Final
Preliminary Assessment Report Windsor Locks Army Aviation Support Facility, Connecticut

Perfluorooctane-Sulfonic Acid (PFOS) and Perfluorooctanoic Acid (PFOA) Impacted Sites
ARNG Installations, Nationwide

February 2020

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Acronyms and Abbreviations

AECOM	AECOM Technical Services, Inc.
AFFF	aqueous film forming foam
AOI	area of interest
ARNG	Army National Guard
AST	above-ground storage tank
bgs	below ground surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CSM	conceptual site model
CTANG	Conneticut Air National Guard
CTARNG	Conneticut Army National Guard
CTDEEP	Connecticut Department of Energy and Environmental Protection
°F	degrees Fahrenheit
FTA	fire training area
IED	Installations and Environment Division
kg	Kilograms
OWS	oil-water seperator
PA	Preliminary Assessment
PFAS	per- and poly-fluoroalkyl substances
PFOA	perfluorooctanoic acid
PFOS	perfluorooctanesulfonic acid
SDS	Safety Data Sheet
SI	Site Inspection
SPCCP	Spill Prevention Control and Countermeasures Plan
TAC	The Arnold Companies
TAS	Total Airport Services
US	United States
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
WLRC	Windsor Locks Readiness Center
WWTP	waste water treatment plant

Executive Summary

The United States (US) Army Corps of Engineers (USACE) Baltimore District on behalf of the Army National Guard (ARNG)-Installations & Environment Division (IED), Cleanup Branch contracted AECOM Technical Services, Inc. (AECOM) to perform *Preliminary Assessments (PAs) and Site Inspections for Perfluorooctanesulfonic acid (PFOS) and Perfluorooctanoic acid (PFOA) Impacted Sites at ARNG Facilities Nationwide*. The ARNG is assessing potential effects on human health related to processes at facilities that used per- and poly-fluoroalkyl substances (PFAS), primarily in the form of aqueous film forming foam (AFFF) released as part of firefighting activities, although other PFAS sources are possible.

AECOM completed a PA for PFAS at Windsor Locks Army Aviation Support Facility (AASF) in Hartford County, Connecticut, to assess potential PFAS release areas and exposure pathways to receptors. The performance of this PA included the following tasks:

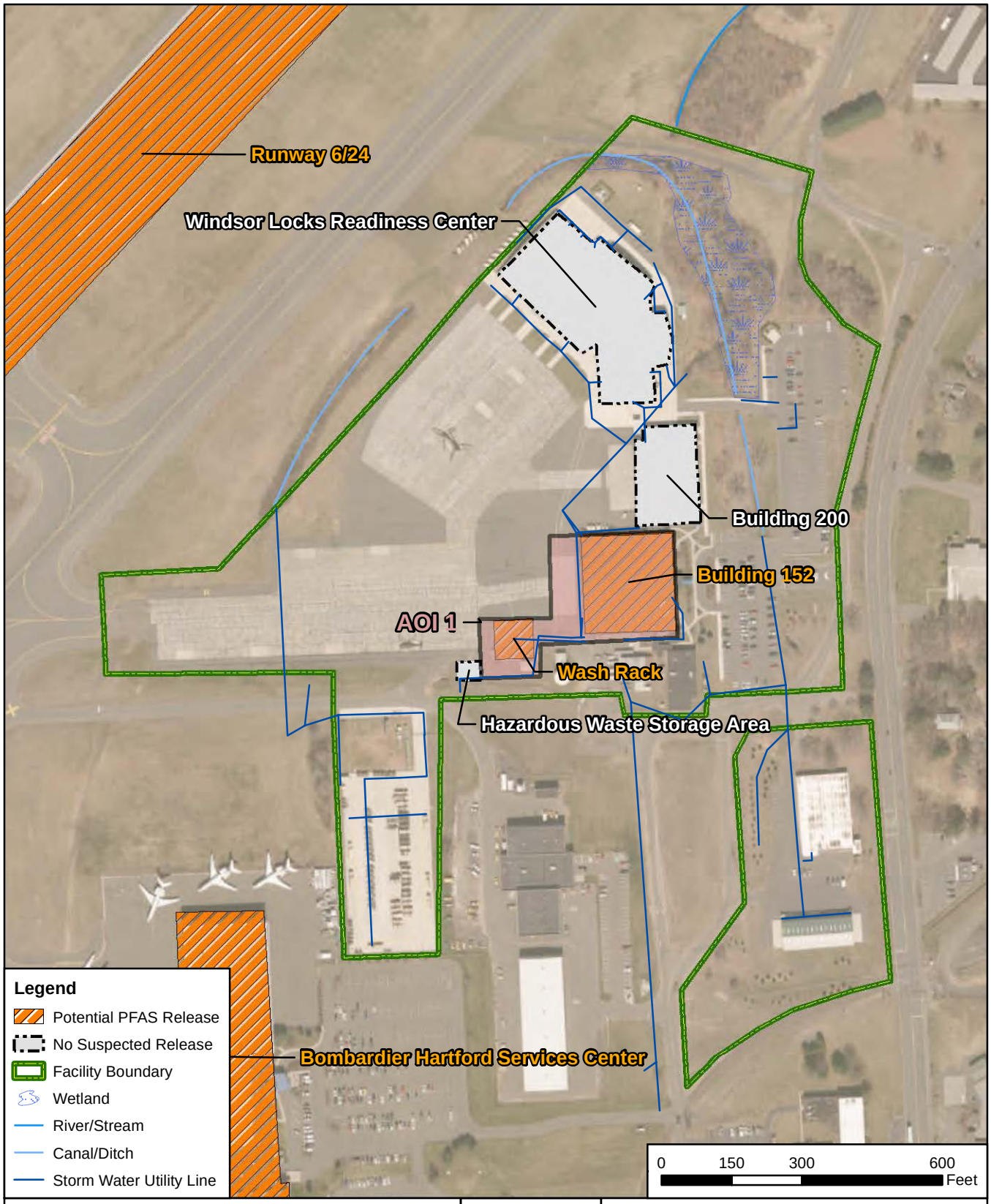
- Reviewed data resources to obtain information relevant to suspected PFAS releases
- Conducted a site visit on July 26, 2018
- Interviewed personnel associated with Windsor Locks AASF activities during the site visit, including the Chief Warrant Officer, a Command Sergeant Major, the Hazardous Waste Program Manager, and the Avionics Small Shops Chief
- Completed visual site inspections at known or suspected PFAS release locations and document with photographs
- If Area(s) of Interest (AOIs) were identified, developed a preliminary conceptual site model (CSM) to outline the potential release and pathway of PFAS for each AOI

One AOI related to PFAS release was identified at Windsor Locks AASF based on PA data. The AOI is shown on **Figure ES-1** and described below:

Area of Interest	Name	Used by	Release Dates
AOI 1	Wash Rack and Building 152 (South Hangar)	CTARNG	2003-2015

Based on known AFFF releases at this AOI, there is potential for exposure to PFAS contamination in surface and subsurface soils to site and construction workers. There is also potential for exposure to site and construction workers, recreational users/trespassers, and off-facility residents in surface water and sediment for all receptors via ingestion. Although groundwater is not used for drinking water at the facility, potential off-facility private wells may provide a pathway for PFAS in groundwater to residents in the vicinity of Windsor Locks AASF. Several potential sources of PFAS were identified in the local area surrounding Windsor Locks AASF through interviews or review of previous environmental investigations, including the Connecticut Air National Guard Bradley Base. PFAS has been confirmed in groundwater beneath Connecticut Air National Guard Bradley Base, but base boundary wells sampled as part of a 2018 Site Inspection confirmed that off base migration is not occurring. Groundwater at the Windsor Locks AASF is not used for drinking; the Connecticut Water Company provides potable water to the facility and its surrounding areas. The CSM for Windsor Locks AASF is shown on **Figure ES-2.**

Potential future actions under the CERCLA process include performing a Site Inspection at AOI 1 focused on soil, groundwater, surface water, and sediment. ARNG evaluates the need for an SI at Windsor Locks AASF based on the presence of a PFAS release, possible receptors, and the migration of potential PFAS contamination to receptors.



CLIENT	ARNG			
NOTES	Preliminary Assessment for PFAS at Windsor Locks AASF, CT			
REVISED	11/5/2019	GIS BY	MS	11/5/2019
SCALE	1:3,600	CHK BY	JW	11/5/2019
Base Map: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS,		PM	RG	11/5/2019

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Summary of Findings

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Figure ES-1

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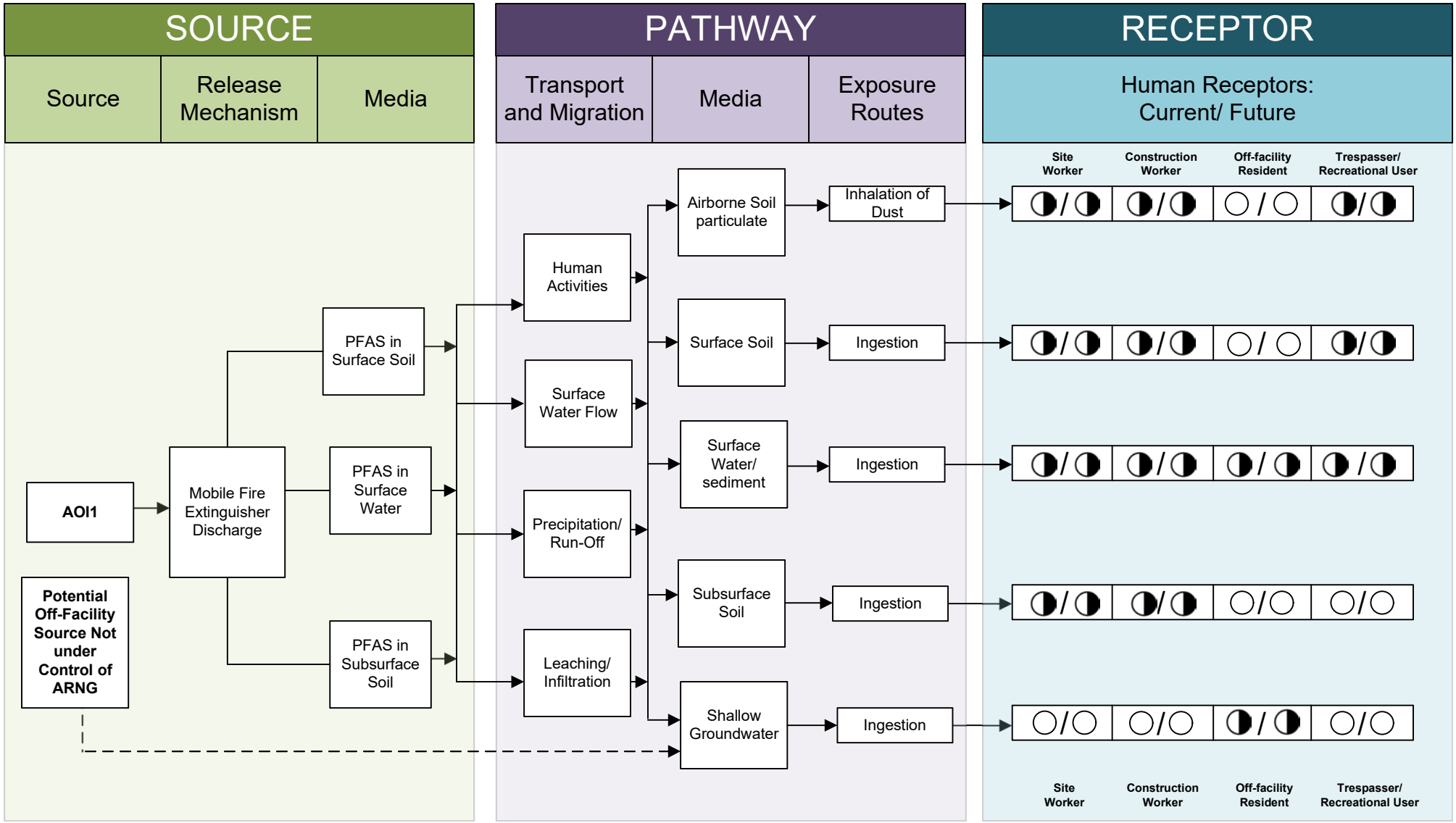


LEGEND

- Flow-Chart Stops
- Flow-Chart Continues
- Partial / Possible Flow
- Incomplete Pathway
- Potentially Complete Pathway
- Complete Pathway

Notes:

1. The resident and recreational user receptors refer to an off-site resident and recreational user.
2. Dermal contact exposure pathway is incomplete for PFAS.

Figure ES-2
Preliminary Conceptual Site Model
Windsor Locks AASF

1. Introduction

1.1 Authority and Purpose

The United States (US) Army Corps of Engineers (USACE) Baltimore District on behalf of the Army National Guard (ARNG)-Installations & Environment Division (IED), Cleanup Branch contracted AECOM Technical Services, Inc. (AECOM) to perform *Preliminary Assessments (PAs) and Site Inspections (SIs) for Perfluorooctanesulfonic acid (PFOS) and Perfluorooctanoic acid (PFOA) Impacted Sites at ARNG Facilities Nationwide* under Contract Number W912DR-12-D-0014, Task Order W912DR17F0192, issued 11 August 2017. The ARNG is assessing potential effects on human health related to processes at their facilities that used per- and poly-fluoroalkyl substances (PFAS), primarily releases of aqueous film forming foam (AFFF) released as part of firefighting activities, although other sources of PFAS are possible. In addition, the ARNG is assessing businesses or operations adjacent to the ARNG facility (not under the control of ARNG) that could potentially be responsible for a PFAS release.

PFAS are classified as emerging environmental contaminants that are garnering increasing regulatory interest due to their potential risks to human health and the environment. The regulatory framework at both federal and state levels continues to evolve. The US Environmental Protection Agency (USEPA) issued Drinking Water Health Advisories for PFOA and PFOS in May 2016, but there are currently no promulgated national standards regulating PFAS in drinking water. In the absence of federal maximum contaminant levels, some states have adopted their own drinking water standards for PFAS.

This report presents findings of a PA for PFAS at Windsor Locks Army Aviation Support Facility (AASF) in Hartford County, Connecticut, in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, the National Oil and Hazardous Substances Pollution Contingency Plan (40 Code of Federal Regulations [CFR] Part 300), and USACE requirements and guidance.

This PA documents the known AASF and associated Connecticut ARNG (CTARNG) locations where a PFAS may have been stored or released into the environment at the facility. The term PFAS will be used throughout this report to encompass all PFAS chemicals being evaluated, including PFOS and PFOA, which are key components of AFFF.

1.2 Preliminary Assessment Methods

The performance of this PA included the following tasks:

- Reviewed data resources to obtain information relevant to suspected PFAS releases
- Conducted a site visit on July 26, 2018
- Interviewed personnel associated with Windsor Locks AASF activities during the site visit, including the Chief Warrant Officer, a Command Sergeant Major, the Hazardous Waste Program Manager, and the Avionics Small Shops Chief
- Completed visual site inspections at known or suspected PFAS release locations and documented with photographs
- If Area(s) of Interest (AOIs) were identified, developed a preliminary conceptual site model (CSM) to outline the potential release and pathway of PFAS for each AOI

1.3 Report Organization

This report has been prepared in accordance with the USEPA *Guidance for Performing Preliminary Assessments under CERCLA* (USEPA, 1991). The report outline is as follows:

- **Section 1** – **Introduction:** identifies the project purpose and authority and describes the facility location, environmental setting, and methods used to complete the PA
- **Section 2** – **Fire Training Areas:** describes the potential or suspected fire training areas (FTAs) at the facility identified during the site visit
- **Section 3** – **Non-Fire Training Areas:** describes other locations of potential or suspected PFAS releases at the facility identified during the site visit
- **Section 4** – **Emergency Response Areas:** describes areas of suspected or potential AFFF release at the facility, specifically in response to emergency situations
- **Section 5** – **Adjacent Sources:** describes sources of PFAS release adjacent to the facility that are not under the control of ARNG
- **Section 6** – Preliminary **Conceptual Site Model:** describes the pathways of PFAS transport and receptors at the facility
- **Section 7** – **Conclusions:** summarizes the data findings and presents the conclusions of the PA
- **Section 8** – **References:** provides the references used to develop this document
- **Appendix A** – Data Resources
- **Appendix B** – Preliminary Assessment Documentation
- **Appendix C** – Photographic Log

1.4 Facility Location and Description

Basic site information was obtained from the CTARNG 2015 Spill Prevention Control and Countermeasures Plan (SPCCP) (Legette, Brashears & Graham, Inc., 2015), updated as necessary with recent data.

The Windsor Locks AASF occupies 37.9 acres that consist primarily of two maintenance hangars with attached office space, the Windsor Locks Readiness Center building, two storage buildings, a maintenance shop, and a fenced-in motor pool that includes bermed parking areas for trucks used to refuel helicopters. The site also contains a hazardous waste storage area, above-ground storage tanks (ASTs), a pump house, water tower, emergency diesel generators, and a civilian parking lot. The facility is located on Route 75 adjacent to Bradley International Airport in Windsor Locks, Connecticut (**Figure 1-1**). It primarily operates as a helicopter operations center and fuel station where minor helicopter repairs and servicing are performed.

Bradley International Airport was acquired by the Federal government in the 1940s as a military reservation and deeded to the State of Connecticut in 1948. The Connecticut Department of Aeronautics leases the property that includes the AASF to the Federal Government. The US Army licenses the property to the Connecticut Military Department. The parcel was used by the Connecticut Air National Guard (CTANG) prior to September 1986 and it has since been used by the CTARNG. The transfer of the property from CTANG to CTARNG included numerous buildings as well as the wash rack, airport apron, taxiway, and boundary fence. The title to land and buildings operated by the CTARNG was listed in the name of the State of Connecticut, Department of Aeronautics, and was leased to the U.S. Government until 2002 (Engineering

Technologies Associates, Inc., 1994). A copy of the current License Agreement for the CTARNG Windsor Locks AASF property is included in **Appendix A**.

1.5 Facility Environmental Setting

This section presents information obtained from the 2008 CTARNG Corrective Action Plan for the Windsor Locks AASF (Fuss & O'Neil, 2008), updated as necessary with recent data. Windsor Locks AASF is located within the Connecticut Valley Lowlands physiographic region of the state (Engineering Technologies Associates, Inc., 1994). The topography of the site is generally level, sloping slightly to the northwest. A drainage swale originates along the northwestern edge of the facility and continues northwest off-facility to an intermittent stream called Spencer Brook (**Figure 1-2**).

1.5.1 Geology

Windsor Locks AASF lies within the Connecticut Valley Lowlands and is underlain by gently sloping sand, silt, and gravel (Colton, 1960). Fine sand and silt are located beneath the ground surface. Surficial material at the site is mapped as stratified drift and deltaic deposits overlying till with clay (Colton, 1960). Historical excavation reports noted a clay layer at depths ranging from 3 to 10 feet below ground surface (bgs). Bedrock beneath the site is mapped as the Portland Arkose (**Figure 1-3**), which is described as a reddish brown siltstone and sandstone (Schnabel and Eric, 1964). Depth to bedrock is estimated to be 100 to 150 feet bgs (Handman, 1973). Approximately 70 percent of the soil underlying the site is classified as made land, i.e., fill material. The underlying soil consists of Ninegrat Fine Sandy Loam, Poquonock Loamy Sand, Windsor Loamy Fine Sand, Agawan Fine Sand, Scantic Silt Loam, and Whatley Loam. These soils range from sand to silty clay loams with moderate to rapid permeability (SCS, 1962).

1.5.2 Hydrogeology

The groundwater beneath the site is classified by the Connecticut Department of Energy and Environmental Protection (CTDEEP) as "GA." Groundwater classified as GA is defined as groundwater with the area existing of private water-supply wells or an area with the potential to provide water to public or private water supply wells. The CTDEEP presumes that groundwater in such an area is, at a minimum, suitable for drinking or other domestic uses without treatment. The designated uses for Class GA groundwater are as existing private and potential public or private supplies of water suitable for drinking without treatment and as base flow for hydraulically-connected surface water bodies (CTDEEP, 2002). There are currently no potable water wells on site.

A 2018 Environmental Data Resources report (**Appendix A**) indicated that no drinking water supply wells are present within a one-mile radius of the facility. According to the United States Geospatial Survey (USGS) National Water Information System Mapper, two active groundwater monitoring wells exist within a four-mile radius of the facility: well "USGS 415446072364501 CT-EW 141" (approximately 3.8 miles southeast of the facility) and well "USGS 415336072414801 CT- W 218" (approximately 3.7 miles south of the facility) (USGS, 2019). These wells are sampled as part of the USGS National Water Quality Assessment. Although no other active wells were listed within 4 miles of the facility on the National Water Information System Mapper, agricultural areas exist to the north/northwest and could potentially draw from unlisted groundwater wells.

A 2015 EDR performed as part of a PA report for the adjacent CTANG Bradley Base indicates that 17 water wells exist within a one-mile radius of the CTANG Bradley Base (southwest of Windsor Locks AASF) (BB&E, 2016). Additionally, a 1996 PA report for CTANG Bradley Base indicates there are 26 water wells within a one-mile radius of the CTANG facility (ANGRC, 1996). CTANG PA reports are included in **Appendix A**.

Windsor Locks AASF receives its potable water from the Connecticut Water Company. The Connecticut Water Company serves East Granby and Windsor Locks in addition to numerous other Connecticut towns and cities (Amec Foster Wheeler Environment & Infrastructure, Inc., 2018). According to the 2017 Water Quality Report for the Connecticut Water Northern Western Water System (serving Windsor Locks), the water supply source for Windsor Locks is the Metropolitan District (MDC), a non-profit municipal corporation that provides potable water and sewerage services. The 2017 Water Quality report is included in **Appendix A**. The MDC water supply source consists of a system of reservoirs that includes the Barkhamsted Reservoir and the Nepaug Reservoir (MDC, 2019). The two reservoirs are approximately 14 miles and 16 miles west of the Windsor Locks AASF, respectively. Available Third Unregulated Contaminant Monitoring Rule (UCMR 3) data for Connecticut does not indicate that PFAS has been detected in either of the aforementioned MDC surface water reservoirs. Additionally, no wells listed within the four-mile radius of the facility are included in the UCMR 3 PFAS data. UCMR 3 data for Connecticut is included in **Appendix A**.

Historical reports indicate that depth to groundwater in the southern portion of the facility generally ranges from 4 to 6 feet bgs. In the absence of confined aquifers, surface topography generally determines the direction of groundwater. Groundwater likely flows to the north and northeast, ultimately discharging to Spencer Brook (**Figure 1-3**). Depths to water measured in 2008 ranged from 3 to 11 feet bgs. Hydraulic conductivity values measured during a 2008 Phase III Investigation ranged from 0.5 to 33 feet per day.

1.5.3 Hydrology

The nearest surface water body to the facility is Spencer Brook, which is located approximately 300 feet northwest of the site at its closest point (**Figure 1-2**). Spencer Brook is not classified by the State of Connecticut and it, therefore, assumed to be a Class A surface water body. Class A surface water bodies support the following designated uses: potential drinking water supply, fish and wildlife habitat, recreational use, agricultural, industrial supply and other legitimate uses, including navigation (CTDEEP, 2002).

Windsor Locks AASF is drained by Spencer Brook, an intermittent stream that discharges to Stoney Brook, a perennial stream 6,300 feet downstream of the facility. Stoney Brook discharges into the Connecticut River 5.3 miles further downstream. The average flow of the Connecticut River is 16,640 cubic feet per second measured at State Route 190. The average flow rate of Stoney Brook is 20.4 cubic feet per second, based on the period 1981 to 1992 at the South Grand Street stream gage.

The western portion of the facility is drained by two surface swales with runoff traveling through two culverts and discharging into the main stem of Spencer Brook. This system drains the tank farm area and approximately one acre of the parking apron, as well as parts of the runway and areas off-facility. The eastern portion of the facility is drained by two closed systems, which discharge into a tributary of Spencer Brook. The system to the west of Building 152 drains the parking apron. The storm drain system east of Building 152 originates on State of Connecticut property. Overall, the drainage system is 1,000 feet in length, and is routed into a concrete swale downstream of the access road crossing Building 160.

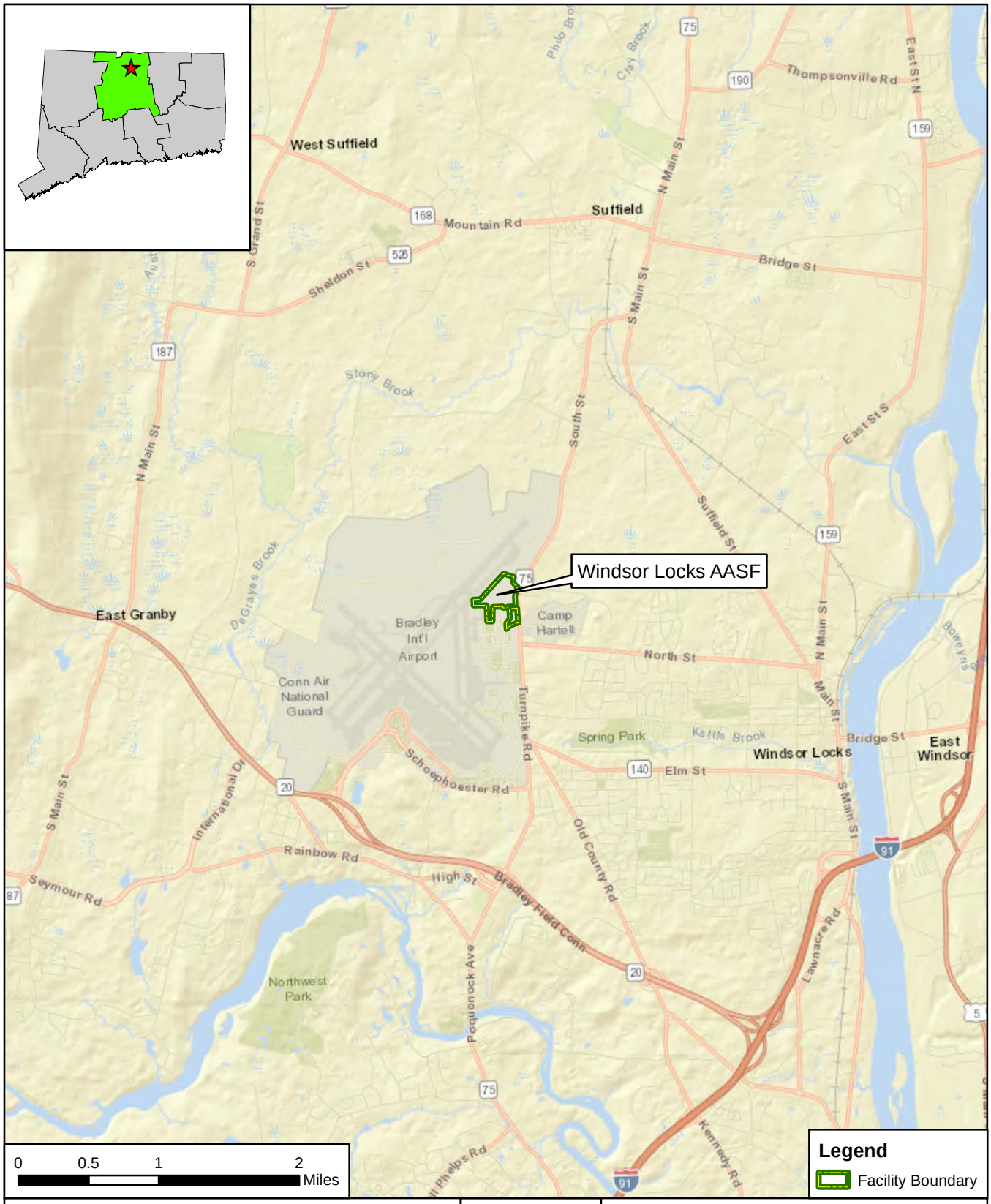
The Windsor Locks AASF facilities discharge stormwater runoff associated with industrial activities into surface waters under state permits. The facility is also permitted to discharge water associated with the wash rack's grit separator and the AASF oil-water separator (OWS) and floor drain system into sanitary sewers. Current permits for stormwater discharge are included in **Appendix A**.

1.5.4 Climate

Data from Hartford Bradley International Airport, Connecticut, indicate that the annual average temperature between 1981 and 2010 in was 50.6 degrees Fahrenheit (ºF) (NOAA, 2018). The warmest months are July and August, with normal daily average temperatures of 73.6ºF and 71.9ºF, respectively. January is the coldest month, with an average temperature of 26.1ºF. Average annual precipitation measured from 1981 to 2010 at the airport was 45.85 inches. Rainfall is heaviest during the months of May through July, averaging approximately 4.3 inches per month; January and February are the driest months. Average monthly precipitation ranges from 2.89 inches in February to 4.37 inches in October (NOAA, 2018).

1.5.5 Current and Future Land Use

Windsor Locks AASF is an operations center used by the CTARNG for the routine maintenance and minor repair or military helicopters and fixed-wing aircraft. A bulk fuel facility has been operating at the Windsor Locks AASF since the early 1970s. The facility includes two maintenance hangars with attached office space, the Windsor Locks Readiness Center building, two storage buildings, a maintenance shop, a fenced-in motor pool that includes bermed parking areas fuel trucks, a hazardous waste storage area, ASTs, a pump house, water tower, emergency diesel generators, and a civilian parking lot. Future use of the Windsor Locks AASF is anticipated to remain the same.



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SCALE	1:63,360	CHK BY	JW	12/14/2018
Base Map: Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI,		PM	RG	12/14/2018

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Facility Location

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Figure 1-1

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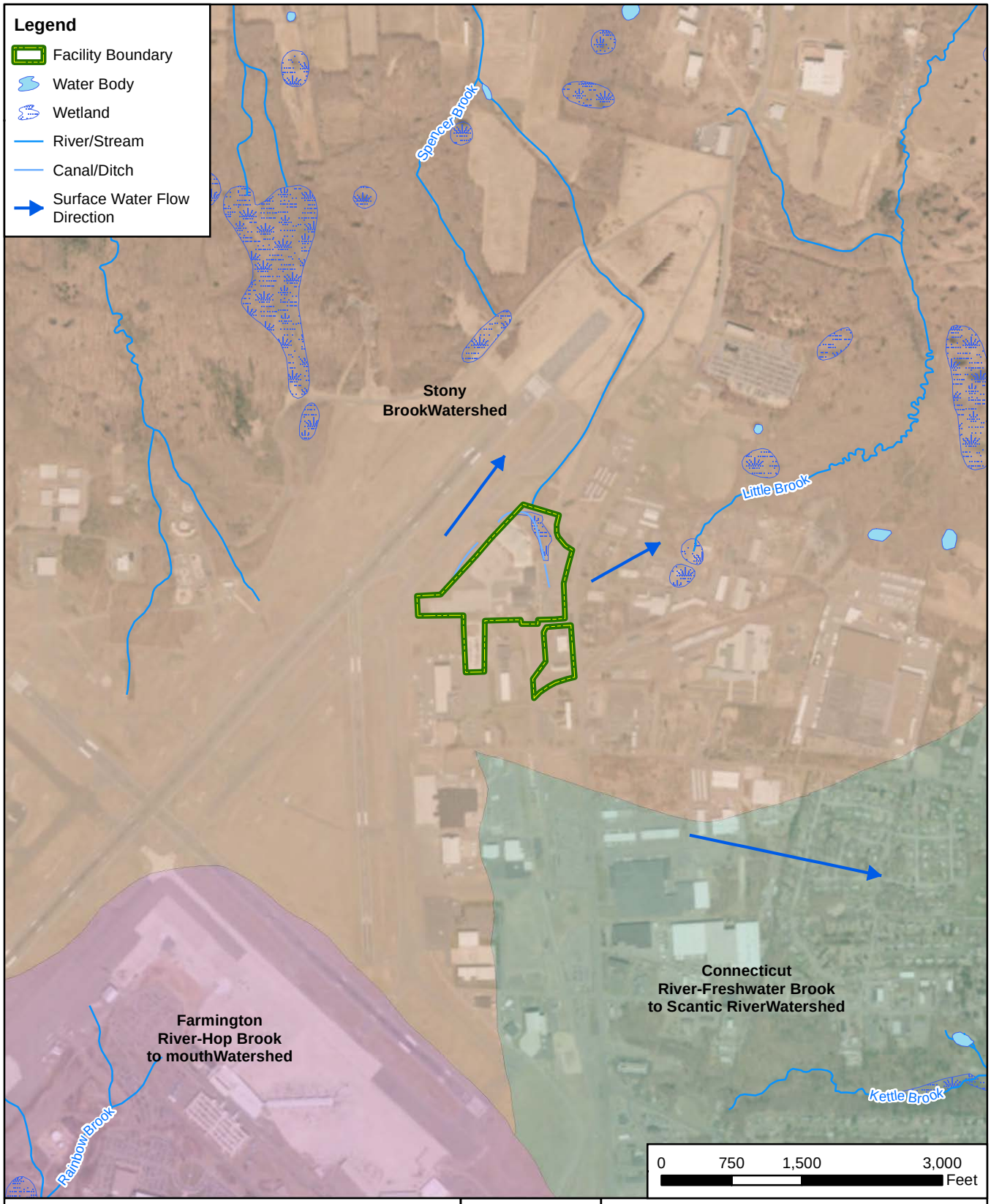

CLIENT	ARNG			
NOTES	Preliminary Assessment for PFAS at Windsor Locks AASF, CT			
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SCALE	1:18,000	CHK BY	JW	12/17/2018
Base Map: Sources: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS,		PM	RG	12/17/2018

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Surface Water Features

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Figure 1-2

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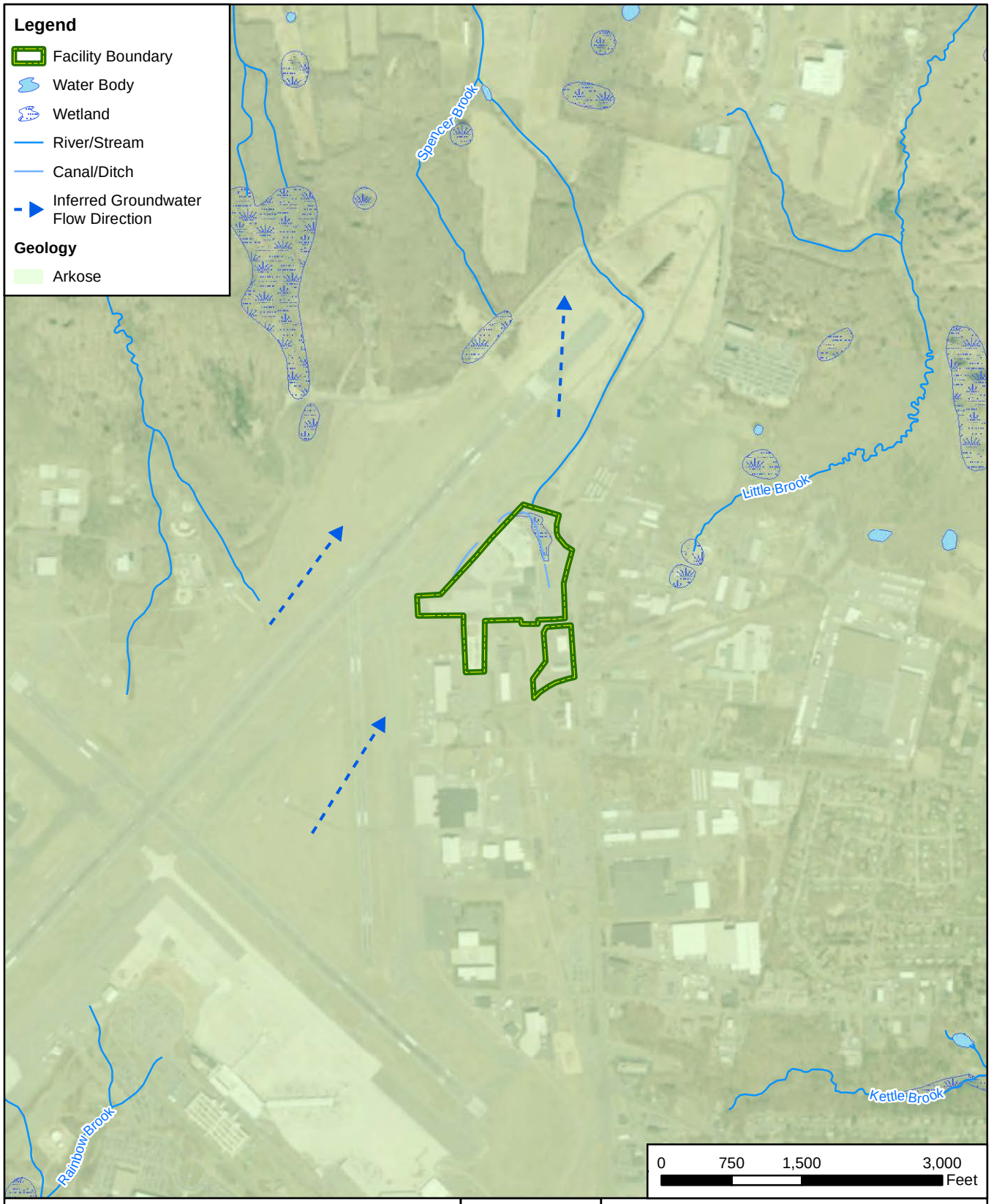

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SCALE	1:18,000	CHK BY	JW	3/14/2019
Base Map: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS,		PM	RG	3/14/2019

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Groundwater Features

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Figure 1-3

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2. Fire Training Areas

Fire training areas (FTAs) were investigated during the PA, and one FTA was identified as a location where AFFF was released to the environment. A description of the FTA is presented below, and the FTA appears on **Figure 2-1** with photographs appearing in **Appendix C**.

2.1 Wash Rack

The Wash Rack at Windsor Locks AASF was identified during site interviews as a location where fire training occurred routinely. The Wash Rack is located west of Building 152 (the south hangar), at the southern boundary of the CTARNG Windsor Locks AASF property. Its geographic coordinates are 41°56'38.5"N and 72°40'26.7"W.

During fire training events at the Wash Rack, a pan containing flammable liquid would be ignited in the center of the Wash Rack and mobile fire extinguishers containing AFFF were discharged to put out the flames. Between six and ten mobile extinguishers containing 30 gallons of an AFFF/water dilution would be used per training exercise. Formal training records were not kept. The AFFF product used during training events is unknown; however, Tri-Max -40 ºF AFFF solution and 3M AFFF Type 3 (3 percent (%)) have been stored at the facility in 5-gallon buckets and are believed to have been used during exercises. Training exercises at the Wash Rack that resulted in the discharge of AFFF are expected to have occurred once per year between 2003 and 2015, according to personnel interviews. Additionally, the facility Avionics Small Shops Chief stated that a fire training demonstration by a non-CTARNG unit occurred at the Wash Rack within the last five years. No other information regarding this event was available during the PA. The Windsor Locks AASF Fire Marshall confirmed via correspondence after the site visit that fire training exercises since August 2015 have been conducted solely at the nearby off-facility Connecticut Fire Academy.

The Wash Rack is a slightly depressed concrete platform approximately 80 feet long by 80 feet wide with a catch basin at the center of the depression. Discharge from the catch basin currently flows to a below-grade stormwater detention system when the Wash Rack is not in use. If the Wash Rack is being used to wash aircrafts, then discharge is diverted via a valve to an underground 2,500-gallon OWS, and then to municipal sanitary sewers. AFFF released during known fire training events at the Wash Rack would have been discharged to the sanitary sewer system via the Wash Rack; however, the recent installation of a valve to divert stormwater runoff through the Wash Rack to the stormwater detention system may result in residue PFAS reaching stormwater outfalls. The stormwater detention system discharges to wetlands in the northeastern portion of the facility and water eventually flows to Spencer Brook. The Windsor Locks AASF SPCCP describes surface water runoff at the Wash Rack and is included in **Appendix A**.

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Base Map: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS,		PM	RG	11/5/2019

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Fire Training Areas

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Figure 2-1

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3. Non-Fire Training Areas

Five non-fire training areas were investigated during the PA, and AFFF is known to have been stored and/or released at four of these areas. A description of each non-FTA is presented below, and the non-FTAs are shown on **Figure 3-1** with photographs appearing in **Appendix C**.

3.1 Building 200 - North Hangar

Building 200 is the north hangar at Windsor Locks AASF. It is located on the north side and adjacent to Building 152, the south hangar. The two hangars are connected and both have AFFF fire suppression systems with an AFFF storage room in the connecting area between the two hangars. Building 200's geographic coordinates are 41°56'41.9"N and 72°40'22.2"W.

Building 200 includes the north hangar maintenance areas, office space within the hangar, and the parking apron/paved area west of the building. The fire suppression system at Building 200 uses National Foam Aer-o-lite 3% AFFF. The AFFF that supplies the Building 200 fire suppression system is stored in a 900-gallon tank in the AFFF Tank Storage Room located between the north and south hangars. The fire suppression system was installed in 1997, and is serviced quarterly by the contractor Fire Protection Team. It is also sampled annually to assure the appropriate AFFF product concentration is adequate. Annual suppression system testing uses only water, and CTARNG staff indicated that an AFFF release has never occurred as a result of suppression system testing. No incidents resulting in an AFFF release have occurred in the AFFF Tank Storage Room. Handheld dry chemical fire extinguishers are also stored in the room for use in the event of an emergency.

Mobile fire extinguishers containing AFFF were formerly stored at Building 200. According to interviews with CTARNG staff, all mobile AFFF extinguishers were relinquished to the Connecticut Fire Academy in 2015, and replaced with mobile or handheld fire extinguishers that use dry chemicals (e.g., Purple K). CTARNG staff confirmed during interviews that no crashes or incidents have occurred at Building 200 that required using AFFF, nor have any AFFF training exercises been conducted at the north hangar. No known PFAS releases have occurred at Building 200. Safety Data Sheets (SDSs) for the AFFF products used in the former mobile extinguishers and within the fire suppression system at Building 200 are included in **Appendix A**.

3.2 Building 152 – South Hangar

Building 152 is the south hangar at Windsor Locks AASF. It is located on the south side and adjacent to Building 200, the north hangar. As noted above, the Fire Protection Team contactor services and collects samples from the AFFF suppression system connected to the two hangars. Similarly to Building 200, Building 152 was considered a potential PFAS release site because hangars can be a common location for refueling accidents, and often use AFFF fire suppression systems. Building 152's geographic coordinates are 41°56'39.6"N and 72°40'23.6"W.

CTARNG personnel stated that mobile fire extinguishers containing AFFF were discharged to the floor drains in Building 152 between 2003 and 2015, though less frequently than fire training events at the Wash Rack. Information sources conflicted on whether AFFF discharges occurred to floor drains in Building 152; however, discharge events have been conservatively presumed to have occurred based on the statements of some personnel. Discharge of AFFF to the Building 152 floor drains were not documented. Based on information provided during interviews, between six and ten mobile extinguishers containing 30 gallons of an AFFF/water dilution would be used per training exercise. The AFFF product used during training events is unknown; however, Tri-Max -40 ºF AFFF solution and 3M AFFF Type 3 (3%) have been stored at the facility in five gallon buckets and are believed to have been used during exercises. Floor drains in Building 152 connect underground to a 2,500 gallon OWS south of the hangar which discharges to municipal

sanitary sewers. SDSs for the AFFF products formerly stored in mobile extinguishers that may have been discharged to floor drains in Building 152 are included in **Appendix A**.

3.3 Hazardous Waste Storage Area

The Hazardous Waste Storage Area is located on the southern boundary of the Windsor Locks AASF property, approximately 100 feet west of the Wash Rack. The area's geographic coordinates are 41°56'37.8"N and 72°40'27.9"W. The fenced and bermed area consists of two small buildings dedicated to the storage of various hazardous materials and wastes, such as petroleum, oils, and lubricants. Two ASTs are also staged within the Hazardous Waste Storage Area. The Windsor Locks AASF is a registered as a Small Quantity Generator, indicating that the hazardous waste generation onsite is greater than 100 kilograms (kg) but less than 1000 kg per month and accumulated hazardous waste never exceeds 1000 kg at any one time (CTARNG, 2018). Secondary containment within the area prevents offsite runoff in the event of a release.

The Hazardous Waste Storage Area was observed during the PA site visit because seven 5-gallon buckets of AFFF concentrate material were previously stored within the site buildings. The AFFF product was disposed of in 2016, and a manifest for the disposal is included in **Appendix A**. Two 5-gallon buckets of National Foam Aer-o-lite 3% AFFF are currently stored in the Hazardous Waste Storage Area. CTARNG staff confirmed during interviews that no incidents have occurred in the Hazardous Waste Storage Area resulting in the release of AFFF or other PFAS-containing products. The site has never been used for training activities and serves only as a storage area.

3.4 Windsor Locks Readiness Center

The Windsor Locks Readiness Center (WLRC) is located in the northeastern portion of the Windsor Locks AASF property. The geographic coordinates for the WLRC are 41°56'45.6"N and 72°40'24.0"W. The WLRC is a two-story, multi-use facility for use in administrative and mission operations for the CTARNG. It includes administrative areas, readiness storage, an assembly hall, kitchen, physical training areas, and a vehicle maintenance bay. The WLRC opened in November 2013.

CTARNG staff confirmed during interviews that no AFFF is stored in the WLRC for fire suppression, nor has AFFF ever been used or accidentally released at the building. The fire suppression system in the WLRC relies upon water, and mobile or handheld fire extinguishers at the WLRC use dry chemicals (e.g., Purple K). No releases of AFFF have occurred at the WLRC. WLRC drainage from the vehicle maintenance bay flows to below-grade grit chamber that discharges to the sanitary sewer.

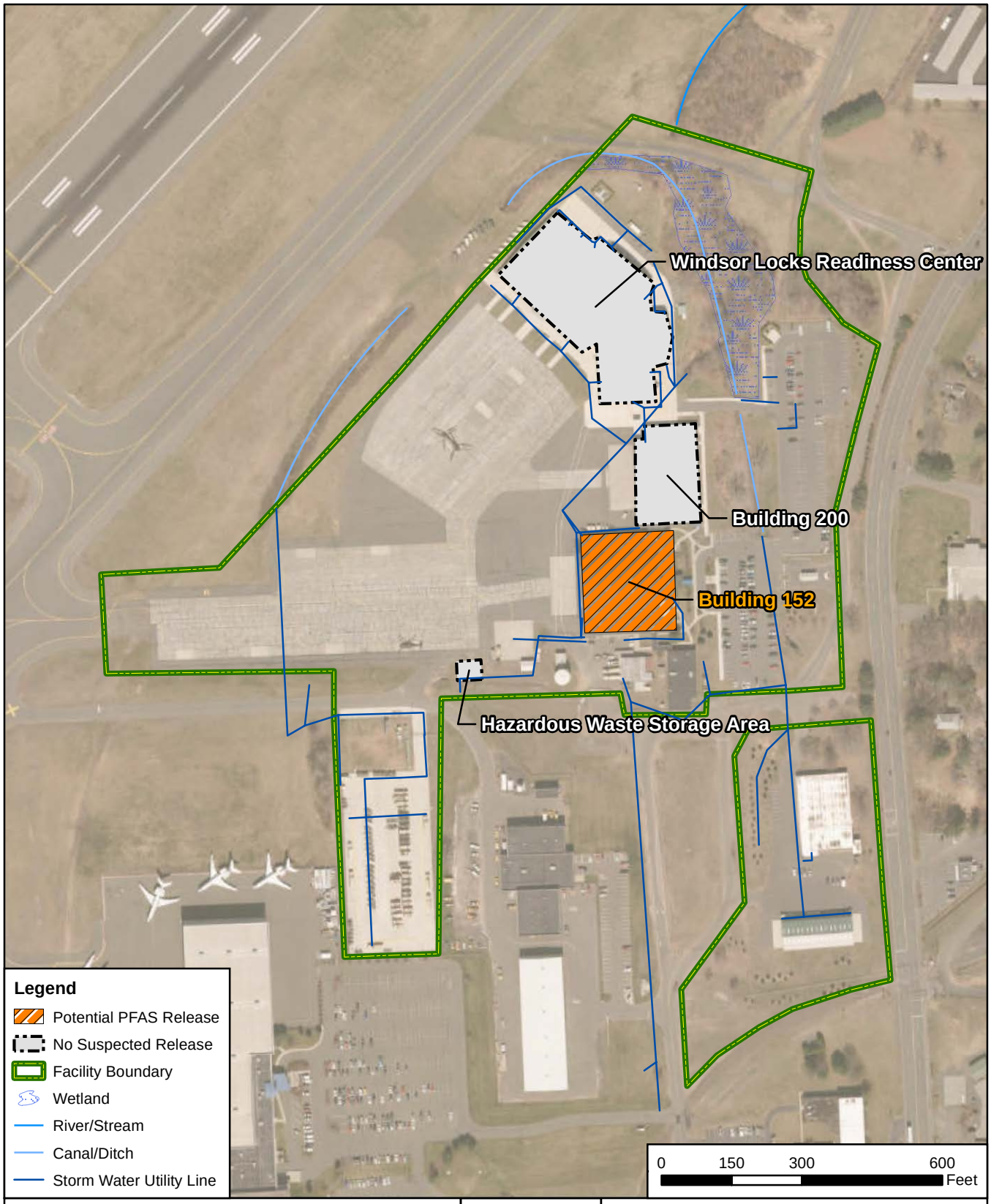
3.5 Waste Water Treatment Plant

There is no waste water treatment plant (WWTP) located at Windsor Locks AASF. WWTPs are not usually a primary potential release area of PFAS, but PFAS-containing liquids were processed at a WWTP, the resulting sludge and liquids could create a secondary source of contamination. At Windsor Locks AASF, no information obtained indicated PFAS-related materials were treated at a WWTP. The only known PFAS releases were discharged to an OWS and ultimately to municipal sanitary sewers.

3.6 Landfills

The interviewees reported that there are no landfills at Windsor Locks AASF. Similar to WWTPs, landfills are not usually a primary potential release area of PFAS, but materials disposed of in landfills may create a secondary source of contamination. Such materials may include sludge

from a WWTP that processes PFAS-laden water, used AFFF storage containers, or products associated with waterproofing uniforms or boots. No information obtained at the facility indicates PFAS-related materials were disposed of in a landfill.



CLIENT	ARNG			
NOTES	Preliminary Assessment for PFAS at Windsor Locks AASF, CT			
REVISED	11/5/2019	GIS BY	MS	11/5/2019
SCALE	1:3,600	CHK BY	JW	11/5/2019
Base Map: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS,		PM	RG	11/5/2019

N

Non-Fire Training Areas

AECOM
12420 Milestone Center Drive
Germantown, MD 20876

Figure 3-1

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4. Emergency Response Areas

Emergency responses to crashes sometimes require flame suppression, which may result in the release of PFAS to the environment in the form of AFFF. Interviewed CTARNG staff stated that no emergency response using AFFF has occurred during the last 31 years at the facility; the first-hand knowledge of interviewees did not pre-date 1987. Thus, no emergency response locations exist at the Windsor Locks AASF. Bradley International Airport Fire Department responds to emergencies for all tenants in the Bradley International Airport vicinity, including the Windsor Locks AASF. It is unknown whether the Bradley International Airport Fire Department uses AFFF for emergency response; staff from the Bradley International Airport Fire Department were not available for interview during the site visit.

5. Adjacent Sources

Numerous potential off-facility PFAS sources were identified for the Windsor Locks AASF during this PA. Several of these areas are tenants of the Bradley International Airport. The locations of the potential off-facility source areas are shown on **Figure 5-1**.

5.1 Bradley International Airport

The Windsor Locks AASF is located on the Bradley International Airport property. Bradley International Airport includes Runway 6/24 and Runway 15/33. The Bradley International Airport Fire Department responds to emergencies on the airport property, and for airport tenants, including the Windsor Locks AASF. It is unknown whether the Bradley International Airport Fire Department trains with AFFF or uses AFFF for emergency response. The Bradley International Airport Fire Department is located east of the runway off Fire House Road. Staff from the Bradley International Airport Fire Department were not available for interview during the site visit.

5.2 Connecticut Fire Academy

The Connecticut Fire Academy is located west of the northern portion of the Bradley International Airport runway about 0.5 mile west of the Windsor Locks AASF. The academy operates under the administration of the Connecticut Commission on Fire Prevention and Control. The Training Division is responsible for the development and delivery of Fire & Rescue, Hazardous Materials, Emergency Medical, National Incident Management System, and other Emergency Services training programs. It is unknown whether the Connecticut Fire Academy incorporates AFFF into training exercises. Additionally, CTARNG has participated in burn training exercises with the Connecticut Fire Academy at the academy training areas. Materials used during training exercises at the Connecticut Fire Academy are provided by the academy. Records of CTARNG training at the academy were not available during the PA.

5.3 Connecticut Air National Guard Bradley Base

The CTANG Bradley Base occupies a parcel of land in the southwestern portion of the Bradley International Airport. A 2016 PA for PFAS at the Bradley Base confirmed that no FTAs exist at the CTANG facility; however, AFFF has been stored at the facility and may have been released during the testing of fire equipment (BB&E, 2016). A 2018 SI report for the Bradley Base confirmed that PFOS concentrations exceed the USEPA Lifetime Health Advisory in groundwater at the facility (Amec Foster Wheeler Environment & Infrastructure, Inc., 2018). CTARNG staff stated during interviews that the CTANG has an emergency response agreement with the Town of Granby Fire Department. Previous PFAS investigation reports at the CTANG Bradley Base are included in **Appendix A**.

5.4 Private Aviation Companies at Bradley International Airport

The Bombardier, Inc. Hartford Service Center is located adjacent to the Windsor Locks AASF on its southern boundary. It is unknown whether AFFF is used at the Bombardier, Inc. Hartford Service Center, or if emergency responses using AFFF have occurred at the location.

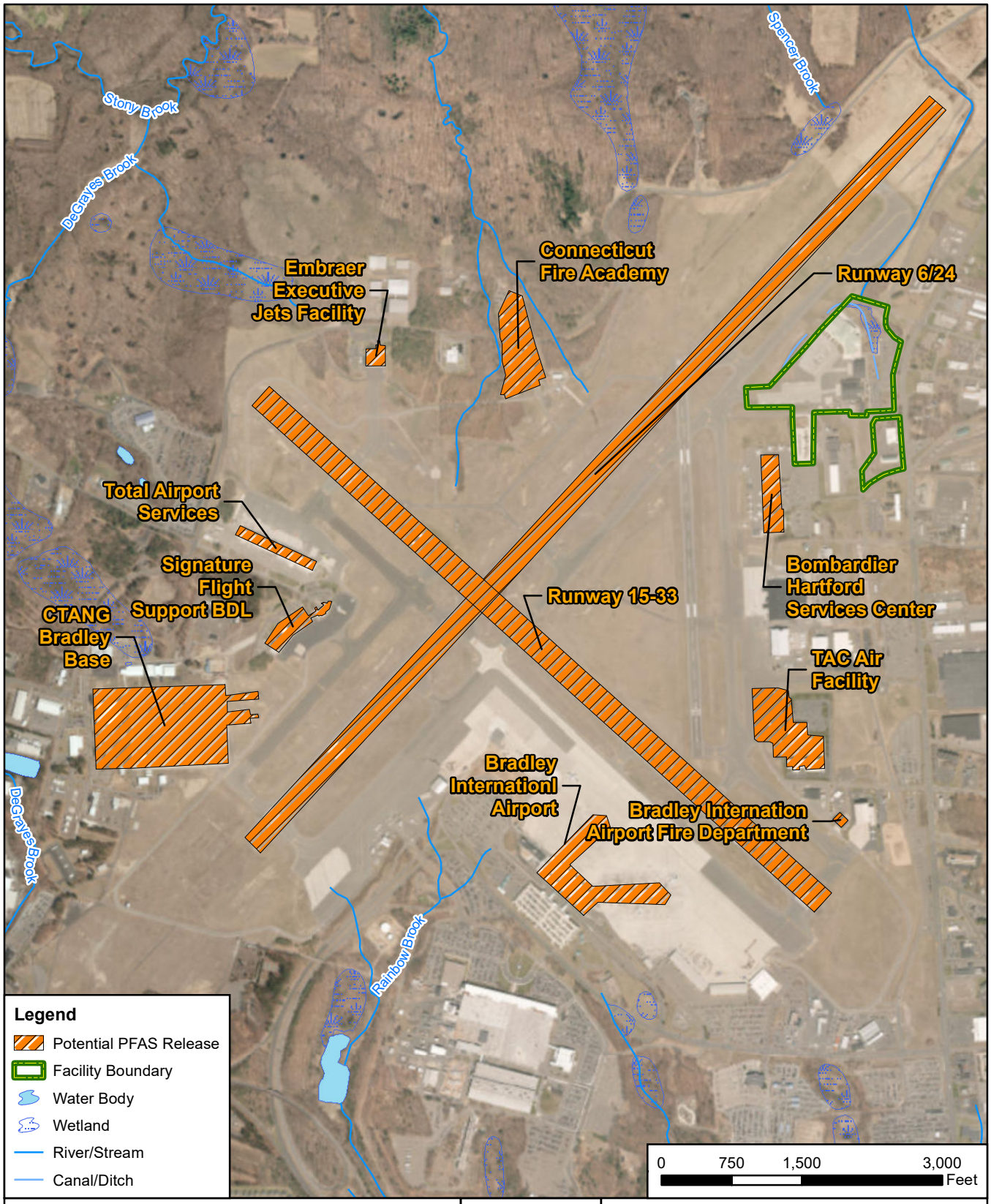
Embraer Executive Jets maintains a hangar on a parcel of land west of the Bradley International Airport runway. It is unknown whether AFFF is used at the Embraer Jets facility, or if emergency responses using AFFF have occurred at the location.

The Arnold Companies (TAC) Air maintains a facility east of Bradley International Airport runway. The TAC Air facility includes a hangar and provides aircraft maintenance onsite. It is unknown

whether AFFF is used at the TAC Air facility, or if emergency responses using AFFF have occurred at the location.

Total Airport Services (TAS), an aviation service company providing quality cargo aircraft handling, cargo warehousing, passenger aircraft ramp handling and counter services, and airport support services, maintains a facility west of the Bradley International Airport runway. It is unknown whether AFFF is used at the TAS facility, or if emergency responses using AFFF have occurred at the location.

Signature Flight Support BDL, an aviation service provider, maintains a facility west of the Bradley International Airport runway. It is unknown whether AFFF is used at the Signature Flight Support BDL facility, or if emergency responses using AFFF have occurred at the location.



CLIENT	ARNG			
NOTES	Preliminary Assessment for PFAS at Windsor Locks AASF, CT			
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SCALE	1:18,000	CHK BY	JW	7/16/2019
Base Map: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS,		PM	RG	7/16/2019

N

Adjacent Sources

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Figure 5-1

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6. Preliminary Conceptual Site Model

Based on the PA findings, potential release areas were identified at one AOI: AOI 1 Wash Rack and Building 152. The AOI location is shown on **Figure 6-1**. The following sections describe the CSM components and the specific CSM developed for the AOI. The CSM identifies the three components necessary for a potentially complete exposure pathway: (1) source, (2) pathway, and (3) receptor. If any of these elements are missing, the pathway is considered incomplete. Receptors at Windsor Locks AASF and its surrounding areas include site workers, construction workers, and recreational users/trespassers.

Human exposure via the dermal contact pathway may occur, and current risk practice suggests it is an insignificant pathway compared to ingestion; however, exposure data for dermal pathways is sparse and continues to be the subject of PFAS toxicological study.

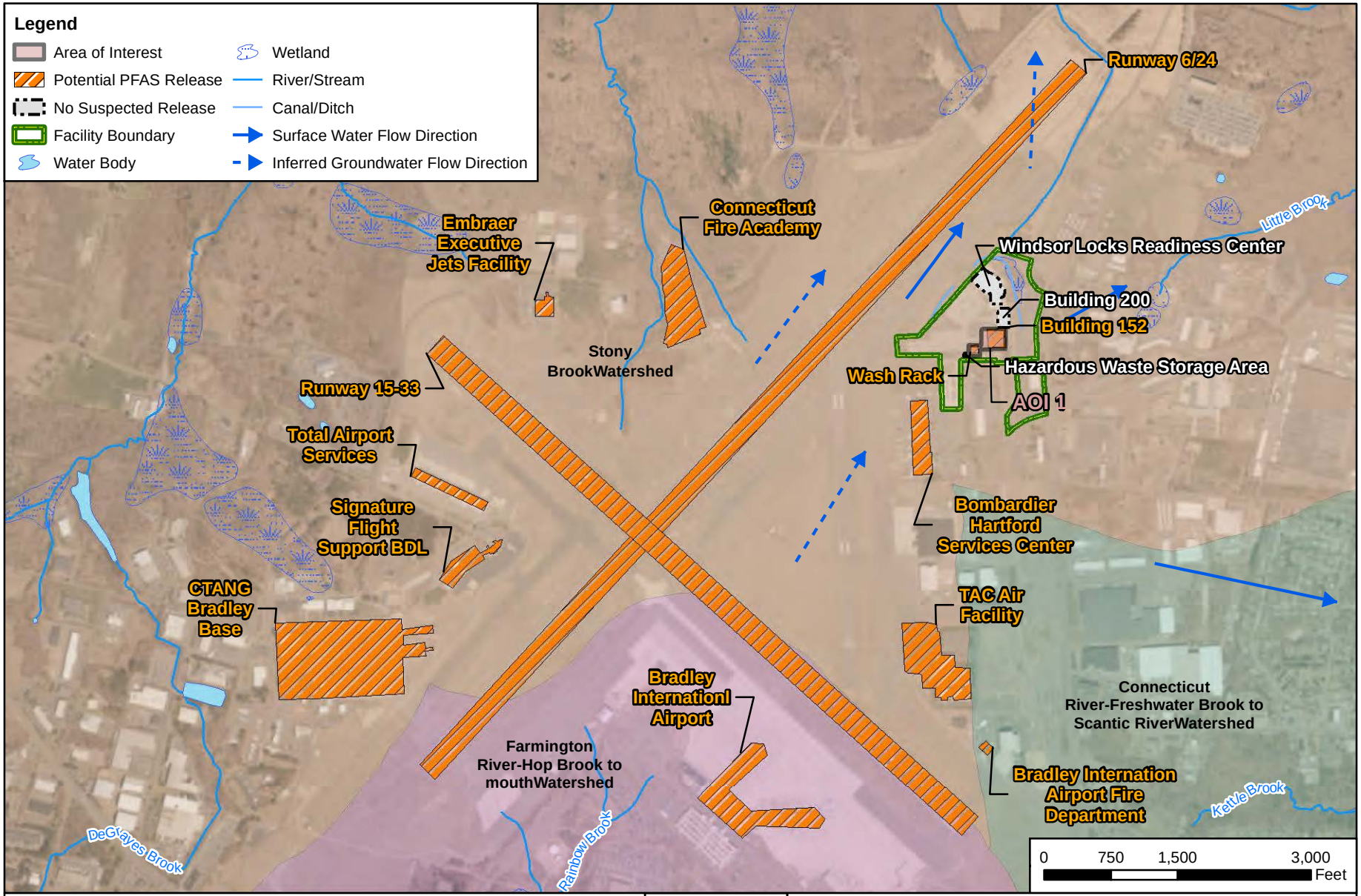
6.1 AOI 1 Wash Rack and Building 152 (South Hangar)

AOI 1 is the area including the Wash Rack and Building 152. Controlled AFFF releases to the Wash Rack and/or Building 152 by CTARNG have occurred approximately once per year during fire training exercises between 2003 and 2015. Information sources identified during the VSI conflicted on whether discharges of AFFF occurred within Building 152; however, the area has been conservatively included as a potential release area based on the statements of some personnel.

The area to the north of the Wash Rack is paved, but unpaved soil is adjacent to the southern boundary of the Wash Rack. Fire training exercises may have resulted in AFFF releases to the soil south of the Wash Rack. Discharges of expiring AFFF to the floor drains in Building 152 occurred within the confined south hangar and would not have resulted in releases to soil. The pathway for potential exposure to PFAS contamination via inhalation of dust particles, or ingestion of surface soil during construction or maintenance, is considered partially complete at the AOI due to the presence of unpaved areas in the vicinity of the Wash Rack. Both the Wash Rack and Building 152 drain to sanitary sewers via the OWS; however, the wash rack currently diverts water to the forested/shrub wetlands approximately 0.1 mile northeast of the Wash Rack when it is not being used. PFAS are water soluble and can migrate readily from soil to groundwater or surface water via leaching and run-off. It is possible that remnant AFFF left over from fire training exercises or discharge of expiring AFFF may have traveled to surface soil at the AOI and wetlands northeast of the AOI via stormwater detention system outfall. All receptors may be exposed to PFAS contaminated surface water in the nearby wetlands due to channelization of drainage from the Wash Rack and Building 152 to the wetlands.

Although no drinking water supply wells exist at the facility, private drinking water wells may exist off-facility. As such, the pathway for PFAS in groundwater to off-facility receptors via drinking water is potentially complete. Groundwater at Windsor Locks AASF presumably flows to the north and northeast, ultimately discharging into the facility wetlands and the off-facility Spencer Brook. Spencer Brook lies within close proximity to several recreational fields and residential areas. Due to potential recreational use of Spencer Brook, there is also potential exposure of PFAS contamination to off-facility residents and recreational users of surface water as a result of surface water and groundwater migration.

Ground-disturbing activities to subsurface soil at AOI 1 could result in site and construction worker exposure to potential PFAS contamination via inhalation of dust particles or ingestion of subsurface soil in the unpaved areas surrounding the Wash Rack. Therefore, the exposure pathways for these receptors are potentially complete. The CSM for AOI 1 is shown on **Figure 6-2.**



CLIENT	ARNG			
PROJECT	Preliminary Assessment for PFAS at Windsor Locks AASF, CT			
REVISED	11/5/2019	GIS BY	MS	11/5/2019
SCALE	1:19,200	CHK BY	JW	11/5/2019
Base Map: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community		PM	RG	11/5/2019

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Areas of Interest

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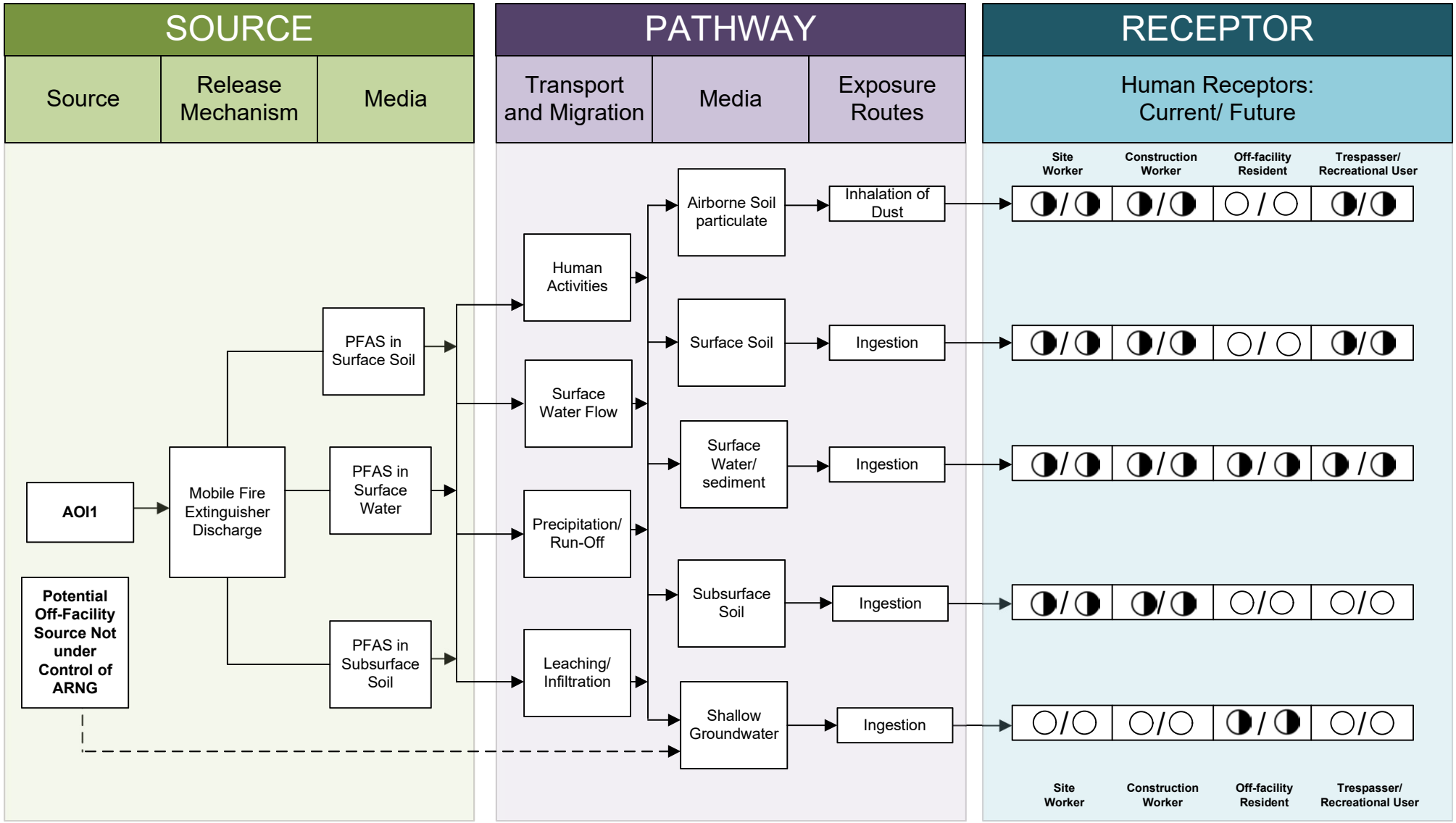
Figure 6-1



LEGEND

- Flow-Chart Stops
- Flow-Chart Continues
- Partial / Possible Flow
- Incomplete Pathway
- Potentially Complete Pathway
- Complete Pathway

Notes:

1. The resident and recreational user receptors refer to an off-site resident and recreational user.
2. Dermal contact exposure pathway is incomplete for PFAS.

Figure 6-2
Preliminary Conceptual Site Model
AOI 1 Wash Rack and Building 152

7. Conclusions

This report presents a summary of available information gathered during PA efforts on the use and storage of AFFF and other PFAS-related activities at Windsor Locks AASF. The PA findings are based on the personnel interviews, environmental investigations and reports, historical documents, and the visual site inspection presented in **Appendix A** and **Appendix B**.

7.1 Findings

One AOI related to potential PFAS release was identified at Windsor Locks AASF based on PA data. This AOI is shown on **Figure 7-1** and described in the table below:

Area of Interest	Name	Used by	Release Dates
AOI 1	Wash Rack and Building 152 (South Hangar)	CTARNG	2003-2015

Based on known AFFF releases at this AOI, there is potential for exposure to PFAS contamination in surface and subsurface soils to site and construction workers. There is also potential for exposure to site and construction workers, recreational users/trespassers, and off-facility residents in surface water and sediment for all receptors via ingestion. Although groundwater is not used for drinking water at the facility, potential off-facility private wells may provide a pathway for PFAS in groundwater to residents in the vicinity of Windsor Locks AASF. Several potential sources of PFAS were identified in the local area surrounding Windsor Locks AASF through interviews or review of previous environmental investigations, including the Connecticut Air National Guard Bradley Base where PFAS has already been confirmed in groundwater. The CSM for Windsor Locks AASF is shown on **Figure ES-2.**

7.2 Uncertainty

A number of information sources were investigated during this PA to determine the potential for PFAS-containing materials to have been present, used, or released at Windsor Locks AASF. Historically, documentation of PFAS use was not required because PFAS were considered benign. For example, specific records documenting the discharge of expiring AFFF to the floor drains in Building 152 were not kept by CTARNG staff.

The conclusions of this PA are predominantly based on the information provided during interviews with personnel who had direct knowledge of PFAS use at the facility. Sometimes the provided information was vague, or conflicted with another source. For example, interviewees provided conflicting information on whether or not AFFF was ever discharged to Building 152 floor drains. Gathered information has a degree of uncertainty due to the absence of written documentation, the limited number of personnel with direct knowledge due to staffing changes, the time passed since PFAS was first used (1969 to present), and a reliance on personal recollection. Inaccuracies may arise in potential PFAS release locations. There is also a possibility the PA has missed a source of PFAS, as the science of how PFAS may enter the environment continually evolves.

In order to minimize the level of uncertainty, readily available data regarding the use and storage of PFAS were reviewed, multiple persons were interviewed for the same potential source area, and potential source areas were visually inspected.

The visual site inspection and interview process included inquiries and requests into the existence and availability of documentation that supports the identification of the potential PFAS source areas. All known potential source areas were visually inspected during the visual site inspection

to the fullest extent possible. During interviews, potential AFFF release areas were identified however, no records or documentation confirming such a release could be found.

The following table summarizes the uncertainties associated with the PA:

Area of Interest	Source of Uncertainty
AOI 1 Wash Rack and Building 152 (South Hangar)	No records were available to confirm the type, amount, and concentration of AFFF used during fire training exercises at the Wash Rack or Building 152 between 2003 and 2015. It is unknown whether the CTANG's use of the facility until 1986 resulted in PFAS releases. The number of exercises resulting in discharges of AFFF to the Wash Rack is unknown. The number of times AFFF was discharged to the floor drains of Building 152 is unknown. Interviewees conflicted on whether AFFF has ever been discharged to floor drains in Building 152 entirely. During interviews, the facility Avionics Small Shops Chief recalled that a fire training demonstration by a non-CTARNG unit occurred at the Wash Rack within the last five years. No information regarding this event is available. Although discharges of expiring AFFF occurred at the facility in one location, it is unknown if similar practices occurred at other locations at the facility that went undocumented. Numerous potential adjacent sources of PFAS exist near the facility.
Non-AOIs	**Source of Uncertainty**
CTANG Bradley Base	Nozzle testing by the Fire Department was performed in the grassy area behind the hush house at the facility. The quantity of AFFF released during nozzle testing, and frequency of testing is unknown. Building 15, Building 11, and Building 19 have all stored AFFF is contained AFFF in fire suppression systems. Although no releases are reported at these buildings, it is unknown if undocumented minor releases have occurred. Results from a 2018 SI indicate that exceedances of the USEPA Lifetime Health Advisory of PFOS/PFOA were identified in groundwater at the current Fire Station and the Stormwater Drainage Basin. The PFAS plume size is unknown, but sample data from boundary wells confirmed that off base migration is not occurring.
Connecticut Fire Academy	It is unknown whether the Connecticut Fire Academy incorporates AFFF into training exercises. Additionally, CTARNG has participated in burn training exercises with the Connecticut Fire Academy at the academy training areas. The materials used during their training are unknown.
Bradley International Airport Fire Department	It is unknown whether the Bradley International Airport Fire Department trains with AFFF or uses AFFF for emergency response. It is unknown whether the fire department has used AFFF in response historically at any areas in the vicinity of the Windsor Locks AASF.
Bradley International Airport	It is unknown whether the Bradley International Airport utilizes AFFF in any hangar space or fire suppression systems.
Private Aviation Companies at Bradley International Airport	It is unknown whether AFFF is used at the the numerous private facilities surrounding the airport, or if emergency responses using AFFF have occurred at the location.

7.3 Potential Future Actions

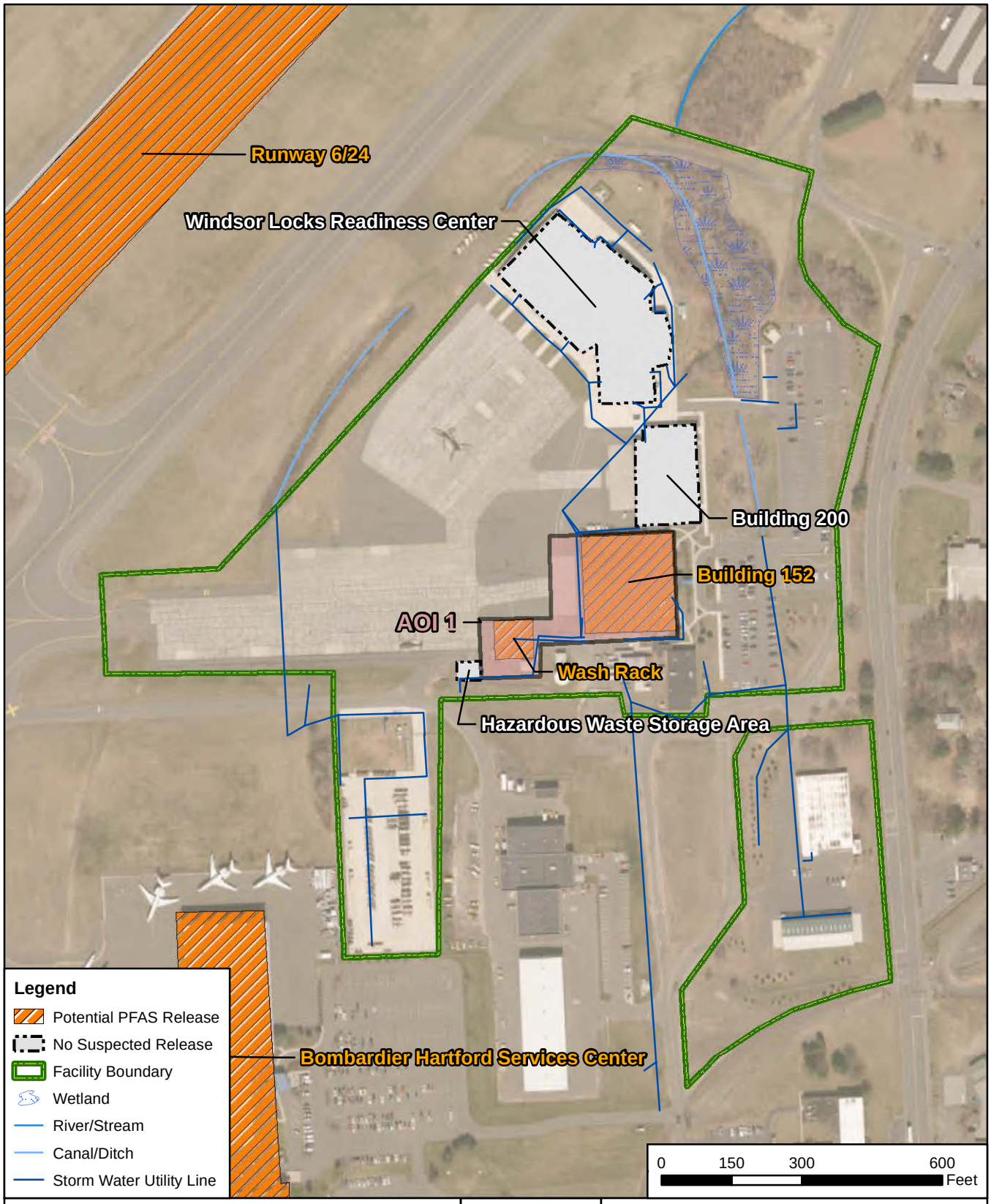
Interviews with CTARNG facility staff whose first-hand knowledge span 31 years at Windsor Locks AASF (1987-present) indicate that CTARNG activities at AOI 1 may have contributed PFAS contamination to soil, groundwater, surface water, and sediment at the facility and surrounding areas.

Based on the CSM developed for AOI 1, there is potential for receptors to be exposed to PFAS contamination in soil, groundwater, surface water, and sediment. **Table 7-1** summarizes the rationale used to determine if the AOI should be considered for further investigation under the CERCLA process and undergo an SI.

ARNG evaluates the need for an SI at Windsor Locks AASF based on the presence of a PFAS release, possible receptors, and the migration of potential PFAS contamination to receptors.

Table 7-1 PA Findings Summary

Area of Interest	AOI Location	Rationale	Potential Future Action
AOI 1 Wash Rack and Building 152	41°56'38.5"N and 72°40'26.7"W	Unknown quantity of AFFF used during fire training between 2003 and 2015	Proceed to an SI, focus on soil, groundwater, surface water, and sediment



CLIENT	ARNG			
NOTES	Preliminary Assessment for PFAS at Windsor Locks AASF, CT			
REVISED	11/5/2019	GIS BY	MS	11/5/2019
SCALE	1:3,600	CHK BY	JW	11/5/2019
Base Map: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS,		PM	RG	11/5/2019

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Summary of Findings

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Figure 7-1

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Appendix A
Data Resources

Data resources will be provided separately on CD. Data resources for Windsor Locks AASF include:

CTARNG Windsor Locks Army Aviation Support Facility License Agreement

- 2011 AASF License No. DACA33-3-11-032

Stormwater Discharge Permit and Analytical Data

- 2011 CTDEEP General Permit for the Discharge of Vehicle Maintenance Wastewater
- 2012 Phoenix Environmental Laboratories, Inc. Windsor Locks AASF Oil-water Separator Analytical Data
- 2013 Phoenix Environmental Laboratories, Inc. Windsor Locks AASF Oil-water Separator Analytical Data
- 2014 Phoenix Environmental Laboratories, Inc. Windsor Locks AASF Oil-water Separator Analytical Data

Previous Investigations and Work Plans

- 1994 Preliminary Assessment of the Federally-owned National Guard Facilities at Bradley Field, Windsor Locks, Connecticut
- 1997 Narrative Report Site Inspection No. 38-EH-2651-96 Army Aviation Support Facility, Bradley Field, Windsor Locks, Connecticut
- 2008 Connecticut Army National Guard Army Aviation Support Facility Tank Fuel Farm Area Corrective Action Plan, Bradley International Airport, Route 75, Windsor Locks, Connecticut
- 2015 Spill Prevention Control and Countermeasures Plan, Connecticut Army National Guard, Army Aviation Support Facility, Bradley International Airport, Windsor Locks, Connecticut
- 2017 Preliminary Assessment Interview Questionnaire, Windsor Locks Army Aviation Support Facility
- 2018 State of Connecticut Military Department Windsor Locks Army Aviation Support Facility Preparedness and Prevention Plan

Aqueous Film Forming Foam Material Safety Data Sheets

- 1999 3M FC-203CF Light Water™ AFFF 3% Material Safety Data Sheet
- 2004 ESF 3% AFFF Material Safety Data Sheet
- 2018 National Foam Aer-O-Lite™ C6 3% AFFF Safety Data Sheet

Aqueous Film Forming Foam Waste Manifest

- 2016 CTARNG AFFF Concentrate Waste Manifest

Connecticut Air National Guard Previous Investigations

- 2016 Final Perfluorinated Compounds Preliminary Assessment Site Visit Report, Bradley Air National Guard Base, East Gransby, Connecticut
- 2017 Final Work Plan FY16 Phase 1 Regional Site Inspections for Perfluorinated Compounds, 103rd Airlift Wing Connecticut Air National Guard, Bradley Air National Guard Base, East Gransby, Connecticut

- 2018 Final Report FY16 Phase 1 Regional Site Inspections for Perfluorinated Compounds, 103rd Airlift Wing Connecticut Air National Guard, Bradley Air National Guard Base, East Gransby, Connecticut

Environmental Data Resources, Inc. Geocheck Report

- 2018 Environmental Data Resources, Inc. Geocheck Report for Windsor Locks AASF, CT

Third Unregulated Contaminant Monitoring Rule Data

- 2015 Third Unregulated Contaminant Monitoring Rule Data for Connecticut

DEPARTMENT OF THE ARMY
NEW ENGLAND DISTRICT, CORPS OF ENGINEERS
696 VIRGINIA ROAD
CONCORD, MASSACHUSETTS 01742-2751

REPLY TO
ATTENTION OF
CENAE-RE-AM

23 March 2011

MEMORANDUM FOR Connecticut Army National Guard, ATTN: Construction and Facilities Management Office (MAJ Dawn Works-Dennis), 360 Broad Street , Hartford, CT 06105

SUBJECT: Army Aviation Support Facility (AASF), Windsor Locks, CT—License No. DACA33-3-11-032 (succeeding License No. DACA51-3-87-80)

1. Enclosed for your records is a fully signed copy of License No. DACA33-3-11-032 (succeeding License No. DACA51-3-87-80). This license is subject to the terms and conditions of Lease No. DACA33-5-10-039. The License provides that when the Army has signed the instrument, former License No. DACA51-3-87-80 will terminate. The Army signed the instrument on 21 March 2011.

2. Point of contact in this office is Maureen McCabe, 978-318-8570.

JOSEPH M. REDLINGER
Chief, Real Estate Division

NO. DACA33-3-11-032

DEPARTMENT OF THE ARMY
LICENSE FOR
ARMY NATIONAL GUARD PURPOSES

Army Aviation Support Facility, Windsor Locks
(Bradley International Airport)

Hartford County, Connecticut

THE SECRETARY OF THE ARMY, hereinafter referred to as the Secretary, under the authority of Title 32, United States Code, Section 503, hereby grants to the **STATE OF CONNECTICUT**, hereinafter referred to as the grantee, a license to use and occupy for training and support of the **Connecticut Army National Guard** approximately 35.33 acres of land, together with the improvements thereon, at the Army Aviation Support Facility (AASF) in Windsor Locks, Connecticut, hereinafter referred to as the premises, as described in Exhibit **A** and shown in Exhibit **B**, attached hereto and made a part hereof.

THIS LICENSE is granted subject to the following conditions:

1. TERM

This license shall be effective beginning as of 1 September 2010 and ending 31 August 2011, but revocable at will by the Secretary.

The land covered hereby is occupied by the United States under Lease No. DACA33-5-10-039 from the State of Connecticut, Department of Transportation for the period beginning 1 September 2010 through 31 August 2011, which provides that, unless and until the Government shall give notice of termination in accordance with the terms thereof, the said lease shall remain in force thereafter from year to year without further notice but in any event it shall expire automatically on 31 October 2055. For such yearly periods that the United States shall allow said lease to remain in effect, this license shall be automatically renewed, but not to extend beyond 31 October 2055, and this license, together with any renewals thereof, shall be subject to all provisions and conditions of said Lease No. DACA33-5-10-039.

2. SUPERVISION BY THE U.S. PROPERTY AND FISCAL OFFICER

The use and occupancy of the premises shall be without cost to the regular establishment of the military departments of the Department of Defense and shall be under the general supervision of the U.S. Property and Fiscal Officer, hereinafter referred to as said officer, and subject to such rules and regulations as may be prescribed from time to time by said officer.

3. APPLICABLE LAWS AND REGULATIONS

The grantee shall comply with all applicable Federal, state, county, and municipal laws, ordinances, and regulations wherein the premises are located.

4. FACILITY MAINTENANCE

The grantee shall maintain and keep the premises in good repair and condition and all costs of operation, maintenance, and restoration shall be paid for from funds available to the grantee, or from funds other than those appropriated for the regular establishment of the military departments.

5. RIGHT TO USE

The United States, hereinafter referred to as the Government, reserves the right to use the premises, or any part thereof, including all buildings and improvements situated thereon, for such purposes as said officer deems necessary in the interest of national defense.

6. COST OF UTILITIES

The grantee shall pay the cost, as determined by the officer having immediate jurisdiction over the premises, of producing and/or supplying any utilities or other services furnished by the Government or through Government-owned facilities for the use of the grantee, including the grantee's proportionate share of the cost of operation and maintenance of the Government-owned facilities by which such utilities or services are produced and supplied. The Government shall be under no obligation to furnish utilities or services. Payment shall be made in the manner prescribed by the officer having such jurisdiction.

7. USE RESTRICTIONS

The buildings and improvements included in this license shall not be used for the quartering of personnel engaged in the national guard activities except when such personnel are in the federal service or are participating in authorized training.

8. IMPROVEMENTS AND ALTERATIONS

Additions to or alteration or improvement of the premises shall not be made without prior written approval of the U.S. Property and Fiscal Officer. All such additions, alterations or improvements shall be maintained by the grantee in good repair and condition. All such work designated as permanent by said officer shall, upon completion, become property of the Government.

9. CONDITION OF PREMISES

The grantee acknowledges that it has inspected the premises, knows its condition, and understands that the same is granted without any representations or warranties whatsoever and without any obligation on the part of the Government.

10. TERMINATION

This license may be terminated by the grantee at any time by giving the District Engineer, U.S. Army Corps of Engineers, New England District, 696 Virginia Road, Concord, MA 01742-2751 at least thirty (30) days notice in writing.

11. RESTORATION

On or before the expiration of this license or its termination by the grantee, the grantee shall vacate the premises, remove its property (except those permanent additions, alterations, and improvements which have become property of the Government under provision of the Condition on **IMPROVEMENTS AND ALTERATIONS**) and restore the premises to a condition satisfactory to said officer, ordinary wear and tear and damage beyond the control of the grantee excepted. If, however, this license is revoked, the grantee shall vacate the premises, remove said property and restore the premises within such time as the said officer may designate. In either event, if the grantee fails to remove said property and restore the premises, then, at the option of said officer, the property shall either become the property of the Government without compensation therefor, or said officer may cause the property to be removed at the expense of the grantee, and no claim for damages against the Government shall be created on account of such action.

12. USE BY OTHERS

The grantee shall not transfer or assign this license, or any interest in the premises, however, upon concurrence of the Director, Army National Guard, National Guard Bureau, the grantee may (1) permit the temporary or intermittent use of the premises by elements of the Department of Defense for joint use or individual training purposes, provided such use will not interfere with the National Guard use; or (2) issue licenses for nonprofit, community service-type activities under the same conditions as those allowed by active installation commanders by existing Army regulations.

13. PROTECTION OF PROPERTY

a. The grantee shall keep the premises in good order and in a clean, safe condition by and at the expense of the grantee. The grantee shall be responsible for any damage that may be caused to property of the United States by the activities of the grantee under this license, and shall exercise due diligence in the protection of all property located on the premises against fire or damage from any and all other causes. Any property of the United States damaged or destroyed by the grantee incident to the exercise of the privileges herein granted shall be

promptly repaired or replaced by the grantee to a condition satisfactory to said officer, or at the election of said officer, reimbursement made therefor by the grantee in an amount necessary to restore or replace the property to a condition satisfactory to said officer.

b. Upon termination of the grantee's requirement for the premises, the grantee shall remain responsible to protect and maintain the premises until transfer to and acceptance by another accountability officer is accomplished or in accordance with applicable laws, rules and regulations.

14. ENVIRONMENTAL PROTECTION

a. Within the limits of their respective legal powers, the parties to this license shall protect the premises against pollution of its air, ground and water. The grantee shall comply with any laws, regulations, conditions or instructions affecting the activity hereby authorized if and when issued by the Environmental Protection Agency, or any Federal, state, interstate or local governmental agency having jurisdiction to abate or prevent pollution. The disposal of any toxic or hazardous materials within the premises is specifically prohibited. Such regulations, conditions or instructions in effect or prescribed by said Environmental Protection Agency, or any Federal, state, interstate or local governmental agency are hereby made a condition of this license. The grantee shall not discharge waste or effluent from the premises in such a manner that the discharge will contaminate streams or other bodies of water or otherwise become a public nuisance.

b. The grantee will use all reasonable means available to protect the environment and natural resources, and where damage nonetheless occurs from the grantee's activities, the grantee shall be liable to restore the damaged resources.

c. The grantee must obtain approval in writing from said officer before any pesticides or herbicides are applied to the premises.

15. ENVIRONMENTAL CONDITION OF PROPERTY

A "Preliminary Final Environmental Assessment and Environmental Impact Evaluation for the Windsor Locks Readiness Center at the Army Aviation Support Facility (Appendix C – Pre-Construction Assessment" (PCA) by Baystate Environmental Consultants dated December 2010, documenting the known history of the property with regard to the storage, release or disposal of hazardous substances thereon, is incorporated herein by reference. Upon expiration, revocation or relinquishment of this license an Environmental Condition of Property (ECP) shall be prepared which will document the environmental condition of the property at that time. A comparison of the two assessments will assist the said officer in determining any environmental restoration requirements. Any such requirements will be completed by the grantee to the satisfaction of the said office.

16. HISTORICAL PRESERVATION

The grantee shall not remove or disturb, or cause or permit to be removed or disturbed, any historical, archeological, architectural, or other cultural artifacts, relics, or objects of antiquity. In the event such items are discovered on the premises, the grantee shall immediately notify said officer and protect the site and material from further disturbance until the said officer gives clearance to proceed.

17. NON-DISCRIMINATION

The grantee shall not discriminate against any person or persons or exclude them from participation in the grantee's operations, programs or activities conducted on the licensed premises because of race, color, religion, sex, age, handicap or national origin. The grantee by acceptance of this license, hereby gives assurance that it will comply with the provisions of Title VI of the Civil Rights Act of 1964 as amended (42 U.S.C. § 2000d); the Age Discrimination Act of 1975 (42 U.S.C § 6102); the Rehabilitation Act of 1973 as amended (29 U.S.C. § 794); and all requirements imposed by or pursuant to the Department of Defense Directive 5500.11 (32 CFR Part 300) issued on December 28, 1964.

18. ADDITIONAL CONDITIONS

a. This license succeeds License No. DACA51-3-87-80, as modified or supplemented. Effective as of the date that this license is signed by the Army, former License No. DACA51-3-87-80 is terminated.

b. The grantee acknowledges that the Pre-Construction Assessment (PCA) referenced in Condition 15 above is sufficient to understand the environmental condition of the property prior to construction and to satisfy the requirements of Army Regulation 200-1. The site is classified as MILCON Category II—there is no known contamination; there remains some potential that contamination may be encountered during construction.

THIS LICENSE is not subject to Title 10, United States Code, Section 2662, as amended.

IN WITNESS WHEREOF, I have hereunto set my hand by authority of the Secretary of the Army, this 21st day of March, 2011.

Joseph M. Redlinger
Chief, Real Estate Division
U.S. Army Corps of Engineers, New England District

License No. DACA33-3-11-032
Army Aviation Support Facility (AASF)
Windsor Locks, CT

THIS LICENSE is also executed by the grantee this 16 day of Mar, 2011.

STATE OF CONNECTICUT
Army National Guard

By: _____
THADDEUS J. MARTIN
Major General, Connecticut National Guard
The Adjutant General

LEGAL DESCRIPTION OF PREMISES

Parcel 1

A certain piece or parcel of land situated in the Town of Windsor Locks, County of Hartford and State of Connecticut. Said Parcel is designated as Parcel No. 1 on a map entitled: "Land to be Leased to the U.S. Government by The State of Connecticut, Bradley International Airport, Windsor Locks, CT, Scale: 1" = 80'-0", Dated: November 1, 2008 (rev. July 11, 2010), Prepared by CTARNG-Construction and Facilities Management Office" certified by Charles P. Sheehan, CTMD, Brigadier General (retired), PLS No. 10840.

Parcel No.1 is more particularly bounded and described as follows:

Beginning at a point located at Connecticut State Plane Grid Coordinate 404,549.69 North and 621,222.02 East which point marks the southeasterly corner of the Parcel herein described;

Thence along land now or formerly of the State of Connecticut S 89° 30' 41" W a distance of 248.35 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut S 89° 30' 41" W a distance of 50.00 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut S 00° 29' 59" E a distance of 44.00 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut S 87° 35' 29" W a distance of 75.67 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut N 89° 00' 38" W a distance of 98.29 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut N 00° 02' 29" E a distance of 54.96 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut S 89° 02' 00" W a distance of 401.69 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut S 00° 58' 00" E a distance of 551.33 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut S 89° 02' 00" W a distance of 205.00 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut N 00° 58' 00" W a distance of 612.83 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut S 89° 20' 00" W a distance of 510.00 feet to a point marking the southwesterly corner of the parcel herein described;

Thence continuing along land now or formerly of the State of Connecticut N 00° 58' 00" W a distance of 232.21 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut N 89° 20' 00" E a distance of 260.72 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut N 44° 18' 00" E a distance of 1304.58 feet to a point marking the northwesterly corner of the parcel herein described;

Thence continuing along land now or formerly of the State of Connecticut S 74° 00' 00" E a distance of 384.34 feet to a point marking the northeasterly corner of the parcel hereinafter described;

Thence continuing along land now or formerly of the State of Connecticut on an arc having a radius of 275 feet and a central angle of 94-16'-04" a distance of 452.45 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut S 19° 46' 49" W a distance of 172.42 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut S 11° 57' 39" W a distance of 192.79 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut S 00° 33' 20" E a distance of 192.44 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut S 02° 53' 37" E a distance of 193.65 feet to the point or place of beginning;

Parcel No. 1 contains an area of 1,333,248.06 square feet (30.61 Acres).

Parcel 2

A certain piece or parcel of land situated in the Town of Windsor Locks, County of Hartford and State of Connecticut. Said Parcel is designated as Parcel No. 2 on a map entitled: "Land to be Leased to the U.S. Government by The State of Connecticut, Bradley International Airport, Windsor Locks, CT, Scale:1" = 80'-0", Dated: November 1, 2008 (rev: July 11, 2010), Prepared by CTARNG-Construction and Facilities Management Office" certified by Charles P. Sheehan, CTMD, Brigadier General (retired), PLS No. 10840.

Parcel No.2 is more particularly bounded and described as follows:

Beginning at a point located at Connecticut State Plane Grid Coordinate 403,918.14 North and 621,314.04 East which point marks the southeasterly corner of the Parcel herein described;

Thence along land now or formerly of the State of Connecticut S 72° 07' 34" W a distance of 27.46 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut on an arc having a radius of 595.86 feet and a central angle of 5-25'-59" a distance of 56.50 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut S 78° 43' 28" W a distance of 7.29 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut on an arc having a radius of 604.04 feet and a central angle of 19-10'-51" a distance of 202.21 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut on an arc having a radius of 604.04 feet and a central angle of 19-10'-51" a distance of 202.21 feet to a point which marks the southwesterly corner of the Parcel herein described;

Thence continuing along land now or formerly of the State of Connecticut N 03° 22' 44" W a distance of 205.53 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut N 38° 55' 00" E a distance of 173.42 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut N 30° 21' 20" E a distance of 63.13 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut N 02° 25' 29" W a distance of 313.69 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut N 29° 04' 48" E a distance of 62.45 feet to a point which point marks the northwesterly corner of the Parcel herein described;

Thence continuing along land now or formerly of the State of Connecticut N 87° 25' 44" E a distance of 57.89 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut N 87° 41' 36" E a distance of 114.23 feet to a point;

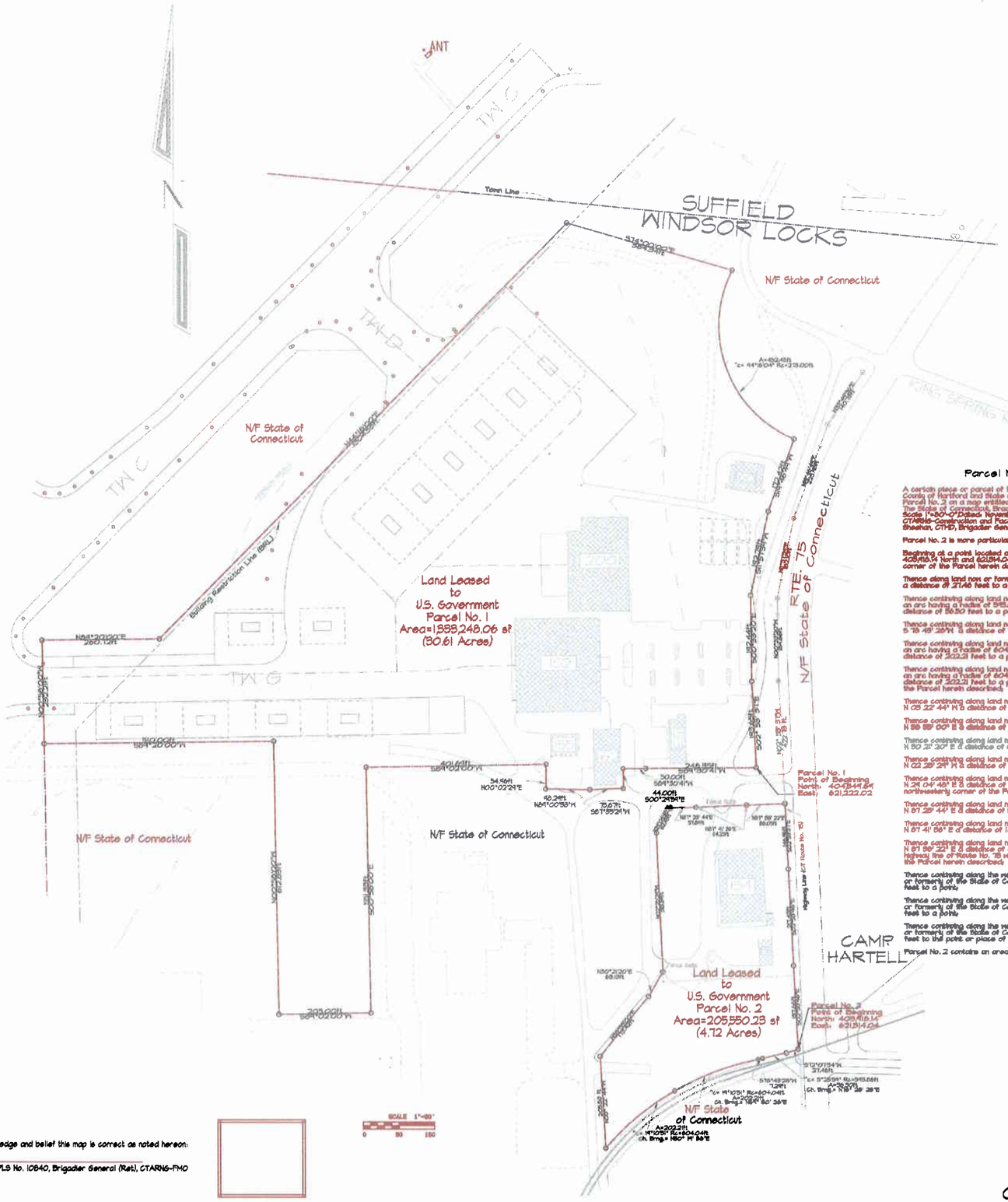
Thence continuing along land now or formerly of the State of Connecticut N 87° 38' 22" E a distance of 86.05 feet to a point located along the westerly highway line of Route No. 75 which point marks the northeasterly corner of the Parcel herein described;

Thence continuing along the westerly highway line of Route No. 75 (land now or formerly of the State of Connecticut) S 02° 53' 37" E a distance of 146.96 feet to a point;

Thence continuing along the westerly highway line of Route No. 75 (land now or formerly of the State of Connecticut) S 02° 53' 46" E a distance of 217.43 feet to a point;

Thence continuing along the westerly highway line of Route No. 75 (land now or formerly of the State of Connecticut) S 02° 53' 46" E a distance of 187.66 feet to the point or place of beginning;

Parcel No. 2 contains an area of 205,550.23 square feet (4.72 Acres)



Certification:
To the best of my knowledge and belief this map is correct as noted hereon:

CHARLES P. SHEEHAN, PLS No. 10840, Brigadier General (Ret), CTARNG-FMO

GENERAL NOTES

1.This survey and map have been prepared pursuant to the Regulations of Connecticut State Agencies 20-300b1 through 20-300b20 and the Standards for Surveys and Maps in the State of Connecticut as adopted by the Connecticut Association of Land Surveyors, Inc. on September 26, 1996.

2.The type of survey performed and the mapped features depicted hereon are in accordance with the requirements of a Topographic and Perimeter Survey with the intention of depicting the area to be leased on Bradley International Airport by the U.S. Government for Connecticut Army National Guard Use.

3.The boundary determination/opinion is based upon a dependent resurvey of the following Map Reference:

a. Exhibit 'A' - Bradley International Airport, Map Showing Land to be Leased to the U.S. Government, Scale 1"=100', Dated 12-08-88 prepared by The Connecticut Department of Transportation, certified by O. Paquette, Chief of Survey.

b. Exhibit 'B' - Bradley International Airport, Map Showing Land to be Leased to the U.S. Government, Scale 1"=40', Dated 12-08-88 prepared by The Connecticut Department of Transportation, certified by O. Paquette, Chief of Survey.

4.The horizontal baseline conforms to Class A-2 accuracy standard. The topographic locations conform to a class T-2 accuracy standard.

5.The bearings and coordinates are based upon the Connecticut Coordinate System N.A.D. 1929 datum derived from horizontal control provided by CONDOT.

Parcel No. 2 - Description

A certain piece or parcel of land situated in the Town of Windsor Locks, County of Hartford and State of Connecticut. Said Parcel is designated as Parcel No. 2 on a map entitled "Land to be Leased to the U.S. Government by The State of Connecticut, Bradley International Airport, Windsor Locks, CT, Scale 1"=80'-0" Dated November 1, 2008 (rev. July 11, 2010), Prepared by CTARNG-Construction and Facilities Management Office" certified by Charles P. Sheehan, CTHD, Brigadier General(retired), PLS No.10840.

Parcel No. 2 is more particularly bounded and described as follows:

Beginning at a point located at Connecticut State Plane Grid Coordinate 403,816.14 North and 821,514.04 East which point marks the southeasterly corner of the Parcel herein described;

Thence along land now or formerly of the State of Connecticut S 72 07' 34" W a distance of 27.46 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut on an arc having a radius of 595.56 feet and a central angle of 5-25-51" a distance of 56.30 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut S 78 49' 25"W a distance of 1.24 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut on an arc having a radius of 604.04 feet and a central angle of 19-10'-51" a distance of 202.21 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut on an arc having a radius of 604.04 feet and a central angle of 19-10'-51" a distance of 202.21 feet to a point which marks the southwesterly corner of the Parcel herein described;

Thence continuing along land now or formerly of the State of Connecticut N 05 22 44" W a distance of 205.55 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut N 86 59' 00" E a distance of 119.42 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut N 50 21' 30" E a distance of 66.16 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut N 02 28' 24" W a distance of 358.64 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut N 24 04' 48" E a distance of 62.49 feet to a point which point marks the northwesterly corner of the Parcel herein described;

Thence continuing along land now or formerly of the State of Connecticut N 67 29' 44" E a distance of 57.64 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut N 87 41' 59" E a distance of 114.28 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut N 81 59' 22" E a distance of 56.05 feet to a point located along the westerly highway line of Route No. 75 which point marks the northeasterly corner of the Parcel herein described;

Thence continuing along the westerly highway line of Route No. 75 (land now or formerly of the State of Connecticut) S 02 59' 57" E a distance of 146.90 feet to a point;

Thence continuing along the westerly highway line of Route No. 75 (land now or formerly of the State of Connecticut) S 02 59' 46" E a distance of 271.49 feet to a point;

Thence continuing along the westerly highway line of Route No. 75 (land now or formerly of the State of Connecticut) S 02 59' 46" E a distance of 157.66 feet to the point or place of beginning.

Parcel No. 2 contains an area of 205,550.23 square feet (4.72 Acres).

Parcel No. 1 - Description

A certain piece or parcel of land situated in the Town of Windsor Locks, County of Hartford and State of Connecticut. Said Parcel is designated as Parcel No. 1 on a map entitled "Land to be Leased to the U.S. Government by The State of Connecticut, Bradley International Airport, Windsor Locks, CT, Scale 1"=80'-0" Dated November 1, 2008 (rev. July 11, 2010) Prepared by CTARNG-Construction and Facilities Management Office" certified by Charles P. Sheehan, CTHD, Brigadier General(retired), PLS No. 10840.

Parcel No.1 is more particularly bounded and described as follows:

Beginning at a point located at Connecticut State Plane Grid Coordinate 404,844.84 North and 821,222.02 East which point marks the south-easterly corner of the Parcel herein described;

Thence along land now or formerly of the State of Connecticut S 84 50' 41" W a distance of 246.55 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut S 84 50 41" W a distance of 50.00 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut S 00 24' 34" E a distance of 44.00 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut S 87 59' 24" W a distance of 15.67 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut N 84 00' 59" W a distance of 48.24 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut N 00 02' 24" E a distance of 34.46 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut S 84 02' 00" W a distance of 401.64 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut S 00 58' 00" E a distance of 591.35 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut S 84 02' 00" W a distance of 328.00 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut N 00 58' 00" W a distance of 512.85 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut S 84 30' 00" W a distance of 190.00 feet to a point marking the southwesterly corner of the parcel herein described;

Thence continuing along land now or formerly of the State of Connecticut N 00 58' 00" W a distance of 282.21 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut N 84 30' 00" E a distance of 280.72 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut N 44 18' 00" E a distance of 190.35 feet to a point marking the northwesterly corner of the parcel herein described;

Thence continuing along land now or formerly of the State of Connecticut S 74 00' 00" E a distance of 184.84 feet to a point marking the northeasterly corner of the parcel herein described;

Thence continuing along land now or formerly of the State of Connecticut on an arc having a radius of 278.00 feet and a central angle of 94-16'-04" a distance of 452.49 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut S 19 46' 44" W a distance of 112.42 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut S 11 57' 54" W a distance of 142.74 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut S 00 59' 20" E a distance of 142.44 feet to a point;

Thence continuing along land now or formerly of the State of Connecticut S 02 59' 57" E a distance of 145.65 feet to the point or place of beginning.

Parcel No. 1 contains an area of 1,988,248.06 square feet (30.61 Acres)

Land to be Leased
to
The U.S. Government
by
The State of Connecticut
Bradley International Airport
Windsor Locks, CT
Scale: 1"=80'-0" Nov. 1, 2008 (rev: July 11, 2010)
Prepared By
CTARNG-Construction and Facilities Manangement Office

EXHIBIT "B"

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF MATERIALS MANAGEMENT AND COMPLIANCE ASSURANCE
PERMITTING AND ENFORCEMENT DIVISION
860-424-3018

General Permit for the Discharge of Vehicle Maintenance Wastewater

Issuance Date: January 23, 2011
Expiration Date: January 23, 2021

Printed on recycled paper

General Permit for the Discharge of Vehicle Maintenance Wastewater

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General Permit for the Discharge of Vehicle Maintenance Wastewater

Section 1. Authority

This general permit is issued under the authority of Sections 22a-430b and 22a-454(e) of the General Statutes and supersedes the Car Wash and Vehicle Service Floor Drain Wastewater General Permits issued by the Commissioner on December 7, 1989.

Section 2. Definitions

Terms used in this general permit shall have the same definitions as contained in Section 22a-423 of the General Statutes and Section 22a-430-3(a) of the Regulations of Connecticut State Agencies. As used in this general permit, the following definitions shall apply:

"*Approval of registration"* means an approval of registration issued under Section 3 of this general permit.

"Authorized discharge*"* means any discharge authorized under this general permit.

"Best management practice" (BMP) means a practice, procedure, structure or facility designed to prevent or minimize environmental damage, or to maintain or enhance environmental quality. BMPs include without limitation treatment requirements, operating procedures, practices to control spillage or leaks, sludge or waste disposal, or providing for drainage from raw material storage.

"Chemical liquids" means chemical liquids as defined by Section 22a-448 of the General Statutes.

"Commissioner" means the commissioner of environmental protection or his agent.

"Department" means the department of environmental protection.

"Facility" means any facility at which an authorized discharge originates.

"Holding tank" means a tank or other container for storing vehicle maintenance wastewater in accordance with this general permit.

"Individual permit" means a permit issued to a named permittee under Section 22a-430 of the General Statutes.

"Maximum daily flow*"* means the greatest volume of wastewater that is discharged during an operating day.

"Municipality" means a city, town or borough of the state.

"Oil or petroleum" means oil or petroleum as defined in Section 22a-448 of the General Statutes.

"Permittee", unless the context indicates otherwise*,* means any person who or municipality which initiates, creates, originates or maintains a discharge of vehicle maintenance wastewater under the authority of this general permit.

"Person" means person as defined by Section 22a-2(c) of the General Statutes.

"POTW Authority" means the chairperson of the Water Pollution Control Authority which owns or operates a Publicly Owned Treatment Works.

"Registrant" means a person who or municipality which files a registration.

"Registration" means a registration form filed with the commissioner pursuant to Section 4 of this general permit.

"Separator" means a device or equipment for separating oil or grit from wastewater.

"Site" means geographically contiguous land or water on which an authorized activity takes place or on which an activity for which authorization is sought under this general permit is proposed to take place. Non-contiguous land or water owned by the same person and connected by a right-of-way which such person controls and to which the public does not have access shall be deemed the same site.

"Small volume autobody *repair facility"* means a facility 1) from which, in connection with autobody repair operations, there is discharged less than 500 gallons per day of vehicle maintenance wastewater, 2) where steam cleaning of engines is not performed, and 3) where neither engine service nor engine repair is performed.

"Small volume vehicle detailing facility" means a facility 1) from which, in connection with vehicle cleaning operations, there is discharged less than 500 gallons per day of vehicle maintenance wastewater, 2) processes less than ten vehicles per day, 3) where automated exterior cleaning equipment is not used, 4) where steam cleaning of engines is not performed, and 5) where neither engine service nor engine repair is performed.

"Temporary vehicle wash area" means an area at any site where, for a period not exceeding twenty-four consecutive hours, nonpermanent structures are set up to collect all wastewater generated during washing operations and maintained for the purpose of washing vehicles.

"Unsewered area" means an area that does not have direct access to a POTW by means of a permanent sewer line.

"Vehicle" means a motorized device for transporting persons or things and including without limitation, every type of aircraft, automobile, bus, golf cart, motorcycle, train, and truck. For the purpose of this general permit, a motorized watercraft is not a vehicle.

"Vehicle maintenance wastewater" means wastewater generated by 1) floor washdown and incidental drippage from vehicles as a result of routine vehicle servicing operations and 2) washing of vehicle exteriors or steam cleaning of vehicle engines.

"Waste oil" means waste oil as defined in Section 22a-448 of the General Statutes.

"Water Pollution Control Authority" means water pollution control authority as referred to in Chapter 103, Title 7.

Section 3. Authorization Under This General Permit

(a) Eligible Activities

The following discharge is authorized by this general permit, provided the requirements of subsection (b) of this section are satisfied: Any discharge of vehicle maintenance wastewater (1) through a sanitary sewer to a POTW, or (2) to a holding tank meeting the requirements of subsection 5(d) of this general permit, from which holding tank the wastewater is transported to a POTW.

Any other discharge of water, substance or material into the waters of the state is not authorized by this general permit, and any person who or municipality which initiates, creates, originates or maintains such a discharge shall first apply for and obtain authorization under Section 22a-430 of the General Statutes or 22a-430(b) of the General Statutes.

(b) Requirements for Authorization

This general permit authorizes the discharge listed in subsection (a) of this section provided:

(1) Registration

(A) A completed registration with respect to such discharge has been filed with the commissioner.

(B) If an applicant is proposing a collection and/or treatment system for such discharge that does not meet the requirements of subsection 5(a)(1) of this general permit, the commissioner has issued an approval of registration with respect to such discharge.

(C) The applicable POTW Authority has approved the discharge in writing on a form provided by the commissioner.

(2) Coastal Area Management

Such discharge is consistent with all applicable goals and policies in Section 22a-92 of the General Statutes, and will not cause adverse impacts to coastal resources as defined in Section 22a-93 of the General Statutes.

(3) Endangered and Threatened Species

Such discharge does not threaten the continued existence of any species listed pursuant to Section 26-306 of the General Statutes as endangered or threatened and will not result in the destruction or adverse modification of habitat designated as essential to such species.

(4) The maximum daily flow of all discharges of vehicle maintenance wastewater generated by a permittee at a single site does not exceed 15,000 gallons per day.

(5) Such discharge is not subject to any provision of Title 40, Parts 403 through 471 of the Code of Federal Regulations.

(c) Geographic Area

This general permit applies throughout the State of Connecticut.

(d) Effective Date and Expiration Date of this General Permit

This general permit is effective on January 23, 2011, and expires on January 23, 2021.

(e) Effective Date of Authorization

(1) A discharge of vehicle maintenance wastewater

(A) from a small volume autobody repair facility or small volume vehicle detailing facility, or

(B) to a treatment and/or collection system that meets the specifications of subdivision 5(a)(1) of this general permit, or

(C) that was previously authorized by a valid individual permit issued by the Department in accordance with section 22a-430 of the Connecticut General Statutes or by the Car Wash or Vehicle Service Floor Drain Wastewater General Permits issued by the Commissioner on December 7, 1989 <u>is authorized by this general permit on the date the commissioner receives a completed registration with respect to such discharge</u>.

(2) A discharge of vehicle maintenance wastewater to a collection and/or treatment system that does *not* meet the specifications of subdivision 5(a)(1) of this general permit and was not previously authorized by a valid individual permit issued by the Department in accordance with section 22a-430 of the Connecticut General Statutes or by the Car Wash or Vehicle Service Floor Drain Wastewater General Permit issued by the Commissioner on December 7, 1989, <u>is authorized by this general permit on the date the commissioner receives a completed professional certification</u> pursuant to subdivision 4(c)(2)(N) of this general permit with respect to such discharge.

(f) Revocation of an Individual Permit

If a discharge which is eligible for authorization under this general permit is presently authorized by an individual permit, such individual permit may be revoked by the commissioner upon a written request by the permittee. If the commissioner revokes such individual permit in writing, such revocation shall take effect on the effective date of authorization of such discharge under this general permit.

(g) Issuance of an Individual Permit

If the commissioner issues an individual permit for a discharge authorized by this general permit, this general permit shall cease to authorize that discharge as of the date such individual permit is issued.

Section 4. Registration Requirements

(a) Who Must File a Registration

Any person or municipality seeking to initiate, create, originate or maintain a discharge of vehicle maintenance wastewater shall file with the commissioner (1) a registration form which meets the requirements of Section 4 of this general permit and (2) the applicable fee.

(b) Scope of Registration

A registrant shall register on one registration form every discharge at a single site for which discharge the registrant seeks authorization under this general permit. Discharges at more than a single site may not be registered on one registration form.

(c) Contents of Registration

(1) Fees

(A) A registration fee of $625.00 for any person or $312.50 for any municipality shall be submitted with a registration for any discharge of vehicle maintenance wastewater from a small volume autobody repair facility or small volume vehicle detailing facility, for any discharge of vehicle maintenance wastewater to a collection and/or treatment system that meets the specifications of subdivision 5(a)(1) of this general permit, or for any discharge that was previously authorized by a valid individual permit issued by the Department in accordance with section 22a-430 of the Connecticut General Statutes or by the Car Wash or Vehicle Service Floor Drain Wastewater General Permit issued by the Commissioner on December 7, 1989.

A registration fee of $1,250.00 for any person or $625.00 for any municipality shall be submitted with a registration for any discharge of vehicle maintenance wastewater to a collection and/or treatment system which does **not** meet the specifications of subdivision 5(a)(1) of this general permit.

A registration shall not be deemed complete and the subject discharge shall not be authorized by this general permit unless the registration fee has been paid in full.

(B) The registration fee shall be paid by certified check or money order payable to the **Department of Environmental Protection**.

(C) The registration fee is non-refundable.

(2) Registration

A registration shall be filed on forms prescribed and provided by the commissioner and shall include the following:

(A) Legal name, address, and telephone number of the person or municipality seeking to initiate, create, originate or maintain a discharge of vehicle maintenance wastewater. If any such person(s) is a corporation or a limited partnership, provide the exact name as registered with the Connecticut Secretary of the State.

(B) Legal name, address, and telephone number of the owner of the property on which the discharge is proposed to take place.

(C) Legal name, address, and telephone number of the registrant's attorney or other representative, if applicable.

(D) Legal name, address, and telephone number of any consultant retained to design or certify the treatment system for the discharge which is the subject of this registration.

(E) Location address of the facility at which the discharge for which the registration is submitted is to take place.

(F) Maximum daily flow of such discharge.

(G) An estimate of when such discharge began or will begin.

(H) A description of the activities generating the discharge.

(I) On a form prescribed and provided by the Commissioner, an approval by the applicable POTW Authority for connection to a POTW.

(J) For a discharge of vehicle maintenance wastewater to a collection and/or treatment system that meets the specifications listed in subdivision 5(a)(1) of this general permit, a completed collection and/or treatment system specification form prescribed and provided by the Commissioner.

(K) For a discharge of vehicle maintenance wastewater to a collection and/or treatment system that does **not** meet the specifications of subdivision 5(a)(1) of this general permit and was **not** previously authorized by a valid individual permit issued in accordance with section 22a-430 of the Connecticut General Statutes or by the Car Wash or Vehicle Service Floor Drain Wastewater General Permit issued by the Commissioner on December 7, 1989, plans and specifications for the proposed collection and/or treatment system as prescribed by the Commissioner.

(L) The signatures of the registrant and of the individual or individuals responsible for preparing the registration, each of whom shall certify in writing as follows:

"I have personally examined and am familiar with the information submitted in this registration, including all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that information is true, accurate and complete to the best of my knowledge and belief;

"That this registration is on complete and accurate forms as prescribed by the commissioner, without alteration of their text;

That I have read the General Permit for the Discharge of Vehicle Maintenance Wastewater issued by the commissioner on ; that each discharge which is the subject of this registration is eligible for authorization under such permit; that if such discharge is an existing discharge, it complies with all applicable requirements of such permit; and that, if necessary, a functioning and effective system or equipment is in place to ensure that all such requirements are complied with so long as each such discharge continues;

That written approval from the POTW Authority with jurisdiction over the receiving POTW has been granted;

I understand that a false statement made in the registration, including all attachments thereto, may, pursuant to Section 22a-6 of the General Statutes, be punishable as a criminal offense under Section 53a-157b of the General Statutes, and may also be punishable under Section 22a-438 of the General Statutes and any other applicable law."

(M) For a discharge of vehicle maintenance wastewater to a collection and/or treatment system that meets the specifications of subdivision 5(a)(1) of this general permit, except for a discharge that was previously authorized by a valid individual permit issued in accordance with section 22a-430 of the Connecticut General Statutes or by the Car Wash or Vehicle Service Floor Drain Wastewater General Permit issued by the Commissioner on December 7, 1989, the following certification, signed by a certified hazardous materials manager or professional engineer licensed to practice in Connecticut, shall be submitted at the time of registration after installation of the proposed treatment system:

"I certify that, in my professional judgement, a treatment system meeting the specifications of subdivision 5(a)(1) has been properly installed to treat the discharge(s) which are the subject of this registration. I further certify that all open floor drains that receive vehicle maintenance wastewater at this facility are directed to the treatment system. Additionally, I certify that there are no unpermitted open floor drains at this facility. This certification is based in part on my review of engineering reports and plans and specifications describing the proposed treatment system and activities creating the discharge and on a visual inspection by me or someone under my direct supervision conducted on _____ of the treatment
[Date of Inspection]
system after it was installed. I further certify that if the treatment system was installed after June 1, 2001, the visual inspection of this system was performed prior to backfilling. I am aware that there are significant penalties for false statements in this certification, including the possibility of fine and imprisonment for knowingly making false statements."

(N) For a discharge of vehicle maintenance wastewater to a collection and/or treatment system that does **not** meet the specifications of subdivision 5(a)(1) of this general permit, except for a discharge that was previously authorized by a valid individual permit issued in accordance with section 22a-430 of the Connecticut General Statutes or by the Car Wash or Vehicle Service Floor Drain Wastewater General Permit issued by the Commissioner on December 7, 1989, the following certification, signed by a certified hazardous materials manager or professional engineer licensed to practice in Connecticut, shall be submitted **after the commissioner issues an approval of the plans and specifications** submitted in accordance with subparagraph (K) of this subdivision:

"I certify that, in my professional judgement, a collection and/or treatment system meeting the specifications provided in _____
(Name of Registrant)
registration and approved by the commissioner on
(Date of Approval)
has been properly installed to treat the discharge(s) which are the subject of this registration. I further certify that all open floor drains that receive vehicle maintenance wastewater at this facility discharge to the collection and/or treatment system. Additionally, I certify that there are no unpermitted open floor drains at this facility. This certification is based in part on my review of engineering reports and plans and specifications describing the proposed collection and/or treatment system and activities creating the discharge and on a visual inspection by me or someone under my direct supervision conducted on _____ of the collection and/or
(Date of Inspection)

treatment system after it was installed. I further certify that if the treatment system was installed after June 1, 2001, the visual inspection of this system was performed prior to backfilling. I am aware that there are significant penalties for false statements in this certification, including the possibility of fine and imprisonment for knowingly making false statements."

(O) For a discharge that was previously authorized by a valid individual permit issued in accordance with section 22a-430 of the Connecticut General Statutes or the Car Wash or Vehicle Service Floor Drain Wastewater General Permits issued by the Commissioner on December 7, 1989, certifications described in paragraphs (M) or (N) of this subdivision are not required. However, one of the following items shall be submitted at the time of registration:

(i) A copy of the approval issued by the Department in accordance with section 22a-430 of the Connecticut General Statutes for the collection and/or treatment system installed to treat the vehicle maintenance wastewaters that are the subject of this registration.

(ii) A copy of Certification Form VW2 or VS2, which was previously submitted to the Department for authorization under the respective Car Wash or Vehicle Service Floor Drain Wastewater General Permit for the vehicle maintenance wastewaters that are the subject of this registration.

(d) Where to File a Registration

(1) A registration shall be filed with the commissioner at the following address:

CENTRAL PERMIT PROCESSING UNIT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127

(2) For any discharge of wastewater to a POTW, a copy of the completed registration form shall also be sent to the POTW Authority which receives or will receive the discharge.

(e) Additional Information

The commissioner may require a registrant to submit additional information which the commissioner reasonably deems necessary to evaluate the consistency of the subject discharge with the requirements for authorization under this general permit.

(f) Action by Commissioner

(1) The commissioner may reject without prejudice a registration if he determines that it does not satisfy the requirements of subdivisions 4(c) or 4(e) of this general permit or more than thirty days have elapsed since the commissioner requested that the registrant submit additional information or the required fee and the registrant has not submitted such information or fee. Any registration refiled after such a rejection shall be accompanied by the fee specified in subdivision 4(c)(1) of this general permit.

(2) The commissioner may disapprove a registration if he finds that the subject activity is inconsistent with the requirements for authorization under Section 3 of this general permit, or for any other reason provided by law.

(3) Disapproval of a registration under this subdivision shall constitute notice to the registrant that the subject activity may not lawfully be conducted or maintained without the issuance of an individual permit.

(4) Rejection, disapproval, or approval of a registration shall be in writing.

Section 5. Conditions of this General Permit

The permittee shall at all times continue to meet the requirements for authorization set forth in Section 3 of this general permit. In addition, a permittee shall assure that every authorized discharge is conducted in accordance with the following conditions:

(a) Treatment Requirements

(1) Except as provided in subdivisions (a)(2) and (a)(3) of this section, every discharge of vehicle maintenance wastewater shall be treated using an oil and/or grit separator which meets the following specifications:

(A) The separator shall have a capacity of at least 1,000 gallons or have a retention time of at least six hours at the average daily flow, whichever is greater.

(B) The separator shall be constructed of precast concrete, precast polymer concrete, cathodically protected steel, or fiberglass.

(i) If the separator is constructed of precast concrete, the following requirements shall apply:

1) The interior of the separator shall be coated with an epoxy sealant resistant to gasoline, oil, and solvents.

2) The exterior of the separator, including the exterior top and bottom and extension to grade manholes, shall be coated with a waterproof sealant.

3) All structural seams shall be located above the static liquid level and grouted with non-shrinking cement or similar material and coated with a waterproof sealant.

4) Voids between separator walls and inlet and outlet piping shall be grouted with non-shrinking cement and coated with a waterproof sealant.

5) Concrete covers shall be permanently removed from the separator.

(ii) If the separator is constructed of polymer concrete, it shall comply with subparagraphs (i)(3), (4) and (5) of this subparagraph (B).

(C) No pipe carrying any other water, material or substance, including but not limited to domestic sewage or stormwater, shall be connected to the separator.

(D) The separator shall have manholes with extensions to grade above the inlet and outlet piping. The extensions shall have steel frames and manhole covers. The manholes, extensions, and accesses to the separator shall be at least 18 inches in diameter.

(E) The inlet extension to grade shall be provided with a properly secured vent line which extends at least eight feet above finished grade. The size of the vent shall be at least half the size of the outlet discharge line from the separator.

(F) The outlet piping shall utilize a tee-pipe on the interior of the separator. The tee-pipe shall be equipped with a stand pipe riser extending up the extension to grade more than three inches above the static liquid level, but no closer than eight inches from the manhole cover. The tee-pipe shall extend to within six to 24 inches from the bottom of the separator.

(G) The outlet discharge line from the separator shall be directly connected to the municipal sanitary sewer or to a holding tank that meets the requirements listed in subsection 5(d) of this general permit.

(H) The diameter of the outlet discharge line shall be at least the size of the inlet pipe and in no event less than four inches.

(2) A discharge of vehicle maintenance wastewater to a collection and/or treatment system that does **not** meet the specifications of subdivision 5(a)(1) of this general permit, shall be treated using a system approved by the Commissioner pursuant to the approval of plans and specifications applicable to such discharge.

(3) A discharge from a small volume autobody repair or small volume vehicle detailing facility does not require treatment.

(b) Effluent Limitations

At no time shall

(1) the pH of vehicle maintenance wastewater exceed 11.0 standard units nor be less than 6.0 standard units, or

(2) oil and grease (hydrocarbon fraction) in such wastewater exceed 100 milligrams per liter.

(c) Pollution Prevention/Best Management Practices

(1) Every structure at the subject facility shall be constructed and maintained, and all operations at the site on which the facility is located shall be conducted, so as to ensure that vehicle maintenance wastewater is directed solely to interior floor drains and **not** to the outdoors. No valve or piping bypass equipment that could prevent vehicle maintenance wastewater from entering appropriate treatment equipment shall be present at such facility or site.

(2) All washing of vehicles or vehicle tires shall be performed inside the wastewater collection structure.

(3) All structures and operations at the subject site shall be located so as to minimize the collection of stormwater in the vehicle service floor drain and vehicle wash areas.

(4) A temporary vehicle wash area at the subject site shall have an impervious ground surface surrounded by an impermeable berm that ensures that all wastewater generated during washing operations is retained within the bermed area. Wastewater from a temporary vehicle wash area shall be treated in accordance with subdivision (a)(1), (a)(2) or (a)(3) of this section and shall be discharged to a POTW or to a holding tank that meets the requirements of subsection (d) of this section.

(5) Storage at the subject facility of any toxic or hazardous materials, as those terms are defined in Section 22a-430-4 Appendix B Tables II, III, and V, and Appendix D of the Regulations of Connecticut State Agencies and 40 CFR 116.4, shall take place within an impermeable containment area capable of holding at least the volume of the largest chemical container used, or ten % of the total volume of all containers used in such containment area, whichever is larger, without overflow from such containment area.

(6) Chemical liquids, waste chemical liquids, oil or petroleum, and waste oil, associated with vehicle maintenance or autobody repair, including without limitation lubricating oils, gasoline, kerosene, anti-freeze, degreasing agents, paints, solvents and rustproofing compounds, shall be stored and disposed of in accordance with all applicable state and federal law, including without limitation Connecticut General Statute 22a-454 and regulations adopted under Connecticut General Statute Section 22a-449(c).

(7) The permittee shall manage any waste oil storage tank and its contents in accordance with the applicable waste management requirements of RCSA Sections 22a-449(c)-100 et seq., including but not limited to those requirements pertaining to the management of used oil.

(8) Any above ground waste oil storage tank located at the facility shall have a capacity of at least 250 gallons.

(9) Any underground waste oil storage tank shall comply with Sections 22a-449 (d)-1 and 22a-449(d)-101 through 113 of the Regulations of Connecticut State Agencies.

(10) At an autobody repair facility, flooring in any area where sanding or grinding of automobile parts occurs shall be swept or vacuumed clean of sand, grit, metal dust and any other material at least once per day and immediately prior to floor washing.

(11) Any spill or release or leakage of any chemical liquid referred to in subdivision (5) or (6) of this subsection shall be immediately cleaned up and disposed of in accordance with all applicable state and federal law. In no case shall such a chemical liquid be disposed of in any floor drain, toilet, sink, sanitary sewer, storm drain, surface water body or on the ground.

(12) Semi-annual inspections of all treatment equipment associated with each discharge authorized by this general permit shall be performed. A log of such inspections shall be maintained at the facility on a copy of the form provided as Attachment A to this general permit. The log shall document the date of the inspection, the inspector's name, title and signature, the quantities, as measured at the time of the inspection, of oil, grease and grit located within the separator, and any maintenance work and changes in equipment associated with such discharge that has taken place at the site since the last inspection.

(13) The separator shall be completely cleaned by a certified waste hauler as often as necessary to assure that the separator continues to operate effectively and efficiently. The quantity of oil, grease and grit located within the separator at any time shall not exceed twenty percent of the distance between the separator base and static liquid level.

(14) During vehicle washing operations, the permittee shall not use any detergent which could cause oil and grease/ hydrocarbon fraction in wastewater to exceed a concentration of 100 milligrams per liter.

(d) Collection and Transport of Treated Wastewater from Unsewered Areas

Any permittee who or which is authorized to discharge vehicle maintenance wastewater under this general permit, and does not have access to sanitary sewer for the disposal of such wastewater shall 1) file a complete registration for the General Permit for the Discharge of Vehicle Maintenance Wastewater with the commissioner, 2) install appropriate facilities to store such wastewater after it has been treated in accordance with subdivision (a)(1) or (a)(2) of this subsection, 3) provide for the conveyance of such wastewater to a POTW by means of a properly licensed transporter for further treatment in the manner prescribed by the applicable POTW Authority and approved by the commissioner, and 4) provide written certification to the POTW Authority that such wastewater is not a hazardous waste as defined in 40CFR261, Subparts C and D. All such wastewater transported to a POTW shall comply with the effluent limitations specified in subsection 5(b) of this general permit.

If a holding tank is constructed to store such treated wastewater, the permittee shall comply with the following:

(1) An aboveground holding tank shall have 110% secondary containment storage capacity and located under cover to prevent or minimize stormwater entry to the containment area.

(2) A below-ground holding tank shall comply with the requirements of Section 22a-449(d) of the Regulations of Connecticut State Agencies.

(3) Any holding tank, whether located above or below-ground, shall be equipped with a high level alarm system clearly audible in the normal working range of responding personnel, which alarm system shall indicate when the volume of wastewater in such holding tank has reached eighty percent of its holding capacity.

(e) Reporting and Record Keeping Requirements

(1) Except as provided in subsection (f) of this section, the permittee shall retain, for at least five years, at the subject facility all analytical results from monitoring and all other information required under this general permit.

(f) Recording and Reporting Violations

(1) (A) Immediately upon learning or having reason to believe that an authorized discharge may cause effluent from or influent to the receiving POTW to violate applicable law, including an effluent limitation in a permit issued to such POTW under Section 22a-430 of the Connecticut General Statutes, or may adversely affect the operations of such POTW, the permittee shall notify the POTW Authority and the Commissioner. If such notification is given by telephone, written notification shall also be delivered to such POTW Authority and the Commissioner within 24 hours of telephone notification.

(B) Within five days of ceasing a discharge authorized by this general permit, the permittee shall deliver written notice to the commissioner at the following address:

INFORMATION AND DATA MANAGEMENT SECTION
BUREAU OF MATERIALS MANAGEMENT AND COMPLIANCE ASSURANCE/PED
DEPARTMENT OF ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127

Such written notice shall include the following information: name and address of the permittee, the maximum daily flow, the date on which the discharge was discontinued, and the name and telephone number of a contact person at the subject site. A copy of this notice shall also be provided to the water pollution control authority.

(2) If any analytical results or monitoring data or any other information indicates that a violation of an effluent limitation or another condition of this general permit has occurred, *the permittee shall immediately take steps to identify and correct any and all conditions causing or contributing to such violation. A log of such violations shall be maintained on site and contain the following information*:

(A) The permit conditions(s) or effluent limitation(s) violated,

(B) The analytical results or other information demonstrating such violation(s); if there are analytical results, a copy thereof shall be retained with the log,

(C) The cause of the violation(s), if known,

(D) Dates and times during which the violation continued,

(E) If the violation was not corrected immediately upon being discovered, the anticipated time it is expected to continue; and upon correction, the date and time of correction,

(F) Steps taken and planned to reduce, eliminate and prevent a reoccurrence of the violation, and the dates such steps have been or will be executed, and

(G) The name, title and signature of the individual recording the information and the date and time of such recording.

(3) If any analytical results or monitoring data indicate 1) that oil and grease (hydrocarbon fraction) exceeds the respective limitation listed in section (b) of this section by greater than or equal to twice such limitation, or 2) that pH falls outside the respective range listed in section (b) of this section by more than one standard unit, the permittee shall notify the Commissioner in writing at the following address, within one week of the violation.

COMPLIANCE SECTION
BUREAU OF MATERIALS MANAGEMENT AND COMPLIANCE ASSURANCE/PED
DEPARTMENT OF ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD CT 06106-5127

(g) Regulations of Connecticut State Agencies Incorporated into this General Permit

The permittee shall comply with all applicable law, including without limitation the following Regulations of Connecticut State Agencies, which are hereby incorporated into this general permit as if fully set forth herein:

(1) Section 22a-430-3:

Subsection (b) General - subparagraph (1)(D) and subdivisions (2), (3), (4) and (5)
Subsection (c) Inspection and Entry.
Subjection (d) Effect of a Permit - subdivisions (1) and (4)
Subsection (e) Duty to Comply
Subsection (f) Proper Operation and Maintenance
Subsection (g) Sludge Disposal
Subsection (h) Duty to Mitigate
Subsection (i) Facility Modifications, Notification - subdivisions (1) and (4)
Subsection (j) Monitoring, Records and Reporting Requirements - subsections (1), (6), (7), (8), (9) and (11) (except subparagraphs (9)(A)(2), and (9)(C))
Subsection (k) Bypass
Subsection (m) Effluent Limitation Violations
Subsection (n) Enforcement
Subsection (o) Resource Conservation
Subsection (p) Spill Prevention and Control
Subsection (q) Instrumentation, Alarms, Flow Recorders
Subsection (r) Equalization

(2) Section 22a-430-4:

Subsection (t) - Prohibitions
Subsection (p) - Revocation, Denial, Modification
Appendices

(h) Reliance on Registration

In evaluating the permittee's registration, the commissioner has relied on information provided by the permittee. If such information proves to be false or incomplete, the permittee's authorization to discharge under this general permit may be suspended or revoked in accordance with law, and the commissioner may take any other legal action provided by law.

(i) Duty to Correct and Report Violations

Except as provided in sections 5(1)(A) and 5(f)(3) of this general permit, upon learning of a violation of a condition of this general permit, a permittee shall immediately take all reasonable action to determine the cause of such violation, correct and mitigate the results of such violation, prevent further such violation, and report in writing such violation and such corrective action to the commissioner within one week of the permittee's learning of such violation. Such information shall be filed in accordance with the certification requirements prescribed in subsection (k) of this section.

(j) Duty to Provide Information

If the commissioner requests any information pertinent to the authorized discharge or to compliance with this general permit or with the permittee's registration or approval of registration under this general permit, the permittee shall provide such information within 30 days of such request. Such information shall be filed in accordance with the certification requirements prescribed in subsection (k) of this section.

(k) Certification of Documents

Any document, including but not limited to any notice, information or report, which is submitted to the commissioner under this general permit shall be signed by the permittee or by a duly authorized representative of the permittee in accordance with Section 22a-430-3(b)(2)(A) of the Regulations of Connecticut State Agencies, and by the individual or individuals responsible for actually preparing such document, each of whom shall certify in writing as follows:

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in this document or its attachments may be punishable as a criminal offense, in accordance with Section 22a-6 of the General Statutes, pursuant to Section 53a-157b of the General Statutes, and in accordance with any other applicable statute."

(l) Date of Filing

For purposes of this general permit, the date of filing with the commissioner of any document is the date such document is received by the commissioner. The word "day" as used in this general permit means the calendar day; if any date specified in the general permit falls on a Saturday, Sunday, or legal holiday, such deadline shall be the next business day thereafter.

(m) False Statements

Any false statement in any information submitted pursuant to this general permit may be punishable as a criminal offense, in accordance with Section 22a-6, under Section 53a-157b of the General Statutes.

(n) Correction of Inaccuracies

Within fifteen days after the date a permittee becomes aware of a change in any information in any material submitted pursuant to this general permit, or becomes aware that any such information is inaccurate or misleading or that any relevant information has been omitted, such permittee shall correct the inaccurate or misleading information or supply the omitted information in writing to the commissioner. Such information shall be filed in accordance with the certification requirements prescribed in subsection (k) of this section.

(o) Transfer of Authorization

Any authorization under this general permit shall be non-transferable.

(p) Other Applicable Law

Nothing in this general permit shall relieve the permittee of the obligation to comply with any other applicable federal, state and local law, including but not limited to the obligation to obtain any other authorizations required by such law.

(q) Other Rights

This general permit is subject to and does not derogate any present or future rights or powers of the State of Connecticut and conveys no rights in real or personal property nor any exclusive privileges, and is subject to all public and private rights and to any federal, state, and local laws pertinent to the property or activity affected by such general permit. In conducting any activity authorized hereunder, the permittee may not cause pollution, impairment, or destruction of the air, water, or other natural resources of this state. The issuance of this general permit shall not create any presumption that this general permit should or will be renewed.

Section 6. Commissioner's Powers

(a) Abatement of Violations

The commissioner may take any action provided by law to abate a violation of this general permit, including the commencement of proceedings to collect penalties for such violation. The commissioner may, by summary proceedings or otherwise and for any reason provided by law, including violation of this general permit, revoke a permittee's authorization hereunder in accordance with Sections 22a-3a-2 through 22a-3a-6, inclusive, of the Regulations of Connecticut State Agencies. Nothing herein shall be construed to affect any remedy available to the commissioner by law.

(b) General Permit Revocation, Suspension, or Modification

The commissioner may, for any reason provided by law, by summary proceedings or otherwise, revoke or suspend this general permit or modify it to establish any appropriate conditions, schedules of compliance, or other provisions which may be necessary to protect human health or the environment.

(c) Filing of an Individual Application

If the commissioner notifies a permittee in writing that such permittee must obtain an individual permit if he wishes to continue lawfully conducting the discharge authorized by this general permit, the permittee may continue conducting such discharge only if he files an application for an individual permit within 30 days of receiving the commissioner's notice. While such application is pending before the commissioner, the permittee shall comply with the terms and conditions of this general permit and any approval of registration. Nothing herein shall affect the commissioner's power to revoke a permittee's authorization under this general permit at any time.

Issued Date: January 27, 2011

AMEY W. MARRELLA
Commissioner

This is a true and accurate copy of the general permit executed on January 27, 2011 by the Commissioner of the Department of Environmental Protection.

Attachment A: Treatment System Inspection/Clean-out Log

Date	Inspector			Separator Measurements			Separator Maintenance		
	Name	Title	Signature	Sand [1] [inches]	Oil & Grease [1] [inches]	Working Depth [2] [inches]	Clean-out [1] Date	Clean-out [1] Contractor	Other
/ /							/ /		
/ /							/ /		
/ /							/ /		
/ /							/ /		
/ /							/ /		
/ /							/ /		
/ /							/ /		
/ /							/ /		
/ /							/ /		
/ /							/ /		

[1] The separator shall be completely cleaned by a certified waste hauler as often as necessary to assure that the separator continues to operate effectively and efficiently. The quantity of oil, grease and grit located within the separator at any time shall not exceed twenty percent of the distance between the separator base and static liquid level.

[2] The working depth is the distance between the separator base and static liquid level.

PHOENIX
Environmental Laboratories, Inc.

Wednesday, October 03, 2012

Attn: Mr. John Jablonski, CHMM
State of CT Military Dept
360 Broad Street
Hartford, CT 06105-3780

Project ID:
Sample ID#s: BC67993 - BC67996

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone (860) 645-1102 Fax (860) 645-0823

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

October 03, 2012

FOR: Attn: Mr. John Jablonski, CHMM
State of CT Military Dept
360 Broad Street
Hartford, CT 06105-3780

Sample Information		Custody Information		Date	Time
Matrix:	OIL	Collected by:		09/13/12	0:00
Location Code:	CTAIRNGD	Received by:	LB	09/13/12	14:00
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	13024				

Laboratory Data

SDG ID: GBC67993
Phoenix ID: BC67993

Project ID:
Client ID: USED OIL

Parameter	Result	RL/ PQL	Units	Date/Time	By	Reference	
Flash Point	>200	200	degree F	09/17/12	Y	SW1010	
Ignitability	Passed	140	deg F	09/17/12	Y	SW1010	
Total Halogens	43.6	20	mg/Kg	09/25/12	*	SW9076	S

S = This parameter is subcontracted.

RL/PQL=Reporting/Pratical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

Ignitability is based solely on the results of the closed cup flashpoint analysis performed above.

* Total Halogens analyzed by CT certified lab #PH-0520. CT does not certify for this parameter.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
October 03, 2012
Reviewed and Released by: Johanna Harrington, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

October 03, 2012

FOR: Attn: Mr. John Jablonski, CHMM
State of CT Military Dept
360 Broad Street
Hartford, CT 06105-3780

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:		09/13/12	0:00
Location Code:	CTAIRNGD	Received by:	LB	09/13/12	14:00
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	13024				

Laboratory Data

SDG ID: GBC67993
Phoenix ID: BC67994

Project ID:
Client ID: OIL WATER SEP #1

Parameter	Result	RL/ PQL	Units	Date/Time	By	Reference
Oil and Grease by EPA 1664	< 1.4	1.4	mg/L	09/19/12	ESG	EPA 1664A

RL/PQL=Reporting/Pratical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
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Phyllis Shiller, Laboratory Director
October 03, 2012
Reviewed and Released by: Johanna Harrington, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

October 03, 2012

FOR: Attn: Mr. John Jablonski, CHMM
State of CT Military Dept
360 Broad Street
Hartford, CT 06105-3780

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:		09/13/12	0:00
Location Code:	CTAIRNGD	Received by:	LB	09/13/12	14:00
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	13024				

Laboratory Data

SDG ID: GBC67993
Phoenix ID: BC67995

Project ID:
Client ID: OIL WATER SEP #2

Parameter	Result	RL/ PQL	Units	Date/Time	By	Reference
Oil and Grease by EPA 1664	100	1.4	mg/L	09/19/12	ESG	EPA 1664A

RL/PQL=Reporting/Pratical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
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Phyllis Shiller, Laboratory Director
October 03, 2012
Reviewed and Released by: Johanna Harrington, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

October 03, 2012

FOR: Attn: Mr. John Jablonski, CHMM
State of CT Military Dept
360 Broad Street
Hartford, CT 06105-3780

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		09/13/12	0:00
Location Code:	CTAIRNGD	Received by:	LB	09/13/12	14:00
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	13024				

Laboratory Data

SDG ID: GBC67993
Phoenix ID: BC67996

Project ID:
Client ID: SHOP RAGS

Parameter	Result	RL/ PQL	Units	Date/Time	By	Reference
Silver	3.02	0.34	mg/Kg	09/14/12	LK	SW6010
Arsenic	< 0.7	0.7	mg/Kg	09/14/12	LK	SW6010
Barium	65.6	0.34	mg/Kg	09/14/12	LK	SW6010
Cadmium	670	3.4	mg/Kg	09/17/12	LK	SW6010
Chromium	112	0.34	mg/Kg	09/14/12	LK	SW6010
Mercury	< 0.08	0.08	mg/Kg	09/14/12	JA	SW-7471
Lead	29.9	0.34	mg/Kg	09/14/12	LK	SW6010
Selenium	< 1.4	1.4	mg/Kg	09/14/12	LK	SW6010
TCLP Silver	< 0.10	0.10	mg/L	09/16/12	LK	SW6010
TCLP Arsenic	< 0.10	0.10	mg/L	09/16/12	LK	SW6010
TCLP Barium	0.50	0.10	mg/L	09/16/12	LK	SW6010
TCLP Cadmium	4.59	0.050	mg/L	09/16/12	LK	SW6010
TCLP Chromium	0.42	0.10	mg/L	09/16/12	LK	SW6010
TCLP Mercury	< 0.0002	0.0002	mg/L	09/17/12	JA	SW7470
TCLP Lead	0.11	0.10	mg/L	09/16/12	LK	SW6010
TCLP Selenium	< 0.10	0.10	mg/L	09/16/12	LK	SW6010
TCLP Metals Digestion	Completed			09/14/12	X/X	SW3005
Percent Solid	100	1	%	09/14/12	LB	E160.3
Mercury Digestion	Completed			09/14/12	X/X	SW7471
TCLP Digestion Mercury	Completed			09/17/12	X/X	E1311/7470
TCLP Extraction for Metals	Completed			09/13/12	X	EPA 1311
Total Metals Digest	Completed			09/13/12	AG	SW846 - 3050

Project ID:
Client ID: SHOP RAGS

Phoenix I.D.: BC67996

Parameter	Result	RL/ PQL	Units	Date/Time	By	Reference

RL/PQL=Reporting/Pratical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
October 03, 2012
Reviewed and Released by: Johanna Harrington, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

October 03, 2012

QA/QC Data

SDG I.D.: GBC67993

Parameter	Blank	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 209259, QC Sample No: BC67628 (BC67996)													
Mercury - Soil	BRL	<0.08	<0.09	NC	89.5	101	12.1	92.6	125	29.8	70 - 130	30	
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.													
QA/QC Batch 209294, QC Sample No: BC68344 (BC67996)													
ICP Metals - TCLP Extraction													
Arsenic	BRL	<0.10	<0.10	NC	114	109	4.5	102	104	1.9	75 - 125	20	
Barium	BRL	0.44	0.53	18.6	99.2	99.9	0.7	101	103	2.0	75 - 125	20	
Cadmium	BRL	<0.050	<0.050	NC	102	96.2	5.9	98.1	101	2.9	75 - 125	20	
Chromium	BRL	<0.10	<0.10	NC	104	98.2	5.7	97.9	100	2.1	75 - 125	20	
Lead	BRL	0.17	0.21	21.1	101	96.5	4.6	98.5	101	2.5	75 - 125	20	r
Selenium	BRL	<0.10	<0.10	NC	117	113	3.5	107	109	1.9	75 - 125	20	
Silver	BRL	<0.10	<0.10	NC	111	111	0.0	103	105	1.9	75 - 125	20	
QA/QC Batch 209207, QC Sample No: BC68523 (BC67996)													
ICP Metals - Soil													
Arsenic	BRL	3.7	5.39	37.2	95.0			93.4	91.8	1.7	75 - 125	30	r
Barium	BRL	41.9	38.3	9.00	95.0			105	105	0.0	75 - 125	30	
Cadmium	BRL	<0.36	<0.35	NC	94.5			92.7	91.5	1.3	75 - 125	30	
Chromium	BRL	12.7	14.5	13.2	96.0			112	107	4.6	75 - 125	30	
Lead	BRL	6.79	8.74	25.1	95.7			94.3	93.1	1.3	75 - 125	30	
Selenium	BRL	<1.4	<1.4	NC	87.0			85.1	84.0	1.3	75 - 125	30	
Silver	BRL	<0.36	<0.35	NC	92.1			96.9	93.6	3.5	75 - 125	30	
QA/QC Batch 209380, QC Sample No: BC69172 (BC67996)													
Mercury - Water	BRL	<0.0002	<0.0002	NC	108	105	2.8	103	108	4.7	70 - 130	20	
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.													

r = This parameter is outside laboratory rpd specified recovery limits.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

October 03, 2012

QA/QC Data

SDG I.D.: GBC67993

Parameter	Blank	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 209574, QC Sample No: BC67981 (BC67994, BC67995)												
Oil and Grease by EPA 1664	BRL	2.2			94.0						85 - 115	20
QA/QC Batch 209576, QC Sample No: BC67981 (BC67994, BC67995)												
Oil and Grease by EPA 1664	BRL	2.2			94.0						85 - 115	20
QA/QC Batch 209378, QC Sample No: BC68673 (BC67993)												
Flash Point		>200	>200	NC	101						85 - 115	30

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
October 03, 2012

Wednesday, October 03, 2012

Requested Criteria: None

State: CT

Sample Criteria Exceedences Report

GBC67993 - CTAIRNGD

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
BC67996	TCLP-CD	TCLP Cadmium	EPA / 40 CFR 261.24 / Toxicity Characteristics	4.59	0.050	1	1	mg/L

Phoenix Laboratories does not assume responsibility for the data contained in this report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

PHOENIX Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Temp | Pg of

Data Delivery:
☐ Fax #:
☐ Email:

Customer: Army Aviation Support facility (AASF)
Address: Bradley Int'l Airport/Rte 75
Windsor Locks, CT 06096

Project:
Report to: John Sublinski
Invoice to:

Project P.O: 13024
Phone #:
Fax #:

Client Sample - Information - Identification

Sampler's Signature: [signature] Date: 9-13-12

Matrix Code:
DW=drinking water WW=wastewater S=soil/solid O=oil
GW=groundwater SL=sludge A=air X=other

Analysis Request

Phoenix Sample #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	Flash Point	Total Halogens	Total Metals RCRA 8	Total Oil + Grease + PH	TCLP	RCRA 8 Metals					Ziplock Inc	Soil VOA Vials [ ] methanol [ ] Sod Bisulfate	GL Soil container ( ) oz	GL Soil container (8) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
67993	Used oil				X	X												✓							
67994	*oil water sep #1							X												✓					
67995	*o/w sep #2							X												✓					
67996	Shop rags								X		X				✓										

Relinquished by:	Accepted by:	Date:	Time:
Jason Lerette	J. Pierson	9-13-12	
J. Pierson	[signature]	9-13-12	14:00

Comments, Special Requirements or Regulations:
* unable to run PH Rcvd HCL preserved
Amber. (LB) JRP

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ Standard
☐ Other
* SURCHARGE APPLIES

CT/RI
☐ RCP Cert
☐ GW Protect
☐ GA Mobility
☐ GB Mobility
☐ SW Protection
☐ Res. Vol.
☐ Ind. Vol.
☐ Res. Criteria
☐ Other

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

Data Format
☐ Excel
☐ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ ASP-A
☐ NJ Reduced Deliv. *
☐ NJ Hazsite EDD
☐ Phoenix Std Report
☐ Other

State where samples were collected:

PHOENIX
Environmental Laboratories, Inc.

Monday, December 23, 2013

Attn: Mr. John Jablonski, CHMM
State of CT Military Dept
360 Broad Street
Hartford, CT 06105-3780

Project ID: ARMY AVIATION SUPPORT FACILITY/CT ARMY
Sample ID#s: BF88332 - BF88335

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone (860) 645-1102 Fax (860) 645-0823

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

December 23, 2013

FOR: Attn: Mr. John Jablonski, CHMM
State of CT Military Dept
360 Broad Street
Hartford, CT 06105-3780

Sample Information		Custody Information		Date	Time
Matrix:	OIL	Collected by:		12/13/13	10:00
Location Code:	CTAIRNGD	Received by:	LB	12/13/13	14:12
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	15165				

Laboratory Data

SDG ID: GBF88332
Phoenix ID: BF88332

Project ID: ARMY AVIATION SUPPORT FACILITY/CT ARMY
Client ID: USED OIL

Parameter	Result	RL/ PQL	Units	Date/Time	By	Reference	
Flash Point	>200	200	degree F	12/17/13	Y	SW1010	
Ignitability	Passed	140	degree F	12/17/13	Y	SW1030	
Total Halogens	BRL	20	mg/Kg	12/19/13	*	SW9076	S

S = This parameter is subcontracted.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

Ignitability is based solely on the results of the closed cup flashpoint analysis performed above. Passed is >140 degree F.

*TOX analysis was completed by a CT certified lab PH-*0520.

Total Halogens was analyzed by CT certified lab #PH-0520.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
December 23, 2013
Reviewed and Released by: Kathleen Cressia, QA/QC Officer

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

December 23, 2013

FOR: Attn: Mr. John Jablonski, CHMM
State of CT Military Dept
360 Broad Street
Hartford, CT 06105-3780

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		12/13/13	10:00
Location Code:	CTAIRNGD	Received by:	LB	12/13/13	14:12
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	15165				

Laboratory Data

SDG ID: GBF88332
Phoenix ID: BF88333

Project ID: ARMY AVIATION SUPPORT FACILITY/CT ARMY
Client ID: SHOP RAGS

Parameter	Result	RL/ PQL	Units	Date/Time	By	Reference	
TCLP Silver	< 0.10	0.10	mg/L	12/16/13	EK	SW6010	
TCLP Arsenic	< 0.10	0.10	mg/L	12/16/13	EK	SW6010	
TCLP Barium	1.01	0.10	mg/L	12/16/13	EK	SW6010	B
TCLP Cadmium	1.60	0.050	mg/L	12/16/13	EK	SW6010	
TCLP Chromium	0.82	0.10	mg/L	12/16/13	EK	SW6010	
TCLP Mercury	< 0.002	0.002	mg/L	12/16/13	RS	SW7470	
TCLP Lead	1.00	0.10	mg/L	12/16/13	EK	SW6010	
TCLP Selenium	< 0.10	0.10	mg/L	12/16/13	EK	SW6010	
TCLP Metals Digestion	Completed			12/16/13	I/I	SW3005	
TCLP Digestion Mercury	Completed			12/16/13	I/I	E1311/7470	
TCLP Extraction for Metals	Completed			12/13/13	I	EPA 1311	

B = Present in blank, no bias suspected.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
December 23, 2013
Reviewed and Released by: Kathleen Cressia, QA/QC Officer

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

December 23, 2013

FOR: Attn: Mr. John Jablonski, CHMM
State of CT Military Dept
360 Broad Street
Hartford, CT 06105-3780

Sample Information		Custody Information		Date	Time
Matrix:	LIQUID	Collected by:		12/13/13	10:00
Location Code:	CTAIRNGD	Received by:	LB	12/13/13	14:12
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	15165				

Laboratory Data

SDG ID: GBF88332
Phoenix ID: BF88334

Project ID: ARMY AVIATION SUPPORT FACILITY/CT ARMY
Client ID: OWS #1

Parameter	Result	RL/ PQL	Units	Date/Time	By	Reference
Silver	< 0.010	0.010	mg/L	12/16/13	EK	SW6010
Arsenic	< 0.040	0.040	mg/L	12/16/13	EK	SW6010
Barium	0.075	0.020	mg/L	12/16/13	EK	SW6010
Cadmium	0.015	0.010	mg/L	12/16/13	EK	SW6010
Chromium	< 0.010	0.010	mg/L	12/16/13	EK	SW6010
Mercury	< 0.002	0.002	mg/L	12/16/13	RS	SW7470
Lead	< 0.020	0.020	mg/L	12/16/13	EK	SW6010
Selenium	< 0.10	0.10	mg/L	12/17/13	LK	SW6010
Oil and Grease by EPA 1664	56	1.4	mg/L	12/18/13	MA	EPA 1664A
Mercury Digestion	Completed			12/16/13	I/I	SW7470
Total Metals Digestion	Completed			12/13/13	AG	SW846 - 3050

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
December 23, 2013
Reviewed and Released by: Kathleen Cressia, QA/QC Officer

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

December 23, 2013

FOR: Attn: Mr. John Jablonski, CHMM
State of CT Military Dept
360 Broad Street
Hartford, CT 06105-3780

Sample Information		Custody Information		Date	Time
Matrix:	LIQUID	Collected by:		12/13/13	10:00
Location Code:	CTAIRNGD	Received by:	LB	12/13/13	14:12
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	15165				

Laboratory Data

SDG ID: GBF88332
Phoenix ID: BF88335

Project ID: ARMY AVIATION SUPPORT FACILITY/CT ARMY
Client ID: OWS #2

Parameter	Result	RL/ PQL	Units	Date/Time	By	Reference
Silver	< 0.010	0.010	mg/L	12/17/13	LK	SW6010
Arsenic	< 0.040	0.040	mg/L	12/17/13	LK	SW6010
Barium	0.072	0.020	mg/L	12/16/13	EK	SW6010
Cadmium	0.033	0.010	mg/L	12/17/13	LK	SW6010
Chromium	< 0.010	0.010	mg/L	12/16/13	EK	SW6010
Mercury	< 0.002	0.002	mg/L	12/16/13	RS	SW7470
Lead	< 0.020	0.020	mg/L	12/17/13	LK	SW6010
Selenium	< 0.10	0.10	mg/L	12/17/13	LK	SW6010
Oil and Grease by EPA 1664	63	1.4	mg/L	12/18/13	MA	EPA 1664A
Mercury Digestion	Completed			12/16/13	I/I	SW7470
Total Metals Digestion	Completed			12/13/13	AG	SW846 - 3050

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

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Phyllis Shiller, Laboratory Director
December 23, 2013
Reviewed and Released by: Kathleen Cressia, QA/QC Officer

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

December 23, 2013

QA/QC Data

SDG I.D.: GBF88332

Parameter	Blank	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 262186, QC Sample No: BF88057 (BF88333)												
ICP Metals - TCLP Extraction												
Arsenic	BRL	0.02	<0.01	NC	115	115	0.0	111	114	2.7	75 - 125	20
Barium	0.02	0.83	0.84	1.20	104	104	0.0	105	113	7.3	75 - 125	20
Cadmium	BRL	<0.005	<0.005	NC	108	108	0.0	103	105	1.9	75 - 125	20
Chromium	BRL	<0.010	<0.010	NC	105	105	0.0	102	104	1.9	75 - 125	20
Lead	BRL	<0.010	<0.010	NC	103	104	1.0	101	103	2.0	75 - 125	20
Selenium	BRL	0.02	<0.01	NC	116	117	0.9	112	115	2.6	75 - 125	20
Silver	BRL	<0.010	<0.010	NC	107	108	0.9	106	109	2.8	75 - 125	20
QA/QC Batch 262339, QC Sample No: BF88352 (BF88333, BF88334, BF88335)												
Mercury - Water	BRL	<0.0002	<0.0002	NC	103	106	2.9	109	107	1.9	70 - 130	20
Comment:												
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.												
QA/QC Batch 262271, QC Sample No: BF88474 (BF88334, BF88335)												
ICP Metals - Aqueous												
Arsenic	BRL	0.002	<0.004	NC	101	101	0.0	102	100	2.0	75 - 125	20
Barium	BRL	0.032	0.033	3.10	103	105	1.9	103	103	0.0	75 - 125	20
Cadmium	BRL	0.006	0.006	0	101	99.8	1.2	102	99.1	2.9	75 - 125	20
Chromium	BRL	<0.001	<0.001	NC	98.9	98.9	0.0	99.7	97.8	1.9	75 - 125	20
Lead	BRL	0.191	0.198	3.60	99.4	99.5	0.1	101	97.9	3.1	75 - 125	20
Selenium	BRL	<0.010	<0.010	NC	98.1	97.8	0.3	97.7	97.2	0.5	75 - 125	20
Silver	BRL	<0.001	<0.001	NC	98.8	98.6	0.2	96.6	96.8	0.2	75 - 125	20

Environmental Laboratories, Inc.
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Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

December 23, 2013

QA/QC Data

SDG I.D.: GBF88332

Parameter	Blank	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 262564, QC Sample No: BF88217 (BF88334, BF88335)												
Oil and Grease by EPA 1664	BRL				98.0						85 - 115	20
QA/QC Batch 262461, QC Sample No: BF88471 (BF88332)												
Flash Point		>200	>200	NC	100						85 - 115	30

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
December 23, 2013

Monday, December 23, 2013

Requested Criteria: None

State: CT

Sample Criteria Exceedences Report

GBF88332 - CTAIRNGD

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
BF88333	TCLP-CD	TCLP Cadmium	EPA / 40 CFR 261.24 / Toxicity Characteristics	1.60	0.050	1	1	mg/L

Phoenix Laboratories does not assume responsibility for the data contained in this report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

Cooler: Yes ☐ No ☑
Coolant: IPK ☐ ICE ☐ No ☑
Temp 1 °C Pg of 1

PHOENIX Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Contact Options:
☐ Fax:
☐ Phone:
☐ Email:

Customer: Tradebe Environmental Services
Address: 136 Gracey Avenue
Meriden, CT 06451

Project: Army Aviation Support Facility/CT Army
Report to:
Invoice to:

Project P.O: 15165

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature: [signature] Date: 12-13-13

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
RW=Raw Water **SE**=Sediment **SL**=Sludge **S**=Soil **SD**=Solid **W**=Wipe
OIL=Oil **B**=Bulk **L**=Liquid

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	Flash Point	Total Halogens	TCLP RCRA Metals	Total Oil + Grease	Total RCRA Metals	32 oz glass	Soil VOA Vials [ ] methanol [ ] H2O	GL Soil container (4) oz	GL Soil container (2) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
88332	Used Oil	O	12-13-13	10:00AM	X	X							1	1						
88333	Shop Rags	S	12-13-13	10:00AM			X			1										
88334	OWS #1	L	12-13-13	10:00AM				X	X						1			1		
88335	OWS #2	L	12-13-13	10:00AM				X	X						1			1		

Relinquished by:	Accepted by:	Date:	Time:
[signature]	Charadise	12-13-13	14:12

Comments, Special Requirements or Regulations:
Billing: State of CT, Military Department
360 Broad St.
Hartford, CT 06105-3779
Site: Army Aviation Support Facility/CT Army National Guard
Bradley International Airport
Windsor Locks, CT 06096

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☐ Standard
☐ Other
* SURCHARGE APPLIES

RI
☐ Direct Exposure (Residential)
☐ GW
☐ Other

CT
☐ RCP Cert
☐ GW Protection
☐ SW Protection
☐ GA Mobility
☐ GB Mobility
☐ Residential DEC
☐ I/C DEC
☐ Other

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

State where samples were collected:

Data Format
☐ Excel
☐ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☐ Phoenix Std Report
☐ Other

* SURCHARGE APPLIES

PHOENIX
Environmental Laboratories, Inc.

Thursday, December 11, 2014

Attn: Mr. John Jablonski
State of CT Military Dept
360 Broad Street
Hartford, CT 06105-3780

Project ID: CTARNG 16260
Sample ID#s: BH48939 - BH48942

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone (860) 645-1102 Fax (860) 645-0823

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

December 11, 2014

FOR: Attn: Mr. John Jablonski
State of CT Military Dept
360 Broad Street
Hartford, CT 06105-3780

Sample Information		Custody Information		Date	Time
Matrix:	OIL	Collected by:	JJ	12/04/14	8:50
Location Code:	CTAIRNGD	Received by:	LB	12/04/14	11:37
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	MILM1-0000014398				

Laboratory Data

SDG ID: GBH48939
Phoenix ID: BH48939

Project ID: CTARNG 16260
Client ID: USED OIL AASF

Parameter	Result	RL/ PQL	Units	Date/Time	By	Reference	
Silver	< 0.9	0.9	mg/kg	12/05/14	EK	SW6010	
Arsenic	< 0.9	0.9	mg/kg	12/05/14	EK	SW6010	
Barium	< 0.9	0.9	mg/kg	12/05/14	EK	SW6010	
Cadmium	< 0.9	0.9	mg/kg	12/05/14	EK	SW6010	
Chromium	< 0.9	0.9	mg/Kg	12/05/14	EK	SW6010	
Mercury	< 0.06	0.06	mg/kg	12/05/14	MA	SW-7471	
Lead	< 0.9	0.9	mg/kg	12/05/14	EK	SW6010	
Selenium	< 2.3	2.3	mg/kg	12/05/14	EK	SW6010	
Flash Point	>200	200	degree F	12/05/14	I	SW1010	
Ignitability	Passed	140	degree F	12/05/14	I	SW1010	
Mercury digestion	Completed			12/05/14	I/I	SW7471	
Oil digestion for Metals	Completed			12/04/14	CB/AG	SW846-3031	
Total Halogens	<50	50	mg/Kg	12/08/14	*	SW9076	S

Project ID: CTARNG 16260
Client ID: USED OIL AASF

Phoenix I.D.: BH48939

Parameter	Result	RL/ PQL	Units	Date/Time	By	Reference

S = This parameter is subcontracted.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

Ignitability is based solely on the results of the closed cup flashpoint analysis performed above. Passed is >140 degree F.

Total Halogens (SW9076) was analyzed by CT certified lab #PH-0520.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
December 11, 2014
Reviewed and Released by: Deb Lawrie, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

December 11, 2014

FOR: Attn: Mr. John Jablonski
State of CT Military Dept
360 Broad Street
Hartford, CT 06105-3780

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:	JJ	12/04/14	9:30
Location Code:	CTAIRNGD	Received by:	LB	12/04/14	11:37
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	MILM1-0000014398				

Laboratory Data

SDG ID: GBH48939
Phoenix ID: BH48940

Project ID: CTARNG 16260
Client ID: SHOP RAGS AASF

Parameter	Result	RL/ PQL	Units	Date/Time	By	Reference	
TCLP Silver	< 0.10	0.10	mg/L	12/05/14	EK	SW6010	
TCLP Arsenic	< 0.10	0.10	mg/L	12/05/14	EK	SW6010	
TCLP Barium	1.66	0.10	mg/L	12/05/14	EK	SW6010	B
TCLP Cadmium	68.4	0.50	mg/L	12/09/14	LK	SW6010	
TCLP Chromium	0.17	0.10	mg/L	12/09/14	LK	SW6010	
TCLP Mercury	< 0.002	0.002	mg/L	12/05/14	MA	SW7470	
TCLP Lead	0.81	0.10	mg/L	12/05/14	EK	SW6010	
TCLP Selenium	< 0.10	0.10	mg/L	12/05/14	EK	SW6010	
TCLP Metals Digestion	Completed			12/05/14	I/I	SW3005	
TCLP Digestion Mercury	Completed			12/05/14	I/I	E1311/7470	
TCLP Extraction for Metals	Completed			12/04/14	I	EPA 1311	

B = Present in blank, no bias suspected.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

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Phyllis Shiller, Laboratory Director
December 11, 2014
Reviewed and Released by: Deb Lawrie, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

December 11, 2014

FOR: Attn: Mr. John Jablonski
State of CT Military Dept
360 Broad Street
Hartford, CT 06105-3780

Sample Information		Custody Information		Date	Time
Matrix:	WASTE WATER	Collected by:	JJ	12/04/14	9:00
Location Code:	CTAIRNGD	Received by:	LB	12/04/14	11:37
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	MILM1-0000014398				

Laboratory Data

SDG ID: GBH48939
Phoenix ID: BH48941

Project ID: CTARNG 16260
Client ID: O/W SEP #1 AASF

Parameter	Result	RL/ PQL	Units	Date/Time	By	Reference	
Silver	< 0.001	0.001	mg/L	12/04/14	LK	E200.7	
Arsenic	< 0.004	0.004	mg/L	12/04/14	LK	E200.7	
Barium	0.008	0.002	mg/L	12/04/14	LK	E200.7	
Cadmium	< 0.001	0.001	mg/L	12/04/14	LK	E200.7	
Chromium	0.001	0.001	mg/L	12/06/14	LK	E200.7	B*
Mercury	< 0.002	0.002	mg/L	12/05/14	MA	245.1	
Lead	< 0.002	0.002	mg/L	12/04/14	LK	E200.7	
Selenium	< 0.010	0.010	mg/L	12/04/14	LK	E200.7	
Oil and Grease by EPA 1664	2.2	1.4	mg/L	12/10/14	MA	EPA 1664A	
pH	6.97	0.10	pH Units	12/05/14 18:40	RWR/KDB	4500-H B/9040	
Mercury Digestion	Completed			12/05/14	I/I	245.1	
Total Metals Digestion	Completed			12/04/14	AG		

B* = Present in blank, a bias is possible.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
December 11, 2014
Reviewed and Released by: Deb Lawrie, Project Manager

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

December 11, 2014

FOR: Attn: Mr. John Jablonski
State of CT Military Dept
360 Broad Street
Hartford, CT 06105-3780

Sample Information		Custody Information		Date	Time
Matrix:	WASTE WATER	Collected by:	JJ	12/04/14	9:15
Location Code:	CTAIRNGD	Received by:	LB	12/04/14	11:37
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	MILM1-0000014398				

Laboratory Data

SDG ID: GBH48939
Phoenix ID: BH48942

Project ID: CTARNG 16260
Client ID: O-W SEP #2 AASF

Parameter	Result	RL/ PQL	Units	Date/Time	By	Reference	
Silver	< 0.001	0.001	mg/L	12/04/14	LK	E200.7	
Arsenic	< 0.004	0.004	mg/L	12/04/14	LK	E200.7	
Barium	0.126	0.002	mg/L	12/04/14	LK	E200.7	
Cadmium	0.020	0.001	mg/L	12/04/14	LK	E200.7	
Chromium	0.022	0.001	mg/L	12/04/14	LK	E200.7	B
Mercury	< 0.002	0.002	mg/L	12/05/14	MA	245.1	
Lead	0.004	0.002	mg/L	12/04/14	LK	E200.7	
Selenium	< 0.010	0.010	mg/L	12/04/14	LK	E200.7	
Oil and Grease by EPA 1664	46	1.4	mg/L	12/10/14	MA	EPA 1664A	
pH	6.45	0.10	pH Units	12/05/14 18:40	RWR/KDB	4500-H B/9040	
Mercury Digestion	Completed			12/05/14	I/I	245.1	
Total Metals Digestion	Completed			12/04/14	AG		

B = Present in blank, no bias suspected.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.
This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
December 11, 2014
Reviewed and Released by: Deb Lawrie, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

December 11, 2014

QA/QC Data

SDG I.D.: GBH48939

Parameter	Blank	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 294006, QC Sample No: BH47674 (BH48941, BH48942)													
ICP Metals - Aqueous													
Arsenic	BRL	<0.004	<0.004	NC	100	101	1.0	101	91.2	10.2	75 - 125	20	
Barium	BRL	0.065	0.054	18.5	102	103	1.0	89.6	83.0	7.6	75 - 125	20	
Cadmium	BRL	0.100	0.083	18.6	104	104	0.0	96.2	85.4	11.9	75 - 125	20	
Chromium	0.002	0.103	0.084	20.3	106	107	0.9	96.8	85.9	11.9	75 - 125	20	
Lead	BRL	<0.002	<0.002	NC	102	103	1.0	92.3	83.2	10.4	75 - 125	20	
Selenium	BRL	<0.010	<0.010	NC	99.3	101	1.7	101	90.1	11.4	75 - 125	20	
Silver	BRL	0.002	0.002	NC	101	101	0.0	96.3	86.1	11.2	75 - 125	20	
QA/QC Batch 294004, QC Sample No: BH48721 (BH48939)													
ICP Metals - Soil													
Arsenic	BRL	7.2	5.12	33.8	110	112	1.8	105	108	2.8	75 - 125	30	r
Barium	BRL	17.3	19.9	14.0	107	109	1.9	111	113	1.8	75 - 125	30	
Cadmium	BRL	0.78	0.80	NC	115	119	3.4	99.6	101	1.4	75 - 125	30	
Chromium	BRL	29.4	29.9	1.70	111	112	0.9	104	107	2.8	75 - 125	30	
Lead	BRL	14.2	12.8	10.4	100	103	3.0	98.5	101	2.5	75 - 125	30	
Selenium	BRL	<1.5	<1.3	NC	107	111	3.7	101	102	1.0	75 - 125	30	
Silver	BRL	<0.37	<0.33	NC	101	101	0.0	106	106	0.0	75 - 125	30	
QA/QC Batch 294040, QC Sample No: BH48985 (BH48940)													
ICP Metals - TCLP Extraction													
Arsenic	BRL	<0.01	<0.01	NC	125	122	2.4	124	122	1.6	75 - 125	20	
Barium	0.02	0.91	0.89	2.20	106	104	1.9	118	113	4.3	75 - 125	20	
Cadmium	BRL	0.032	0.031	3.20	117	113	3.5	112	108	3.6	75 - 125	20	
Chromium	BRL	<0.010	<0.010	NC	116	113	2.6	114	111	2.7	75 - 125	20	
Lead	BRL	0.052	0.052	0	109	107	1.9	106	104	1.9	75 - 125	20	
Selenium	BRL	<0.01	<0.01	NC	127	125	1.6	126	124	1.6	75 - 125	20	l,m
Silver	BRL	0.025	0.023	NC	114	111	2.7	115	113	1.8	75 - 125	20	
QA/QC Batch 294037, QC Sample No: BH49051 (BH48939)													
Mercury - Soil	BRL	0.18	0.21	NC	89.9	89.8	0.1	92.6	84.9	8.7	70 - 130	30	
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.													
QA/QC Batch 294038, QC Sample No: BH49249 (BH48940, BH48941, BH48942)													
Mercury - Water	BRL	<0.0002	<0.0002	NC	72.9	64.9	11.6	77.3	75.0	3.0	70 - 130	20	l
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%.													

l = This parameter is outside laboratory lcs/lcsd specified recovery limits.
m = This parameter is outside laboratory ms/msd specified recovery limits.
r = This parameter is outside laboratory rpd specified recovery limits.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

December 11, 2014

QA/QC Data

SDG I.D.: GBH48939

Parameter	Blank	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 294480, QC Sample No: BH48199 (BH48941, BH48942)												
Oil and Grease by EPA 1664	BRL				101						85 - 115	20
QA/QC Batch 294187, QC Sample No: BH48941 (BH48941, BH48942)												
pH		6.97	7.08	1.60	104						85 - 115	20
QA/QC Batch 294042, QC Sample No: BH49011 (BH48939)												
Flash Point		>200	>200	NC	100						85 - 115	30

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
December 11, 2014

Sample Criteria Exceedences Report

GBH48939 - CTAIRNGD

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
BH48940	TCLP-CD	TCLP Cadmium	EPA / 40 CFR 261.24 / Toxicity Characteristics	68.4	0.50	1	1	mg/L

Phoenix Laboratories does not assume responsibility for the data contained in this report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

Cooler: Yes ___ No ___
Coolant: IPK [X] ICE [ ] No [ ]
Temp 0 °C Pg of

PHOENIX
Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Contact Options:
[ ] Fax:
[X] Phone: 203-217-3211
[ ] Email:

Customer: Hartford Armory (AASF)
Address: 360 Broad St.
Hartford, CT 06105

Project: CTARNG 16260
Report to: John Jablonski
Invoice to:

Project P.O: 16260

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature: [signature] Date:

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
RW=Raw Water **SE**=Sediment **SL**=Sludge **S**=Soil **SD**=Solid **W**=Wipe
OIL=Oil **B**=Bulk **L**=Liquid

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	Total Halogens	Flash Point	Total 8 Metals	Oil + Greaze	Ph	RCRA 8 Metals TCLP	Soil VOA Vials [ ] methanol [ ] H2O	GL Soil container (16) oz	GL Soil container (2) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [X] H2SO4	PL As is [X] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
48939	used oil AASF	Oil	12/4/14	8:50	X	X	X						3							
48940	Shop Rags AASF	S	↓	9:30					X			1								
48941	o/w Sep #1 AASF	WW	↓	9:00			X	X	X						1	1		1		
48942	o/w Sep #2 AASF	WW	↓	9:15			X	X	X						1	1		1		

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	12/4/14	11:37

Comments, Special Requirements or Regulations:

Turnaround:
[ ] 1 Day*
[ ] 2 Days*
[ ] 3 Days*
[X] Standard
[ ] Other
* SURCHARGE APPLIES

RI
[ ] Direct Exposure (Residential)
[ ] GW
[ ] Other

CT
[ ] RCP Cert
[ ] GW Protection
[ ] SW Protection
[ ] GA Mobility
[ ] GB Mobility
[ ] Residential DEC
[ ] I/C DEC
[ ] Other

MA
[ ] MCP Certification
[ ] GW-1
[ ] GW-2
[ ] GW-3
[ ] S-1
[ ] S-2
[ ] S-3
[ ] MWRA eSMART
[ ] Other

Data Format
[ ] Excel
[ ] PDF
[ ] GIS/Key
[ ] EQuIS
[ ] Other

Data Package
[ ] Tier II Checklist
[ ] Full Data Package*
[ ] Phoenix Std Report
[ ] Other

* SURCHARGE APPLIES

State where samples were collected: _____

U.S. Army Environmental Center

Preliminary Assessment

of the

Federally-owned National Guard Facilities

At

Bradley Field

Windsor Locks, Connecticut

Contract Number DACA31-92-D0045

Task 007, Subtask 2

Prepared for:

National Guard Bureau
Environmental Programs Management Directorate
Installation Restoration Program
Aberdeen Proving Ground, MD 21010-5420

Prepared by:

Engineering Technologies Associates, Inc.
3458 Ellicott Center Drive #101
Ellicott City, MD 21043

July 1994

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Under contract with the U.S. Army Environmental Center (USAEC), Engineering Technologies Associates, Inc. (ETA) conducted a Preliminary Assessment (PA) of the Federally-owned National Guard Facility at Bradley Field. The purpose of this investigation was to review all available information regarding past practices for hazardous waste storage and disposal and to assimilate that information in this report. This PA is the first investigation step initiated after the site was listed on the Federal Facilities Hazardous Waste Compliance Docket.

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PRELIMINARY ASSESSMENT OF THE FEDERALLY-OWNED NATIONAL GUARD FACILITIES AT BRADLEY FIELD, CONNECTICUT

EXECUTIVE SUMMARY

Engineering Technologies Associates, Inc. performed a Preliminary Assessment (PA) of the Federally-owned Connecticut Army National Guard (CTARNG) facilities at Bradley Field, Windsor Locks, Hartford County, Connecticut. The PA investigation included a site visit and a review of all available documents pertaining to the operational history, waste characteristics, and the groundwater, surface water, soil and air pathways associated with the Federally-owned National Guard facilities at the installation.

The Bradley Field CTARNG facilities consist of the Army Airport Support Facility #1, a motor pool building, four storage buildings, the former Department of Transportation Aviation Maintenance Building, a fuel farm pump house, and a fuel farm office.

Based on the results of a site reconnaissance and review of all available documentation, a total of nine potential Comprehensive Environmental Response, Compensation, and Liability Act sources have been identified at the Bradley Field CTARNG facilities including: Source 1 - Building 152 Battery Room; Source 2 - Building 152 Wash Rack; Source 3 - Building 152 Hangar Bay Safety-Kleen Machine; Source 4 - Building 152 Flammable Materials Storage Lockers; Source 5 - Building 153 Floor Drain; Source 6 - Building 162 POL/Hazardous Substance Storage Area; Source 7 - Hazardous Waste Accumulation Area, Building 189; Source 8 - Asbestos Containing Materials (ACM); Source 9 - Building 152 Floor Drain System and Oil-Water Separator.

Based on the findings of this PA investigation, the following actions and studies are recommended.

1) An asbestos investigation of the new and original Building 151 should be completed.

2) ✓ The battery room floor drainage system in Building 152 should be investigated to determine if there is any residual metals contamination in the sewer lines.

3) ✓ A sediment sample should be collected downstream of the storm drain outfall north of Building 152 in order to determine if any negative impact on surrounding wetlands is indicated. This storm drain also served as the outfall for the wash rack at Building 152.

4) The materials in the caretaker's office in Building 152 should be rearranged to segregate ammonia and chlorine bleach.

5) The Safety-Kleen parts-cleaning station on the main hangar floor in Building 152 should be relocated away from the floor drain.

6) The outfall of the floor drain of Building 153 should be located, and sediments at the outfall should be sampled.

7) The 275-gallon waste oil UST for Building 160, which is not in use, should be removed.

8) The containment of bulk storage for POL in Building 162 should be upgraded to provide spill protection.

9) The removal of ACM from Building 160 should be confirmed.

10) Determine the location of any abandoned USTs in the vicinity of Building 153.

1.0 INTRODUCTION

Engineering Technologies Associates, Inc. (ETA) under Contract No. DACA31-92-D-0045, Delivery Order 007, Subtask 2 with the U.S. Army Environmental Center (USAEC), performed a Preliminary Assessment (PA) of the Federally-owned Connecticut Army National Guard (CTARNG) facilities at Bradley Field, Connecticut. The address of the CTARNG office at the installation is:

Army Aviation Support Facility (AASF)
Bradley Field
Route #75
Windsor Locks, Connecticut 06096

This PA conforms to the requirements of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980 and the Superfund Amendments and Reauthorization Act (SARA) of 1986. This CTARNG facility was added to the Federal Facility Hazardous Waste Compliance Docket in June 1991 under the Resource Conservation and Recovery Act (RCRA) Section 3010 reporting mechanism. The facility is a RCRA Small Quantity Generator (SQG) with permit number CTD983869785. There is no CERCLIS ID number associated with this facility (Whitehurst, 1994).

The purpose of this investigation is to "differentiate sites that pose little or no threat to human health and the environment from sites that warrant further investigation. The PA also supports emergency responses and removal activities, fulfills public information needs, and generally furnishes appropriate information about the site early in the site assessment process" (EPA, 1991a).

The site visit was conducted on March 9, 1994 by Mr. Raymond Green and Mr. Edward Miles of ETA, Ms. JoAnn Watson and Mr. Francis Coulters of the National Guard Bureau (NGB), and individuals at Bradley Field listed in Appendix B.

The Potential Hazardous Waste Site Preliminary Assessment Form was used to collect and assemble information for the PA. The completed form is included in this report as Appendix C.

2.0 SITE DESCRIPTION, OPERATIONAL HISTORY, AND WASTE CHARACTERISTICS

2.1 Location

The CTARNG area is an active military facility consisting of 36.1 acres within the boundaries of Bradley Field Airport (DA, 1985). This airport is located in a suburban area west of Windsor Locks, Connecticut (see Figure 1). The latitude and longitude (U.S. Geological Survey (USGS)) coordinates of the AASF building are: 41 degrees, 56 minutes, 39 seconds North latitude and 72 degrees, 40 minutes, 24 seconds West longitude (see Appendix D).

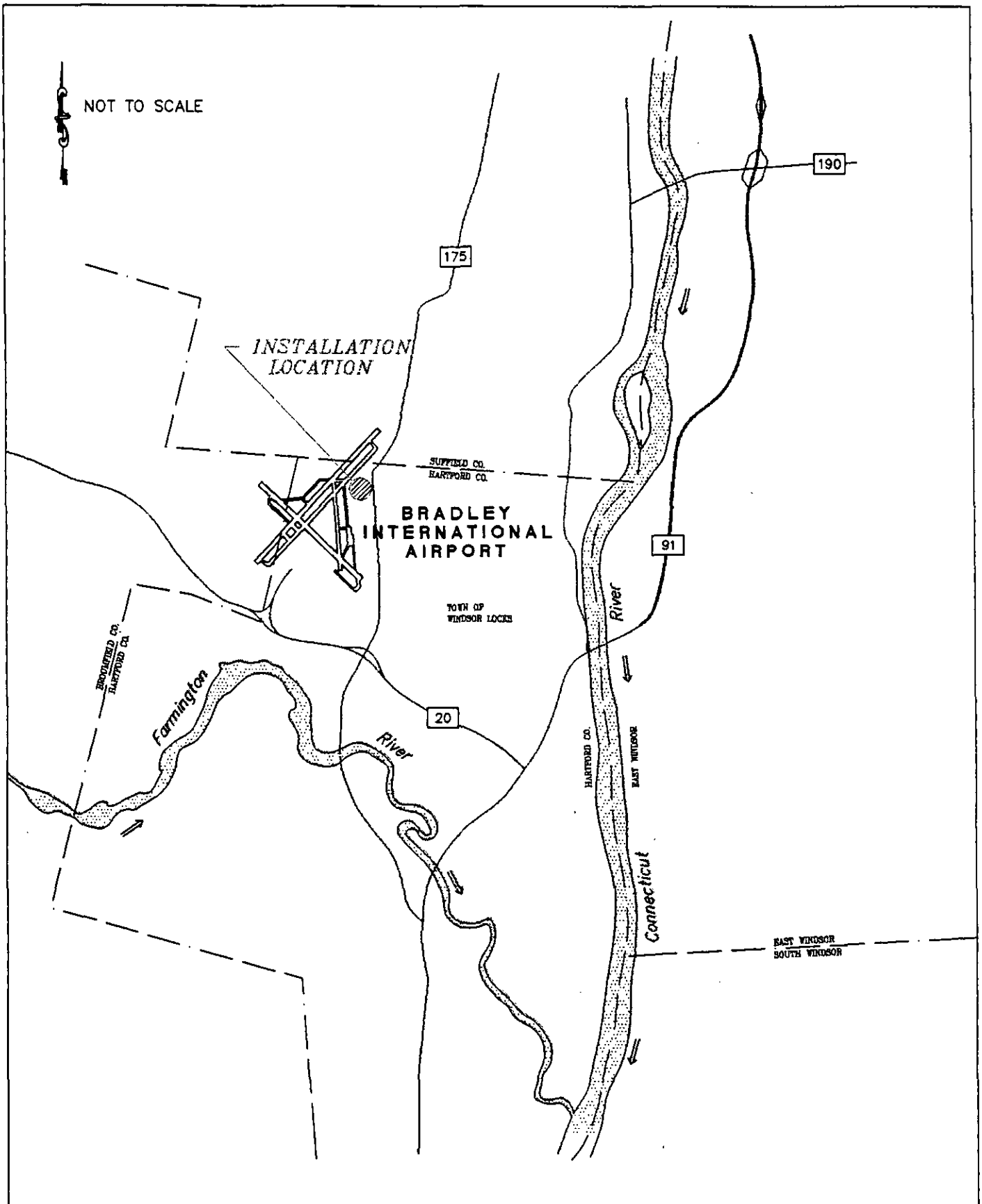
2.2 Site Description

Buildings at the CTARNG facilities include the AASF, a motor pool building, four storage buildings, a fuel farm pump house, and a fuel farm office. Table 1 provides the buildings' operation types, building numbers, and years constructed.

TABLE 1 Federally-owned National Guard Facilities

Type of Operation	Area/Building	Year Built
Storage Building	151	1964
AASF	152	1952
Motor Pool	153	1957
Storage Building	160	1974
Former Department of Transportation Aviation Maintenance Building	162	1963
Hazardous Waste Storage Building	189	1950
Fuel Farm Pump House	190	1955
Fuel Farm Office	191	1951

Source: Rousseau, 1994



DESIGNED R.I.G. 6/94 DATE	ENGINEERING TECHNOLOGIES ASSOCIATES, INC.	FIGURE NO. 1	
DRAWN S.G.P. 6/94 DATE	ENGINEERS • PLANNERS • SURVEYORS	BRADLEY FIELD	
CHECKED K.W. 6/94 DATE	3408 ELLICOTT CENTER DRIVE SUITE 101 ELLICOTT CITY, MARYLAND 21043	CTARNG INSTALLATION LOCATION	
APPROVED D.H.K. 6/94 DATE		SCALE: N.T.S.	CONTRACT NO.: 92307.007.2 DATE: 6/7/94 SHEET:

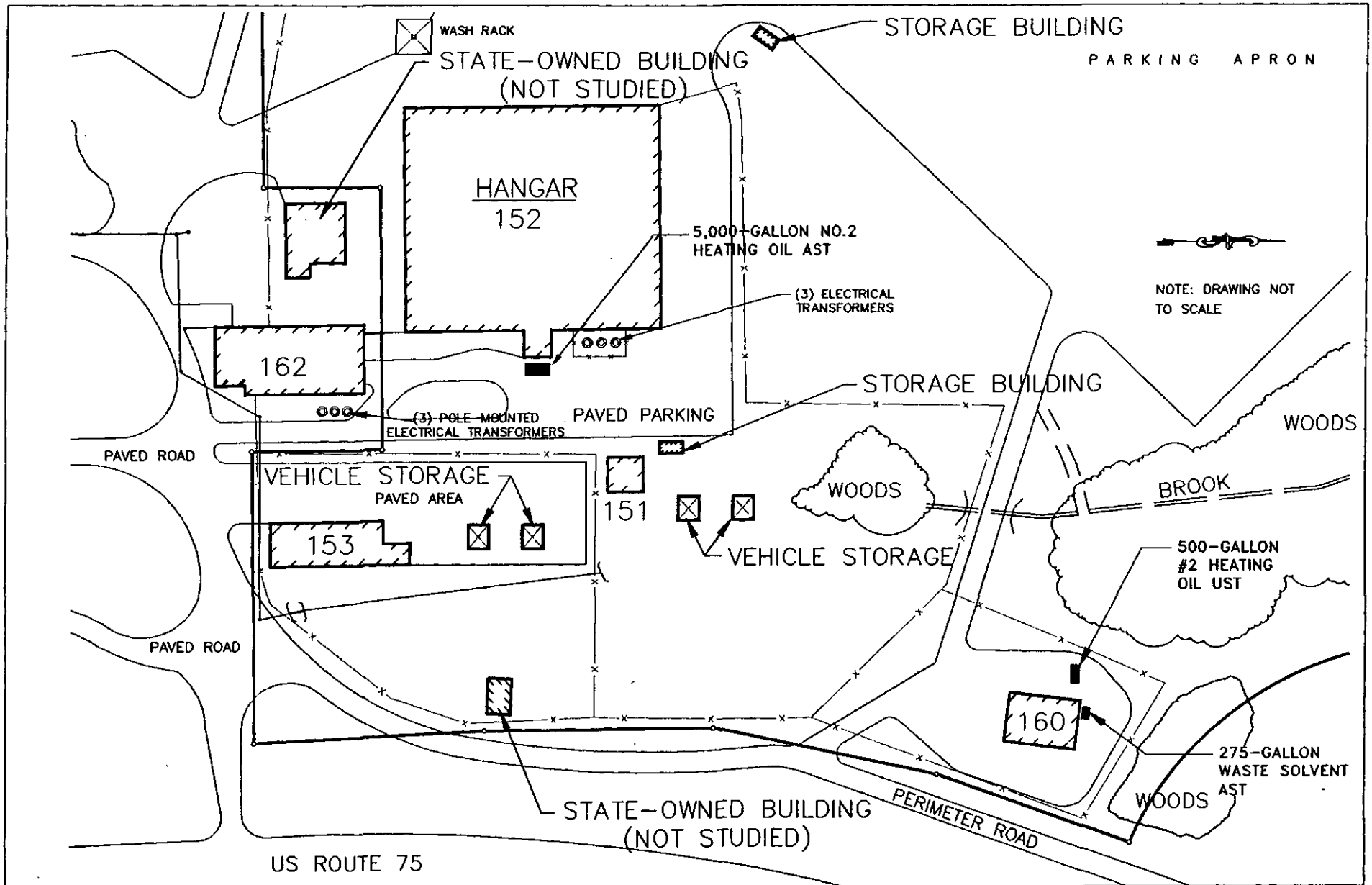
2.2.1 Building 151

The current Building 151 is a "Kirby" brand prefabricated building constructed of sheet steel and a concrete slab floor, measuring 30 feet by 30 feet (Figure 2 and Photo No. 1). (All photographs are presented in Appendix F). It was placed on the site in 1991 and is used as extra storage space for aircraft parts and miscellaneous office equipment. No floor drains or berming are present in this building (Rousseau, 1994).

A cement block building located west of Building 151, measuring approximately 13 feet by 10 feet, matches the description of the original Building 151 that is listed on a Transfer and Acceptance of Military Property Form (DD Form 1354) dated October 21, 1986. This building was constructed in 1964 and is not currently being used. Although the document lists the original roofing material as a wood frame with asphalt shingles (USP&FO, 1986), the current roof is composed of a corrugated fibrous material that may contain asbestos. No testing for asbestos content has been performed on this roofing material (Rousseau, 1994). At the time of the site visit, the building contained an empty 55-gallon drum and seven empty compressed gas cylinders. The 1986 transfer form lists Building 151 as a hazardous materials storage building (USP&FO, 1986). It is marked with a sign reading "No smoking within 50 feet." No floor drains or berming are present in this building (Rousseau, 1994).

2.2.2 Building 152, Army Aviation Support Facility #1

Building 152 is the main building of the AASF at Bradley Field. It is a brick building with a concrete slab floor and measures 192 feet by 212 feet (Figure 2 and Photo No. 2). It was built in 1951 (USP&FO, 1986). The AASF is located in the northeast portion of the Bradley Field Airport adjacent to taxiway "G".



DESIGNED R.I.G. 7/94 DATE	ENGINEERING TECHNOLOGIES ASSOCIATES, INC.	FIGURE NO. 2
DRAWN S.G.P. 7/94 DATE	ENGINEERS • PLANNERS • SURVEYORS	BRADLEY FIELD
CHECKED K.W. 7/94 DATE	3468 ELLICOTT CENTER DRIVE SUITE 101 ELLICOTT CITY, MARYLAND 21043	CTARNG SITE PLAN NO.1
APPROVED D.H.K. 7/94 DATE	BALTO. 481-8830 WASH. 621-4680	SCALE: N.T.S. CONTRACT NO.: 92307.07.2 DATE: 7/20/94 SHEET:

The AASF performs Aviation Unit Maintenance (AVUM) I and II, limited Aviation Intermediate Maintenance (AVIM), as well as modifications of CTARNG aircraft and associated equipment. AVUM activities are those required to retain aircraft in, or return aircraft to, a serviceable condition. This includes identification of the causes of equipment system malfunctions, replacement of worn or damaged modules and components, and air frame repair which does not require extensive disassembly. AVIM provides mobile, responsive "one-stop" maintenance support. These activities include providing quick response and maintenance support, including aircraft recovery and air evacuation, on-the-job training, and technical assistance through the use of mobile maintenance teams (Rousseau, 1994).

Maintenance management, administration, supervision, test flight service, and ground school training are also rendered by the AASF. The allied shops provide AVUM and limited AVIM for aircraft components and ancillary systems including engine maintenance and repair, hydraulics, electrical, power train, structure and airframe, and avionics services. The main hangar, tech supply, battery, engine, avionics, caretaker, mechanical, armaments vault, sheet metal, and boiler rooms are located on the first floor. The facility is responsible for the servicing of 24 UH-1 Huey and 8 CH-47 Chinook helicopters. The second floor has offices, locker rooms, flight surgeon office, latrine, recruiting office, and classrooms. The AASF facility is scheduled to undergo a significant upgrade which will include the rehabilitation of the exterior walls of Building 152 and the ramp areas outside the building (Carragher, 1994).

In 1982, an asbestos abatement action removed an unknown quantity of pipe covering material from the office, shop, and hangar areas of Building 152 (Hedenberg, 1994). The material contained between 40 and 60 percent chrysotile asbestos (CDHS, 1980). However, an asbestos inspection by TRC Environmental Consultants in 1987 found approximately 1,677 square feet of additional asbestos-containing material (ACM) in various conditions scattered throughout the building. The percentage of this asbestos ranged from 5 to 70 percent chrysotile and 2 to 50 percent amosite. This material was removed by Talco Asbestos Removal, Inc., in March 1989 (Hedenberg, 1994).

Building 152 houses a battery room that has an acid resistant drain line, but no berming (Rousseau, 1994). The floor drain, eyewash station, and sink (Photo No. 3) in this room connect to the sanitary sewer system. Between 1983 and 1989, battery acid was disposed of by neutralizing the acid with baking soda and releasing it into the sanitary sewer. The number of batteries treated in this manner is not known (Hedenberg, 1994). Currently, unserviceable batteries cells are collected and delivered to the Defense Reutilization and Marketing Office (DRMO) at Groton Naval Base, Connecticut. Approximately 28 batteries were stored here during the week of May 24, 1994 (Harnett, 1994).

Building 152 contains a central floor drain (Photo No. 4) that is connected to the sanitary sewer system after being routed through an oil-water separator located east of the wash rack. Prior to the installation of the oil-water separator in 1992, the floor drain was routed to the storm drain that also served the wash rack. The outfall of this storm drain was a wetland area north of the hangar building (Rousseau, 1994).

A wash rack (Photo No. 5) is located west of Building 152 on the concrete apron. Waste water from this wash rack discharges to the sanitary sewer system after being routed through a grit separator located immediately to the east. Prior to the installation of the grit separator in 1992, the wash rack, along with the floor drains in Building 152, was connected to a storm drain that discharged to a wetland area north of the building (Rousseau, 1994).

A 5,000-gallon above-ground storage tank (AST) is located adjacent to the eastern wall of the AASF, and is used to store #2 heating oil (Photo No. 6). This tank, installed in 1990, is enclosed in a metal secondary containment device. The void space between the tank and the secondary containment wall must be pumped periodically due to water accumulation (Rousseau, 1994).

There are three pad-mounted electrical transformers located outside the eastern wall of Building 152 (Photo No. 7). Each transformer, holding 25 gallons of dielectric fluid, contains less than one part per million (ppm) polychlorinated biphenyls (PCB) (Willis, 1994).

2.2.3 Building 153, Former Air National Guard Motor Pool

Building 153, constructed in 1957, is a brick building with a concrete slab floor (Photo No. 8). This building, measuring 115 feet by 35 feet, has four service bays. The building and the surrounding paved parking area are enclosed by a 6-foot fence topped with barbed wire. A floor drain runs the length of the interior western side of the building. It is not known if the drain is connected to the sanitary sewer or to the storm drain system (Rousseau, 1994). A hydraulic lift is located in the southern end of the building. The building is currently used to store manuals, CH-47 Chinook extended-range internal fuel tanks, and an unused paint booth.

A vehicle storage lot east of Building 153 is used by the CTARNG for the storage of five 2.5-ton trucks, five 0.25-ton trucks, a Blazer, and four fuel tankers. The fuel tankers do not store any substances as they are excess equipment (Rousseau, 1994).

Two underground storage tanks (USTs) may be located in the vicinity of Building 153. It is not certain if these tanks were ever removed. The first tank is located west of Building 153 and is constructed of steel; its capacity and contents are unknown. The second tank is located east of Building 153 and is believed to be a 550-gallon waste oil tank (Hedenberg, 1994). An attempt was made in May 1994 to positively locate these tanks using metal detectors; however, due to too much interference, this attempt was unsuccessful (Hedenberg, 1994).

Two USTs have been removed from the vicinity of Building 153. A 5,000-gallon steel gasoline tank located beneath the northwest corner of the parking area was removed in December 1993. Contaminated soil was encountered during the excavation. The soil is currently stockpiled on-site and is covered with plastic material pending removal by AMERAC, an outside contractor (Hedenberg, 1994). No analysis has been performed on this soil (Hedenberg, 1994). A 3,000-gallon heating fuel UST was removed from beneath the northwest corner of Building 153 in May 1991 (Hedenberg, 1994). Contaminated soil was encountered during the removal. According to the tank removal contractor, approximately 400 tons of contaminated soil were removed, stockpiled, and covered with polyurethane (Salo, 1991). This soil was tested and found to

contain 24 milligrams per kilogram (mg/kg) total petroleum hydrocarbons (Hedenberg, 1994) and was transported to a landfill (Salo, 1991). There are no tank closure reports as they were not required. The size of the contaminated area was 13 feet by 41 feet (Hedenberg, 1994). Documentation did not indicated to what depth the soil was removed (Hedenberg, 1994).

2.2.4 Building 160

Building 160, constructed in 1974, is a brick building with a concrete slab floor (USP&FO, 1986) (Photo No. 9). No floor drains are present in this building (Rousseau, 1994). This building, measuring 63 feet by 49 feet, is divided into three sections and is used for storage of ground support equipment, external cargo slings (for tying down cargo), and tool boxes. There is a flammable materials cabinet (empty at the time of the site visit) on the outside, eastern face of the building. Three metal CONEX (container, exportable) lockers (Photo No. 10), each measuring 10 feet by 10 feet, are located approximately 120 feet southwest of Building 160. The lockers contain shop sets and tool sets (Rousseau, 1994). A 275-gallon waste oil AST in a vault is located outside the northern wall of the facility (Photo No. 11). It has reportedly never been used by the CTARNG (Ryer, 1994). A 500-gallon steel #2 fuel oil UST, installed in 1950, is located west of Building 160. The AST and the UST are scheduled to be removed in 1994 (Hedenberg, 1994).

As part of a survey of 600 state-owned buildings conducted in 1987, asbestos was observed in Building 160. The three locations that were noted during the inspection, two storage areas and the boiler room, contained approximately 29 square feet of asbestos-containing corrugated air-cell pipe insulation and muddled joints. Bulk sampling analysis of the insulation and joints showed the material to be 50 percent and 30 percent friable chrysotile, respectively (TRC, 1987). It is not known if this material was ever removed (Rousseau, 1994).

There is a vehicle storage lot located approximately 150 feet south of Building 160 which is used by Company B of the 2nd Battalion Aviation Regiment. The perimeter of the lot (and building) is surrounded by a 6-foot chain link fence topped with barbed wire. At the time of

the site visit, the lot contained eight 2.5-ton trucks, six CONEX lockers, and four 0.75-ton trailers.

2.2.5 Building 162

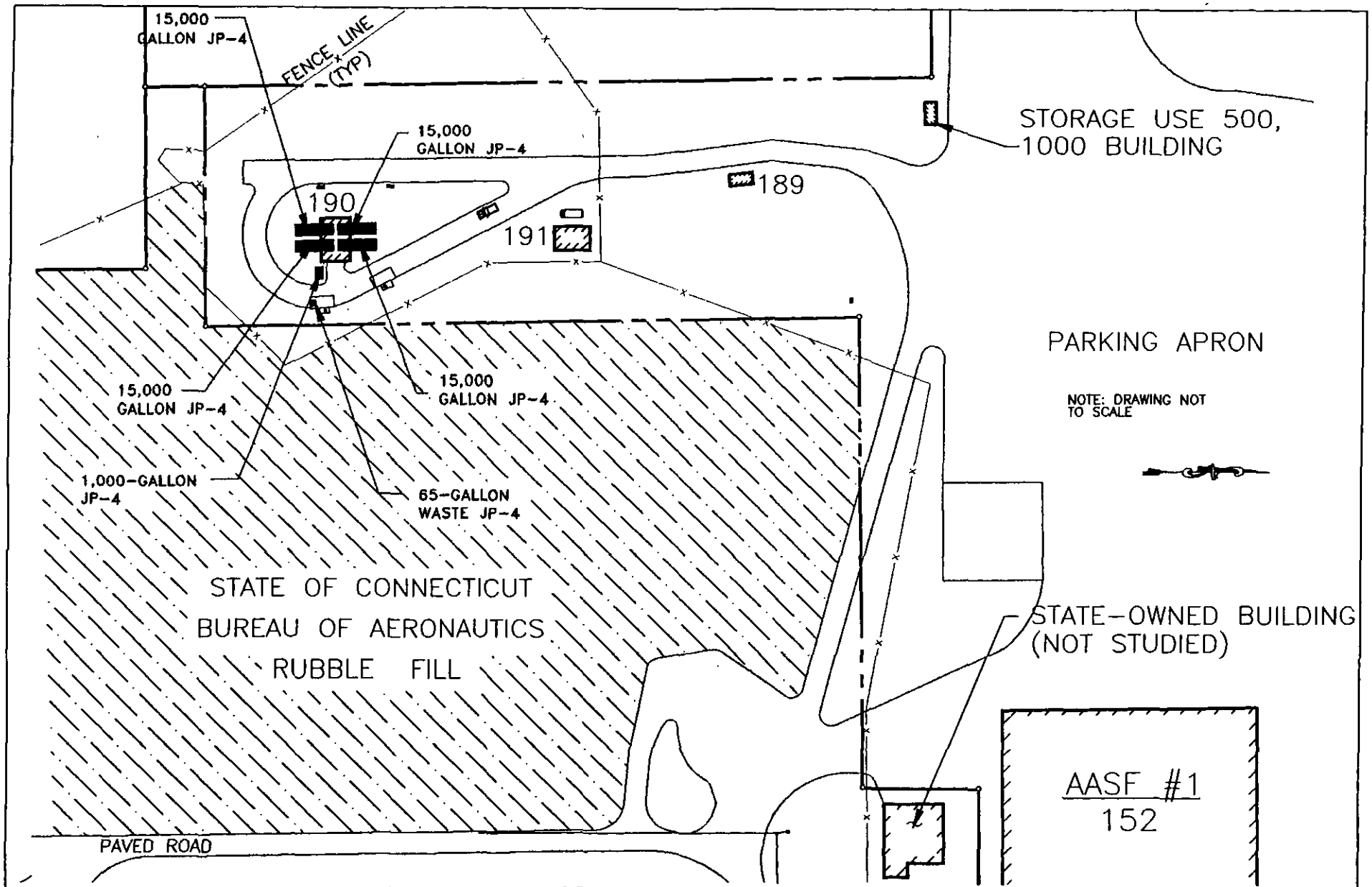
Building 162, constructed in 1963, is a brick building with a concrete slab floor. This maintenance building, measuring 130 feet by 60 feet, contains four service bays and a 6,000-pound capacity overhead crane. Several stockrooms inside the building are currently being used to store petroleum, oil, and lubricants (POL) and hazardous products, including ethylene glycol, methyl ethyl ketone (MEK), and a cleaning compound marked "MIL-C-85704A & AMD3" (Photo No. 12). This facility is being painted as part of a rehabilitation program and will be used as an engine, sheet metal, propeller, and motor shop (Rousseau, 1994).

There are three pole-mounted electrical transformers east of Building 162 (Photo No. 13). Each transformer, holding approximately 25 gallons of dielectric fluid, contains less than 50 ppm PCBs (Willis, 1994).

A 2,000-gallon steel UST used to store #2 fuel oil was removed from the east side of the building when the boiler was converted to natural gas (Harnett, 1994).

2.2.6 Building 189

Building 189, constructed in 1950, is a metal storage building used as the hazardous waste accumulation point for the CTARNG (see Figure 3 and Photo No. 14). This building, measuring 15 feet by 10 feet, has secondary containment in the form of a collection area below a steel grated floor. Waste is deposited in the building every Friday after inspection of the flammable materials locker (Ryer, 1994). Building 189 contained approximately 60 gallons of hazardous substances at the time of the site visit. These substances included paints, solvents,



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CHECKED	K.K.W.	7/94
APPROVED	D.H.K.	7/94

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FIGURE NO. 3

BRADLEY FIELD

CTARNG SITE PLAN NO.2

SCALE: N.T.S.	CONTRACT NO.: 92307.07.2	DATE: 7/20/94	SHEET:

sealing compounds, and degreasers. A flammable materials storage locker is located 5 feet south of this building.

2.2.7 Building 190, Bulk Fuel Facility

The Bulk Fuel Facility building, constructed in 1958, is a brick building with a concrete slab floor (Photo No. 15). This facility, which measures 25 feet by 35 feet, is equipped with a floor drain that connects to a 1,000-gallon spill containment UST. This UST is located beneath the southwest corner of the building. Four 15,000-gallon USTs containing JP-8 (jet fuel)(JP-8 has replaced JP-4 as the fuel used at the AASF since the spring of 1994 [Hedenberg, 1994]) were installed in 1991 partially under the building. Prior to 1989, four 25,000-gallon tanks were present at this location. The four 15,000-gallon JP-8 USTs were hydrostatically tested in accordance with National Fire Protection Code 30 during the installation process and found to be secure (Hedenberg, 1994). The four 15,000-gallon JP-8 USTs and their associated fuel pumps have Stage-I and Stage-II vapor recovery systems which are used to collect volatile gases during fuel loading and unloading. Stage-I captures the vapors emitted during fuel delivery to the tanks. Stage-II captures the vapors emitted during the fueling of vehicles from the tanks. Two fuel truck unloading stations and three truck fill stations serve the four JP-8 tanks (Doran, 1989). Fuel inventory is performed on a daily basis by a stick reading, and no abnormal losses or gains have been noted (Doran, 1989).

In order to comply with Regulations of Connecticut State Agencies Section 22a-449(d)-1, a request for a variance from the regulations for the four 25,000-gallon USTs was made to the Connecticut Department of Environmental Protection (CTDEP) Underground Storage Tank Program on July 29, 1988. This section of the regulations required that the tanks be removed by November 1, 1988 since they were more than 20 years old. The request was denied in a letter dated October 4, 1988 (Doran, 1989). As a result, the four original 25,000-gallon USTs were removed in June 1989. During the removal operation, oil was found in the soil surrounding a fill pipe. A storm drain was broken when the sides of the tank were uncovered, and water that entered the excavation became contaminated with oil that was in the soil. An on-

site representative from the CTDEP required that the contaminated water be pumped out. Approximately 4,000 gallons of water were removed and disposed of and absorbent pads were placed at the bottom of the excavation. After a second site inspection by the CTDEP, undocumented quantities of water and soil were removed from the excavation. The CTDEP requested that monitoring wells be installed at the tank farm (See Appendix K). Further documentation regarding the composition of the contaminated soil or the areal extent of the contamination was not readily available.

Two monitoring wells were installed west of the tank farm in July 1990. One well has a depth of 18.1 feet and the second a depth of 25 feet. There are no sampling data currently available from the wells (Hedenberg, 1994).

2.2.8 Building 191, Fuel Farm Office

The Fuel Farm Office, constructed in 1951, is a brick building with a concrete slab floor (USP&FO, 1986) (Photo No. 16). This building, measuring 36 feet by 24 feet, provides a storage area for hoses and nozzles. A computer in this building is used to monitor the operation of the fuel facility. A flammable materials locker is present in this building.

2.3 Operational History and Waste Characteristics

Bradley Field was acquired by the Federal government in the 1940s as a military reservation. In 1948, Bradley Field was quit-claim deeded by the Federal government as surplus property to the State of Connecticut. The deed provided for rights-of-use by the Federal government during a national emergency. Between 1949 and 1955, various legal agreements were executed to provide for use of the field by reserve components of the Armed Forces of the United States. The most recent lease dated June 1, 1957, between the Connecticut Aeronautics Commission (CAC) and the U.S. Government, provides for the property to be leased to the Federal government until June 30, 2002, unless the government elects to terminate the lease. This lease terminates the agreements that were executed between 1949 and 1955. Acting under

the current lease, the Secretary of the Air Force executed a series of licenses to the State of Connecticut for 5-year periods. Building 152, the main AASF building, was constructed with Federal funds. During the 1960s both the Adjutant General and the CAC attempted to declare Building 152 as excess. In 1967, proposals were solicited for the use of the excess property. This action was supported by an Attorney General's opinion to the effect that the building reverted back to the State when it ceased to be used by the Air National Guard (ANG). The Kaman Corporation proposal was selected and included Buildings 152 and 154. This lease expired on March 31, 1971 (CTMD, 1993).

In September 1986, 36.1 acres of land were transferred from the Connecticut Air National Guard (CTANG) to the CTARNG. Buildings 139, 151, 152, 160, and 191 were included in this transfer. The transfer also included the wash rack, the airport apron, the taxiway, and the boundary fence.

Currently, the title to land and buildings for the CTARNG is in the name of the State of Connecticut, Department of Aeronautics, and is leased to the U.S. Government until June 30, 2002. The U.S. Government, acting through the Department of the Army (DA), has licensed the parcel back to the State of Connecticut, Military Department for a five-year period ending July 20, 1995 (Niemitz, 1993).

The CTARNG facilities are regulated under their SQG status under Subtitle C, Section 3001(d)(1) of RCRA, Number CTD983869785. A SQG produces greater than 100 kilograms (220 pounds) but less than 1,000 kilograms (2,200 pounds) of hazardous waste during a calendar month.

The facility is operating under Permit No. GSW-000250 granted by the CTDEP, Bureau of Storm Water Management under a general permit for the discharge of storm water associated with an industrial activity. This permit was granted in December 1992 and expires October 1997 (Ladotski, 1994). The application for this storm water discharge permit indicated that the facility did not possess a National Pollutant Discharge Elimination System (NPDES) permit or

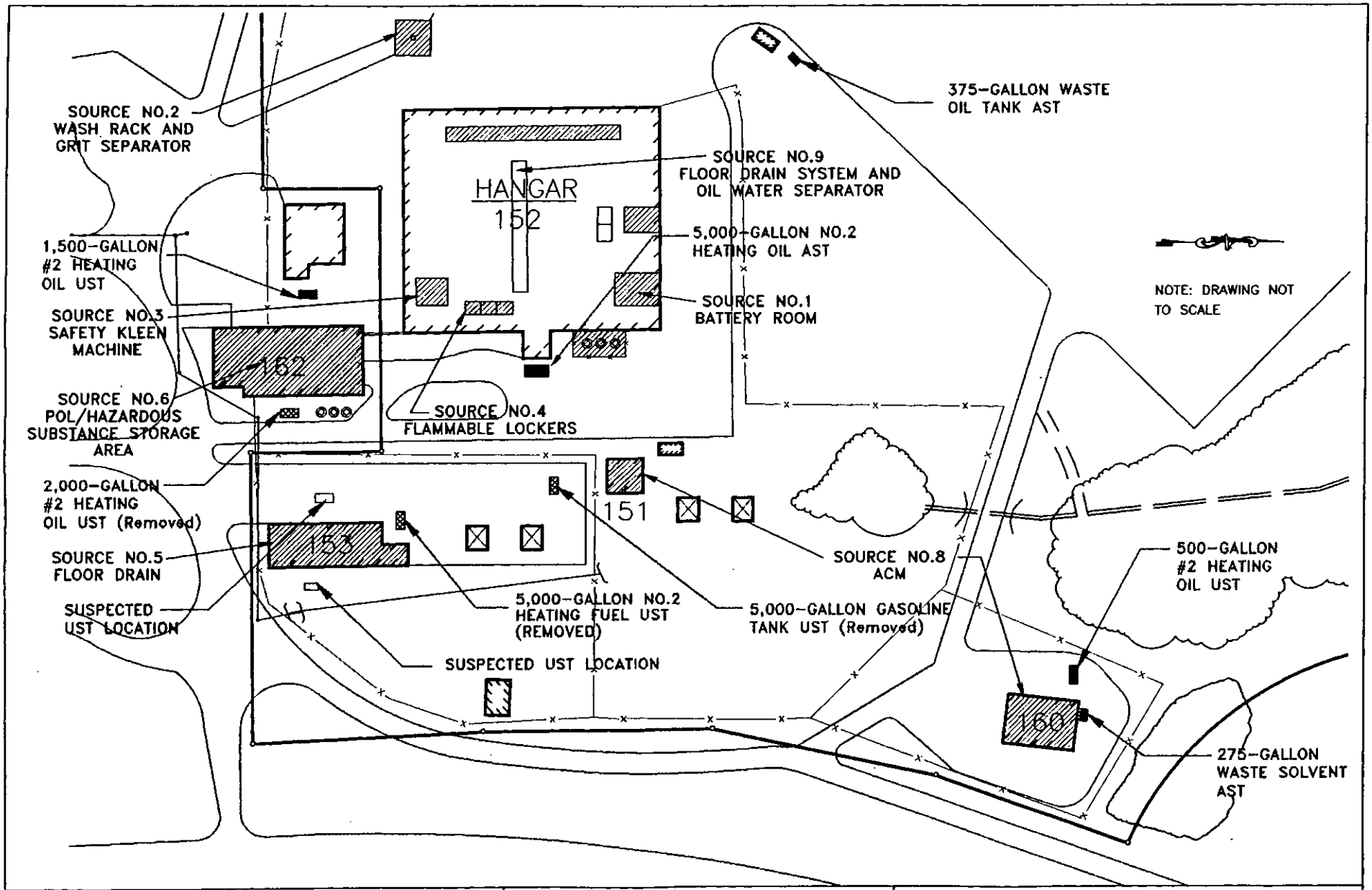
air permits at the time of the application. In March 1992, the AASF received two permits from the CTDEP Water Management Bureau. The first permit was for the installation of a grit separator for the vehicle wash rack (Permit No. GVW-000158). This permit establishes a maximum discharge rate of 10,000 gallons per day (gpd) from this source and requires that the pH of the discharge be between 5.0 and 10.0 (CTDEP, 1992c). The second permit is for the installation of an oil-water separator in association with a floor drain system (Permit No. GVS-000258). This permit establishes a maximum discharge from this source of 1,000 gpd and also requires that the pH of the discharge be between 5.0 and 10.0. In addition, the concentration of oil and grease in the discharge may not exceed 100 milligrams per liter (mg/L) (CTDEP, 1992b). Both of these permits expire in March 2003.

A draft Storm Water Pollution Prevention Plan (SWPPP) that includes the CTARNG area has been prepared by the Bradley International Airport. The plan is currently being reviewed by the State of Connecticut.

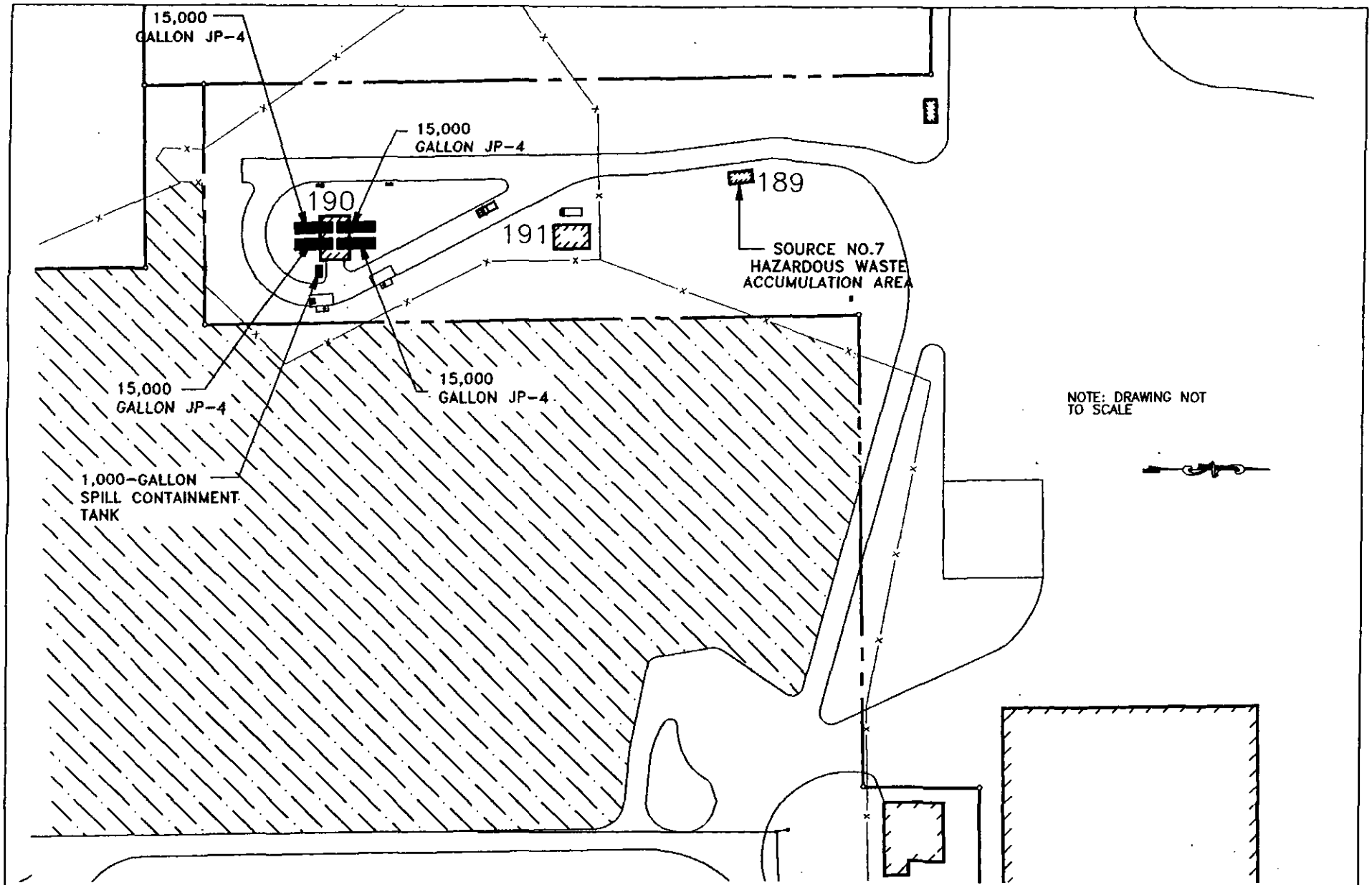
2.4 Potential CERCLA Sources

Under CERCLA, the United States Environmental Protection Agency (EPA) defines "source" as, "an area where a hazardous substance may have been deposited, stored, disposed, or placed." Also, soil that may have become contaminated as a result of hazardous substance migration is considered a source. In general, however, the volumes of air, groundwater, surface water, and stream sediments that may have become contaminated through migration are not considered sources. Constituents that are defined as hazardous substances, pollutants, or contaminants are listed in CERCLA Sections 101(14) and 101(33)(EPA, 1991a). CERCLA, under the petroleum exclusion clause, eliminates uncontaminated petroleum products (crude oil and fractions thereof) from consideration as contaminants.

Based on the results of a site reconnaissance and review of all available documentation, a total of nine CERCLA sources have been identified at the Bradley Field CTARNG facilities. The locations of these sources are shown on Figure 4 and Figure 5.



DESIGNED R.I.G. 7/94	ENGINEERING TECHNOLOGIES ASSOCIATES, INC.	FIGURE NO. 4
DRAWN S.G.P. 7/94	ENGINEERS • PLANNERS • SURVEYORS	BRADLEY FIELD
CHECKED K.W. 7/94	3468 ELLICOTT CENTER DRIVE SUITE 101 ELLICOTT CITY, MARYLAND 21043	CTARNG SITE PLAN NO.1
APPROVED D.H.K. 7/94		CERCLA & NON-CERCLA SOURCES
		SCALE: N.T.S. · CONTRACT NO.: 92307.07.2 · DATE: 7/20/94 · SHEET:



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CHECKED	K.K.W.	7/94 DATE
APPROVED	D.H.K.	7/94 DATE

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FIGURE NO. 5

BRADLEY FIELD
CTARNG SITE PLAN NO.2
CERCLA AND NON-CERCLA SOURCES

SCALE: N.T.S. | CONTRACT NO.: 92307.07.2 | DATE: 7/20/94 | SHEET:

TABLE 2 Source Data

Source Number	Source Name	Building Number	Summary
1	Building 152 Battery Room	152	Storage for 28 Nickel-Cadmium batteries; Neutralization of battery acid
2	Building 152 Wash Rack and Grit Separator	152	Wash water routed to sanitary sewer; prior to 1992, wash water routed to wetlands north of building
3	Building 152 Hanger Bay Safety-Kleen Machines	152	Drums containing parts-cleaning solvent; one located over floor drain
4	Building 152 Flammable Materials Storage Lockers	152	Hazardous substances in five cabinets throughout building
5	Building 153 Floor Drain	153	Possible hazardous substance migration through drains
6	Building 162 POL/Hazardous Substances Storage Area	162	Hazardous substances storage with no secondary containment
7	Hazardous Waste Accumulation Area, Building 189	189	Hazardous waste storage with secondary containment
8	Asbestos Containing Materials (ACM)	160, 151	ACM discovered in Building 160; unknown if it was removed. Possible ACM roof on Building 151
9	Building 152 Floor Drain System and Oil-Water Separator	152	Waste water routed to sanitary sewer. Prior to 1992, routed to wetlands north of building

Source No. 1: Building 152 Battery Room

This potential source consists of approximately 28 nickel-cadmium batteries, each weighing 75 pounds, stored in the battery room during the week of May 24, 1994 (Harnett,

1994). This room has a concrete floor with a drain that is connected to the sanitary sewer. Approximately 2,100 pounds of batteries are stored here.

From 1983 to 1989, waste battery acid was neutralized with baking soda and released to the sanitary sewer. The number of batteries that were treated in this manner is unknown (Hedenberg, 1994).

Source No. 2: Building 152 Wash Rack and Grit Separator

This potential source consists of an aircraft wash rack (Photo No. 5) and grit separator which are located outside the southwest corner of Building 152. Waste water from the wash rack is routed through the grit separator to the sanitary sewer system. Prior to the installation of the grit separator in 1992, wash water was routed directly to the storm water system which discharged to a wetland area north of Building 152. The amount and nature of hazardous substances, if any, associated with this source are unknown. No more than 10,000 gallons per day of waste water may be discharged according to the permit (Hedenberg, 1994). The exact volume of waste routed through this grit separator is unknown as no measuring device exists (Rousseau, 1994). The permit further states that the pH of the waste water will be between 5.0 and 10.0 (CTDEP, 1992c and Appendix G).

Source No. 3: Building 152 Hangar Bay Safety-Kleen Machines

This potential source consists of two Safety-Kleen machines. Each machine has a capacity of 35 gallons (Harnett, 1994) and contains petroleum naphtha 105. The flash point of the solvent is 105 degrees Fahrenheit (Gorman, 1994). One machine was observed to be located directly above a floor drain near the coffee break room (Photo No. 18) and the other in the prop and rotor room. The floor drains used to be routed to a wetlands area north of the AASF building prior to being connected to the sanitary sewer in 1992. The solvent in these machines (approximately 70 gallons) is removed and recycled every nine weeks by Safety-Kleen (Hedenberg, 1994).

Source No. 4: Building 152 Flammable Materials Storage Lockers

This potential source consists of five flammable materials storage lockers located throughout the hangar area (Photo No. 19). These lockers were observed to store approximately 100 gallons of hazardous substances, such as paints, brake fluids and antifreeze in pint, quart, and gallon containers (see Appendix I for a complete list of contents). Any spills from these lockers could potentially migrate to floor drains in the hangar area.

Source No. 5: Building 153 Floor Drain

This potential source consists of a floor drain along the interior west wall of Building 153. This building, which was used as a motor pool by the CTANG, was vacated in 1977. Since the building provided maintenance for wheeled vehicles, hazardous substances used in maintenance, such as antifreeze and brake fluids, could have migrated to the floor drain. The outlet of this floor drain is unknown (Rousseau, 1994). The amount and nature of hazardous substances associated with this potential source, if any, are unknown.

Source No. 6: Building 162 POL/Hazardous Substances Storage Area

This potential source consists of a stockroom in Building 162 that is used for storage of POL and hazardous substances including a cleaning compound marked "MIL-C-85704A & AMD3", ethylene glycol, and MEK (Photo No. 12). This room has no floor drains or berming (Hedenberg, 1994). It was reported that approximately 10 gallons of deicing fluid, 100 gallons of engine starter fluid, and 1,000 gallons of POL product were stored in Building 162 on May 24, 1994 (Harnett 1994). Approximately two gallons of ethylene glycol and nine gallons of MEK were observed at this potential source at the time of the site visit.

Source No. 7: Hazardous Waste Accumulation Area, Building 189

This potential source consists of a hazardous waste accumulation area located in Building 189. This is the storage area for all hazardous wastes generated by CTARNG operations. The building has secondary containment in the form of a collection area below a steel grate floor. At the time of the site visit the building contained approximately 60 gallons of hazardous waste (see Appendix I for a complete list of materials).

Source No. 8: Asbestos-containing Materials

This potential source consists of ACM located in several buildings throughout the facility. During a 1987 survey, asbestos was observed in Building 160. Three locations, two building storage areas and the boiler room, were noted during the inspection. The locations contained asbestos-containing corrugated air-cell pipe insulation and muddled joints. Bulk sampling analysis of the insulation and joints showed the material to be 50 percent and 30 percent friable chrysotile, respectively. Approximately 29 square feet of ACM were discovered (TRC, 1987). It is not known if this material was ever removed (Rousseau, 1994).

During the site visit, the roof of Building 151 was observed to be constructed of a corrugated fibrous material that may contain asbestos. The amount of hazardous materials associated with this source is unknown since no sampling of this material has been performed (Rousseau, 1994).

Source No. 9: Building 152 Floor Drain System and Oil-Water Separator

This source consists of the floor drain system and oil-water separator that serves the vehicle shop area at the AASF. Waste water and possible hazardous substances associated with vehicle repairs could potentially migrate to this system and into the sanitary sewer. Prior to the installation of the oil-water separator in 1992, this system was routed directly to the storm water system which discharged to a wetland area north of Building 152. The amount and nature of

hazardous substances, if any, associated with this source are unknown. No more than 1,000 gallons per day of waste water may be discharged according to the permit (CTDEP, 1994b and Appendix G). Further, the permit states that the pH of the waste water shall be between 5.0 and 10.0, nor shall the water have a oil and grease hydrocarbon fraction exceeding 100 mg/l (CTDEP, 1994b and Appendix G).

2.5 Non-CERCLA Sources

CERCLA, under the petroleum exclusion clause, eliminates petroleum products as hazardous substances unless they are commingled with CERCLA hazardous substances. The following non-CERCLA sources are shown on Figure 4 and 5.

2.5.1 Building 152 Above-ground Storage Tank

A 5,000-gallon AST is located adjacent to the east wall of Building 152. This tank is surrounded by a shell that acts as secondary containment. Rainwater which accumulates in the shell must periodically be pumped out.

2.5.2 Building 153 Underground Storage Tanks

There is a possibility of two USTs located in the vicinity of Building 153. The first tank, located west of Building 153, was constructed of steel, but its capacity and contents are unknown. The second tank, located east of Building 153, is reportedly a 550-gallon tank used to store waste oil (Hedenberg, 1994).

Two additional USTs have been removed from the vicinity of Building 153. During the removal of these USTs in 1991 and 1993, contaminated soil was encountered. The soil from the 1993 tank removal is currently stockpiled on-site and covered with plastic material pending removal by an outside contractor (Hedenberg, 1994).

2.5.3 Building 160 Storage Tanks

A 500-gallon UST is located west of Building 160. Documents indicate that this steel tank was installed in 1950 and currently contains #2 heating fuel (CTDEP-USFP, 1993). A 275-gallon waste oil AST is located north of the building.

2.5.4 Building 162 Underground Storage Tank

A 2,000-gallon steel UST was located east of Building 162. It was used to store #2 heating fuel, but was removed when the building's boiler was converted to natural gas (Harnett, 1994).

2.5.5 Building 190 Underground Storage Tanks

Four 15,000-gallon steel USTs are located beneath Building 190. Documents indicate that these USTs were installed in May 1991 and currently contain JP-8 jet fuel (CTDEP-USFP). A 1,000-gallon UST is located at the southeast corner of the building. This spill containment tank was installed in August 1993 and currently stores waste JP-8 jet fuel (CTDEP-USFP, 1993).

3.0 GROUNDWATER PATHWAY

3.1 Soils Information and Hydrogeology

Review of the surficial geologic map for the Windsor Locks quadrangle indicates that the site is in the Connecticut Valley Lowlands and is underlain by gently sloping sand, silt, and gravel (Colton, 1960). The unconsolidated material is approximately 150 feet thick (Handiman,1973), and lies over bedrock composed of arkosic siltstone (Schnabel and Eric, 1964). Approximately 70 percent of the soil underlying the site is classified as made land, which consists of fill material. Ninegrat Fine Sandy Loam, 0-3 percent slope, makes up about 12 percent of the underlying soil, and is classified as fine sandy or very fine sandy loam with moderate to rapid permeability. Poquonock Loamy Sand, 3-8 percent slope, and Windsor Loamy Fine Sand, 0-3 percent slope, each make up approximately 6 percent of the underlying soil. Poquonock Loamy Sand is classified as a loamy sand or sandy loam with rapid to very rapid permeability. Windsor Fine Loamy Sand is classified as a loamy course or loamy fine sand with very rapid permeability. Approximately 3 percent of the soil is made up of Agawan Fine Sand, 0-3 percent slope. This soil is classified as fine to very fine sandy loam with moderate to rapid permeability. Scantic Silt Loam, 0-3 percent slope, and Whatley Loam, 0-3 percent slope, each make up approximately 1 percent of the underlying soil. Scantic Silt Loam is described as a silt loam surface layer over silty clay loam that has moderate to slow permeability. Whatley Loam is described as a loam with moderate to rapid permeability (SCS, 1962).

Four test holes were drilled for the Connecticut Department of Aeronautics in 1958 approximately 1,500 feet southwest of the CTARNG facilities. Logs indicate that fine sand and silt are located immediately beneath the land surface and range in thickness from 11 to 13 feet. An underlying clay increases in thickness to the west. This clay lies approximately 13 feet below land surface and ranges in thickness from 7 feet to 47 feet; however, it could be thicker since the logs indicate that auger refusal occurred between 26 and 58 feet for the various test holes (Stone, 1976). Two soil borings drilled northwest and southeast of Building 190 indicate

that sand and silty sand exist at the land surface and range in thickness from four feet southeast of the building to 11 feet northwest of the building. Underlying this material is a till layer consisting of silt and clay that continues to the bottom of the borings (Metcalf and Eddy, 1990).

Water levels from soil borings near Building 190 indicate that the shallowest aquifer is 6.5 feet beneath the land surface. Groundwater flow is toward Spencer Brook (Metcalf and Eddy, 1990).

An estimated evapotranspiration value of 25.21 inches was calculated using a theoretical formula (EPA, 1991b) and monthly precipitation and temperature data (CTDEP, 1992e). With a mean annual rainfall of 43.33 inches (CTDEP, 1992e), the net precipitation is calculated to be 18.21 inches.

Karst topography or "sole source" aquifers do not underlie the site (Radka, 1994).

In the early 1980s, the Connecticut Water Company (CWC) Windsor Lock Wellfield, located 15,000 feet southeast of the AASF building, was closed due to ethylene dibromide contamination problems. This contamination was the result of farming practices and was not related to activities at the CTARNG facility (Radka, 1994). After a carbon filter treatment system was installed, the wellfield was reopened in 1991 (Radka, 1994). No citizen complaints have been lodged with the CTDEP with respect to groundwater quality in the area surrounding Bradley Field (Brickelmayer, 1994).

3.2 Groundwater Targets

The target distance limit map presented in Appendix E shows the well locations for the CWC and three additional privately-owned systems. The closest well to any source is a private well located 6,310 feet north of Source Number 8, ACM located in Building 160. This well served a residence along Hale Street which is outside of the Connecticut Water Company (CWC) service area.

Several wells are used for potable purposes by the CWC and other private water suppliers within the four-mile-radius target distance limit. The CWC's West Suffield Well and Windsor Locks Wellfield, both of which are a part of the CWC Northern and Western Service Area, are located 18,100 feet northwest and 15,000 feet southeast of the AASF, respectively. The West Suffield Well is a bedrock well and is 247 feet deep. The Windsor Locks Wellfield has four caisson wells, each of which is 72 inches in diameter. These wells range in depth from 17 to 30 feet (Radka, 1994). The regional groundwater flow direction is not known; therefore, it is not possible to determine if these wells are upgradient or downgradient of the potential sources at AASF (Fitting, 1994). However, in the absence of confined aquifers, surface topography generally determines the direction of groundwater flow (McCarthy, 1994). These two wells are interconnected with other wells in the CWC system. Further, the CWC system is interconnected with the Hazardville Water Company and the Metropolitan District Commission of Hartford County water supply system. However, these interconnections are used only in emergencies (Radka, 1994). There are three privately-owned water systems located within the four-mile-radius target distance limit for Bradley Field. Metacomet Village has two wells which are located 14,200 feet and 14,600 feet west of the AASF Building. The Old Newgate Ridge Water Company has one well 17,300 feet west of the AASF Building. Finally, East Granby Village has two wells located 20,400 feet southwest of the AASF Building.

Additional private potable water wells are known to exist within the four-mile-radius target distance limit, but there is no information available on these wells (Brickelmayer, 1994).

In 1993, 3,000,000,000 gallons were withdrawn from all wells in the CWC system, which is calculated to be a daily average of 8,219,178 gallons (Radka, 1994). Of this total, the West Suffield Well and Windsor Lock Wellfield produced 6,488,000 gallons (17,775 gallons per day) and 42,113,000 gallons (115,378 gallons per day), respectively (Nadeau, 1994). With average demand per capita for potable water of approximately 80 gallons per day (Brickelmayer, 1994), the Northern and Western Service areas support a calculated population of approximately 102,700 people. The Old Newgate Ridge Water Company, East Granby Village, and Metacomet Village support populations of 200, 416, and 45 people, respectively (Brickelmayer, 1994).

There is no groundwater target population within one mile of the CTARNG facilities as all potable water is supplied by the CWC, and the closest well associated with that system is within the two to three mile target distance limit. Within the one to two mile range, potable water is supplied by either private wells or the CWC system. Using CWC water supply maps that are overlaid on USGS topographical maps, 84 houses were determined to receive their potable water from private wells. With 2.6 people per household (Claritas, 1994), the groundwater target population for this range is 219 people. Within the two to three mile target distance limit, 533 houses, serving 1,386 people, receive their potable water from private wells. Further, one well of the CWC system is located in this range. Since no well/intake within the CWC system produces more then 40 percent of the water in the system, apportionment is equally distributed among the number of wells/intakes in the system. Since the CWC system has 26 wells/intakes and serves 102,700, each well is calculated to serve 3,950 people. Therefore, the groundwater target population in the two to three mile target distance limit for the CWC well is 3,950 people. A private municipal system in this range serves an additional 45 people. The total groundwater target population within the two to three mile target distance limit is 5,381 people. There is one CWC well in the three to four mile target distance limit, and this also serves 3,950 people. Private wells at 620 houses serve 1,612 people and two private municipal systems serve 616 people. Therefore, the groundwater target population within the three to four mile target distance limit is 6,178 people.

The AASF receives its potable water from the CWC (Rousseau, 1994). Bradley Field is a U.S. Army Reserve and CTARNG training facility. The highest population that can be expected is during weekends when 569 U.S. Army Reserve personnel undergo training. Overall, the total military population at the CTARNG facility, CTANG, and Camp Hartell (located across Highway 175) increases to 1,274 people for weekend training (Sabotka, 1994).

Resources within the four-mile-radius target distance limit include several wells which are registered with the State of Connecticut, Department of Environmental Protection, for irrigation purposes. One well is located at East Street and Mountain Road in Suffield, and another well is located on Tinker Drive in Windsor Locks (Pendleton, 1994).

The State of Connecticut has no legally designated Wellhead Protection Areas (Radka, 1994).

3.3 Groundwater Conclusions

There is no evidence of groundwater contamination from any potential source of CERCLA hazardous substances located at the CTARNG facilities at Bradley Field. There has been one documented release of non-CERCLA POL substances to the soil which has contaminated the groundwater. During the removal of four 25,000-gallon USTs at the Bulk Fuel Facility in 1989, oil was found in the soil surrounding a fill pipe. When an adjacent storm drain pipe broke, this water contacted the oil-contaminated soil and filled the excavation. On-site CTDEP personnel required this contaminated water to be removed and that two monitoring wells be installed (see Appendix K). No analytical data exists for these wells (Hedenberg, 1994). There are no Wellhead Protection Areas within the target distance limit.

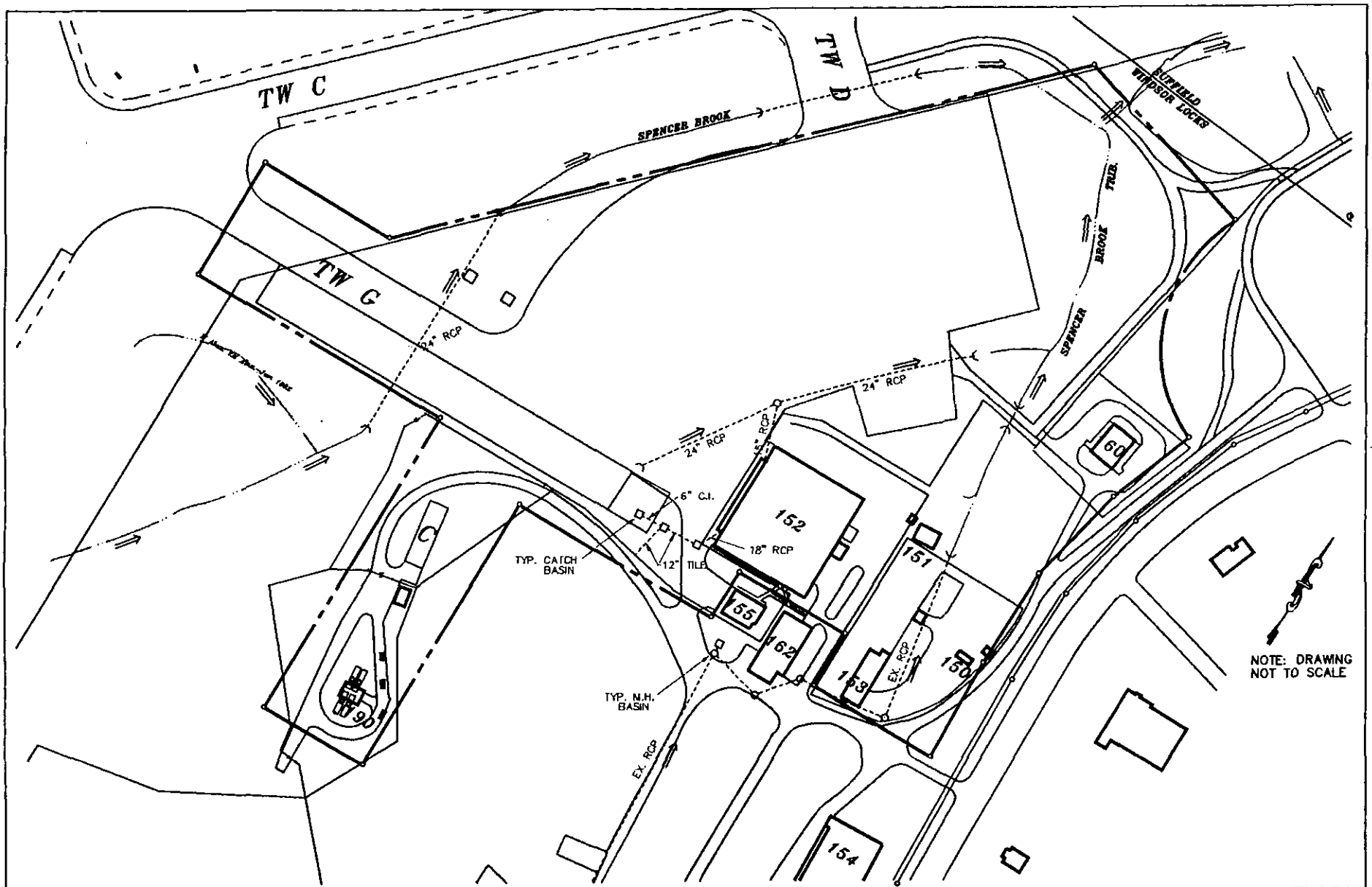
4.0 SURFACE WATER PATHWAY

4.1 Hydrologic Setting

The CTARNG facilities at Bradley Field are drained by Spencer Brook, an intermittent stream that discharges into Stoney Brook, a perennial stream, 6,300 feet downstream of the probable point of entry (PPE) of the CTARNG site. Stoney Brook then discharges into the Connecticut River 5.3 miles further downstream. This surface water target distance limit is shown in Appendix E.

The average flow of the Connecticut River is 16,640 cubic feet per second (cfs) measured at Route 190. The average flow rate of Stoney Brook is 20.4 cfs, based on the period 1981 to 1992, at the stream gage at South Grand Street. The South Grand Street gage has a drainage area of 10.4 square miles (6,656 acres) (Pizzuto, 1994). There are no gaging station records for Spencer Brook (Pizzuto, 1994); therefore, its flow rate is unknown. However, the average flow can be estimated from the records of the surrounding gaging station sites. Flow rates from these tributaries could lessen during drought periods.

The drainage system for the facilities at the CTARNG site is shown in Figure 6. As shown in the figure, the west side of the site is drained by two surface swales, runoff travels through two culverts, and discharges into the main stem of Spencer Brook. This system drains the tank farm, and approximately one acre of the parking apron. This system also serves parts of the runway and areas off-site. The eastern portion of the site is drained by two closed systems, located to the east and west of Building 152, which discharge into a tributary of Spencer Brook. The system to the west of the building drains the parking apron. The storm drain system east of Building 152, which drains Building 162, Building 153, Building 151, and Building 160 and their parking areas, originates on State of Connecticut property. Overall, the drainage system is 1,000 feet in length. The system is routed into a concrete swale downstream of the access road crossing for Building 160.



DESIGNED	R.I.G.	1/94 DATE
DRAWN	S.G.P.	1/94 DATE
CHECKED	K.K.W.	1/94 DATE
APPROVED	D.H.K.	1/94 DATE

ENGINEERING TECHNOLOGIES ASSOCIATES, INC.

ENGINEERS • PLANNERS • SURVEYORS

3458 ELLICOTT CENTER DRIVE SUITE 101
ELLICOTT CITY, MARYLAND 21043
BALTO. 465-9020 WASH. 621-4080

FIGURE NO. 6

CTARNG FACILITIES

DRAINAGE MAP

SCALE: N.T.S.	CONTRACT NO.: 92307.07.2	DATE: 7/20/94	SHEET:

The CTARNG facilities discharge storm water runoff associated with industrial activities into surface waters under state Permit Number GSW-000250. The facilities are also permitted to discharge water associated with the wash rack's grit separator and the AASF oil-water separator and floor drain system into surface waters. These permits, Permit Number GVW-000158 and Permit Number GVS-000258, allow a maximum discharge of 10,000 gpd and 1,000 gpd, respectively.

The mean annual precipitation is 43.33 inches based on data from 1905 to 1992 at Bradley International Airport (CTDEP, 1992e). The estimated 2-year, 24-hour rainfall for Bradley Field is 3.2 inches (SCS, 1994).

As indicated on the target distance limit map (Appendix E), the termination of the 15-mile-downstream target distance limit is located on the Connecticut River approximately 2,000 feet downstream of the confluence of the Connecticut and Farmington Rivers.

A review of the Flood Insurance Rate Maps (FIRM), published by the Federal Emergency Management Agency indicates that none of the potential on-site sources are located in the 100-year or 500-year floodplain (FEMA, 1979).

There are two probable points of entry (PPE) of hazardous substances into surface waters from the CTARNG facilities. One PPE is into Spencer Brook 290 feet west of Source Number 7, Hazardous Waste Accumulation Building, Building 189. The second PPE is located at the outfall of the storm pipes that prior to 1992 served Source Number 2 Building 152 Wash Rack and Grit Separator and Source Number 9, Building 152 Floor Drain System and Oil-Water Separator. The distance between this source and PPE is zero feet, since the pipe is routed directly to a surface water body.

Using USGS topographic maps that included the CTARNG facilities, the drainage area upgradient of the sources was calculated to be 89 acres.

No visible signs of contamination, such as distressed vegetation or sediment discoloration, were observed at the time of the site visit. However, most of the site was covered with snow.

No fisheries or surface water recreational areas along the 15-mile downstream target distance limit have been closed due to contamination problems (Gephardt, 1994).

4.2 Surface Water Targets

There are no potable surface water intakes on any of the surface water bodies along the 15-mile-downstream target distance limit (Radka, 1994).

All three surface water bodies along the water migration path have been designated by the State of Connecticut to be Class B Cold Water Fisheries. Class B fisheries are defined by the State of Connecticut to have a recreational use, to have a fish and wildlife habitat, and to provide agricultural and industrial supply and other legitimate uses including navigation. Class B fisheries must also meet water quality limits including pH (between 6.5 and 8.0), turbidity, and bacteria (maximum of 200 fecal coliform per 200 milliliters) (CTDEP, 1992d).

Within the target distance limit on the Connecticut River, the primary anadromous species of concern are the Atlantic salmon (*Salmo salar*) and the American shad (*Alosa sapidissima*). The area is used primarily as a migration corridor for adults migrating upstream in the spring (and sometimes in the fall), and for downstream-migrating smolts and juveniles on their way to the ocean. American shad is an important recreational and commercial species; however, the commercial fishing activity occurs downstream of the target distance limit. Shore and boat-based recreational fishing occurs at several specific sites along the river north of Hartford. Blueback herring (*A. aestivalis*) and alewife (*A. pseudoharengus*), which are collectively known as river herring, also utilize the portion of the Connecticut River located within the target distance limit (Aarrestad, 1994).

There have been several water quality and fish sampling studies performed for Stoney Brook and the Connecticut River within the 15-mile-downstream target distance limit. However, there are no data available for Spencer Brook. There were two samples taken of Stoney Brook in August and September of 1988. The sampling data are contained in Appendix J. In the September 1988 sample, 15 species of fish were noted. All the fish found in Stoney Brook are common to Connecticut waters, and no species are on the Federal or State endangered and threatened species lists (CTDEP, 1994). The Connecticut River drainage basin is presently the target of a State and Federal cooperative program for the restoration of fish habitat. This program includes the stocking of Atlantic salmon (*Salmo salar*) and the removal of impediments to fish passage.

Resources include Stoney Brook and the Connecticut River, both of which are used for boating and fishing. The CTDEP estimates that Stoney Brook can support 700 recreational users (Hagstrom, 1994). There are no data regarding recreation users available for Spencer Brook or the Connecticut River.

Sensitive environments include that area of the Connecticut River within the 15-mile-downstream target distance limit. Habitat for the Shortnose sturgeon (*Acipenser brevirostrum*), a Federally and State-listed endangered species, is located within this area. The population of adult Shortnose sturgeon within the study area on the river has been estimated at 850 individuals. The movements of the adult Shortnose sturgeon in the Connecticut River are complex and may vary among age groups, sexes, and spawning condition (Aarrestad, 1994). Atlantic sturgeon (*A. oxyrhynchus*), listed as a threatened species by the State of Connecticut, is also located in this area. Adults are often documented in the Connecticut River, usually in the late summer period when they enter the river to feed. The Connecticut River is no longer believed to support a spawning population (Aarrestad, 1994).

More than 20 miles of wetland frontage lie along the 15-mile-downstream target distance limit (USDOI, 1980).

4.3 Surface Water Conclusions

The review of documents and the site visit indicated that prior to drains being connected to the sanitary sewer system there was a potential for the release of hazardous substances to the surface water system. Current practices, which include discharge of floor drains through grit or oil-water separators and into the sanitary sewer system, have reduced the potential for surface water contamination. It is recommended that surface water quality and sediment sampling studies be undertaken for Spencer Brook and its tributary, to determine the possible impact of historic site activities on the stream.

5.0 SOIL EXPOSURE AND AIR PATHWAYS

5.1 Physical Conditions

The CTARNG site covers an area of approximately 32 acres and has a land use of 25 percent grass, 10 percent bare ground, 5 percent woods, and 60 percent paved areas and buildings as shown on the existing site plan (CTMD, 1994).

The installation is located within an attainment area with respect to the National Ambient Air Quality Standards for the following pollutants: nitrogen dioxide, lead, sulfur dioxide, and particulate matter no greater than 10 micrometers. The installation is located within non-attainment areas for ozone and carbon monoxide (CTDEP, 1992e).

Buildings 153, 160, 162, 190, and 191 were observed to be directly surrounded by six-foot chain link fences topped with barbed wire. Buildings 151, 152, and 189 were observed to be indirectly surrounded by six-foot chain link fences with barbed wire and by the airport property including the runways. Although workers would have access to areas of potential contamination, these fences would prevent outside personnel or civilians from gaining access to these areas.

Although there were no visible spill areas noted during the site visit, spill logs maintained by the CTARNG (Appendix H) from October 1990 to the present indicate several small spills of POL compounds of less than one gallon have occurred in Building 152, the parking apron, and the fuel farm. It was also noted in the logs that two spills of JP-4 exceeded 25 gallons. The first spill of 25 to 30 gallons occurred in March 1992 at the AASF hangar bay. The second spill, which occurred in April 1993 at the fuel farm, released approximately 30 to 40 gallons. The logs note that these spills were contained by AASF personnel.

All site operations are conducted in buildings or on asphalt/concrete surfaces. Maintenance, such as fluids replacements, occurs on the parking apron between Building 152 and the runway.

A rubble fill, located on land owned by the State of Connecticut, Bureau of Aeronautics, is located east of the fuel farm pump house (CTMD, 1994). This rubble fill was observed not to have any cover material to prevent rainwater infiltration or control access to the fill material.

There have been several releases of POL compounds into the soil as a result of leaking fuel tanks at the fuel farm pump house and at Building 153. When four 25,00-gallon USTs were removed from the fuel farm, POL-contaminated soil and water were encountered (Appendix K). During two site visits, more than 4,000 gallons of water and an undetermined amount of soil were removed from the excavation. No soil sampling or analytical testing of the soil or water was documented.

POL-contaminated soil was encountered during the removal of a 5,000-gallon gasoline UST at Building 153 in December 1993. The contaminated soil was removed and stockpiled on-site and covered with plastic material pending removal by contractor. No soil sampling or analysis was done (Hedenberg, 1994).

Contaminated soil was also encountered at Building 153 during the removal of a 3,000-gallon heating fuel UST in May 1991. Approximately 400 tons of soil were removed, covered with polyurethane and stockpiled on-site (Salo, 1991). This soil was tested and found to contain 24 mg/kg of total petroleum hydrocarbons (Hedenberg, 1994). After testing, this soil was transported to a landfill (Salo, 1991).

There is no evidence to suggest that a release of CERCLA hazardous substances to the atmosphere has occurred at Bradley Field. No direct observations of substance releases into the air has been reported to the CTARNG (Hedenberg, 1994) or the CTDEP Air Quality Department (Wilson, 1994) in association with the CTARNG facility. Further, no direct

releases were observed during the site visit. No air sampling is known to have been performed with respect to CTARNG facilities (Hedenberg, 1994). There have not been any Clean Air Act permits issued for the CTARNG facilities (CTDEP, 1992a). No permits are required for any fuel tanks on CTARNG property (Hedenberg, 1994). Further, the paint booth is not required to have a permit (Hedenberg, 1994)(see Appendix L). While a boiler operating at the CTARNG facility is registered with the State, no permit is required (Hedenberg, 1994)(see Appendix L).

Only one complaint has been registered with the CTDEP Air Quality Department, but was considered not to have been a violation. This report was made in October 1992 in relation to Bradley Airfield, but was not further identified as coming from the CTARNG facilities (Wilson, 1994). No known health affects associated with this complaint have been reported to the Air Quality Department (Wilson, 1994). No complaints have been registered with the CTARNG (Hedenberg, 1994).

5.2 Soil and Air Targets

There are no schools, day-care centers, or residences within 200 feet of any area of suspected soil contamination. The closest residence to the site is located adjacent to Route 175, approximately 500 feet east of the AASF. The closest institutional land use is the State of Connecticut Driving While Intoxicated (DWI) Center, 2,000 feet west of the AASF in the same building complex as Camp Hartell (Sabotka, 1994).

There are approximately 60 daily workers at the AASF (Rousseau, 1994). However, this population can increase to 275 personnel if two units are drilling on the same weekend (Rousseau, 1994).

There are no CERCLA-defined resources within one mile of the site; however, two parks are located within the target distance limit. Elmwood Park is located 7,600 feet southeast of the facility, and Peski Park is located 11,600 feet east-southeast of the facility.

Potential soil contamination associated with aircraft maintenance operations conducted on the parking apron at Building 152 is substantially covered with asphalt and/or concrete except for cracks in the asphalt. This prevents direct contact with any potentially contaminated soil. Stockpiled contaminated soils associated with tank removals at the facility are covered with impermeable plastic materials which also prevent direct contact.

A sensitive environment in the immediate vicinity of Bradley Field is an on-site wetland area that covers approximately 1.5 acres and is located adjacent to the northeastern corner of the parking apron. Overall, the National Wetland Inventory Maps for the site indicate that there are approximately 1,255 acres of wetlands within the four-mile-radius target distance limit (USDOI, 1975). Table 3 presents the acreage of wetlands within ranges of the target distance limit.

TABLE 3 Wetland Acreage within the Target Distance Limit

Radius from Site	Wetland Acreage
On-site	1.5 acres
0 to 0.25 mile	3 acres
0.25 to 0.50 mile	5 acres
0.50 to 1.0 mile	45 acres
1.0 to 2.0 miles	95 acres
2.0 to 3.0 miles	185 acres
3.0 to 4.0 miles	920 acres
Total	1255 acres

There are no known Federally-listed endangered or threatened species in the vicinity of the site. However, the installation is believed to provide habitat for three State-listed endangered species, which are shown in Table 4 (McKay, 1993). The CTDEP Natural Diversity Data base and files at the Natural Resources Center were researched for the airport with regard to the construction of Taxiway "J" at the Bradley International Airport. There are four grassland bird

species that nest within the vicinity of the project that are State-listed endangered or special concern species. The status of these species is summarized in Table 4. The data base is a compilation of data collected by the Natural Resource Center's Geological and Natural History Survey and cooperating units of the CTDEP, private conservation groups, and the scientific community (McKay, 1993).

TABLE 4 Grassland Bird Species for Bradley Field

Common Name	Latin Name	Last Observed	State Status
Upland Sandpiper	*Bartramia longicauda*	1992	Endangered
Grasshopper Sparrow	*Ammodramus savannarum*	1992	Endangered
Savannah Sparrow	*Passerculus sandwichensis*	1992	Special Concern
Vesper Sparrow	*Pooecetus ganeus*	1986	Endangered

The population within 1/4 mile of the CTARNG facilities at Bradley Field is comprised of the personnel at Camp Hartell (85 people) and of three houses located in this area (8 people, based on 2.6 people per home (Claritas, 1994)). The DWI facility is located within 1/2 mile of the site and has a resident population of 225 (Bouron, 1994). The CTANG has 281 full-time personnel, and is located within one mile of the site. There are 100 homes east of Route 175 with a resident population of 260 within one mile of the site. Table 4 presents the populations at specified distances from the site.

TABLE 5 Population within the Target Distance Limit

Radius from Site	Population
On-site	60[1]
0 to 0.25 mile	93[1]
0.25 to 0.50 mile	225[2]
0.50 to 1.0 mile	541[3]
1.0 to 2.0 miles	5,913[4]
2.0 to 3.0 miles	11,601[4]
3.0 to 4.0 miles	7,976[4]
Total	26,409

Notes:
1. Rousseau, 1994.
2. Bouron, 1994.
3. Based on 100 residential homes, and 2.6 people per home.
4. Claritas, 1994

5.3 Soil Exposure and Air Pathway Conclusions

There is no evidence that CERCLA hazardous substances have been released into the air or the soil. The soils underlying the site are highly transmissive and would conduct any contamination to local surface water bodies. Most of the site area is covered by impervious surface material, which would minimize the possibility of spilled material reaching the soil. There were cracks found on the apron area west of Building 152 which would allow the release of substances to the underlying soil. This potential for release will be minimized once the parking areas are resurfaced in 1994. It is recommended that soil in the vicinity of the cracks be tested during the construction, and that any contaminated soil be removed.

6.0 SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

6.1 Summary and Conclusions

This report presents the results of the Preliminary Assessment for the Federally-owned CTARNG facilities at Bradley Field. No environmental sampling was conducted as part of this investigation. The buildings included in the CTARNG facilities include the AASF, a motor pool building, four storage buildings, a fuel farm pump house, and a fuel farm office.

Nine potential CERCLA sources were documented at the CTARNG facilities investigated at Bradley Field. The location of the sources and the hazardous substances associated with them are summarized below.

1) Building 152 Battery Room: The possible discharge of unknown quantities of battery acid and metals into the drain prior to 1992.
2) Building 152 Wash Rack: Prior to the installation of the grit separator in 1992, the liquids generated during aircraft washing were routed directly to the storm water system which discharged to a wetlands area north of Building 152.
3) Building 152 Hangar Bay Safety-Kleen Machine: The machine's solvent, which is composed of petroleum naphtha 105, is located above a floor drain.
4) Building 152 Flammable Materials Storage Lockers: The lockers do not have secondary containment and in some cases are located within 30 feet of a floor drain.
5) Building 153 Floor Drain: Since the building provided routine maintenance for wheeled vehicles, there is a possibility that oils and solvents could have been discharged to the environment through the floor drain.
6) Building 162: The building has a stockroom which does not provide for secondary containment for POLs and hazardous substances including a cleaning compound marked "MIL-C-85704A & AMD3", ethylene glycol, and MEK.
7) Hazardous Waste Accumulation Area, Building 189: Building 189 is the hazardous waste accumulation point for the CTARNG.

8) ACM: During a 1987 survey, asbestos was observed in Building 160. Bulk sampling analysis showed the material to be comprised of up to 50 percent friable chrysotile (TRC, 1987). There are no records confirming the removal of asbestos from the building. Further, the corrugated fibrous roofing material of the original building appeared to contain ACM.

9) Building 152 Floor Drain System and Oil-Water separator: Prior to the installation of the oil-water separator in 1992, liquids generated on the vehicle maintenance floor were routed directly to the storm water system which discharged to a wetlands area north of Building 152.

The principal pathway of potential contamination from the facilities is from the floor drains. Prior to 1992, the drains at the AASF discharged to the storm drain system. The outfall point for the drains in Building 162 is not known.

Surface water environments that could be affected by the contaminants from these sources include the wetland frontage along Spencer Brook, Stoney Brook, and the Connecticut River within the 15-mile-downstream target distance limit. The Connecticut River has a Federally and State-listed endangered species, the Shortnose sturgeon.

6.2 Recommendations

6.2.1 Building 151 (New and Original)

- Conduct an asbestos investigation of the two buildings, especially the roofing material of the original building.

6.2.2 Building 152

- The materials in the caretakers office should be rearranged to segregate ammonia and chlorine bleach.

- The Safety-Kleen machine on the main hangar floor should be relocated away from the floor drain.
- The battery room floor drain should be investigated to determine if there is any residual metals contamination in the sewer lines.
- The wetlands north of the site should be investigated to determine if the former operations of the wash rack and floor drain system have affected this sensitive environment. A sediment sample should be collected downstream of the storm drain outfall.

6.2.3 Building 153

- The outfall of the floor drain should be located, and if the outfall is to a surface water body, sediments downstream of the outfall should be sampled.
- Determine the location of any abandoned USTs in the vicinity of the building.

6.2.4 Building 160

- The 500-gallon UST, and the 275-gallon waste oil UST should be removed if they are not used.
- The removal of asbestos from the building should be confirmed.

6.2.5 Building 162

- The containment of POL bulk storage in Building 162 should be upgraded to provide for spill protection.

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APPENDIX A

List of Acronyms and Abbreviations

AASF	Army Aviation Support Facility
ACM	Asbestos containing materials
AST	above-ground storage tank
ANG	Air National Guard
AVIM	Aviation Intermediate Maintenance
AVUM	Aviation Unit Maintenance
CAC	Connecticut Aeronautics Commission
CDHS	Connecticut Department of Health Services
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
cfs	cubic feet per second
CONEX	Container, exportable
CTANG	Connecticut Air National Guard
CTARNG	Connecticut Army National Guard
CTDEP	Connecticut Department of Environmental Protection
CTMD	Connecticut Military Department
CWC	Connecticut Water Company
DA	Department of the Army
DRMO	Defense Reutilization and Marketing Office
DWI	Driving While Intoxicated
EPA	United States Environmental Protection Agency
ETA	Engineering Technologies Associates, Inc.
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
gpd	gallons per day
JP-4	jet petroleum - 4
JP-8	jet petroleum - 8
MEK	methyl ethyl ketone
mg/kg	milligrams per kilogram

mg/L	milligrams per liter
NGB	National Guard Bureau
NPDES	National Pollution Discharge Elimination System
P&PO	Property and Procurement Officer
PA	Preliminary Assessment
PCB	polychlorinated biphenyls
POL	petroleum, oils, and lubricants
PPE	probable point of entry
ppm	parts per million
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments and Reauthorization Act
SQG	Small Quantity Generator
SWPPP	Storm Water Pollution Prevention Plan
TRC	TRC Environmental Consultants
U.S.	United States
USAEC	United States Army Environmental Center
USGS	United States Geological Survey
USP&FO	United States Property and Fiscal Office
UST	underground storage tank

APPENDIX B

List of Site Personnel Contacted

Personnel	Title
Colonel John Carragher	Director of Engineering and Environment
Staff Sergeant John Feliciano	Avionics Shop Supervisor
Ed Fijol	Director of Engineering, Bradley Airfield
1st Lieutenant Ralph Hedenberg	Environmental Specialist
Major Mark Rousseau	AASF Commander
Sergeant Scott Ryer	AASF Hazardous Materials Specialist
First Sergeant John Smith	Aircraft Supervisor

APPENDIX C

Potential Hazardous Waste Site Preliminary Assessment Form

OMB Approval Number: 2050-0095
Approved for Use Through: 1/92

EPA Potential Hazardous Waste Site Preliminary Assessment Form

Identification

State: | CERCLIS Number:

CERCLIS Discovery Date:

1. General Site Information

Name: Bradley Field

Street Address: Route 75

City: Windsor Locks | State: CT | Zip Code: 06096 | County: Hartford | Co. Code: | Cong. Dist:

Latitude: 41° 56' 39.1" Longitude: 72° 40' 24.4"

Approximate Area of Site: 36.1 Acres; 1,571,516 Square Ft

Status of Site: ☒ Active ☐ Inactive ☐ Not Specified ☐ NA (GW plume, etc.)

2. Owner/Operator Information

Owner: Dept. of Defense

Street Address: The Pentagon

City: Washington | State: D.C. | Zip Code: | Telephone: ( )

Operator: CTARNG

Street Address: 360 Broad Street

City: Hartford | State: CT | Zip Code: 06105 | Telephone: (203) 524-4945

Type of Ownership:
- ☐ Private
- ☒ Federal Agency Name DOD
- ☐ State
- ☐ Indian
- ☐ County
- ☐ Municipal
- ☐ Not Specified
- ☐ Other

How Initially Identified:
- ☐ Citizen Complaint
- ☐ PA Petition
- ☐ State/Local Program
- ☐ RCRA/CERCLA Notification
- ☒ Federal Program
- ☐ Incidental
- ☐ Not Specified
- ☐ Other

3. Site Evaluator Information

Name of Evaluator: Kim Walters

Agency/Organization: Engineering Technologies Associates, Inc.

Date Prepared: 6/7/94

Street Address: 3458 Ellicott Center Drive | City: Ellicott City | State: MD

Name of EPA or State Agency Contact: Connecticut Dept. of Environmental Protection

Street Address: 165 Capital Avenue

City: Hartford | State: CT | Telephone: (203) 566-5599

4. Site Disposition (for EPA use only)

Emergency Response/Removal Assessment Recommendation:
- ☐ Yes
- ☐ No
- Date: _____

CERCLIS Recommendation:
- ☐ Higher Priority SI
- ☐ Lower Priority SI
- ☐ NFRAP
- ☐ RCRA
- ☐ Other _____
- Date: _____

Signature:

Name (typed):

Position:

EPA Potential Hazardous Waste Site
Preliminary Assessment Form - Page 2 of 4

CERCLIS Number:

5. General Site Characteristics

Predominant Land Uses Within 1 Mile of Site (check all that apply):
- [x] Industrial
- [ ] Commercial
- [x] Residential
- [x] Forest/Fields
- [ ] Agriculture
- [ ] Mining
- [ ] DOD
- [ ] DOE
- [ ] DOI
- [ ] Other Federal Facility
- [x] Other Airport

Site Setting:
- [ ] Urban
- [x] Suburban
- [ ] Rural

Years of Operation:
Beginning Year 1941
Ending Year Present
[ ] Unknown

Type of Site Operations (check all that apply):
- [ ] Manufacturing (must check subcategory)
  - [ ] Lumber and Wood Products
  - [ ] Inorganic Chemicals
  - [ ] Plastic and/or Rubber Products
  - [ ] Paints, Varnishes
  - [ ] Industrial Organic Chemicals
  - [ ] Agricultural Chemicals (e.g., pesticides, fertilizers)
  - [ ] Miscellaneous Chemical Products (e.g., adhesives, explosives, ink)
  - [ ] Primary Metals
  - [ ] Metal Coating, Plating, Engraving
  - [ ] Metal Forging, Stamping
  - [ ] Fabricated Structural Metal Products
  - [ ] Electronic Equipment
  - [ ] Other Manufacturing
- [ ] Mining
  - [ ] Metals
  - [ ] Coal
  - [ ] Oil and Gas
  - [ ] Non-metallic Minerals
- [ ] Retail
- [ ] Recycling
- [ ] Junk/Salvage Yard
- [ ] Municipal Landfill
- [ ] Other Landfill
- [x] DOD
- [ ] DOE
- [ ] DOI
- [ ] Other Federal Facility
- [x] RCRA
  - [ ] Treatment, Storage, or Disposal
  - [ ] Large Quantity Generator
  - [x] Small Quantity Generator
  - [ ] Subtitle D
    - [ ] Municipal
    - [ ] Industrial
  - [ ] "Converter"
  - [ ] "Protective Filer"
  - [ ] "Non- or Late Filer"
- [ ] Not Specified
- [ ] Other

Waste Generated:
- [x] Onsite
- [ ] Offsite
- [ ] Onsite and Offsite

Waste Deposition Authorized By:
- [x] Present Owner
- [ ] Former Owner
- [ ] Present & Former Owner
- [ ] Unauthorized
- [ ] Unknown

Waste Accessible to the Public:
- [ ] Yes
- [x] No

Distance to Nearest Dwelling, School, or Workplace:
on-site Feet

6. Waste Characteristics Information

Source Type: (check all that apply)	Source Waste Quantity: (include units)	Tier[a]:
[ ] Landfill		
[ ] Surface Impoundment		
[x] Drums	70 gal.	V
[x] Tanks and Non-Drum Containers	281 gal.	V
[ ] Chemical Waste Pile		
[ ] Scrap Metal or Junk Pile		
[ ] Tailings Pile		
[ ] Trash Pile (open dump)		
[ ] Land Treatment		
[ ] Contaminated Ground Water Plume (unidentified source)		
[ ] Contaminated Surface Water/Sediment (unidentified source)		
[ ] Contaminated Soil		
[x] Other		
~~[ ] No Source~~ ACM	29 + Sq.Ft.	A

[a] C = Containment, W = Wastestream, V = Volume, A = Area

General Types of Waste (check all that apply)
- [x] Metals
- [x] Organics
- [x] Inorganics
- [x] Solvents
- [x] Paints/Pigments
- [ ] Laboratory/Hospital Waste
- [ ] Radioactive Waste
- [ ] Construction/Demolition Waste
- [ ] Pesticides/Herbicides
- [x] Acids/Bases
- [x] Oily Waste
- [ ] Municipal Waste
- [ ] Mining Waste
- [ ] Explosives
- [ ] Other

Physical State of Waste as Deposited (check all that apply):
- [x] Solid
- [ ] Sludge
- [ ] Powder
- [x] Liquid
- [ ] Gas

EPA Potential Hazardous Waste Site
Preliminary Assessment Form - Page 3 of 4

CERCLIS Number:

7. Ground Water Pathway

Is Ground Water Used for Drinking Water Within 4 Miles:
- [x] Yes
- [ ] No

Type of Drinking Water Wells Within 4 Miles (check all that apply):
- [x] Municipal
- [x] Private
- [ ] None

Is There a Suspected Release to Ground Water:
- [ ] Yes
- [x] No

Have Primary Target Drinking Water Wells Been Identified:
- [x] Yes
- [ ] No

If Yes, Enter Primary Target Population: None People

Depth to Shallowest Aquifer: 6.5 Feet

Karst Terrain/Aquifer Present:
- [ ] Yes
- [x] No

Nearest Designated Wellhead Protection Area:
- [ ] Underlies Site
- [ ] >0 - 4 Miles
- [x] None Within 4 Miles

List Secondary Target Population Served by Ground Water Withdrawn From:

0 - ¼ Mile	0
> ¼ - ½ Mile	0
> ½ - 1 Mile	0
> 1 - 2 Miles	219
> 2 - 3 Miles	5,381
> 3 - 4 Miles	6,178
Total Within 4 Miles	11,778

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply):
- [x] Stream
- [x] River
- [ ] Pond
- [ ] Lake
- [ ] Bay
- [ ] Ocean
- [ ] Other _____

Shortest Overland Distance From Any Source to Surface Water:
150 Feet
_____ Miles

Is There a Suspected Release to Surface Water:
- [ ] Yes
- [x] No

Site is Located in:
- [ ] Annual - 10 yr Floodplain
- [ ] >10 yr - 100 yr Floodplain
- [ ] >100 yr - 500 yr Floodplain
- [x] >500 yr Floodplain

Drinking Water Intakes Located Along the Surface Water Migration Path:
- [ ] Yes
- [x] No

Have Primary Target Drinking Water Intakes Been Identified:
- [x] Yes
- [ ] No

If Yes, Enter Population Served by Primary Target Intakes: NONE People

List All Secondary Target Drinking Water Intakes:

Name	Water Body	Flow (cfs)	Population Served

Total within 15 Miles: NONE

Fisheries Located Along the Surface Water Migration Path:
- [x] Yes
- [ ] No

Have Primary Target Fisheries Been Identified:
- [x] Yes
- [ ] No

List All Secondary Target Fisheries:

Water Body/Fishery Name	Flow (cfs)
Connecticut River	16,640 cfs
Stoney Bridge	20.4 cfs

CERCLIS Number:

8. Surface Water Pathway (continued)

Wetlands Located Along the Surface Water Migration Path:
- [x] Yes
- [ ] No

Have Primary Target Wetlands Been Identified:
- [x] Yes
- [ ] No

List Secondary Target Wetlands:

Water Body	Flow (cfs)	Frontage Miles
Spencer Br.	1.6	2.0
Stoney Br.	20.4	8.0
Connecticut River	16,640	20.0

Other Sensitive Environments Located Along the Surface Water Migration Path:
- [x] Yes
- [ ] No

Have Primary Target Sensitive Environments Been Identified:
- [x] Yes
- [ ] No

List Secondary Target Sensitive Environments:

Water Body	Flow (cfs)	Sensitive Environment Type
Connecticut River	16,640	Endangered Species Habitat

9. Soil Exposure Pathway

Are People Occupying Residences or Attending School or Daycare on or Within 200 Feet of Areas of Known or Suspected Contamination:
- [ ] Yes
- [x] No

If Yes, Enter Total Resident Population: N/A People

Number of Workers Onsite:
- [ ] None
- [x] 1 - 100
- [ ] 101 - 1,000
- [ ] >1,000

Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination:
- [ ] Yes
- [x] No

If Yes, List Each Terrestrial Sensitive Environment: N/A

10. Air Pathway

Is There a Suspected Release to Air:
- [ ] Yes
- [x] No

Enter Total Population on or Within:

Onsite	60
0 - ¼ Mile	93
> ¼ - ½ Mile	225
> ½ - 1 Mile	531
> 1 - 2 Miles	5,913
> 2 - 3 Miles	11,601
> 3 - 4 Miles	7,976
Total Within 4 Miles	26,399

Wetlands Located Within 4 Miles of the Site:
- [x] Yes
- [ ] No

Other Sensitive Environments Located Within 4 Miles of the Site:
- [x] Yes
- [ ] No

List All Sensitive Environments Within ½ Mile of the Site:

Distance	Sensitive Environment Type/Wetlands Area (acres)
Onsite	Wetlands/1.5 acres
0 - ¼ Mile	Wetlands/3 acres
> ¼ - ½ Mile	Wetlands/5 acres

APPENDIX D

Latitude and Longitude Calculation Worksheet #2

LATITUDE AND LONGITUDE CALCULATION WORKSHEET #2
LI USING ENGINEER'S SCALE (1/60)

SITE NAME: CTARNG AASF #1 BRADLEY FIELD CERCLIS #: _____

AKA: _____ SSID: _____

ADDRESS: BRADLEY FIELD, ROUTE #75

CITY: WINDSOR LOCKS STATE: CONNECTICUT ZIP CODE: 06096

SITE REFERENCE POINT: CENTRE OF BUILDING 152

USGS QUAD MAP NAME: WINDSOR LOCKS TOWNSHIP: ____ N/S RANGE: ____ E/W

SCALE 1:24,000 MAP DATE REV. 1984 SECTION: ____1/4 ____1/4 ____1/4

MAP DATUM: 1927 1983 (CIRCLE ONE) MERIDIAN: _____

COORDINATES FROM LOWER RIGHT (SOUTHEAST) CORNER OF 7.5' MAP (attach photocopy):

LONGITUDE: 72 37 ' 30 " LATITUDE: 41 52 ' 30 "

COORDINATES FROM LOWER RIGHT (SOUTHEAST) CORNER OF 2.5' GRID CELL:

LONGITUDE: 72 40 ' 00 " LATITUDE: 41 55 ' 00 "

CALCULATIONS: LATITUDE (7.5' QUADRANGLE MAP)

A) NUMBER OF RULER GRADUATIONS FROM LATITUDE GRID LINE TO SITE REF POINT: 300

B) MULTIPLY (A) BY 0.3304 TO CONVERT TO SECONDS:

A x 0.3304 = 99 .10 "

C) EXPRESS IN MINUTES AND SECONDS (1'= 60'): 01 '39 .10 "

D) ADD TO STARTING LATITUDE: 41 55 '00 .00 " + 01 '39 .10 "=

SITE LATITUDE: 41 56 '39 .10 "

CALCULATIONS: LONGITUDE (7.5' QUADRANGLE MAP)

A) NUMBER OF RULER GRADUATIONS FROM RIGHT LONGITUDE LINE TO SITE REF POINT: 74

B) MULTIPLY (A) BY 0.3304 TO CONVERT TO SECONDS:

A x 0.3304 = 24 .40 "

C) EXPRESS IN MINUTES AND SECONDS (1'= 60'): 00 '24 .40 "

D) ADD TO STARTING LONGITUDE: 72 40 '00 .00 " + 00 '24 .40 "=

SITE LONGITUDE: 72 40 '24 .40 "

INVESTIGATOR: ED MILES DATE: MARCH 14, 1994

APPENDIX E

Target Distance Limit Map

APPENDIX F

Photodocumentation Log

All photographs taken March 9, 1994

Photo. 1: Kirby Building No. 151 facing east with original Building 151 in foreground.

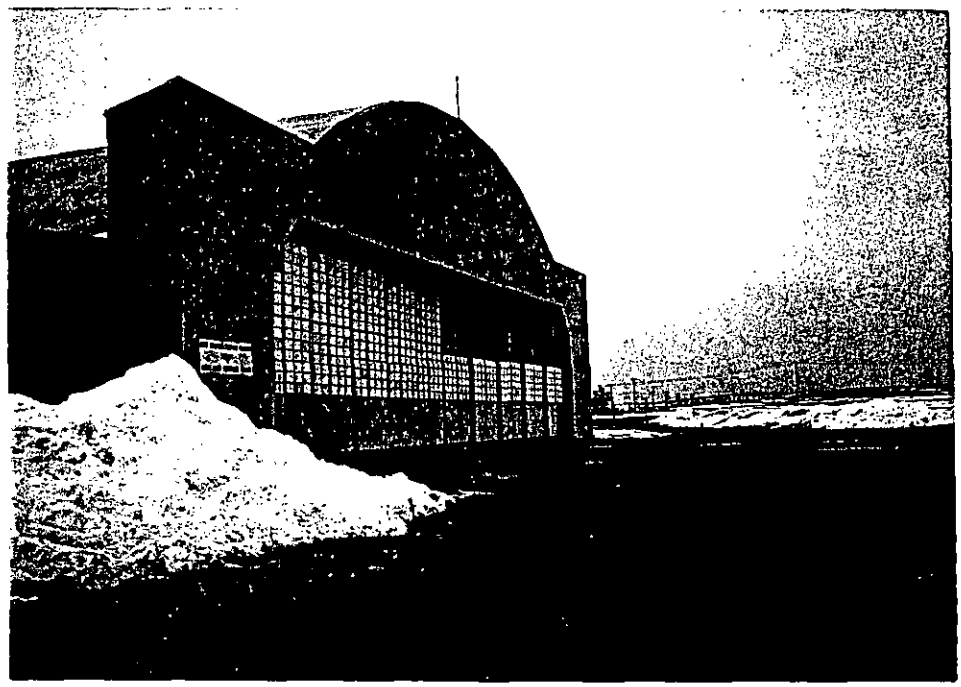


Photo. 2: Western face of AASF Building No. 152 showing hanger doors.

DESIGNED ____ DATE DRAWN ____ DATE CHECKED ____ DATE APPROVED ____ DATE	ENGINEERING TECHNOLOGIES ASSOCIATES, INC. ENGINEERS • PLANNERS • SURVEYORS 3468 ELLICOTT CENTER DRIVE SUITE 101 ELLICOTT CITY, MARYLAND 21043 BALTO. [illegible] WASH. [illegible]	BRADLEY FIELD Photographic Sheet No. 1	
		SCALE: CONTRACT NO.: DATE: SHEET:	

Photo. 3: Battery room sink in AASF Building No. 152

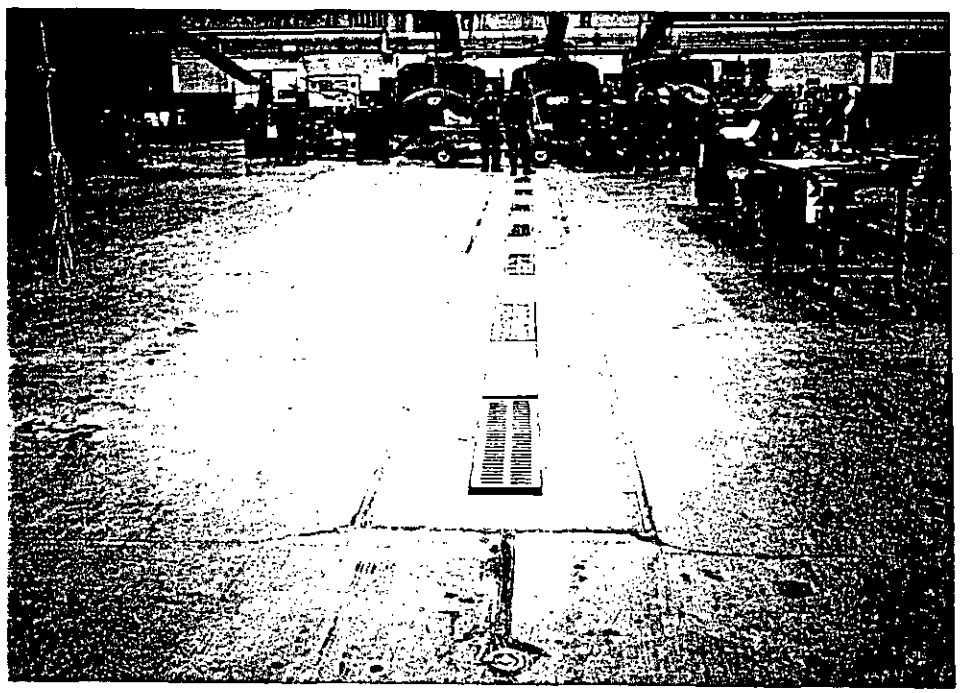


Photo. 4: Central floor drain in hanger bay in AASF Building No. 152

DESIGNED ____ DATE DRAWN ____ DATE CHECKED ____ DATE APPROVED ____ DATE	ENGINEERING TECHNOLOGIES ASSOCIATES, INC. ENGINEERS • PLANNERS • SURVEYORS 3468 ELLICOTT CENTER DRIVE SUITE 101 ELLICOTT CITY, MARYLAND 21043 BALTO. 461-[illegible] WASH. 621-[illegible]	BRADLEY FIELD Photographic Sheet No. 2	
		SCALE: CONTRACT NO.: DATE: SHEET:	

Photo. 5: Washrack in southwest corner of AASF Building No. 152.

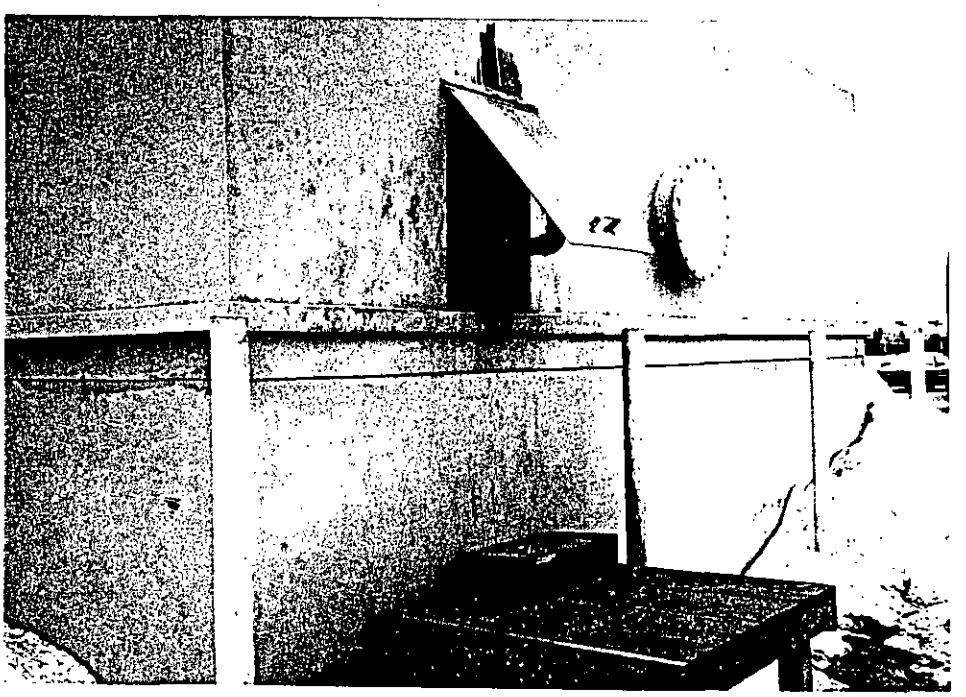


Photo. 6: 5,000 gallon AST east face of AASF Building No. 152.

DESIGNED ____ DATE DRAWN ____ DATE CHECKED ____ DATE APPROVED ____ DATE	ENGINEERING TECHNOLOGIES ASSOCIATES, INC. ENGINEERS • PLANNERS • SURVEYORS 3488 ELLICOTT CENTER DRIVE SUITE 101 ELLICOTT CITY, MARYLAND 21043 BALTO. [illegible] WASH. [illegible]	BRADLEY FIELD Photographic Sheet No. 3 SCALE: CONTRACT NO.: DATE: SHEET:	

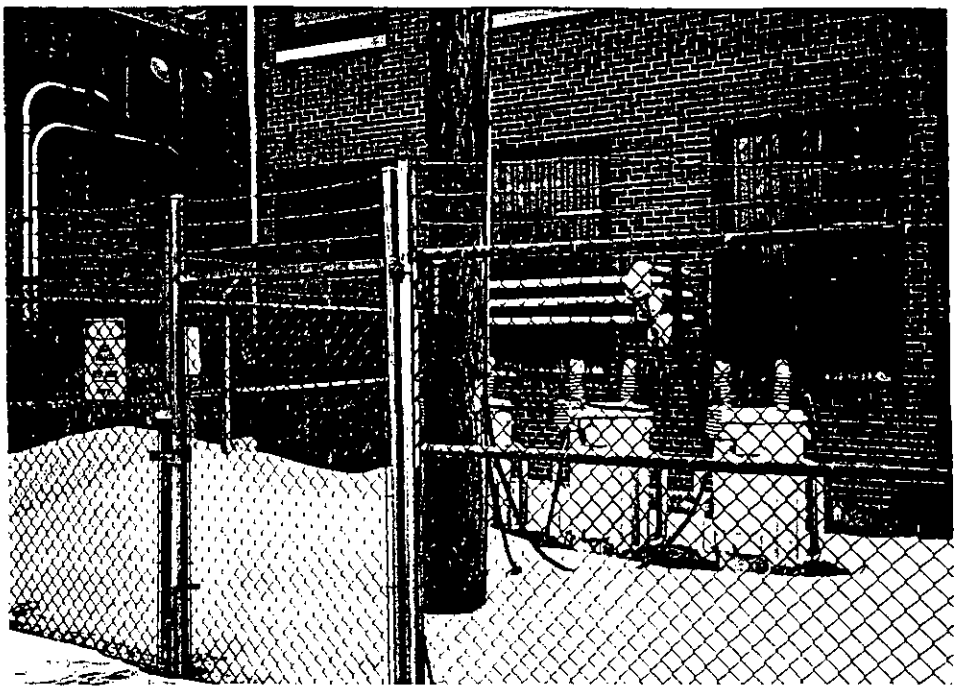


Photo. 7: Electrical transformers within fence adjacent to east face of AASF Building No. 152

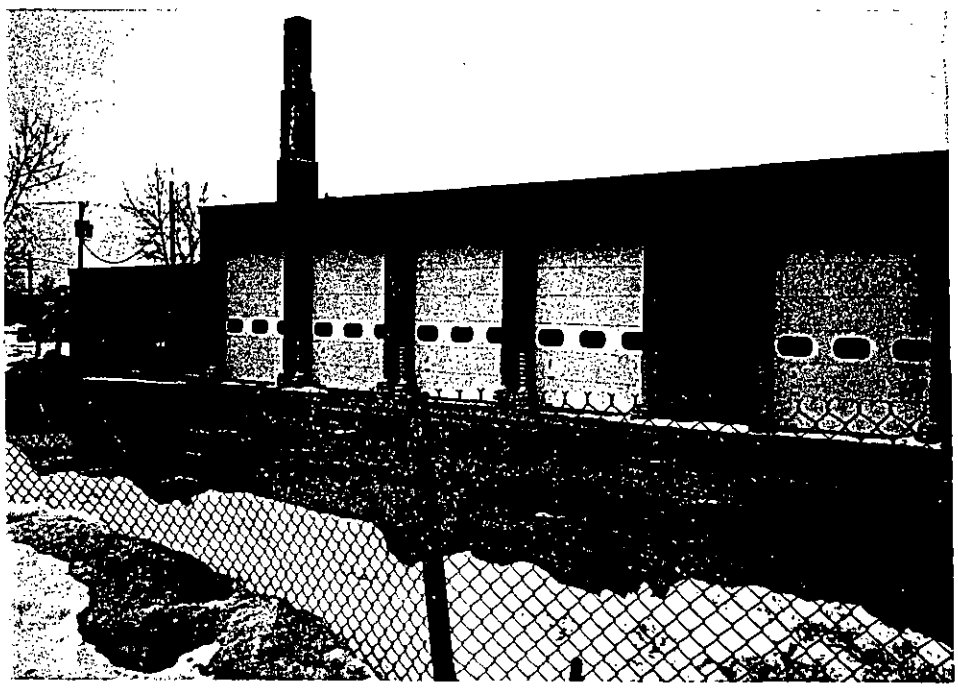


Photo. 8: Western face of Building No. 153.

DESIGNED ____ DATE DRAWN ____ DATE CHECKED ____ DATE APPROVED ____ DATE	ENGINEERING TECHNOLOGIES ASSOCIATES, INC. ENGINEERS • PLANNERS • SURVEYORS 3468 ELLICOTT CENTER DRIVE SUITE 101 ELLICOTT CITY, MARYLAND 21043 BALTO. 461-[illegible] WASH. 621-[illegible]	BRADLEY FIELD Photographic Sheet No. 4	SCALE: CONTRACT NO.: DATE: SHEET:

Photo. 9: Western face of Building No. 160.

Photo. 10: Conex storage buildings south of Building No. 160

DESIGNED ____ DATE DRAWN ____ DATE CHECKED ____ DATE APPROVED ____ DATE	ENGINEERING TECHNOLOGIES ASSOCIATES, INC. ENGINEERS • PLANNERS • SURVEYORS 3468 ELLICOTT CENTER DRIVE SUITE 101 ELLICOTT CITY, MARYLAND 21043 BALTO. 461-[illegible] WASH. 621-[illegible]	BRADLEY FIELD Photographic Sheet No. 5	
		SCALE: CONTRACT NO.: DATE: SHEET:	

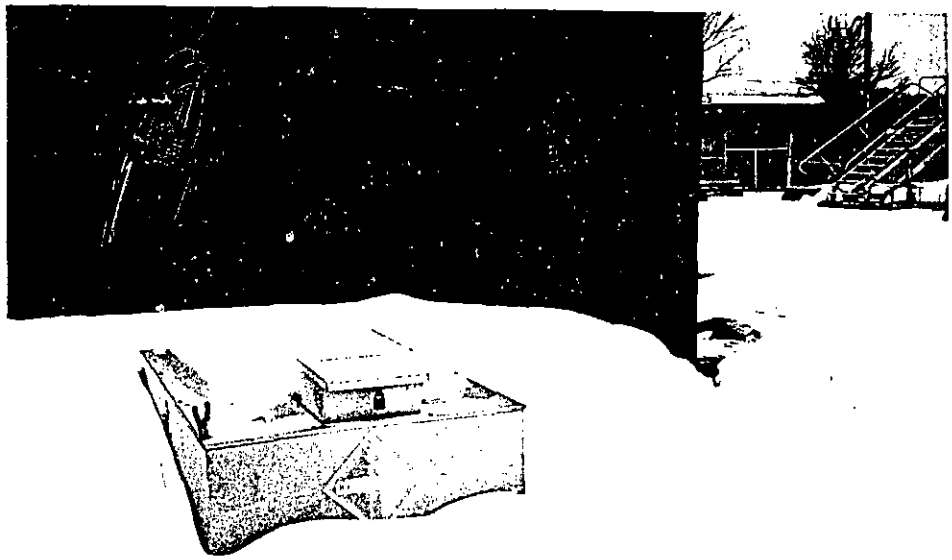


Photo. 11: Vaulted waste storage tank in northwest corner of Building No. 160.

Photo. 12: Solvents storage area in Building No. 162.

DESIGNED ____ DATE DRAWN ____ DATE CHECKED ____ DATE APPROVED ____ DATE	ENGINEERING TECHNOLOGIES ASSOCIATES, INC. ENGINEERS • PLANNERS • SURVEYORS 3468 ELLICOTT CENTER DRIVE SUITE 101 ELLICOTT CITY, MARYLAND 21043 BALTIMORE [illegible] WASH. [illegible]	BRADLEY FIELD Photographic Sheet No. 6	
		SCALE:	CONTRACT NO.: DATE: SHEET:

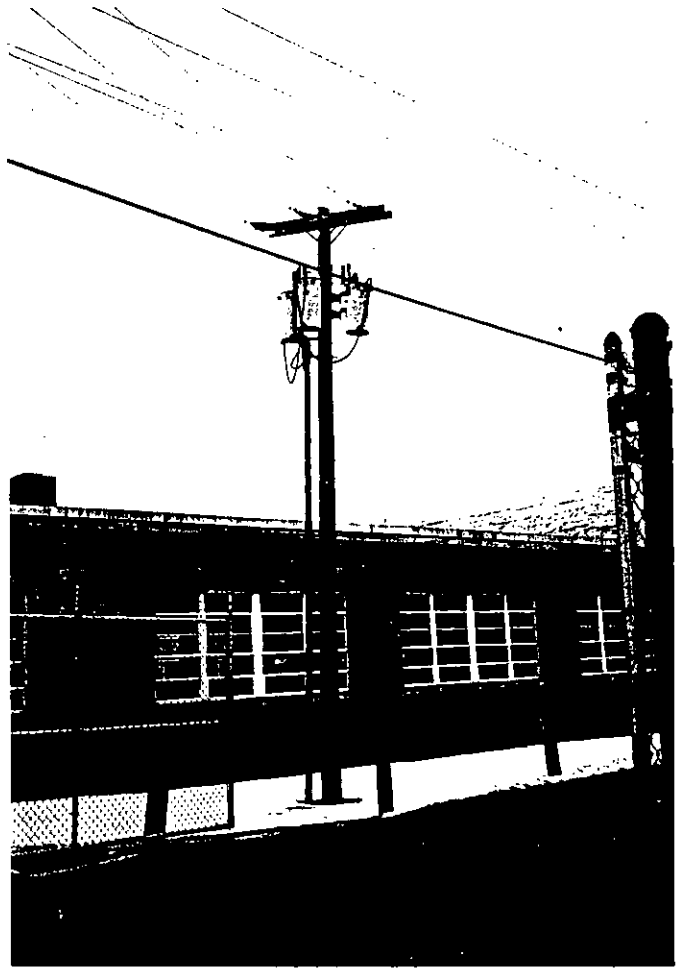


Photo. 13: Electrical transformers on pole southeast corner of Building No. 162.

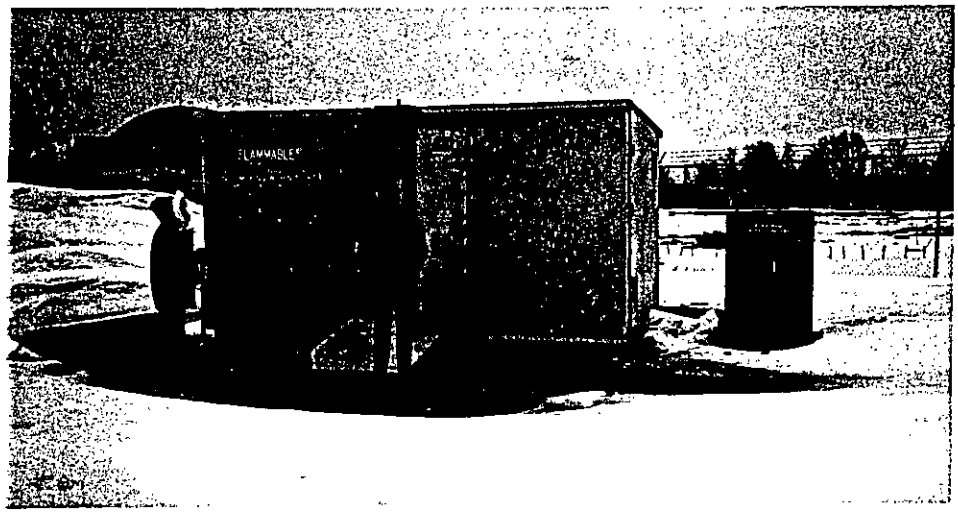


Photo. 14: Hazardous waste storage Building No. 189, hazardous waste storage locker to the east, and AASF in the background.

DESIGNED ____ DATE DRAWN ____ DATE CHECKED ____ DATE APPROVED ____ DATE	ENGINEERING TECHNOLOGIES ASSOCIATES, INC. ENGINEERS • PLANNERS • SURVEYORS 3468 ELLICOTT CENTER DRIVE SUITE 101 ELLICOTT CITY, MARYLAND 21043 BALTO. [illegible] WASH. [illegible]	BRADLEY FIELD Photographic Sheet No. 7	
		SCALE: CONTRACT NO.: DATE: SHEET:	

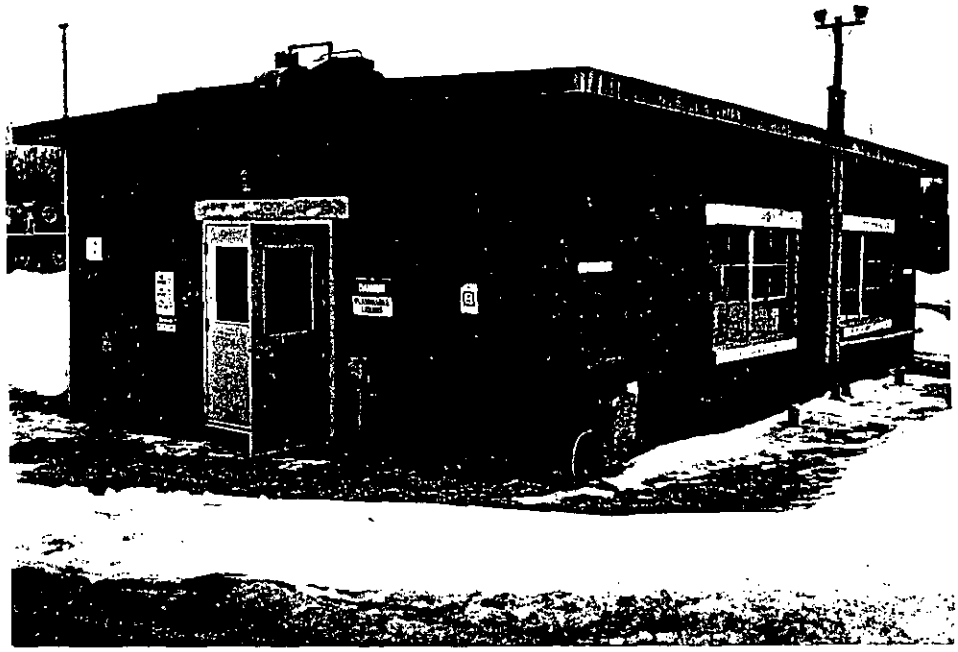


Photo. 15: Northeast corner of Tank Farm Building No. 190 facing southwest.

Photo. 16: Western face of Building No. 191.

DESIGNED ____ DATE DRAWN ____ DATE CHECKED ____ DATE APPROVED ____ DATE	ENGINEERING TECHNOLOGIES ASSOCIATES, INC. ENGINEERS • PLANNERS • SURVEYORS 3468 ELLICOTT CENTER DRIVE SUITE 101 ELLICOTT CITY, MARYLAND 21043 BALTO. 461-[illegible] WASH. 621-[illegible]	BRADLEY FIELD Photographic Sheet No. 8	
		SCALE: CONTRACT NO.: DATE: SHEET:	

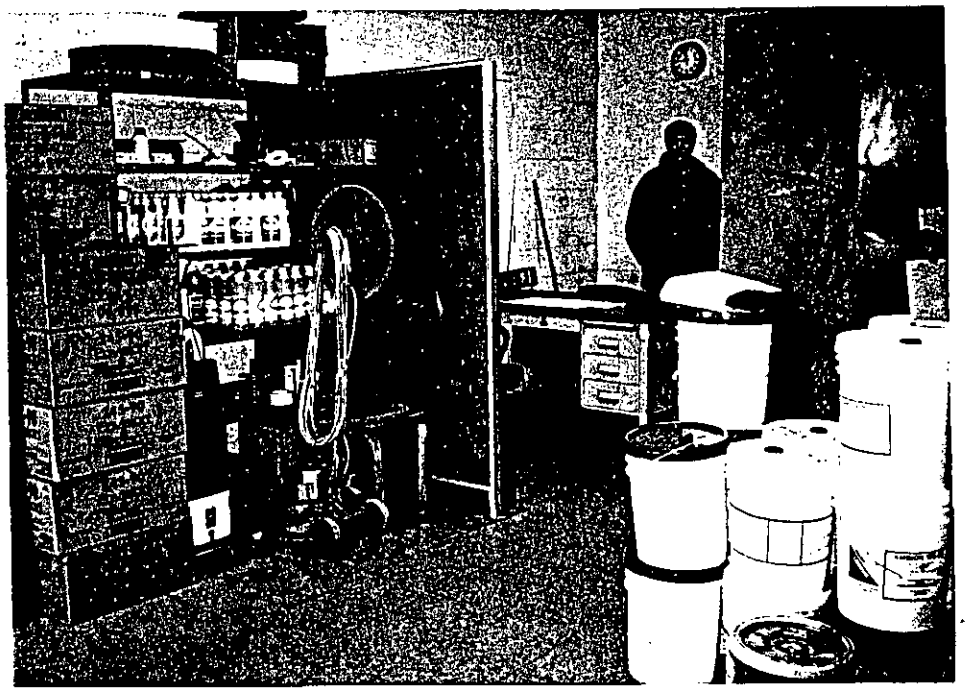


Photo. 17: Cleaning compounds in state caretaker's office in AASF Building No. 152.

Photo. 18: Safety Kleen washer over floor drain, northeast corner of hanger bay in AASF Building No. 152.

DESIGNED ____ DATE DRAWN ____ DATE CHECKED ____ DATE APPROVED ____ DATE	ENGINEERING TECHNOLOGIES ASSOCIATES, INC. ENGINEERS • PLANNERS • SURVEYORS 3468 ELLICOTT CENTER DRIVE SUITE 101 ELLICOTT CITY, MARYLAND 21043 BALTO. [illegible] WASH. [illegible]	BRADLEY FIELD Photographic Sheet No. 9 SCALE: CONTRACT NO.: DATE: SHEET:	

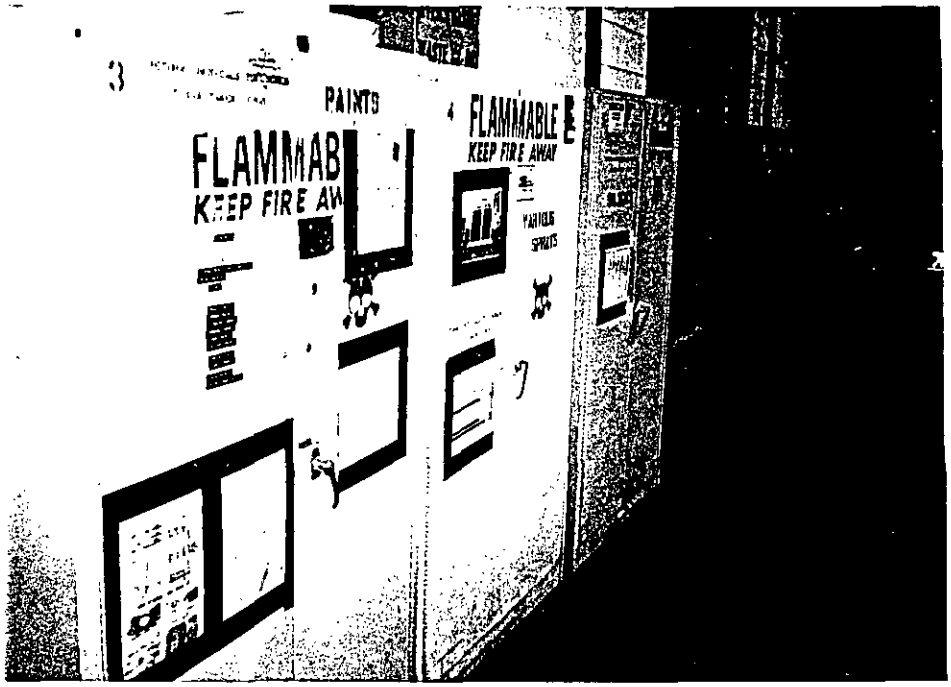


Photo. 19: Hazardous materials lockers adjacent to east wall of hanger bay in AASF Building No. 152.

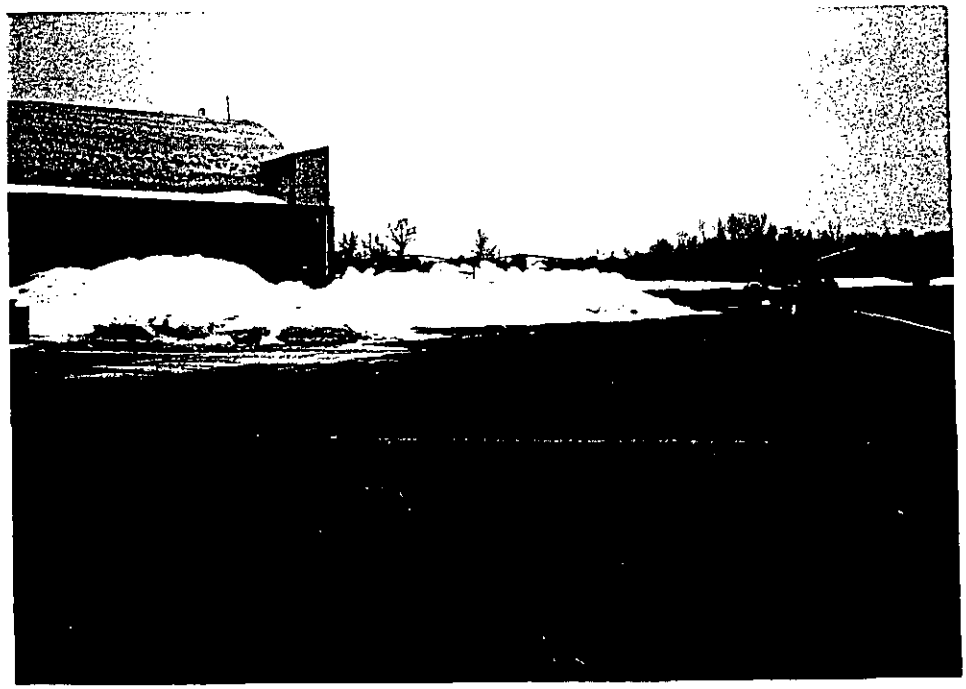


Photo. 20: Cracked asphalt apron west of Building 152

DESIGNED ____ DATE DRAWN ____ DATE CHECKED ____ DATE APPROVED ____ DATE	ENGINEERING TECHNOLOGIES ASSOCIATES, INC. ENGINEERS • PLANNERS • SURVEYORS 3458 ELLICOTT CENTER DRIVE SUITE 101 ELLICOTT CITY, MARYLAND 21043 BALTO. 461-9620 WASH. 621-[illegible]	BRADLEY FIELD Photographic Sheet No. 10	
		SCALE: CONTRACT NO.: DATE: SHEET:	

APPENDIX G

Site Discharge Permits

CERTIFICATION FORM VW2

Submit After Installation of Treatment Facilities

Facility Name & Address: Connecticut Army Aviation Support Facility

Bradley Field, Route 75

Windsor Locks, CT 06096

Application No: 92-023 (See Approval/Permit)

I HEREBY CERTIFY, UNDER PENALTY OF LAW, THAT THE COLLECTION AND TREATMENT FACILITIES HAVE BEEN INSTALLED IN ACCORDANCE WITH THE APPLICATION TO THE BEST OF MY KNOWLEDGE AFTER REASONABLE INVESTIGATION.

I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR IMPROPER INSTALLATION OF THESE FACILITIES AND FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT.

Signature of Applicant — Date: 11 January 1993

David W. Gay, MG, The Adjutant General

Print Name of Applicant

Signature of Professional Engineer — Date: 1/13/93

John H. Miller

Print Name of Professional Engineer

Professional Engineer's Stamp

STATE OF CONNECTICUT ★ JOHN H. MILLER ★ No. 4142 LICENSED PROFESSIONAL ENGINEER

AGENCY USE ONLY
The Department of Environmental Protection has received your certified statement above. You are now hereby authorized to discharge waste waters as described in the APPROVAL/PERMIT dated January 13, 1993.

Return to: CT Department of Environmental Protection, Water Management Bureau
122 Washington Street, Hartford, CT 06106, Attention: Permit Coordinator

DISCHARGE OF CAR WASH WASTEWATER FROM THE ABOVE SITE IS AUTHORIZED UPON RECEIPT OF THIS CERTIFICATION FORM BEARING THE DEP AUTHORIZATION STAMP.

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

ADMINISTRATOR
FACILITIES MANAGEMENT
MAR 12 '92
dist 3/13/92 d25

	COMMISSIONER	NILES
	DPTY. COMM.	ROBERSON
	CAO	WAGNER
	PERSONNEL	DIST. (3)
		L.O.T.
	CROSSON	FILE
X	DOEG	# COPIES

CAR WASH WASTEWATER

APPROVAL LETTER AND GENERAL PERMIT

Applicant: CT Dept. of Public Works
Address: 165 Capitol Avenue
Hartford, CT 06106

MAR 25 1992

DEPT. OF PUBLIC WORKS
DISTRICT II

Re: Application No. 92-[illegible]
Permit No. GVW[illegible]

I) APPROVAL

Dear Applicant:

Public notice for this category of general permit has been published in accordance with Section 22a-430-3(b)(6)(C) of the Regulations of Connecticut State Agencies.

The Commissioner of Environmental Protection has found that the referenced application is in compliance with all applicable Department requirements and is hereby APPROVED, subject to the condition that the facilities are properly maintained and operated in accordance with all applicable conditions of the referenced application and Sections 22a-430-3 and 4 of the Regulations of Connecticut State Agencies. **This APPROVAL does not apply to those sites which have been issued a separate APPROVAL letter.**

The applicant is hereby authorized to install grit separators and associated appurtenances at:

(1) the site or sites specified in the referenced application, and

(2) any site or sites which are added to the referenced application in the future, and for which this department has received a COMPLETE application (NOTE: it is the responsibility of the Applicant to ensure that a COMPLETE application is received by this department before the commencement of installation of grit separators and associated appurtenances),

for the treatment of a maximum flow of ten thousand (10,000) gallons per day at each site of car wash wastewater prior to being discharged to the sanitary sewer.

This APPROVAL does not relieve you of the obligation to obtain any other authorizations as may be required by Federal, State or Local laws or regulations.

The following Permit shall go into effect for a site upon receipt by the applicant of Certification Form VW2 for that site, stamped by the Department of Environmental Protection.

03.25.92 04:42PM *PublicWorks—Dist#2 P02

III) GENERAL PERMIT

This permit is issued in accordance with Section 22a-430 of Chapter 446k of the Connecticut General Statutes and regulations adopted thereunder, as amended.

For those sites for which a signed final certification form has not been submitted but at which an inspection by this department has been performed, the Commissioner of Environmental Protection (hereinafter "the Commissioner") has found that the system installed for the treatment of the discharge will protect the waters of the state from pollution.

For those sites for which a signed final certification form has been submitted, by virtue of the signed certifications submitted by the Applicant as part of the referenced application, the Commissioner has found that the system installed for the treatment of the discharge will protect the waters of the state from pollution.

This action is further found to be consistent with the applicable policies of the Connecticut Coastal Management Act (Section 22a-92 of the Connecticut General Statutes).

The Commissioner, acting under Section 22a-430 hereby permits the applicant to discharge Vehicle Washing Wastewater at the sites specified in the referenced application, and at any sites which are added to the referenced application in the future, in accordance with the following conditions:

1) The wastewater shall be collected, pretreated and discharged in accordance with the above referenced application and all approvals issued by the Commissioner or her agent for the discharges and/or activities authorized by or associated with this permit.

2) The discharges shall not exceed and shall otherwise conform to specific terms and conditions listed below.

   A. Discharge Serial No. 001
      Description: Car Wash Wastewater
      Code 1550090
      Maximum Flow: 10,000 gallons per day

      (1) The pH of the discharge shall not be less than 5.0 or greater than 10.0 (Code 609-012).

3) The grit separator tank shall be pumped out and cleaned by a firm licensed for that purpose by the Department of Environmental Protection at least once per year. Records of such servicing shall be kept on site for a minimum of seven years.

4) All waste oil and antifreeze solutions shall be collected in separate waste holding tanks and disposed of by a licensed waste hauler. Records of such waste hauling shall be kept for a minimum of seven years.

This permit is issued under Section 22a-430 and shall expire on March 4, 2003.

This permit shall be subject to the following sections of the Regulations of Connecticut State Agencies which are hereby incorporated into this permit:

Section 22a-430-3 General Conditions

(a)Definitions
(b)General
(c)Inspection and Entry
(d)Effect of a Permit
(e)Duty
(f)Proper Operation and Maintenance
(g)Sludge Disposal
(h)Duty to Mitigate
(i)facility Modifications; Notification
(j)Monitoring, Records and Reporting Requirements
(k)Bypass
(l)Conditions Applicable to POTWs
(m)Effluent Limitation Violations (Upsets)
(n)Enforcement
(o)Resource Conservation
(p)Spill Prevention and Control
(q)Instrumentation, Alarms, Flow Recorders
(r)Equalization

22a-430-4 Procedures and Criteria

(a)Duty to Apply
(b)Duty to Reapply
(c)Application Requirements
(d)Preliminary Review
(e)Tentative Determination
(f)Draft Permits, Fact Sheets
(g)Public Notice, Notice of Hearing
(h)Public Comments
(i)Final Determination
(j)Public Hearings
(k)Submission of Plans and Specifications. Approval.
(l)Establishing Effluent Limitations and Conditions
(m)Case by Case Determinations
(n)Permit issuance or renewal
(o)Permit Transfer
(p)Permit revocation, denial or modification
(q)Variances
(r)Secondary Treatment Requirements
(s)Treatment Requirements for Metals and Cyanide
(t)Discharges to POTWs - Prohibitions

Your attention is especially drawn to the notification requirements of subsection (i)(2), (i)(3), (j)(9)(C), (k)(3), (k)(4) and (l)(2) of Section 22a-430-3.

This General Permit requires the payment of an annual compliance determination fee of $62.50 per facility as set forth in section 22a-430-7 of the Regulations of Connecticut State Agencies. This fee payment is due at least thirty (30) days before each anniversary date of the issuance of this General Permit (for the issuance date, see below).

The Commissioner reserves the right to make appropriate revisions to the permit in order to establish any appropriate effluent limitations, schedules of compliance, or other provisions which may be authorized under the Clean Water Act or the Connecticut General Statutes or regulations adopted thereunder, as amended. The permit as modified or renewed under this paragraph may also contain any other requirements of the Clean Water Act or Connecticut General Statutes or regulations adopted thereunder which are then applicable.

Entered as a General Permit of the Commissioner of the Department of Environmental Protection on March 4, 1992.

DISCHARGE AT A SITE IS NOT AUTHORIZED UNTIL THE APPLICANT RECEIVES A COPY OF CERTIFICATION FORM VW2 FOR THAT SITE STAMPED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

THIS PERMIT AUTHORIZES DISCHARGE FROM ANY SITE FOR WHICH THE APPLICANT HAS RECEIVED CERTIFICATION FORM VW2 FOR THAT SITE STAMPED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

Adrian P. Freund
Bureau Chief
Bureau of Water Management

03. 25. 92 04:42PM *PublicWorks—Dist#2 P05

CERTIFICATION FORM VS2

Submit After Installation of Treatment Facilities

Facility Name & Address: Connecticut Army Aviation Support Facility

Bradley Field, Route 75

Windsor Locks, CT 06096

Application No: 92-024 (See Approval/Permit)

I HEREBY CERTIFY, UNDER PENALTY OF LAW, THAT THE COLLECTION AND TREATMENT FACILITIES, AS REQUIRED UNDER SECTION 22a-430-4(S)(3) OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES, HAVE BEEN INSTALLED IN ACCORDANCE WITH THE APPLICATION TO THE BEST OF MY KNOWLEDGE AFTER REASONABLE INVESTIGATION.

I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR IMPROPER INSTALLATION OF THESE FACILITIES AND FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

Signature of Applicant

13 Jan 93
Date

David W. Gay, MG, The Adjutant General
Print Name of Applicant

Signature of Professional Engineer

1/13/93
Date

John H. Miller
Print Name of Professional Engineer

Professional Engineer's Stamp

STATE OF CONNECTICUT
JOHN H. MILLER
No. 4142
LICENSED
PROFESSIONAL ENGINEER

AGENCY USE ONLY
The Department of Environmental Protection has received your certified statement above. You are now hereby authorized to discharge waste waters as described in the APPROVAL/PERMIT dated January 13, 1993.

Return to: CT Department of Environmental Protection, Water Management Bureau
122 Washington Street, Hartford, CT 06106, Attn: Permit Coordinator

DISCHARGE OF VEHICLE SERVICE FLOOR DRAIN WASTEWATER FROM THE ABOVE SITE IS AUTHORIZED UPON RECEIPT OF THIS CERTIFICATION FORM BEARING THE DEP AUTHORIZATION STAMP.

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

MOTOR VEHICLE SERVICE FLOOR DRAIN WASTEWATER

APPROVAL LETTER AND GENERAL PERMIT

RECEIVED
MAR 25 1992
DEPT. OF PUBLIC WORKS
DISTRICT II

Applicant: CT DEPT of Public Works
Address: 165 Capitol Avenue
Hartford, CT 06106

RECEIVED
MAR 25 1992

Re: Application No. 92-0[illegible]
Permit No. GVS000258

I) APPROVAL

Dear Applicant:

DEPT. OF PUBLIC WORKS
DISTRICT II

Public notice for this category of general permit has been published in accordance with Section 22a-430-3(b)(6)(C) of the Regulations of Connecticut State Agencies.

The Commissioner of Environmental Protection has found that the referenced application is in compliance with all applicable Department requirements and is hereby APPROVED, subject to the condition that the facilities are properly maintained and operated in accordance with all applicable conditions of the referenced application and Sections 22a-430-3 and 4 of the Regulations of Connecticut State Agencies. This APPROVAL does not apply to those sites which have been issued a separate APPROVAL letter.

The applicant is hereby authorized to install oil separators and associated appurtenances at:

(1) the site or sites specified in the referenced application, and

(2) any site or sites which are added to the referenced application in the future, and for which this department has received a COMPLETE application (NOTE: it is the responsibility of the Applicant to ensure that a COMPLETE application is received by this department before the commencement of installation of oil separators and associated appurtenances),

for the treatment of a maximum flow of one thousand (1,000) gallons per day at each site of vehicle service floor drain wastewater prior to being discharged to the sanitary sewer.

This APPROVAL does not relieve you of the obligation to obtain any other authorizations as may be required by Federal, State or Local laws or regulations.

The following Permit shall not be effective for a site until receipt by the applicant of Certification Form VS2 for that site, stamped by the Department of Environmental Protection.

II) GENERAL PERMIT

This permit is issued in accordance with Section 22a-430 of Chapter 446k of the Connecticut General Statutes and regulations adopted thereunder, as amended. The Commissioner of Environmental Protection (hereinafter "the Commissioner") has found that the system installed for the treatment of the discharge will protect the waters of the state from pollution, except for those sites for which a signed final certification form has been submitted, in which case the Commissioner has found, by virtue of the signed certifications submitted by the Applicant as part of the referenced application, that the system installed for the treatment of the discharge will protect the waters of the state from pollution. This action is further found to be consistent with the applicable policies of the Connecticut Coastal Management Act (Section 22a-92 of the Connecticut General Statutes).

The Commissioner, acting under Section 22a-430 hereby permits the applicant to discharge Vehicle Service Floor Drain Wastewater at the sites specified in the referenced application, and at any sites which are added to the referenced application in the future, in accordance with the following conditions:

1) The wastewater shall be collected, pretreated and discharged in accordance with the above referenced application and all approvals issued by the Commissioner or her agent for the discharges and/or activities authorized by or associated with this permit.

2) The discharges shall not exceed and shall otherwise conform to specific terms and conditions listed below.

   A. Discharge Serial No. 001
      Description: Vehicle Service Floor Drain Wastewater
      Code 5250000
      Maximum Flow: 1,000 gallons per day

      (1) The pH of the discharge shall not be less than 5.0 or greater than 10.0 (Code 609-012).

Parameter	Code	Maximum Concentration Limits
Oil and Grease - Hydrocarbon Fraction	623-019	100 mg/l

3) The oil separator tank shall be properly maintained in order that the above limitation will be met. The oil separator tank shall be pumped out and cleaned by a firm licensed by the Department of Environmental Protection at least once per year. Records of such servicing shall be kept on site for a minimum of seven years.

4) All waste oil and antifreeze solutions shall be collected in separate waste holding tanks and disposed of by a licensed waste hauler. Records of such waste hauling shall be kept for a minimum of seven years.

5) No vehicle washing, either exterior or interior, is permitted at this facility except for the washing of vehicles by hand as part of normal servicing operations, unless a separate permit has been obtained for a car washing discharge.

This permit is issued under Section 22a-430 and shall expire on March 4, 2003.

This permit shall be subject to the following sections of the Regulations of Connecticut State Agencies which are hereby incorporated into this permit:

Section 22a-430-3 General Conditions

(a)Definitions
(b)General
(c)Inspection and Entry
(d)Effect of a Permit
(e)Duty
(f)Proper Operation and Maintenance
(g)Sludge Disposal
(h)Duty to Mitigate
(i)facility Modifications; Notification
(j)Monitoring, Records and Reporting Requirements
(k)Bypass
(l)Conditions Applicable to POTWs
(m)Effluent Limitation Violations (Upsets)
(n)Enforcement
(o)Resource Conservation
(p)Spill Prevention and Control
(q)Instrumentation, Alarms, Flow Recorders
(r)Equalization

22a-430-4 Procedures and Criteria

(a)Duty to Apply
(b)Duty to Reapply
(c)Application Requirements
(d)Preliminary Review
(e)Tentative Determination
(f)Draft Permits, Fact Sheets
(g)Public Notice, Notice of Hearing
(h)Public Comments
(i)Final Determination
(j)Public Hearings
(k)Submission of Plans and Specifications. Approval.
(l)Establishing Effluent Limitations and Conditions
(m)Case by Case Determinations
(n)Permit issuance or renewal
(o)Permit Transfer
(p)Permit revocation, denial or modification
(q)Variances
(r)Secondary Treatment Requirements
(s)Treatment Requirements for Metals and Cyanide

(t)Discharges to POTWs - Prohibitions

Your attention is especially drawn to the notification requirements of subsection (i)(2), (i)(3), (j)(9)(C), (k)(3), (k)(4) and (l)(2) of Section 22a-430-3.

The Commissioner reserves the right to make appropriate revisions to the permit in order to establish any appropriate effluent limitations, schedules of compliance, or other provisions which may be authorized under the Clean Water Act or the Connecticut General Statutes or regulations adopted thereunder, as amended. The permit as modified or renewed under this paragraph may also contain any other requirements of the Clean Water Act or Connecticut General Statutes or regulations adopted thereunder which are then applicable.

Entered as a General Permit of the Commissioner of the Department of Environmental Protection on March 4, 1992.

DISCHARGE AT A SITE IS NOT AUTHORIZED UNTIL THE APPLICANT RECEIVES A COPY OF CERTIFICATION FORM VS2 FOR THAT SITE STAMPED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

THIS PERMIT AUTHORIZES DISCHARGE FROM ANY SITE FOR WHICH THE APPLICANT HAS RECEIVED CERTIFICATION FORM VS2 FOR THAT SITE STAMPED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

Adrian E. Freund
Bureau Chief
Bureau of Water Management

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER MANAGEMENT

REGISTRATION UNDER A GENERAL PERMIT
CGS SECTION 22a-430b
for
STORMWATER DISCHARGE ASSOCIATED WITH
INDUSTRIAL ACTIVITY

DEP USE ONLY
REG.#
PERMIT #
FAC. ID.

FILE COPY

type or print neatly

I. Facility Information

A. Name and address of owner
State Military Department
Connecticut Army National Guard (CTARNG)

National Guard Armory
360 Broad Street
Hartford, CT. 06105- 3795
Attn: MCTFO ENV

B. Name and address of operator
Army Aviation Support Facility # 1
Bradley Field, Route # 75

~~Windsor Locks, CT. 06096~~

Ownership status: Federal____, State xxx, Public____, Private____, Other_____

C. Site address Bradley Field, Route # 75, Windsor Locks, CT. 06096

D. Site contact person Commander Phone: (205) 627- 4871

E. Standard Industrial Classification (SIC) Code for industrial activities, up to four four-digit numbers (primary # first): 4581 (secondary #s if applicable)_____/_____/_____ and primary SIC description
~~Airports, Flying Fields and Airport Terminal Services~~

F. Other DEP Permits currently in force for the site: NPDES #_____, Air Yes:____No: xxx
RCRA #_____, Number and type of other general permit discharges to stormwater system
CTD 983869785

G. Attach 8 1/2" x 11" copy of the applicable section of a USGS quadrangle map showing site boundaries and the location of all conveyances, outfalls, or channelized flows on the site.

II. Stormwater discharge information

A. Number, type (e.g. swale or pipe) and size of conveyances, outfalls, or channelized flows that run off the site: 2, Pipe, 24" and 60"

B. Material of construction, if applicable, of the conveyances, outfalls, or channelized flows: Reinforced Concrete Pipe

(over)

C. Where does stormwater discharge to?

- Municipal Separate Storm Sewer System? No: xx Yes: ___ (Name): _____
- Surface water body or wetlands? No: ___ Yes: xx (Name): Seaman Brook
- Is discharge located less than 100 feet from a tidal wetland which is not a fresh-tidal wetland? No xx, Yes _____ (Only for discharges initiated after October 1, 1992.)
- Seeps into ground? No: xx Yes: ___ (If yes, Well: ___ Seepage Pit: ___ Detention Pond: ___ Other: _____

D. Name of the watershed where the site is located: Stony Brook Basin (41) into Connecticut (8/83)

E. Have any stormwater quality analytical data been collected? No: x Yes: ___ (If yes, maintain data from past three (3) years on site.)

D. Has this discharge been previously registered by a different permittee? No: x Yes: ___ If yes, name of previous permittee: _____

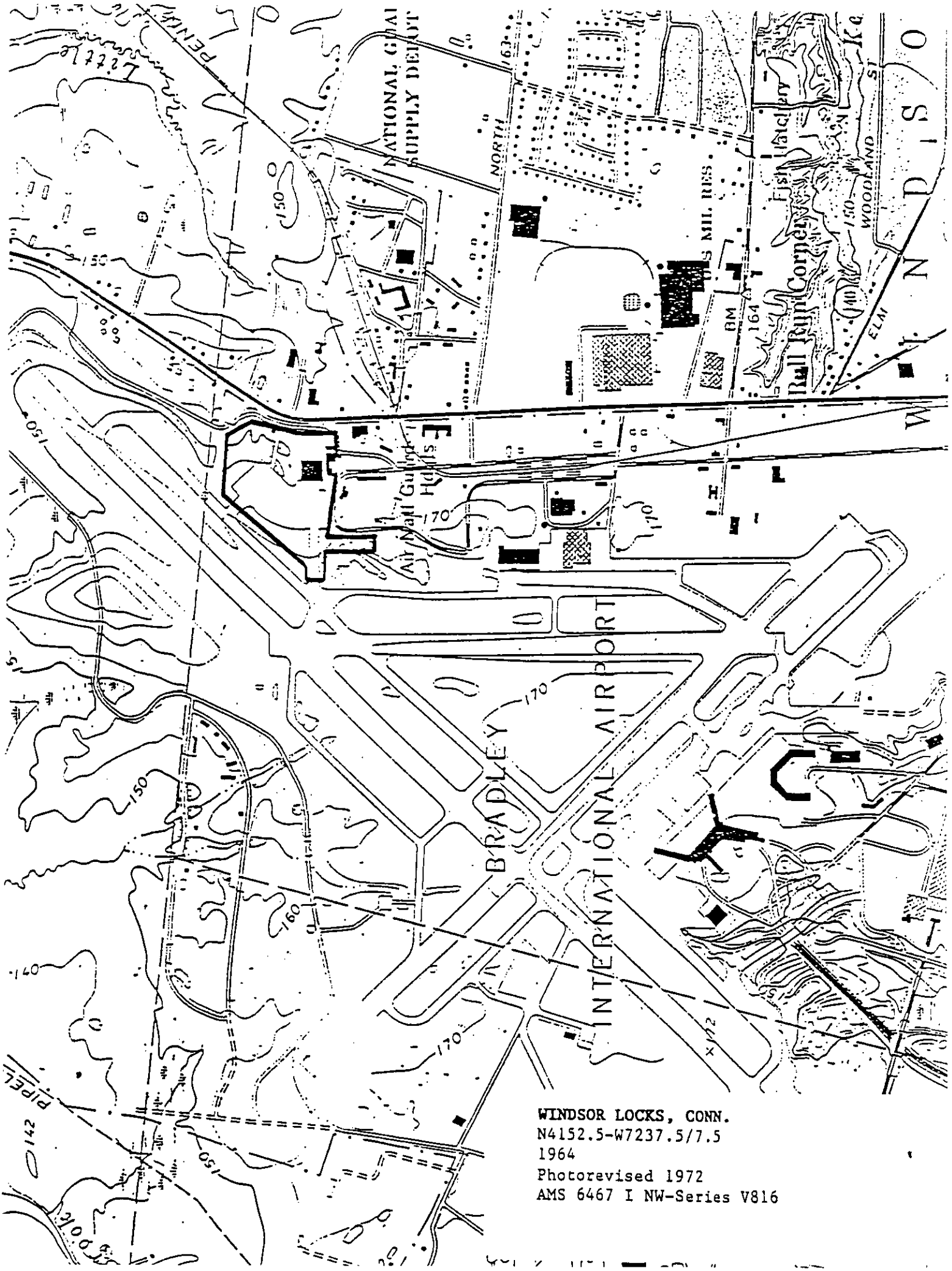
III. Certification

I certify under penalty of law that I have read and understand all conditions of the general permit for the discharge of stormwater associated with industrial activity issued on October 1, 1992, and that all conditions for eligibility for coverage under this general permit are met. This document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained in this registration is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are penalties for submitting false information, including the possibility of fine and imprisonment for knowingly making false statements.

Ralph F. Hedenberg, 1LT, IN, CTARNG	Environmental Protection Specialist
Name of Registrant (please print)	Title
	25 November 1992
Signature	Date

Fee attached $ N/A. A fee of $250.00 for any person and $125.00 for any municipality shall be paid with the registration. (Make your check payable to the Department of Environmental Protection and annotate check: Water Management Permit fee.) State owned facilities are not required to pay a registration fee.

Mail application to: Department of Environmental Protection
Bureau of Water Management
Permits, Enforcement, and Remediation Division
165 Capitol Avenue
Hartford, CT 06106
Attention: General Permit Coordinator



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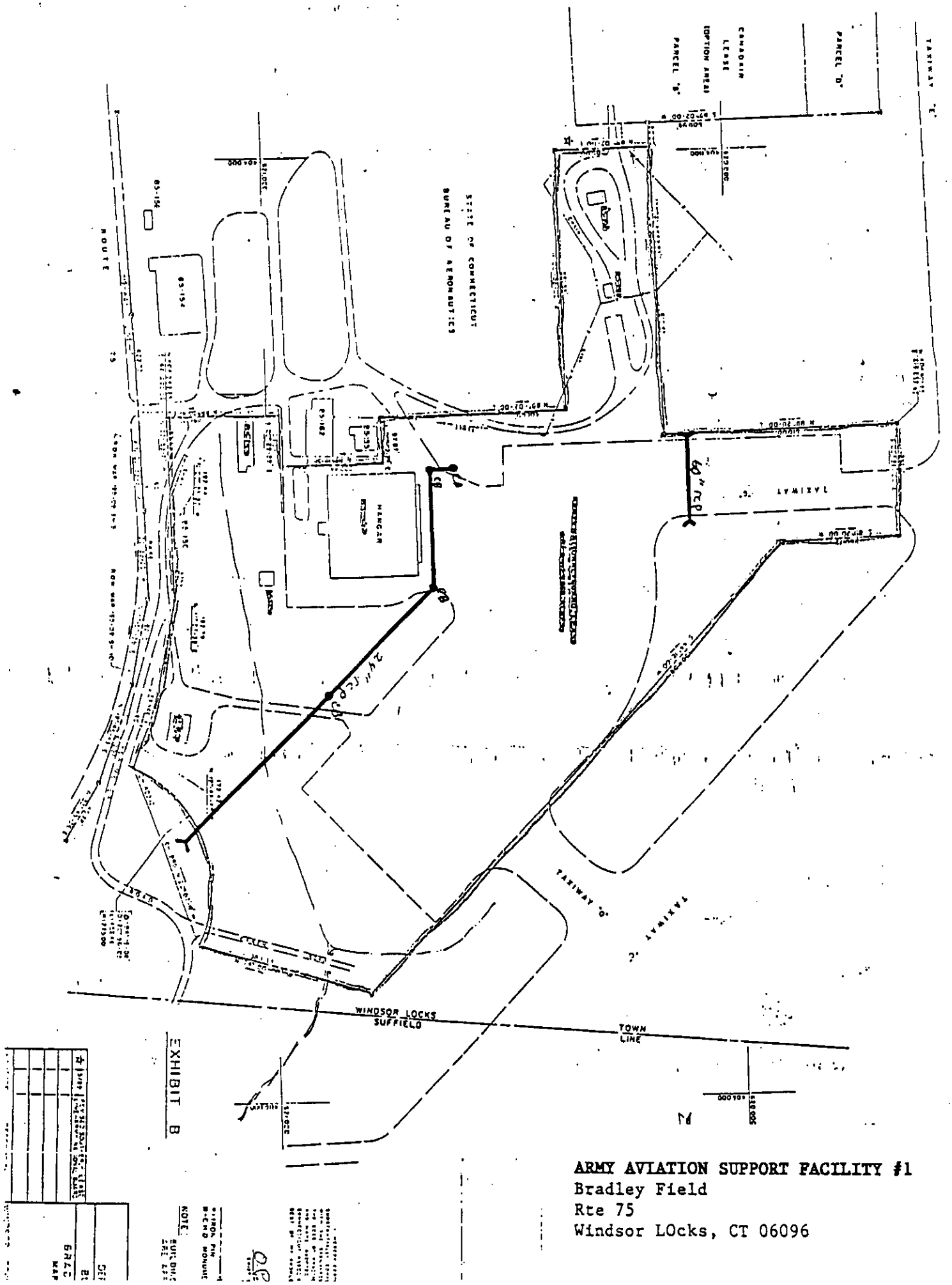

ARMY AVIATION SUPPORT FACILITY #1
Bradley Field
Rte 75
Windsor LOcks, CT 06096

GENERAL PERMIT FOR THE DISCHARGE OF STORMWATER ASSOCIATED WITH INDUSTRIAL ACTIVITY

October 1, 1992

State of Connecticut
Department of Environmental Protection
Bureau of Water Management

Printed on Recycled Paper

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GENERAL PERMIT FOR THE DISCHARGE OF STORMWATER ASSOCIATED WITH INDUSTRIAL ACTIVITY

PART I. AUTHORITY

This general permit is issued under the authority of Section 22a-430b of the Connecticut General Statutes, as amended by Public Act 91-263.

PART II. DEFINITIONS

The definitions of terms used in this general permit shall be the same as the definitions contained in Section 22a-423 of the Connecticut General Statutes and Section 22a-430-3(a) of the Regulations of Connecticut State Agencies. The definition of the term "coastal area" shall be the same as the definition contained in section 22a-94. The definition of the term "high tide line" shall be the same as that contained in section 22a-359 of the Connecticut General Statutes. The definition of the term "coastal tidal waters" shall be the same as the definition contained in section 22a-29 of the Connecticut General Statutes. In addition, the following definitions shall apply:

"Industrial activity" means:

(1) An activity subject to stormwater effluent limitation guidelines, new source performance standards, or toxic pollutant effluent standards under 40 CFR Subchapter N (except facilities with toxic pollutant effluent standards which are exempt under category (10) of this paragraph);

(2) An activity classified as Standard Industrial Classifications "Standard Industrial Classification Manual, Executive Office of the President, Office of Management and Budget 1987" 24 (except 2434), 26 (except 265 and 267), 28 (except 283 and 285), 29, 311, 32 (except 323), 33, 3441, 373;

(3) An activity classified as Standard Industrial Classifications 10 through 14 (mineral industry) including active or inactive mining operations (except for areas of coal mining operations meeting the definition of a reclamation area under 40 Code of Federal Register 434.11(1)) and oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge stormwater contaminated by contact with or that has come into contact with, any overburden, raw material, intermediate products, finished products, by-products or waste products;

(4) Hazardous waste treatment, storage, or disposal facilities, including those facilities operating under interim status or a permit pursuant to section 22a-449(c) or 22a-454 of the Connecticut General Statutes.

(5) Landfills, land application sites, and open dumps that have received any industrial wastes (waste that is received from any of the facilities described under this subsection) including but not limited to those that are subject to regulation under Subtitle D of the Resource Conservation and Recovery Act, 42 U.S.C. sections 6901, et seq.;

(6) The recycling of materials including metal scrap yards, battery reclaimers, salvage yards, and automobile junk yards, including but not limited to those classified as Standard Industrial Classification 5015 and 5093;

(7) Steam electric power generating facilities, including coal handling sites;

(8) Transportation facilities classified as Standard Industrial Classifications 40, 41, 42 (except 4221-25), 44, 45, and 5171 which have vehicle maintenance shops, equipment cleaning operations, or airport deicing operations. Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, airport

deicing operations, or which are otherwise identified under paragraphs (1) through (7), (9) or (10) of this subsection are included in this definition;

(9) Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, but not including farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located in the confines of the facility, or areas that are in compliance with 40 CFR 503;

(10) Facilities under Standard Industrial Classifications 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 285, 30, 31 (except 311), 323, 34 (except 3441), 35, 36, 37 (except 373), 38, 39, 4221 - 25, (and which are not otherwise included within categories (2) through (9)), including only those areas where material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by products or industrial machinery are exposed to stormwater.

"Fresh-tidal wetland" means a tidal wetland with an average salinity of less than 0.5 parts per thousand.

"Inland wetland" means a wetland as that term is defined in section 22a-38 of the Connecticut General Statutes.

"Municipal separate storm sewer" means conveyances for stormwater(including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels or storm drains) owned or operated by any municipality and discharging directly to surface waters of the state.

"Permittee" means any person who or municipality which initiates, creates, originates or maintains a discharge to the waters of the state; which discharge is covered under this general permit in accordance with Part IV of this general permit.

"Point Source" means any discernible, confined and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged.

"Registrant" means a person who or municipality which submits a complete registration in accordance with Part V of this general permit.

"Site" means on the same or geographically contiguous property which may be divided by public or private right(s)-of-way.

"Stormwater" means waters consisting of precipitation runoff.

"Stormwater discharge associated with industrial activity" means the discharge from any conveyance which is used for collecting and conveying stormwater and which is directly related to manufacturing, processing or raw material storage areas at an industrial plant.

"Tidal wetland" means a wetland as that term is defined in section 22a-29 of the Connecticut General Statutes.

PART III. FEES

A fee of $250.00 for any person and $125.00 for any municipality shall be paid with the registration required by Part V of this general permit. On and after January 1, 1993, registration and annual fees, if applicable, shall be paid in

accordance with applicable regulations, including but not limited to Sections 22a-430-6 and 22a-430-7 of the Regulations of Connecticut State Agencies.

PART IV. COVERAGE UNDER THIS GENERAL PERMIT

A. CONDITIONS FOR ELIGIBILITY. This general permit covers only discharges comprised solely of stormwater associated with industrial activity, provided that the following conditions are met prior to coverage under this general permit.

1. The discharge is not covered by a permit issued under Section 22a-430 of the Connecticut General Statutes;

2. The stormwater is not discharged to a Publicly Owned Treatment Works (POTW) or to ground water;

3. No effluent limitations, standard or guideline adopted by the U. S. Environmental Protection Agency under the Federal Clean Water Act is applicable to the discharge;

4. The stormwater is discharged from a point source which is directly related to manufacturing, processing or raw material storage areas at an industrial plant, including but not limited to stormwater discharged from ground surfaces immediately adjacent to manufacturing areas, processing or raw material storage areas; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste materials, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at 40 CFR 401); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and finished products; and areas where industrial activity has taken place in the past and materials remain and are exposed to stormwater;

5. The stormwater is not discharged from an industrial activity owned by a municipality with a 1990 census population of less than 100,000, unless the stormwater discharge is from municipally-owned airports, power plants, and uncontrolled landfills (e.g., landfills which do not meet the requirements of run-on and run-off controls established pursuant to subtitle D of the Solid Waste Disposal Act.)

B. GEOGRAPHIC AREA. This general permit covers all areas of the State of Connecticut.

C. EFFECTIVE DATE AND EXPIRATION DATE. This general permit is effective on October 1, 1992 and expires on October 1, 1997.

D. EFFECTIVE DATE OF COVERAGE. The effective date of coverage under this general permit is the effective date of this permit listed in Part IV Paragraph C above, or the date the industrial activity is initiated, whichever is later.

E. ISSUANCE OF AN INDIVIDUAL PERMIT. Under Section 22a-430b of the General Statutes, when an individual permit is issued to a person or municipality for stormwater discharges at the site otherwise covered by this permit, the applicability of this general permit to the individually permitted discharge is automatically terminated on the effective date of the individual permit.

PART V. REGISTRATION REQUIREMENTS

A. DUTY TO REGISTER. Any person who or municipality which initiates, creates, originates or maintains

a discharge described in Part IV Paragraph A of this general permit shall submit to the Commissioner a registration which satisfies the requirements of this part either (1) 60 days after the date of issuance of this permit for any discharge initiated, created, originated or maintained on or before the date of issuance of this permit, or (2) for any other discharge, no later than the date the industrial activity is initiated. If the facility or activity for which a registration is submitted under this permit is owned by one person or municipality but is leased or, in some other way, the legal responsibility of another person or municipality (the operator), the operator is responsible for submitting the registration required by this general permit. The permittee is responsible for compliance with all conditions of this general permit.

B. SCOPE OF REGISTRATION. A registrant may only include on a registration those discharges which are operated by such registrant on one site. A registrant may not submit more than one registration per site under this permit.

C. CONTENTS OF REGISTRATION. The registration shall be submitted on forms prescribed by the Commissioner and shall include but not necessarily be limited to the following information.

1. Facilities Information

   a. Name, Address of owner and operator and status as federal, state, private, public or other entity
   b. Site address if different from a. above
   c. Site contact person and phone number
   d. Primary activity; up to four four-digit Standard Industrial Classification (SIC) codes.
   e. A list of other DEP permits currently in force for the site, including discharges of non-stormwater to the stormwater outlets
   f. An original 8-1/2 x 11" copy of the applicable section of a United States Geological Survey Quadrangle Map showing the site boundaries.

2. Stormwater Discharge Information

   a. Number, type (e.g. swale or pipe) and size of conveyances, outfalls or channelized flows that run off the site;
   b. Location and material of construction (if applicable) of the conveyances, outfalls, or channelized stormwater flows discharging from the site shall be shown on the map required in paragraph C.1. above;
   c. Confirmation of the existence of any analytical laboratory stormwater quality data associated with the site
   d. The name of the receiving water(s), or if the discharge is through a municipal seperate storm sewer, the name of the operator of the storm sewer, and the ultimate receiving water(s).
   e. The name of the watershed the site is located within.

3. Any additional information requested by the Commissioner.

D. SIGNATURE OF REGISTRANT. Any person who or municipality which submits a registration under this general permit shall sign the registration and shall make the following certification:

"I certify under penalty of law that I have read and understand all conditions of the general permit for the discharge of stormwater associated with industrial activity issued on October 1, 1992, and that all conditions for eligibility for coverage under this general permit are met. This document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or

persons who manage the system, or those persons directly responsible for gathering the information, the information contained in this registration is, to the best of my knowledge and belief; true, accurate and complete. I am aware that there are penalties for submitting false information, including the possibility of fine and imprisonment for knowingly making false statements."

E. WHERE TO SUBMIT A REGISTRATION. Persons who or municipalities which submit a registration under this general permit shall submit such registration to the Department of Environmental Protection at the following address:

Department of Environmental Protection
Bureau of Water Management
165 Capitol Avenue, Hartford, CT 06106
Attention: General Permit Coordinator

F. TRANSFER OF COVERAGE. Any coverage under this general permit shall be non-transferable. However, any person registering a discharge which has previously been registered under this permit may adopt by reference the stormwater prevention pollution plan developed by the previous permittee. The new registrant shall amend the Plan as required by part VI, B. 4. prior to submitting a registration.

G. FAILURE TO REGISTER. Any person or municipality who fails to submit a registration, and who initiates, creates, originates or maintains a stormwater discharge to the waters of the State without coverage under a general permit issued under Section 22a-430b of the Connecticut General Statutes or an individual permit issued under Section 22a-430 of the Connecticut General Statutes, is in violation of the Connecticut General Statutes, and is subject to injunction and penalties of up to $25,000 per day per violation under Chapter 446k of the Connecticut General Statutes.

H. ADDITIONAL NOTIFICATION. Facilities that discharge stormwater associated with industrial activity through a municipal separate storm sewer system shall also submit a copy of the registration to the owner and operator of that system.

PART VI. PERMIT CONDITIONS FOR STORMWATER ACTIVITIES ASSOCIATED WITH INDUSTRIAL ACTIVITIES

A. CONDITIONS APPLICABLE TO CERTAIN DISCHARGES

1. Any person who or municipality which initiates, creates, or originates a discharge of stormwater associated with industrial activity after the date of issuance of this general permit, which discharge is located less than 100 feet from a tidal wetlands which is not a fresh-tidal wetland, shall discharge such stormwater through a system designed to store the volume of stormwater runoff generated by 1 inch of rainfall on the site.

2. Any person who or municipality which discharges stormwater into coastal tidal waters for which a permit is required under either the Structures and Dredging Act in accordance with Section 22a-361 of the Connecticut General Statutes or the Tidal Wetlands Act in accordance with Section 22a-32 of the Connecticut General Statutes, shall obtain such permit(s) from the Commissioner.

B. STORMWATER POLLUTION PREVENTION PLANS.

1. Development of Plan

The permittee shall develop a stormwater pollution prevention plan ("Plan") for each site. The Plan shall be prepared in accordance with sound engineering practices. The permittee shall perform all actions required by the Plan in accordance with the schedule set forth in Part VI paragraph B.2 below. Permittee shall maintain compliance with the Plan thereafter.

2. Deadlines for Plan Preparation and Compliance.

a. For a discharge that is initiated, created, originated or maintained on or before the date of issuance of this general permit, the Plan shall be completed on or before 180 days after the date of issuance of this general permit. The permittee shall perform all actions required by such Plan as soon as possible, but in no event later than three hundred and sixty-five days after the date of issuance of this general permit, and shall maintain compliance with such Plan thereafter.

b. For any stormwater discharges associated with industrial activity which activity is initiated after the date of issuance of this general permit, the Plan shall be prepared on or before the date such activity is initiated. The permittee shall perform all actions required by such Plan as soon as possible, but in no event later than 60 days after the date the industrial activity is intitiated, and shall maintain compliance with such Plan thereafter.

3. Signature and Plan Review

a. The Plan shall be signed as follows: for a corporation, by a responsible corporate officer or a duly authorized representative thereof, as those terms are defined in RCSA Section 22a-430-3(b)(2); for a municipality, state, Federal, or other public agency, by either a principal executive officer or a ranking elected official, as those terms are defined in RCSA 22a-430-3(b)(2); for a partnership or a sole proprietorship, by a general partner or the proprietor, respectively. The Plan shall be certified in accordance with Part VI Paragraph B.6 by an independent professional engineer licensed in the State of Connecticut and not in the regular employ of the permittee. The Plan shall be retained on site at the facility which generates the stormwater discharge.

b. The permittee shall make a copy of the Plan available to the Commissioner immediately upon request, and, in the case of a stormwater discharge associated with industrial activity which discharges through a municipal separate storm sewer system, to the operator of the municipal system upon request. In the case of a stormwater discharge associated with industrial activity which discharges to a water supply watershed, the permittee shall make copies of the plan available upon request to the public water supply company.

c. The Commissioner may notify the permittee at any time that the plan does not meet one or more of the requirements of this Part. Unless otherwise notified by the Commissioner in writing, within 30 days of such notification from the Commissioner the permittee shall revise the plan, perform all actions required by the revised plan, and shall submit to the Commissioner in writing that the requested changes have been made and implemented, and such other information as the Commissioner requires.

4. **Keeping Plans Current.** The permittee shall amend the plan whenever (1) there is a change at the site which has an effect on the potential to cause pollution of the waters of the state; or (2) the actions

required by the Plan fail to ensure or adequately protect against pollution of the waters of the state. The permittee shall amend the plan as necessary to address any sources or potential sources of pollution identified as a result of a Comprehensive site compliance evaluation conducted pursuant to Part VI.B.5.d. of this general permit. The amended plan shall be completed and all actions required by the plan shall be completed within 60 days of the date the Permittee becomes aware or should have become aware that either condition above has occurred.

5. **Contents of Plan.** The plan shall include, at a minimum, the following items:

   a. Pollution Prevention Team. Each plan shall identify a specific individual or individuals for the site who shall serve as members of a stormwater Pollution Prevention Team ("team"). The team shall be responsible for developing the stormwater pollution prevention plan and assisting the permittee in the implementation, maintenance, and revision of the plan. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the plan.

   b. Description of Potential Pollutant Sources. Each plan shall describe the potential sources of pollutants which may reasonably be expected to affect stormwater quality at the site or which may result in the discharge of pollutants during dry weather from the site. Each plan shall identify all activities and materials which may be a source of stormwater pollution at the site. In addition, each plan shall include, but not be limited to the following:

      (i) Drainage.

         (a) A site map showing an outline of the drainage area of each stormwater outfall, existing structural control measure installed to reduce pollutants in stormwater runoff, receiving surface water body, location where materials are exposed to precipitation, location where major spills or leaks identified under Part VI Paragraph A.5.b.(iii) of this permit have occurred, and each location of the following activities where such activities are exposed to precipitation: fueling stations, vehicle and equipment maintenance and/or cleaning areas, loading/unloading areas, locations used for the treatment, storage or disposal of wastes, liquid storage tanks, processing areas and storage areas.

         (b) For each area of the site that generates stormwater discharges associated with industrial activity, the direction of flow, and the types of pollutants which are present or likely to be present in the discharge, including but not limited to discharges with a potential for causing erosion in the area of the receiving water.

      (ii) Inventory of Exposed Materials. An inventory of the types of materials handled at the site that may be exposed to precipitation. Such inventory shall include a list of materials that have been handled, treated, stored or disposed in a manner to allow exposure to stormwater between the time of three years prior to the date of the issuance of this permit and the present; method and location of on-site storage or disposal; materials management practices employed to minimize contact of materials with stormwater runoff between the time of three years prior to the date of the issuance of this permit and the present; the location and a description of existing structural and non-structural control measures to reduce pollutants in stormwater runoff; and a description of any treatment the stormwater receives.

      (iii) Spills and Leaks. A list of spills and leaks of five gallons or more of toxic or hazardous substances which could affect stormwater, as those terms are defined in section 22a-430-4

Appendix B Tables II, III and V, and Appendix D of the Regulations of Connecticut State Agencies, and 40 CFR 116.4, that occurred at the facility after the date of three years prior to the effective date of this permit.

(iv) Monitoring Program. A description of the monitoring program and sampling data for stormwater discharges at the site, in accordance with Part VI C 1 of this general permit.

(v) Summary of Potential Pollutant Sources. A narrative description of the potential pollutant sources at the following areas: loading and unloading operations; roof areas; outdoor storage activities; outdoor manufacturing or processing activities; dust or particulate generating processes; and on-site waste disposal practices. The description shall specifically list any potential source of pollutants at the site and for each potential source, any pollutants associated with the potential source.

c. Measures and Controls. Each plan shall describe the stormwater management controls appropriate for the facility. The permittee shall implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the site. The plan shall include but not be limited to a schedule for implementing such controls and the following components:

(i) Good Housekeeping - The plan shall provide for the maintenance of a clean, orderly facility. The plan shall provide at a minimum that no washing of equipment or vehicles shall be allowed at the site which would allow wash waters to enter any storm drainage system or receiving water.

(ii) Preventive Maintenance - The plan shall include a preventive maintenance program, which shall include but not be limited to the inspection and maintenance of stormwater management devices (e.g., cleaning oil/water separators, catch basins); the inspection and testing of equipment and systems on the site to identify conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and the appropriate maintenance of such equipment and systems.

(iii) Spill Prevention and Response Procedures - Areas where potential spills can occur, and their accompanying drainage points shall be identified clearly in the plan. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a cleanup shall be available to personnel.

The plan shall provide that all areas in which chemicals are stored are provided with impermeable containment which will hold at least the volume of the largest chemical container, or 10% of the total volume of all containers in the area, whichever is larger, without overflow from the containment area. For industrial activities initiated after the date of this general permit, all chemicals and their containers shall be stored under a roof which minimizes stormwater entry to the containment area, except for those chemicals stored in containers of 100 gallon capacity or more, in which case a roof is not required.

The plan shall also provide that all dumpsters used to store waste materials are supplied with attached covers with drain plugs intact, or are in roofed areas which will not allow dumpster leakage to enter any stormwater drainage system.

(iv) Inspections - In addition to or as part of the comprehensive site evaluation required under Part VI Paragraph B.5.d. of this permit, qualified personnel shall be identified to inspect designated equipment and areas of the site at appropriate intervals specified in the plan, but at an interval no greater than once every six months. A set of tracking or follow up procedures shall be used to

ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained.

(v) Employee Training - The plan shall provide for employee training programs designed to inform all appropriate personnel of the components and goals of the stormwater pollution prevention plan. Training shall address topics such as spill response, good housekeeping and material management practices. The plan shall identify periodic dates for such training, but at intervals no greater than once per year.

(vi) Non-Stormwater Discharges - The plan shall include the following certification, signed by an independent professional engineer not in the regular employ of the permittee, licensed to practice in Connecticut:

"I certify that in my professional judgement, the discharge from the site consists only of stormwater, or of stormwater combined only with groundwater seepage and/or wastewater covered by an effective permit issued under Section 22a-430 or Section 22a-430b of the Connecticut General Statutes. This certification is based on testing and evaluation of the stormwater discharge from the site. I further certify that all potential sources of non-stormwater at the site, a description of the results of any test and/or evaluation for the presence of non-stormwater discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the on-site drainage points that were directly observed during the test have been described in detail in the stormwater pollution prevention plan prepared for the site. I further certify that no interior building floor drains exist which are connected to any storm drainage system or which may otherwise direct interior floor drainage to exterior surfaces, unless such floor drain connection has been approved and permitted by the Commissioner. I am aware that there may be significant penalties for false statements in this certification, including the possibility of fine and imprisonment for knowingly making false statements."

(viii) Sediment and Erosion Control - The plan shall identify areas which, due to topography, activities, or other factors, have a potential for soil erosion, and shall identify measures to limit erosion.

(ix) Management of Runoff - The plan shall contain a discussion of the need for stormwater management or treatment practices other than those which control the source of pollutants which practices shall be used to divert, infiltrate, reuse, or treat stormwater runoff in a manner that reduces pollutants in stormwater discharges from the site. The plan shall provide that management or treatment measures determined to be reasonable and appropriate to prevent pollution of the waters of the state shall be implemented and maintained at the site. The permittee shall consider the potential of various sources at the facility to contribute pollutants to stormwater discharges associated with industrial activity when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales or buffer strips, reuse of collected stormwater (such as for a process or as an irrigation source), oil/water separators, snow management activities, infiltration devices, and wet detention/retention basins.

(x) The plan shall identify roof areas which may be subject to drippage from exhausts or vents or other sources of pollution, shall include an inspection program of such areas to determine if any potential sources of stormwater pollution are present, and shall contain steps to be taken to eliminate such sources or potential sources of pollution, and a schedule for performing such steps.

d. Comprehensive Site Compliance Evaluation. The plan shall provide that qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but in no event less

frequently than twice a year. Such evaluations shall include:

(i) Visual inspection of material handling areas and other potential sources of pollution identified in the plan for evidence of, or the potential for, pollutants entering the stormwater drainage system. Structural stormwater management measures, erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made. Inspections should be made during rainfall events if possible.

(ii) Preparation of a report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the plan, and actions taken shall be made and retained as part of the stormwater pollution prevention plan for at least five years. The report shall be signed by the permittee.

e. Additional requirements for stormwater discharges associated with industrial activity through municipal separate storm sewer systems serving a population of 100,000 or more. In addition to the applicable requirements of this general permit, sites covered by this permit shall comply with applicable requirements in municipal stormwater management programs developed under NPDES permits issued for the discharge of the municipal separate storm sewer system that receives the facility's discharge, provided the discharger has been notified of such conditions.

f. Consistency with other plans. Stormwater pollution prevention plans may reference requirements contained in Spill Prevention Control and Countermeasure (SPCC) plans and other plans required by state, federal or local law for the prevention or control of spillage.

g. Additional Requirements for Salt Storage. The plan shall provide that within one year of the date of issuance of this permit, storage piles of salt used for deicing or other commercial or industrial purposes and which generate a stormwater discharge associated with industrial activity which is discharged to a waters of the state, shall be enclosed or covered to prevent exposure to precipitation, except for exposure resulting from adding or removing materials from the pile.

6. Professional Engineer Certification

The plan shall contain the following certification, signed by an independent professional engineer not in the regular employ of the permittee, licensed in the State of Connecticut.

"I certify that in my professional judgement, the stormwater pollution prevention plan prepared for this site meets the criteria set forth in the general permit for the discharge of stormwater from industrial activities issued on October 1, 1992. This certification is based on my review of the stormwater pollution control plan for the site and an inspection of the site. I am aware that there are significant penalties for false statements in this certification, including the possibility of fine and imprisonment for knowingly making false statements."

C. MONITORING AND REPORTING REQUIREMENTS

1. PARAMETERS TO BE MONITORED

a. Annual stormwater monitoring shall be conducted no later than 365 days after the date of issuance of this permit, and annually thereafter for the pollutants listed below:

Total Oil and Grease (mg/l)
pH
Chemical Oxygen Demand (mg/l)
Total Suspended Solids (mg/l)
Total Phosphorous (mg/l)
Total Kjeldahl Nitrogen (mg/l)
Nitrate as Nitrogen (mg/l)
Fecal Coliforms (#/100 ml)
Total Copper (mg/l)
Total Zinc (mg/l)
Total Lead (mg/l)

Pollutants limited or required to be monitored under a discharge permit issued by the Commissioner to the site for process water.

Pollutants limited in an EPA effluent guideline to which the permittee is subject.

b. In addition to the list of pollutants in paragraph C.1.a. of this Part, for airports with stormwater discharges associated with industrial activities from areas where aircraft or airport deicing operations occur (including runways, taxiways, ramps and dedicated aircraft deicing stations), monitoring shall be conducted no later than 365 days after the date of issuance of this permit, and annually thereafter for the primary ingredient used in the deicing materials used at the site (e.g., ethylene glycol, urea, etc.). All monitoring shall be performed immediately following deicing operations during a storm event and samples shall be collected in such a manner that they are representative of stormwater quality resulting from deicing operations.

c. In addition, acute toxicity biomonitoring tests shall be conducted no later than 365 days after the date of issuance of this permit, and annually thereafter for each site where:

A discharge is maintained which is subject to effluent limits or monitoring requirements on acute or chronic toxicity under an individual discharge permit issued by DEP.

Monitoring conducted in accordance with Part VI, Paragraph C.1.a., above indicates that any monitored pollutant is present in the stormwater discharge at a concentration which exceeds the adopted numeric water quality criteria for freshwater acute toxicity listed in Connecticut Water Quality Standards and Criteria. For those pollutants for which the numeric water quality criteria for freshwater acute toxicity specifically apply to the dissolved fraction(arsenic, cadmium, chromium, copper, lead, nickel, selenium, silver, zinc), the dissolved concentration shall be considered equal to the total concentration present in the stormwater discharge.

Stormwater discharges associated with industrial activities include areas where aircraft or airport deicing operations exist as specified in Part VI Paragraph C.1.b. above.

d. Representative Discharge. When a facility has two or more outfalls that, based on a consideration of features, (e.g. grass vs. pavement, slopes, catch basins vs. swales), and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may test the effluent of one of such outfalls and report that the quantitative data also applies to the substantially identical outfalls. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area shall be provided in the Plan. In no case shall one outfall test

be substituted for more than 5 outfalls.

2. STORMWATER MONITORING PROCEDURES

a. Annual samples shall be collected from discharges resulting from a storm event that is greater than 0.1 inch in magnitude and that occurs at least 72 hours after any previous storm event of 0.1 inch or greater. Where feasible, the difference between the sampled event and the average or median rainfall event in the area (in terms of the rainfall intensity during the first 30 minutes of the storm event) shall not exceed 50 percent. Runoff events resulting from snow or ice melt cannot be used to meet the minimum annual monitoring requirements. Grab samples shall be used for all monitoring. Grab samples shall be collected during the first 30 minutes of a storm event discharge.

b. Storm Event Information

The following information shall be collected for the storm events monitored:

(1) The date, temperature, time of the start of the discharge, time of sampling, and magnitude (in inches) of the storm event sampled.

(2) The duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event.

c. Test Procedures

(1) Unless otherwise specified in this permit, all pollutant parameters shall be determined according to methods prescribed in Title 40, CFR, Part 136 (1990), promulgated pursuant to Section 304(h) of the Federal Water Pollution Control Act.

(2) Acute toxicity biomonitoring tests shall be conducted on undiluted samples of stormwater (specified NOAEL concentration 100%) according to the procedures specified at 22a-430-3 (j)(7)(A)(i) of the Regulations of Connecticut State Agencies. The following specific conditions apply:

- Tests shall employ neonatal (less than 24 hour old) Daphnia pulex and juvenile (30 +/- 5 day old) Pimephales promelas as test organisms.
- Tests shall be conducted at 20 +/- 2 degrees Centigrade.
- Tests shall be 24 hours in duration.
- Synthetic dilution water adjusted to an approximate hardness of 50 mg/l as $CaCO_3$ shall be used as control water in all tests.
- Test organisms shall not be fed during the test period.
- Any test determined to be invalid as a result of inadequate survival of test organisms or failure to conduct the test in accordance with the protocol and conditions specified above shall be repeated as soon as practicable.
- Stormwater which exhibits a hardness of less than 50 mg/l as CaCO3 may be adjusted to an

approximated hardness of 50 mg/l as $CaCO_3$ prior to testing in accordance with the methodology specified in Methods for Measuring the Acute Toxicity of Effluent and Receiving Waters to Fresh Water and Marine Organisms, 4th edition (EPA/600/4-90/027).

(3) Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the discharger shall record the following information:

(a) the place, date, and time of sampling

(b) the person(s) collecting samples

(c) the dates and times the analyses were initiated

(d) the person(s) or laboratory who performed the analyses

(e) the analytical techniques or methods used

(f) the results of all required analyses

d. Records Retention

All records and information resulting from the monitoring activities required by this general permit including all records of analyses performed and calibration and maintenance of instrumentation shall be retained for a minimum of five (5) years following the expiration of this general permit, or longer if required by the Commissioner.

3. REPORTING REQUIREMENTS

a. Unless specifically stated by the Commissioner in writing, all stormwater monitoring results shall be retained on site and made available immediately upon request to the Commissioner or in the case of a stormwater discharge through a municipal separate stormwater system, to the operator of that system upon request.

b. If the results of any acute toxicity biomonitoring test indicate greater than 50 percent mortality to either test species has occurred during a valid test as a result of exposure to undiluted stormwater, the discharger shall submit a report to the Commissioner which includes as a minimum the following information:

(1) The complete results of the acute toxicity biomonitoring test, including the percent survival in each replicate test chamber and any physical/chemical monitoring of test solutions conducted prior to, during, or upon completion of the test.

(2) Results of any chemical analyses conducted on samples of stormwater believed to be representative of the samples used in the acute toxicity biomonitoring test.

(3) A copy of the discharge registration form for the discharge.

c. Reports prepared in accordance with Part VI Paragraph C.3.b. above shall be submitted within 90 days

of the date of sampling to :

Department of Environmental Protection
Bureau of Water Management
165 Capitol Avenue
Hartford, CT 06106
Attention: Water Toxics Program Coordinator

d. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall meet the reporting requirements of Part VI Paragraph C.3.a. above.

4. STORMWATER DATA PREVIOUSLY COLLECTED

Data collected for the purpose of completing the Environmental Protection Agency Form 2F prior to adoption of this general permit may serve to meet the first year of monitoring required by this permit (Part VI Paragraph C.1).

D. OTHER REQUIREMENTS

1. There shall be no distinctly visible floating scum, oil or other matter contained in the stormwater discharge. Excluded from this are naturally occurring substances such as leaves and twigs provided no person has placed such substances in or near the dishcarge.

2. The stormwater discharge shall not result in pollution due to acute or chronic toxicity to aquatic and marine life, impair the biological integrity of aquatic or marine ecosystems, or result in an unacceptable risk to human health.

PART VII. GENERAL CONDITIONS

A. The permittee shall comply with the following Regulations of Connecticut State Agencies which are hereby incorporated into this general permit, as if fully set forth herein:

1. Section 22a-430-3:

Subsection (b) General - subparagraph (1)(D) and subdivision (2), (3), (4) and (5)
Subsection (c) Inspection and Entry
Subsection (d) Effect of a Permit - subdivisions (1) and (4)
Subsection (e) Duty to Comply
Subsection (f) Proper Operation and Maintenance
Subsection (g) Sludge Disposal
Subsection (h) Duty to Mitigate
Subsection (i) Facility Modifications, Notification - subdivisions (1) and (4)
Subsection (j) Monitoring, Records and Report Requirements - subdivisions (1), (6), (7), (8), (9) and (11) (except subparagraphs (9) (A) (2) and (9) (C)
Subsection (k) Bypass
Subsection (m) Effluent Limitation Violations

Subsection (n) Enforcement
Subsection (p) Spill Prevention and Control
Subsection (q) Instrumentation, Alarms, Flow Recorders
Subsection (r) Equalization

2. Section 22a-430-4

Subsection (t) Prohibitions
Subsection (p) Revocation, Denial, Modification
Appendices

B. The permittee shall comply with the following additional terms and conditions:

1. Discharge of any substance which is not from the activities described in this general permit shall be considered a violation of this general permit unless it is authorized by an individual permit issued under Section 22a-430 of the General Statutes.

C. The permittee shall at all times continue to meet the conditions for eligibility set forth in Part IV of this general permit.

D. Within fifteen days after the date the registrant or permittee becomes aware of a change in any information submitted to the Commissioner in a registration or pursuant to this general permit, or that any such information was inaccurate or misleading or that any relevant information was omitted, the registrant or permittee shall submit the correct or omitted information in writing to the Commissioner.

E. Nothing in this general permit shall relieve the registrant or permittee of other obligations under applicable federal, state and local law.

F. Any document, including but not limited to any notice, which is required to be submitted to the Commissioner under this general permit by the permittee shall be signed by the permittee and by the individual or individuals responsible for actually preparing such document, each of who shall certify in writing as follows: "I have personally examined and am familiar with the information submitted in this document and all attachments and certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief, and I understand that any false statement made in this document or its attachments may be punishable as a criminal offense."

G. Any false statement in any information submitted pursuant to this general permit may be punishable as a criminal offense under Section 22a-438 of the General Statutes or, in accordance with Section 22a-6, under Section 53a-157 of the General Statutes.

Robert E. Moore

ROBERT E. MOORE
DEPUTY COMMISSIONER

9/30/92
Date

APPENDIX H

CTARNG Spill Reports

Date: 2 FEB

Taken by: RFD

Spill Report

1. Name and Location of Installation: AASF #1 BRADLEY INT AIRPORT RTE 75 WINDSOR LOCKS, CT 06096

2. Commander of Installation and Phone Number: MAJ ROUSSEAU 627-4872

3. Name and Phone Number of person making report: SFC RYCR 627-4883

4. Mailing Address: AASF #1 BIA RTE 75 W.L. CT 06096

5. Location of Spill: HANGAR

6. Date and Time of the Incident: 2 FEB 0200 HRS

7. Body of Water: N/A

8. Cause and source of the incident: HYDRAULIC LEAK

9. Injuries or Property Damage:

10. Quantity or duration of discharge: 1/2 GALLON

11. Remedial Actions Taken: CLEANED UP WITH SPEEDY DRY, BAGGED WASTE

12. Agencies notified: DEP

Date: 25 JAN 94
Taken by: LT H.

Spill Report

1. Name and Location of Installation: AASF #1, Bradley International Airport, Rte 75, Windsor Locks, CT 06096

2. Commander of Installation and Phone Number: MAJ Mark Rousseau 627-4872

3. Name and Phone Number of person making report: SGT Scott Ryer, 627-4883

4. Mailing Address: AASF #1, BIA, Rte 75, Windsor Locks, CT 06096

5. Location of Spill: Flight Line

6. Date and Time of the Incident: 25 JAN 94; 1030 hr

7. Body of Water: N/A

8. Cause and source of the incident: 1 Qt MOGAS; Overfill of ground support trucker while topping off

9. Injuries or Property Damage: N/A

10. Quantity or duration of discharge: 1 Qt

11. Remedial Actions Taken: Mopped up with rags and speedy dry; Bagged waste

12. Agencies notified: DEP;

Date: 27 Dec 1993
Taken by: RFD

Spill Report

S-063

1. Name and Location of Installation: AASF #1 RTE 75 WINDSOR

2. Commander of Installation and Phone Number: MAJ MARK ROUSSEAU

3. Name and Phone Number of person making report: SGT RYER X4483

4. Mailing Address: AASF #1 BRADLEY FIELD, RTE 75, WINDSOR LOCKS CT

5. Location of Spill: HANGAR FLOOR

ate and Time of the Incident: 27 DEC 1993 0945 HRS

7. Body of Water: NO

8. Cause and source of the incident: ~~[illegible]~~ VEHICLE BLEW SEAL
1/2 GALLON TRANSMISSION FLUID LEAKED

9. Injuries or Property Damage: NO

10. Quantity or duration of discharge: 1/2 GALLON

11. Remedial Actions Taken: CLEANED UP AND BAGGED

Agencies notified: DEP

Date: 15 Dec 93 0900 hr
Taken by: LT H.

Spill Report

S-062

1. Name and Location of Installation: AASF #1, Rte 75, Windsor Lock,

2. Commander of Installation and Phone Number: MAJ Mark Roussel

3. Name and Phone Number of person making report: SGT Scott Keyes x 4883

4. Mailing Address: AASF #1, Bradley Field, Rte 75, Windsor Lock

5. Location of Spill: #2 HF 5,000 gal AST

ate and Time of the Incident: 14 Dec 93 1400 hrs

7. Body of Water: None

8. Cause and source of the incident: 1/2 gal heating oil, buy AST for heating oil, overfill during filling

9. Injuries or Property Damage: None

10. Quantity or duration of discharge: 1/2 gal #2 HF

11. Remedial Actions Taken: Cleaned w/ speedi-dry, bagged and placed in haz waste storage area.

Agencies notified:

Date: 22 Nov 93
Taken by: LT H

Spill Report

S-059

1. Name and Location of Installation: AASF #1, Bradley International Airport, Rte 75, Windsor Locks, CT

2. Commander of Installation and Phone Number: MAJ Mark Rousseau, 627-4852

3. Name and Phone Number of person making report: 1LT Ralph Hedenberg 524-4945

4. Mailing Address: AASF #1

5. Location of Spill: P-153

ate and Time of the Incident: 1000 22 NOV 93

7. Body of Water: N/A

8. Cause and source of the incident: UST Removal, substantial plume, substantial contamination" per contractor

9. Injuries or Property Damage: unknown property damage

10. Quantity or duration of discharge: unknown

11. Remedial Actions Taken: in process

Agencies notified: Don Barton - DEP

Date: 11/8/93

Taken by: RFD

Spill Report

S-056.

1. Name and Location of Installation: AASF - WINDSOR LOCKS

2. Commander of Installation and Phone Number: MARK RUSSO 627-4882

3. Name and Phone Number of person making report: SGT RYER 627-4882

4. Mailing Address: BRADELY INT. AIRPORT, RT 75 WINDSOR LOCKS CT

5. Location of Spill: HANGAR FLOOR

ate and Time of the Incident: 11/7/93 1400 HRS

7. Body of Water: NO

8. Cause and source of the incident: M DAY PERSONNEL SPILLED JP4

9. Injuries or Property Damage: NO

10. Quantity or duration of discharge: 1/2 GALLON

11. Remedial Actions Taken: CLEANED UP IMMEDIATELY WITH SPEEDY DRY, BAGGED AND TAGGED. NO THREAT TO ENVIRONMENT AS SPILL WAS ON AN IMPERVIOUS SURFACE INDOORS

Agencies notified:

Date: 10/18/93

Taken by: LD

Spill Report

S-053

1. Name and Location of Installation: AASF

2. Commander of Installation and Phone Number: MARK RUSSO

627-4882

3. Name and Phone Number of person making report: SGT RYER

4. Mailing Address:

5. Location of Spill: FLIGHT LINE

6. Date and Time of the Incident: 10/16/93 1500 HRS

7. Body of Water:

8. Cause and source of the incident: AIRCRAFT LEAKED HYDRAULIC FLUID

9. Injuries or Property Damage: N/A

10. Quantity or duration of discharge: 3 QTS

11. Remedial Actions Taken: BAGGED & TAGGED FOR DISPOSAL

12. Agencies notified: DEP

Date: ~~[illegible]~~ 29 Sep 93
Taken by: 1030h

Spill Report

S-051

1. Name and Location of Installation: ARSF #1, Rte 75, Bradley International Airport, Windsor Locks, CT

2. Commander of Installation and Phone Number: MAJ Mark Roussseau, 627-4871

3. Name and Phone Number of person making report: SGT Scott Ryer, 627-4882

4. Mailing Address: Bradley International Airport, Rte 75, Windsor Locks, CT

5. Location of Spill: Hanger Floor

Date and Time of the Incident: 29 Sep 93 / 1025

7. Body of Water: None

8. Cause and source of the incident: Fuel cell work on a CH-47D over flow from drip pan. JP-4

9. Injuries or Property Damage: None

10. Quantity or duration of discharge: 2 Qts

11. Remedial Actions Taken: Speedi-dry, swept up, placed in disposal bag, moved to Hazardous Waste Storage Area marked for disposal.

Agencies notified: DEP.

Date: 20 Sep 93

Taken by: LTH

Spill Report

S-047

1. Name and Location of Installation: AASF #1, Rt 75, Windsor Locks, CT

2. Commander of Installation and Phone Number: MAJ Mark Rousseau 627-4852

3. Name and Phone Number of person making report: SGT Scott Ryan 627-4883

4. Mailing Address: AASF #1, Rt 75, Windsor Locks, CT

Location of Spill: Fuel Farm

Date and Time of the Incident: 20 Sep 93 / 1530

7. Body of Water: N/A

8. Cause and source of the incident: loose fuel line from ITEMM-TS

9. Injuries or Property Damage: None

10. Quantity or duration of discharge: 1 pint

11. Remedial Actions Taken: Speedi-dry on spill, swept up and bagged for disposal

Agencies notified: DEP

Date: 9/21/93
Taken by: RFD

Spill Report

S-048

1. Name and Location of Installation: AASF #1, Rt 75, Windsor Locks, C

2. Commander of Installation and Phone Number: MAJ MARK ROUSSEAU
627-4852

3. Name and Phone Number of person making report:
SGT RYER 627-4883

4. Mailing Address: AASF #1, Rt 75, Windsor Locks, CT

Location of Spill: NEXT TO DUMPSTER

Date and Time of the Incident: 9/21/93 1045 HRS

7. Body of Water: N/A

8. Cause and source of the incident: TRUCK EMPTYING DUMPSTER BLEW A HYDRAULIC FILTER

9. Injuries or Property Damage: NONE

10. Quantity or duration of discharge: 1 PINT HYDRAULIC FLUID

11. Remedial Actions Taken: CONTAMINATED SOIL REMOVED AND BAGGED FOR DISPOSAL

Agencies notified: DEP

Date: 9/13/93
Taken by: Sta

Spill Report

S-041

1. Name and Location of Installation: AASF, Rte 75, Windsor Locks Ct. 06096

2. Commander of Installation and Phone Number: Capt. Roxeau ~~Sgt Ryer~~ 627-~~4882~~ 4872

3. Name and Phone Number of person making report: Sgt Ryer 627-4882

4. Mailing Address: AASF, Rte 75, Windsor Locks, Ct. 06096

Location of Spill: On Flight Line UH-1 pad

Date and Time of the Incident: 9/13/93 13:25

7. Body of Water: None

8. Cause and source of the incident: Checking line that leaked

9. Injuries or Property Damage: None

10. Quantity or duration of discharge: 1/2 gal 20 seconds

11. Remedial Actions Taken: Turned off fuel system. Cleaned up on site

Agencies notified: None yet. State DEP will be called

Date: 6/25/93

Taken by: Lt. H.

Spill Report

S-027

1. Name and Location of Installation: AASF, Rte. 75 Windsor Locks, CT 06016

2. Commander of Installation and Phone Number: CPT Mark Rouxeau 627-4871

3. Name and Phone Number of person making report: Sgt Ryan 627-4882

4. Mailing Address: Rte. 75, Windsor Locks, CT 06016

Location of Spill: Flight Line

Date and Time of the Incident: 6/25/93 11:30

7. Body of Water: None

8. Cause and source of the incident: Hydraulic Fluid

9. Injuries or Property Damage: None

10. Quantity or duration of discharge: 1qt.

11. Remedial Actions Taken: Cleaned up w/ Speedi-Dry

Agencies notified: DEP

Date: 15 Jul 1993

Taken by: 1Lt [illegible]

Spill Report

S-028

1. Name and Location of Installation: AASF, Rt. 75 Windsor Locks, CT 06096

2. Commander of Installation and Phone Number: CPT Mark Rousseau 627-4871

3. Name and Phone Number of person making report: Sgt [illegible] 627-4883

4. Mailing Address: Rte 75, Windsor Locks, CT 06096

Location of Spill: No witnesses / Flight line

Date and Time of the Incident: 15 Jul 1993

7. Body of Water: None

8. Cause and source of the incident: Engine Oil

9. Injuries or Property Damage: None

10. Quantity or duration of discharge: 1qt

11. Remedial Actions Taken: Cleaned and Bagged

Agencies notified: DEP

Date: June 21

Taken by:

Spill Report

S-026

1. Name and Location of Installation: AASF, Rte. 75 Windsor Locks Ct 06016

2. Commander of Installation and Phone Number: CPT Mark Rousseau 627-4871

3. Name and Phone Number of person making report: SGT Ryer 627-4883

4. Mailing Address: Rte 75, Windsor Locks, CT 06016

Location of Spill: CH-47 pad; flight line; no drains

Date and Time of the Incident: June 21

7. Body of Water: None

8. Cause and source of the incident: Fuel Line leak

9. Injuries or Property Damage: None

10. Quantity or duration of discharge: 1/2 gal oil

11. Remedial Actions Taken: Speedy dry

.. Agencies notified: DEP

Date: 5/26/93

Taken by: Larry Fritch

Spill Report

S-021

1. Name and Location of Installation: AASF, Rte 75 Windsor Locks, Ct. 06096

2. Commander of Installation and Phone Number: CPT Mark Rousseau 627-4871

3. Name and Phone Number of person making report: Sgt. Ryder 627-4882

4. Mailing Address: Rte 75, Windsor Locks CT 06096

Location of Spill: ~~Rt~~ On Flight Line

Date and Time of the Incident: 5/21/93

7. Body of Water: None

8. Cause and source of the incident: 1 qt hydraulic oil on fuel line

9. Injuries or Property Damage: None

10. Quantity or duration of discharge: 1 qt.

11. Remedial Actions Taken: Clean up O.K.

Agencies notified: DEP

ate: June 17

Taken by: LTH

Spill Report

S-024

1. Name and Location of Installation: AASF Rte 75 Windsor Locks CT 06096

2. Commander of Installation and Phone Number: CPT Mark Rossow 627-4871

3. Name and Phone Number of person making report: SGT Ryer 627-4883

4. Mailing Address: Rte 75, Windsor Locks, CT 06096

ocation of Spill: Flight line, no drains

ate and Time of the Incident: 17 Jun 93 / 1400

7. Body of Water: N/A

8. Cause and source of the incident: Spill on Flight line

9. Injuries or Property Damage: N/A

10. Quantity or duration of discharge: 1½ gal JP-4

11. Remedial Actions Taken: Cleaned w/ Speedy Dri

... Agencies notified: DEP

SPILL REPORT LOG

LOG #	DATE	LOCATION	POC	DEP NOTIFIED	NGB-ARE NOTIFIED
S-001	24 Oct 90	CT AVCRAD	441-2940 MR. OZANNE	24 Oct 90 Mike McCann 0715 hr	24 Oct 90 0845 hr
S-002	22 JAN 91	CAMP HARTELL	BOB COLSON	22 JAN 91 Ed Alexander	NA - State Spill
S-003	22 APRIL 92	AASF	CW3 KEVIN STEWART 627-4895	22 APR 92 1000 hr	22 APR 92 1115 hr
S-004	23 APR 92	SOUTHINGTON	SSG STURGEON 621-9404	23 APR 92 1420 hr	23 APR 92 1600 hr
S-005	12 APR 92	SRMR	1LT KOWAL 192d Engr Bn - Westbrook		
S-006	4 May 92	SRMR	SFC McGuire		
S-007	16 May 92	SRMR	SSG THERRIEN 441-2991	16 May 92 1200	NA - below NGB - RQ
S-008	1 June 92	MASS - 495	CPT Fitzgerald MSG Kiszka 596-4122	1 June 92 MA-DEP	NA Below NGB-RQ
S-009	23 Oct 92	CT - AVCRAD	441-2940 CW4 Ozanne	23 Oct 92 James Sullivan	NA Below - NGB-RQ
S-010	06 Jan 93	CT - AVCRAD	441-2989 CW4 Ozanne	06 Jan 93 Jeff Wilcox	N/A - Contract
S-011	28 Jan 93	SRMR	447-5963 MSG Arthur Rickey	28 Jan 93 1400 James Sullivan	N/A Below
S-012	31 Mar 93	Putnam Armory	928-2216 SSG Vaugh Sweatman	31 Mar 93	N/A - Below NGB
S-013	09 Apr 93	Camp Hartell	627-4852 SFC Gary Salmon	09 Apr 93 Neal Delacorte	N/A Below NGB-RQ
S-014	16 Apr 93	OMS #10 - Norwich	441-2995 MSG George Brown	16 Apr 93 Eric Gothberg	N/A Below NGB-RQ
S-015	16 Apr 93	OMS #10 - Norwich	441-2995 MSG George Brown	16 Apr 93 Eric Gothberg	N/A Below NGB-RQ
S-016	18 Apr 93	Camp Hartell - OMS #8	627-4852 SFC LeFevre	18 Apr 93 Neal Delacorte	N/A Below NGB-RQ
S-017	19 Apr 93	OMS #10 - Norwich	441-2995 MSG George Brown	19 Apr 93	N/A Below NGB-RQ
S-018	30 Apr 93	OMS #8A HTED	4441 SSG HERRON	30 APR 93	N/A BELOW NGB-RQ
S-019	4 May 93	OMS #8 CAMP HARTELL	627-4852 BRIAN ELLIS	4 May 93	N/A BELOW NGB-RQ

SPILL REPORT LOG

LOG #	DATE	LOCATION	POC	DEP NOTIFIED	NGB-ARE NOTIFIED
S-020	19 MAY 93	OMS #8 CAMP HARTELL	627-4852 SGT BRIAN ELLIS	19 MAY 93	N/A
S-021	26 MAY 93	AASF WINDSOR LOCKS	627-4882 SGT RYER	26 MAY 93	N/A
S-022	26 MAY 93	ENFIELD ARMORY	741-2750	26 MAY 93	N/A
S-023	6 JUNE 93	OMS #10	SPC MCLARKEY		
S-024	17 JUNE 93	AASF WINDSOR LOCKS	627-4883 SGT RYER	17 JUNE 93	
S-025	17 JUNE 93	ENFIELD ARMORY			
S-026	21 JUNE 93	AASF WIND. LOCKS	627-4883 SGT RYER		
S-027	25 JUNE 93	AASF WIND LOCKS	627-4883 SGT RYER		
S-028	15 JULY 93	AASF WIND LOCKS	627-4883 SGT RYER		
S-029	21 JULY 93	CT AVCRAD	441-2989 CW4 OZANNE	21 JULY 93	
S-030	5 AUG 93	MERIDEN ARMORY	784-8677 SSG AVANYIM	5 AUG 93	
S-031	5 AUG 93	OMS #8A	524-4941 SGT BRIAN TRIPP	5 AUG 93	
S-032	7 AUG 93	CT AVCRAD	441-2989 CW4 OZANNE	7 AUG 93	
S-033	8 AUG 93	CT AVCRAD	441-2989 CW4 OZANNE	8 AUG 93	
S-034	14 AUG 93	PUTNAM ARMORY	CPT THORTSEAU	14 AUG 93	
S-035	16 AUG 93	STONES RANCH MR	447-5763 MSG RICKEL		
S-036	19 AUG 93	STONES RANCH MR	CPT THORTSEAU	19 AUG 93	
S-037	25 AUG 93	CSMS CMP HARTELL	CW4 TASDIC		
S-038	30 AUG 93	OMS #10 NORWICH	MSG BROWN	30 AUG 93	

SPILL REPORT LOG

LOG #	DATE	LOCATION	POC	DEP NOTIFIED	NGB-ARE NOTIFIED
S-039	31AUG93	CT AICRAD	441-2989 CW4 OZANNE	31 AUG 93	
S-040	10SEPT93	UTLS SRMR	447-5962 JOE ELLIS	10 SEPT 93	
S-041	13SEPT93	AASF Wing Locks	627-4883 SGT RYER	13 SEPT93	
S-042	15SEPT93	OMS #8A HTFD	524-4491 SGT TRIPP	15 SEPT 93	
S-043	17SEPT93	OMS #8A HTFD	524-4491 SSG LEBRON	17 SEPT 93	
S-044	19SEPT93	SRMR	LT LUGLI	19 SEPT93	
S-045	19SEPT93	SRMR	LT LUGLI	19 SEPT93	
S-046	19SEPT93	OMS #9A NORWALK	375-1876 SGT TAYLOR	19SEPT93	
S-047	21SEPT93	AASF #1	627-4883 SGT RYER	21SEPT93	
S-048	21SEPT93	AASF #1	627-4883 SGT RYER	21SEPT93	
S-049	27SEP93	SRMR	447-6030 MSG RICKEY		
S-050	21SEP93	OMS #4 Ansonia	734-4701 MSG Sheehan	21SEP93	
S-051	29SEP93	AASF#1	627-4883 SGT Ryer	29SEP93	
S-052	8Oct93	CT-AVCRAD	447-2900 LTC Bennett	8Oct93	
S-053	18Oct93	AASF #1	627-4883 SGT Ryer	18Oct93	
S-054		143rd M.P Company	SGT Johnson		
S-055	28Oct93	OMS #8 (Amf Hartell)	627-4852 SGT Ellis	28Oct93	
S-056	8Nov93	AASF #1	627-4883 SGT Ryer	8Nov93	
S-057	10Nov93	OMS #5-Naugatuck	MSG GUISTO	10NOV93	

SPILL REPORT LOG

LOG #	DATE	LOCATION	POC	DEP NOTIFIED	NGB–ARE NOTIFIED
S-058	15Nov93	CT-AVCRAD	447-2989 CW4 Ozanne	15Nov93	
S-059	22Nov93	AASF #1	627-4883 SGT Ryer	22Nov93	
S-060	1Dec93	CT-AVCRAD	447-2989 CW4 Ozanne	1Dec93	
S-061	3Dec93	OMS #8A - HFTD	524-4941 SSG Lebron	3Dec93	
S-062	15Dec93	AASF #1	627-4883 SGT Ryer	15Dec93	
S-063	27Dec93	AASF #1	627-4883 SGT Ryer	27Dec93	

AASF #1 HAZARDOUS SPILL LOG

DATE	TIME	TYPE	AMOUNT	LOCATION	BY NAME	REMARKS
21 Apr 92	1530	JP-4	1530 gal	Fuel farm	Stokes	Contained 39 pounds per square [illegible]
26 March	1400	JP4	[illegible]	[illegible]	[illegible]	[illegible]
24 Apr 92	1135	Hyd Fluid	[illegible]	[illegible]	Ryer	[illegible]
1 May 93	0730	JP4	2 gal	Fuel farm	Sears	Continued cleaned called by ACFT crew [illegible]
20 May 93	1333	23699	1 gal	Ramp	[illegible]	[illegible]
14 Jul 93	1240	23699	1 Qt	Unpaved	Ryer	[illegible]
24 Jul 93	1910	23697	1 Qt	UH-1 Pad	Ryer	"
1 Sep 93	1021	JP4	2 Pt	UH-1 Pad	Ryer	"
13 Sep 93	1335	JP4	1/2 Gal	UH-1 Pad	Ryer	"
20 Sep 93	1530	~~JP4~~ Diesel	~~Gal~~ Pint	Fuel farm	Ryer	"
21 Sep 93	1045	Hyd Fluid	1 Pint	by Bumpshop	Ryer	"
27 Sep 93	1035	JP4	2 Qt	Hanger Floor	Ryer	"
16 Oct 93	1521	Hyd Fluid	3 QT	Flight line	Ryer	Reported on the 18th of Oct
7 Nov 93	1400	JP4	1/2 Gal	Hanger	Ryer	Called FMO
30 Nov	1200	Gas		Storm Drain	Ryer	Called FMO, Insp OK. "Smell in storm drain"
14 Dec 93	1400	Heating oil	1/2 Gall	Parking lot	Ryer	Inform FMO about 1' of water in tank
27 Dec 93	0830	Xylene Fluid	1/2 Gal	Hanger	Ryer	Called FMO, Call Dep
25 ~~Dec~~ Jan 94	1030	Gas	1 Qt	Flight line	Ryer	Called FMO + Dep

AASF #1 HAZARDOUS SPILL LOG

DATE	TIME	TYPE	AMOUNT	LOCATION	NAME	REMARKS
Feb 1	0890	MIL-H-86282	1/2 Gal	Hangar	Ryan	called FMO & Dep
Mar 5	1025	JP4	QJ+	Flt line	Ryan	" "

APPENDIX I

Site Inventory of Hazardous Substances

ARMY AVIATION SUPPORT FACILITY
CONNECTICUT ARMY NATIONAL GUARD
BLDG 152, BRADLEY INTERNATIONAL AIRPORT
WINDSOR LOCKS, CONNECTICUT 06096-1086

April 12, 1994

SUBJECT: Hazardous Substances

Mr. Raymond Green
Engineering Technologies, Associates Inc.
3458 Ellicott Center Drive, Suite 101
Ellicott City, MD 21043

Dear Mr. Green:

Enclosed are the inventory sheets of the hazardous substances at the Army Aviation Support Facility (AASF) CTARNG.

Please direct any questions to me at (203) 627-4872.

Sincerely,

Mark H. Rousseau
Major, AV, CTARNG
AASF, CDR

FAX TRANSMITTAL: PAGES ____
TO: Mr Ray Green
FROM: AASF#1 CT: MAJ Rousseau
TELE: 203-627-4875/4895
FAX: 203-627-4872

State Caretakers Room

CKER #	Chemical	N.S.N.	Part Number	Manufacturer	Hazard class	UN Number	Amount
mbion WS-55	WAX Stripper			Ambion Corp.	Corrosive		60 gal.
mbicidn 87	Germicidal Detergent			Ambion Corp.			20 gal.
unglo	Floor WAX			Bauer Chem.			10 gal.
Spectroway/	Floor WAX			Spectroway/ corp.			15 gal.
iaur Power	degreaser			Sanitary Products			2 gal.
Climb Cleaner				Deliver & Dougherty			15 cans
ast + Easy	Glass Cleaner			Spurton chemical			20 cans
[illegible]				[illegible] Corp.			24 cans
itchen Klenzer				Fitzpatrick Bros			20 cans
mmonia				Hines Austin			50 cans
Right Look				Sanitary products			2 gal.
SAE 30 motor oil				Pett Penn			24 QTS
SAE 10W-40	motor oil			Gibson Oil			12 QTS

CKER #1/R Chemical	N.S.N.	Part Number	Manufacturer	Hazard class	UN Number	Amount	M
Paint	899-8825	TTP-1757	So-Sure			3	
Adhesive sealant	MIL S43835	QC-3001	Qual. Chemical Sealant			1	
Detergent	7930-00426 5280	PD 17475	Light House for Glass products			2	
Trichloroethane	781000 930 6311	OT 620C	Garage Dr. Bedford Heights			1	
Lubricant Solid Film	715001 260 2594	MIL 83798A	Elm Corp			2	
Silicone Compound	685000 8807616	MIL 38606	Dow Corning Corp			1	
Break Free	7150010546453		Break Free Division CA			1	
Real Glass Cleaner			Cleveland Cotton products			1	
Grease WTR	9150001450 268	MIL 8132 2	Amco Shell			1	
Gasket Lube Moly	9150001411 4581	804-1767	Koppers Warren OH			1	
Lube Compound Fluorosilicone	7150001482 6894	131144	Dow Corning			4	
Pipe	803000 8376557	MIL 8183	Steel Bayonne NJ			1	
Molybdenum Disulfide	7150001 234 2000	MIL 00211680	Royal Lubricant			1	
Adhesive 734	8040000169005		Waskin Asso Company			1	
Isopropyl Alcohol	[illegible]					2	
Lime Dope	8010001605787		Sanroc TX			1	
[illegible]	8030002312853	MIL 11796B	Bulk Chemical			1	
Sealing Compound	803000 7534599	MIL 8807E	Chemical Dist CA			[illegible]	

OCKER # ___ Chemical	N.S.N.	Part Number	Manufacturer	Hazard class	UN Number	Amount	M
Low Reflec. Black	8010-01-211-1106	P956	LENMAR			25 qts	
Low Reflec. GREEN	8010-01-211-1107	P954	LENMAR			7 qts	
Engine Primer (Leather)	6850-00823-7861		Spray Products Corp			21 cans	
Zinc Chromate Primer	8010-00-889-8825	TT-P-1757	L.H.B. Industries			3 cans	
Gloss Black Paint	8010-00-290-6984	17038	" "			3 cans	
Flat Black Paint	8010-00-582-5382	37038	" "			1 can	
Gloss White Paint	8010-00-290-6983	17875	" "			2 cans	
Gray Camouflage	8010-00-664-1914	36231	" "			3 cans	
Olive Drab Camouflage	8010-00-941-3712	34088	" "			[illegible]	
Yellow	8010-00-181-2950	13655	" "			3 [illegible]	
Silver	8010-00-721-9751	17178	" "			1 [illegible]	
Red	8010-00-721-9745	11105	" "			[illegible]	
Clear	8010-00-515-2487					[illegible]	
Dull Green Camo	8010-01-141-2420	MIL-C-18180D	DEET Chemical			1 Kit	
Lacquer Thinner	8040-00-184-5384	[illegible]				[illegible]	
Epoxy Adhesive	8040-00-180-2941	1838 B/A	3M			1 kit	
Scotch Weld Adhesive	8040-00-145-0932	2216 B/A	3M			2 kits	
Scotch Weld Adhesive	8040-00-145-0919	2216 B/A	3M			[illegible]	
Epoxy	8040-01-163-3181	Hy SOL EA9309.3NA	Dexter Aero			1 kit	
Resin Coating	8030-00-088-1546	EPON 828	STEVEN Indust			3 cans	
Neo. Adhesive	8040-00-776-9614	80295-30	Fenwal Inc.			18 kits	
Low Reflective Adt. Green	8010-01-033-8917	TPH-B-X-0637-IT	LENMAR			4 qts	
Dull Green CARC	8010-01-131-6262	03GN-19	DEET Chemical			1 kit	
FLOCK Purple Lacquer	8010-00-527-2284	MIL-L-19538C	PRATT + Lambert			1 gal	
White Wall Paint		3425	Glidden			1 gal	
Tire Black		CONN. D.O.T. #25	CON-LUX			1 gal	
Floor Cement Epoxy			Merrifield			5 gals	
Isopropyl Alcohol	6810-00-286-5435	TT-I-735A				1 gal	
Vacuum Pump Oil			ROBINAIR			1 [illegible]	
Cylinder Engine Cold Starting	2910-00-646-9727		Cooper GROup			13 cyl.	

CKER #/	Chemical	N.S.N.	Part Number	Manufacturer	Hazard class	UN Number	Amount	M
	Hyd. Fluid Trans Dexron II	9150-000-98-2382		Octagon Process Inc.			6 QT	
	Motor oil 10-W30		21400 56065	Shell oil Company			3 QT	
	Engine oil 10W30		Mil-L-46152B	So. West Petro Chem Div			1 QT	
	Engine oil OE/HDG-30	9150-01-178-4726		Octagon Process Inc.			13 QT	
	Engine Primer Fuel	6850-00-823-7861		Spray Product Corp.			1 Can	
	Hyd. oil / John Deer Tractor		9003088	Napa Ashland oil Co.			1 gal.	
	Grease Plug Valve	9150-00-257-5360		Rockwell International			2 pt.	
	Grease Molybdenum Dis Fdc	9150-00-754-2595		Royal Lubricants Co Inc.			1 QT	
	Break Free	9150-01-079-6124		Break Free Division			1 gal.	
	Glass Cleaner		Z010024	Cleveland Carbon Prod.			2 oz	
	Break Fluid Silicone	9150-01-102-4455		Dow Corning Corp.			1 gal.	
	Anti-Seize Compound		250	Dimite Laboratories			2 oz	
	Sodium Bicarbonate	6810-00-264-6618					1 Pound	
	Lacquer (Aerosol) Blk	8010-00-290-6984		LHB Industries			10.5 oz	
	Lacquer (Aerosol) Dia	8010-00-[illegible]-5382		LHB Industries			10.5 oz	
	Lacquer (Aerosol) White	8010-00-290-6983		LHB Industries			10.5 oz	
	Water Reagent Type III	6810-00-682-6861					1 gal.	
	Glycol Ethylene	6810-00-006-4205					1 gal.	
	Lacquer Thinner Dupe	8010-00-160-5787		GSD Inc.			1 gal.	
	Soprapyl Alcohol	6810-00-855-6160		Defense Genel			5 Gal.	
	Fuel System	6850-00-753-5061		Phillips Prod. Corp.			5 Gal.	
	Auto Trans Fluid		D-21079	Intercontinental Lub Corp.			5 Gal.	

CKER# ____ Chemical	N.S.N.	Part Number	Manufacturer	Hazard class	UN Number	Amount	M.
Corrosion Prevent	6850-00-066-2333					408 gal	
Dope Lacquer Thinner	8010-00-160-5786					204 gal	
Detcing Fluid	6850-00-901-0591					5 gal	
Cleaning Compound	6850-00-965-2331					10 gal	
Toluene Technical	6810-00-290-0048					20 gal	
Ethylene Glycol	6810-00-006-4205					14 gal	
Engine Oil OE/HDO 30	9150-01-178-4726					217 QTS	
Engine oil 1000/30	9150-01-177-2762					53 QTS	
Lub oil A/C Turbin Eng	9150-00-782-2627					416 QTS	
Lub oil A/C Turbin Eng	9150-00-108-5359					640 QTS	
Lub oil A/C Engine Synthetic	9150-00-270-4057					72 gal	
Hydraulic Fluid Fire Resistant	9150-00-149-7432					90 gal	
Hydraulic Fluid Fire Resistant	9150-00-149-7431					408 QTS	
Lub oil A/C Turbin Eng Synthetic	9150-00-181-6266					432 PTS	
Lub oil A/C Turbin Synthetic	9150-00-985-7039					144 QTS	
Lub oil A/C Turbin Eng.	9150-00-773-2388					72 QTS	
OHT Hydraulic Fluid	9150-00-935-9807					120 QTS	
HT Hydraulic Fluid	9150-00-935-9808					30 gal	
HA Hydraulic Fluid	9150-00-252-6883					72 QTS	
A/C Grease	9150-00-145-0268					12 lb CN	
Methyl Ethyl	6810-00-281-2785					9 gal	
Grease Lub Flr	9150-00-506-8497					36 Tubes	
A/C Grease	9150-00-478-0055					26 lb CN	
Cleaning Compound Eng.	6850-00-181-7594					155 gal	
Lub Instrument oil	9150-00-233-4129					24 PTCN	
Lub oil	9150-00-035-5392					12 QTS	
A/C Grease	9150-00-269-8255					48 lb CN	
Lub oil General Purpose	9150-00-231-6689					11 PTS	
A/C Grease	9150-00-616-9020					9 lb CN	
Grease Moly Lub	9150-00-754-2595					31 lb CN	
Petrolatum Technical	9150-00-250-0926					23 lb CN	

[illegible] Hazard Building Inventory

Material	NSN		Unit	Qty	Hazard	Manufacturer
[illegible] (Green)			Cans	B	Combustible	Deeco
Paint (White)			Cans	B	Combustible	Glidden
Paint			Gal	B	Combustible	Benjamin Moore & Co.
Enamel Paint		1/2 Gal	Gal	B	Combustible	Coronado Paints
Hot dogs with JPY	9130-00-203-2380		2 lbs	B	Flammable	Cherron
Cheese cloth 23699	9150-00-585-7095		2 oz	B	Flammable	Hatco Corp.
Tent Sealer	8030-00-281-2346		Gal	B	Flammable	Midland Corp.
Heater insulation MIL-H-83282	9150-00-149-7471		1 lbs	B	Flammable	Royal lub
[illegible] MIL-H-83282			2 lbs	B	"	"
Spray Paint		10 oz	Cans	B	Flammable	SO-Sure
Rags & brushes Paint Stripper	8010-00-181-7568	2 lbs	Bags	B	Corrosive	Eldorado Chemicals
CPC	8030-00-271-2373		10 oz	B	Flammable	Bulk Chemical
Solvent Cement	8040-00-931-2		1 oz	B	Flammable	Methods Research
Walkway Comp.	5610-00-641-0427		Gal	B	Flammable	Akron Paint
Cement	8040-00-776-9601		2 oz	B	Flammable	?
Fiberglass	1560-00-856-5222		Kits	B	Flammable	?
Breakfree	9150-01-079-6124		2 oz	B	Flammable	Breakfree
Cleaner lubricant	9150-01-079-6124	2 Tubes	3 oz	B	Flammable	Royal lub
Alkyd Resin	8010-00-290-4302	1 can	2 lbs	B	Flammable	Kalcor Coatings
Adhesive	8040-00-933-4055	1 can	Quart	B	Flammable	Steven Ind
Structural Adhesive	EA 9309 Part A	1 can	Quart	B	Flammable	Dexter Corp.
Floor Wax			2 oz	B	Not Regulated	Barrier Industries.
Tan Paint.	8010-01-234-2504	1 can	2 oz	B	Flammable	Hentzen
Hardener (B)	50165		32 oz	B		American abrasives (201-373-7060)
Exoxy Primer	8010-01-098-6539		12 oz	B	Flammable	AKZO Corp
Decreaser	SE 3776	2 cans	32 oz	B	Flammable	Rochester Midland
Grease C-354	9150-00-985-7247		Gal	B	Flammable	Royal lub
Sealing Compound	8030-00-616-9191	4 cans	2 lbs	B	Flammable	Flamemaster
Adhesive	8040-00-664-9318		1 Pin	B	Flammable	Steven Ind
Solid Film lub	9150-00-[illegible]	4	[illegible]	B	[illegible]	[illegible] Corp

HazMat Building Inventory

...terial	NSN	Amount	Cond.	Insp.	Remarks
...ner	8010-00-160-1754	1 oz	B	Flammable	CSD Inc.
...C (Part A)	8010-01-146-2646	1 Gal	B	Flammable	Deft
...n Paint	8010-00-598-5464	1 Gal	B	Flammable	Pratt & Lambert
...hesive	8040-00-307-5925	1 Gal	B	Flammable	3M
...it Paint	JM +263	1 Gal	B	Flammable	Enterprise Comp.
...TR	9150-00-145-0268	1 oz	B	Flammable	Shell
...lkway Comp Black	8010-00-641-0427	1/2 Gal	B	Flammable liquid	Akron
...C PC	8030-01-041-1576	1 oz	B	Flammable	Steven Ind
... Comp. Stylo	9150-00-823-7860	36 oz	B	Flammable	Bulk Chem.
...lter = JP4		5 lbs	B	Flammable	

HazMat Building Inventory

Material	NSN	Amount	Cond of Bd	Insp	Remarks
Yellow Paint		5 Gal	G		
CPC	8030-00-231-2353	16 Gal	G		Turn in
Thinner	8010-00-160-5787	12 Gal	G		
Methanol	6010-00-599-3608	2 Gal	G		
MEK	6810-00-281-2785	1 Gal	G		
House Paint		29 Gal	G		
Floor Sealer		3 Gal	G		
Tile Adhesive		2 Gal	G		
Spray Kit	4940-00-803-6444	22 Bx	G	+20 Boxes	Turn in.
Glass Cleaner	7930-00-664-6910	19 Bx	G		Turn in
Degreaser	SE 377C	12 Boxes			Turn in
Cleaning Comp	6850-00-965-2331	10 Gal	G		Turn in
Corrosion Preventive	6850-00-066-2333	55 Gal	G		Turn in

CKER # 1 Chemical	NSN	Part Number	Manufacturer	Hazard class	UN-Number	Amount
yd Fluid	9150-00-935-7807	MIL-H-6083 E	Royal lubricants	Flammable liquid		6 Gal
ft oil	9150-00-785-7079	MIL-L-23699	Hexagon	Flammable liquid		47 Qt
ft oil	9150-00-782-2627	MIL-L-7808 J	Exxon	Flammable liquid		17 Qt
wy. oil	9150 01-178-4726	MIL-L-2104 E	Octagon	Flammable liquid		5 Qt
"10"	9150 00-273-2588	MIL-L-6081 C	Technolub	Flamable liquid		19 Qt
"PE30"	9150-00-111-0209	MIL-L-21260 D	Imperial	Flammable liquid		5 Gal
lyd. Fluid	9150-00-252-6383	MIL-H-5606 E	Hüls	Flammable liquid		14 Qt
yd. Fluid	9150 00-149-7432	MIL-H-83282	Emery	Flammable liquid		24 Qt
ion Preventive Compound	8850 00-081-2333					5 Gal
bs oil	00-231-0087	VV-L-800 A	Bulk chem	Flammable liquid		49 oz
cker #2						
licone	6850-00-285-7616	MIL-S-8660C	Philips	Flammable		16 oz
rrosol	6850-00-581-8147	3913-61				32 oz
rous Moly #3	9150-00-141-4481		Warren	Flammable	6 tubes	2 Tubes
ub oil 6.F.	9150 00-262-3440	MIL-L-7870A	American ink	Flammable liquid		4 Qt
mping Fluid	9150-00-217-8296	VV-D-1078	Dexis Houlanch	Flammable liquid		7 Qt
rease GOB	9150-00-616-7020	MIL-G-25537C	Crown	Flammable		4 Qt
rease WTR	9150 00-145-6268	MIL-G-81322 C	Shell	Flammable		10 lbs
rease GMD	9150-00-745-2535	MIL-G-21164 D	Shell	Flammable	3-Cans	4 Cans
rease GSP	9150-00-269-8255	MIL-G-4343 C	E F Houghton	Flammable	6 Cans	3 Cans
raphite	9150-00-190-0918	VV-G-671E	Graphit	Flammable	23-1.75 lbs	1 Gal
355		MIL-G-3545C	Rayco 45A			1 lb
ET	9150-00-250-0926	VV-P-236	Octigon	Flammable	4 Cans	6 Cans
rease GLA	9150-00-985-7247	MIL-G-23827 A	Royal	Flammable		2.4 Gal
rease Automotive	9150-00-190-0907	MIL-G-10924 D	Ballou Field	Flammable		5 Gal
leaner lubricant	7160 01-054-6453	MIL-L-63460 D	Royal	Flammable liquid		2 Qt
etrating oil	9150-00-527-7510	VV-P-216 C	American ink	Flammable liquid		24 oz

CKER# 3 Chemical	NSN	Part Number	Manufacturer	Hazard class	UN Number	Amount	M
pray Paints (all colors)			So-Sure LHB	Combustable		30 Cans	✓
Black Paint	8010-01-211-1106	MIL-L-46159A	Lenmar	Flammable liquid		7 Qt	✓
Green Paint	8010-01-211-1107	MIL-L-46159A	Lenmar	Flammable liquid		2 Gal 1 Qt	✓
Yellow Paint	8010-00-286-7758	TT E 498H	Darlin	Flammable liquid		2 Gal	✓
CARC Green	8010-01-141-2920	MIL-C-46168	Deft	Flammable		1 Qt	
White Paint	8010-00-515-1596	TT-E-489H	Chemray	Flammable		1 Qt	
Red Paint	8010-00-527-3797	TT-E 409G	Chemray	Flammable		3 QT	
nc Chromate	8010-00-899-8825	TT-P-1757	So-Sure	Combustable		9 Cans	
Halloway Green	5010-00-141-7838	MIL-W-5044C	Akron Paint	Flammable liquid		4 Gal	✓
rimer	8010-01-048-6537	MIL-P-23377P	AKZO	Flammable		2 Gal	
Floor Sealer			Merrifield	Combustable liquid		4 Gal	✓
arc Yellow	8010-00-181-8302	MIL-C-83286B	Deft	Flammable		1 Qt	
ARC Black	8010-00-144-9885	MIL-C-4616D	Pratt & Lambert	Flammable		1 Qt	

ICKER # 4 Chemical	N.S.N.	Part Number	Manufacturer	Hazard class	UN Number	Amount	M
Spray Kit	4940-00-803-6444		Pegasus Mg	Combustable liquid		18 Cans	
Crown Spra tool		MIL-S-22805A	Crown	combustable liquid		36 Cans	
ichlorodifluoromethane	6830-01-0384517		Chemtronics	combustable liquid		5 Cans	
leaning lubricant	6850-00-973-3122	MIL-C-83360C	chemscope	Flammable liquid		6-6 oz	
rosion Preventative Compound	8030-01-041-1596	MIL-C-85054	Bolle	Flammable liquid		7-16 oz	
11 Trichloroethane	6810-00-930-6311	O-T-620 C	Spray on	Combustable liquid		4-12 oz	
olvent Degreaser			Brulin	Combustable liquid		9-12 oz	
eat Glass cleaner			Cleveland cotton	Flammable liquid		5-12 oz	
eak Free	9150-01-102-1473	MIL-L-63460D	Break Free	Flammable		24 oz	
eak Detecting Compound	6850-00-621-1819	MIL-L-25567	American Gas	Not Regulated		8 oz	
eveloper	6850-01-690-5532		Magna Flux	Flammable		2 Gal	
astic Polish # 10			Mirror Glaze			2 Pt	
astic Cleaner # 12			Mirror Glaze			2 Pt	
tric Polish	7930-00-935-3799	PP-560 B	Mill Plastic			2 Pt	
metrant 1072		MIL-I-25135	Crown			8-12 oz	
leaner 1071		MIL-I-25135	Crown			12 oz	
eveloper 1079		MIL-I-25135	Crown			19-12 oz	
olid Film lubricant	9150-01-260-2574	MIL-L-23398D	F/M Corp			23-16 oz	
rosion Preventative Compound	8030-01-041-1596	MIL-C-85054	Storm Ind.	Flammable		11-16 oz	
rosion Preventative Compound	8030-00-938-1947	MIL-C-81302D	Holt	Flammable		2-16 oz	
rosion Preventative Compound	8030-00-118-0666	MIL-C-1617D	Stevens Ind.	Flammable		56-16 oz	
ectrical Protection Compound	8030-00-546-8622	MIL-C-81309D	Bulk	Flammable		13-16 oz	
ng. Primer	6850-00-823-7861	O-F-1044B	Spray Products	Combustable liquid		16 oz	
urface Conditioner I			Perma-lok			6 oz	
enetrating oil	9150-00-529-7518	VV-P-216B	Aerosol west	Flammable liquid		15 oz	
Dichlored	6830-00-902-2430		GC Elect.			6 oz	
Adhesive	8040-00-181-7761		J.M	Flammable		2 lbs	
nsulation Compound	5970-00-970-0492		Humiseal	Flammable		3-24 oz	

APR-12-94 TUE 9:23 AASF #1 BDL CTARNG P.13

CKER # 5	Chemical	N.S.N.	Part Number	Manufacturer	Hazard class	UN Number	Amount	M
	Aircraft wax	7930-00-267-5588		Concord Chem.	Flammable		1 Gal	
	Methanol	6810-00-597-3608	DLA-400-88-C-2257	AAPER	Combustable		1 Gal	
	Thinner	8010-00-160-5786			Flammable liquid		1 Gal	✓
	Isopropyl Alcohol	6810-00-286-5435	TT-I-735 A	CSD Conroc	Flammable liquid		1 Gal	
	MEK	6810-00-281-2785			combustable		2 Gal	✓
	Surface Cleaner	6850-00-144-9816	MIL-C-43616 B	Octagon	Flammable		5 Gal	✓
	Cleaning Compound	6850-00-965-2321	P-C-444A	Magna Flux	Flammable		5 Gal	
	Gas Path	6850-00-181-7594	MIL-C-6062				150 Gal	

ICKER # 6 Chemical	NSN	Part Number	Manufacturer	Hazard class	UN Number	Amount	M
Sealing Compound	8030-00-753-4577	MIL-S-8802	Flamaster	Flammable		22 PT	
Sealing Compound	8030-00-765-2004		Flamaster	Flammable		4 PT	
Sealing Compound	8030-00-616-9171		Flamaster	Flammable	201 Kits	6 PT	
Fiberglass Resin EA 930			Dexter Corp			1 QT	
Epoxy Paste	8030-00-891-3113		REN Plastics			6 QT	
Anti Seize Compound	8030-00-243-3285		McKoor			10 - 4oz	
Anti Seize Compound	8030-00-251-3980	MIL-A-907 E	Jet lube		2 lbs	6 lbs	
Anti Seize Compound	8030-00-087-8630	MIL-T-83483	McKoor			5 QT	
Sealing Compound	8030-01-069-3046	MIL-S-46163	Stoner Ind	Flammable		1 Kit	
Disassembly Fluid	7930-00-085-9572		Ultrachem			3-16oz	
Sealing Compound	8030-00-201-0996	TT-S-1732				2 Gal	
Adhesive	8040-00-832-6172	MMM-A-121	Stoner Ind	Flammable		10 oz	
Adhesive 20/20	8040-00-944-7292	MMM-A-1754	Epi Seal	Flammable		12 oz	
Adhesive	8040-00-226-3535	MIL-A-46050				32 oz	
Sealing Compound	8030-00-245-8005	TT-S-1732	Stoner Ind	Flammable	UN 1133	3 Gal	
Thiokol	[illegible]	MIL-A-10377	TACC		PG II	9 PT	
Sealing Compound	5350-00-153-7227					4 PT	
Sealing Compound	8030-00-614-9417	MIL-S-4357A	PRC	Flammable	3 PG	18 PT	
Sealing Compound	8030-00-201-0996	TT-S-1732	Stoner Ind	Flammable		3 PT	
Corrosion Preventative Compound	8030-00-231-2353	MIL-C-11796	Bulk			7 Gal	
Corrosion Preventative Compound	8030-00-231-2345	MIL-C-16173D				5 Gal	
Sealing Compound	8030-00-965-2437	MIL-S-1103E				1 Gal	
Sealing Compound (Gasket)	8030-00-252-5351						

CKER # 7 Chemical	N.S.N.	Part Number	Manufacturer	Hazard class	UN Number	Amount
Aladine 1200	8030-00-811-3727		Amchem	corrosive		18 lbs
rrosion Preventative Compound	8030-00-837-6557	MIL-C-16173D	Steven Ind			26 Pt
dhesive	8040-00-691-1122	MMM-A-124	Steven Ind			6 Qt
Sealing Compound	8030-00-081-2330	MIL-S-22473	Herman			4 x 10 oz
Brayco 599	6850-00-142-9582		Brayco			10 Pt
Sealing Compound	8030-00-952-2205	MIL-S-22473	Saf-T-lok			16 Pt.
Paint - Striper	8010-00-181-7564	MIL-R-81294C	Eldorado chem.			5 Gal

APPENDIX J

Stream Survey Site Report

STREAM SURVEY SITE REPORT FOR
DIVISION OF INLAND FISHERIES
THE STATE OF CONNECTICUT

Stream Name:STONY BROOK Sample Date: 09/14/1988

Site Description:DOWNSTREAM OF BRIDGE ON NURSERY ENTRY ROAD OFF HALE ST
SUFFIELD
Stream Polygon Code:41000030R50000 Site Number: 7

Town: SUFFIELD Topographic Map Name: WINDSOR LOCKS

CHEMICAL DATA:	Mean	SD		
Dissolved Oxygen:	8.07	0.06 mg/l	Turbidity . . . :	SLIGHT
pH . . . . . .:	7.63	0.15	Water Color. . . :	LIGHT AMBER
Conductivity . .:	239.33	6.03 umohs	Air Temperature. :	19. C
Alkalinity . . .:	72.57	0.51 mg/l (as CaCO3)	Water Temperature:	14. C

Maximum Air Temperature .: C Maximum Water Temperature: C
Date Maximum Temperature was recorded:

PHYSICAL DATA:
Sample Site Length: 100. (m) Sample Site Area: 652. (sq. m)

	Mean	SD	
Width . . . . . .:	6.52	1.32	(m)
Depth . . . . . .:	41.8	39.4	(cm)

Method used	Flow Meter Mean	Flow Meter SD	Salt Dilution Mean	Salt Dilution SD	
Water Velocity. .:			0.104	-----	(m/sec)
Discharge Volume.:			0.310	0.2470	(m3/sec)

Substrate Summary

Substrate Type	Area Percentage	Percent Mean Embeddedness
1)Fine Sand	100.00	100.
2)Course Sand.	0.00	100.
3)Gravel	0.00	99.5
4)Rubble (Cobble).	0.00	53.3
5)Small Boulders	0.00	55.0
6)Large Boulders	0.00	76.7
7)Bedrock		

Instream Cover Type	Area in Square Meters	Percentage of sample area
Logs, Deadfalls.	3.35	0.51
Undercut Banks	0.00	0.00
Rocks	0.08	0.01
Overhanging Plants . . .	9.04	1.39
Artificial Materials . .	0.12	0.02
Turbulance	0.08	0.01
Deep Water	62.90	9.65
Total Habitat.	85.92	13.18

Pool- Riffle Ratio: 82.333
Maximum Length of pools: 92. Number of pools in sample length: 2.
Maximum Length of riffle: 1.2 Number of riffles in sample length: 1.

Is the site located below a dam or lake? Y
Does the immediate stream area have additional nutrient sources such as fertilized lawns or agricultural runoff, etc.? Y

Percent Overhead Canopy: 50.

Dominant Water Shed Rock Type: A

G= granite, A= arkose, L= limestone, B= basalt

Flow Stability: 2.

0=intermittent, 1=no flow one out of five years,
2=low flow less than 25 % of average flow, 3=less than 50 %
of average flow, 4=controlled discharge.

POPULATION EVALUATIONS:

Species Name	Number per Hectare	Standard Error of Population Est.
Unknown Minnow	521.5	0.0
White Sucker	921.8	432.9
Pumpkinseed	199.4	0.0
American Eel	1733.1	305.9
Bluegill	153.4	50.6
Common Shiner	15.9	0.0
Fallfish	245.4	0.0
Grass Pickerel	613.5	141.5
Golden Shiner	2101.2	957.0
Largemouth Bass	107.4	0.0
Tessellated darter	1717.8	850.1
Redbreast Sunfish	79.7	0.0
Creek Chubsucker	309.7	0.0
Spottail Shiner	15.9	0.0
Unknow Sunfish	138.0	21.5
Totals	8598.3	1061.5

Subjective invertebrate population estimates
0= none visible, 1= a few individuals, 2= numerous individuals present

Crayfish: Clams/Mussels:

page 4

State of Connecticut, Division of Fisheries
Invertebrate Site Report

Stream Name : STONY BROOK
Site Number : 7 Sample Date: 09/14/88
Total Number of Samples taken: 5

Number and Weight of Invertebrates per square meter.

Taxonomic Group	Average Number	Standard Deviation	Average Weight(g)	Standard Deviation
AMPHIPODA	163.20	209.35	0.10	0.14
ISOPODA	3.20	7.16	0.00	0.00
ELMIDAE	9.60	14.31	0.00	0.00
GYRINIDAE	32.00	40.79	2.43	2.80
CHIRONOMIDAE	121.60	120.59	0.00	0.00
SIMULIIDAE	12.80	20.86	0.00	0.00
BAETIDAE	41.60	43.23	0.00	0.00
VELIIDAE	12.80	20.86	0.00	0.00
COENAGRIONIDAE	44.80	47.19	0.03	0.07
HYDROPSYCHIDAE	54.40	88.07	0.06	0.14
TOTALS	496.00	534.98	2.94	3.11

STREAM SURVEY SITE REPORT FOR
DIVISION OF INLAND FISHERIES
THE STATE OF CONNECTICUT

Stream Name:STONY BROOK Sample Date: 08/02/1988

Site Description:STREAM PARALLELS BOSTON NECK RD OFF RTE 159 SUFFIELD

Stream Polygon Code:41000040R30000 Site Number: 8

Town: SUFFIELD Topographic Map Name: WINDSOR LOCKS

CHEMICAL DATA:	Mean	SD		
Dissolved Oxygen:	8.70	0.00 mg/l	Turbidity . . . :	NONE
pH . . . . . .:	8.10	0.00	Water Color. . . :	LIGHT AMBER
Conductivity . .:	249.33	1.15 umohs	Air Temperature. :	28. C
Alkalinity . . .:	66.37	0.06 mg/l (as CaCO3)	Water Temperature:	25. C

Maximum Air Temperature .: C Maximum Water Temperature: C
Date Maximum Temperature was recorded:

PHYSICAL DATA:
Sample Site Length: 150. (m) Sample Site Area: 1854. (sq. m)

	Mean	SD	
Width . . . . . .:	12.36	2.16	(m)
Depth . . . . . .:	16.3	15.6	(cm)

Method used	Flow Meter Mean	Flow Meter SD	Salt Dilution Mean	Salt Dilution SD	
Water Velocity. .:	0.174	0.041		-----	(m/sec)
Discharge Volume.:	2.360	0.280			(m3/sec)

Substrate Summary Substrate Type	Area Percentage	Percent Mean Embeddedness
1)Fine Sand	0.00	100.
2)Course Sand.	2.22	100.
3)Gravel	11.11	25.0
4)Rubble (Cobble).	11.11	18.0
5)Small Boulders	4.44	27.5
6)Large Boulders	71.11	0.9
7)Bedrock		

Instream Cover Type	Area in Square Meters	Percentage of sample area
Logs, Deadfalls.	0.00	0.00
Undercut Banks	0.00	0.00
Rocks	0.12	0.01
Overhanging Plants . . .	4.07	0.22
Artificial Materials . .	0.00	0.00
Turbulance	40.99	2.21
Deep Water	177.76	9.59
Total Habitat.	223.54	12.06

Pool- Riffle Ratio: 0.6519
Maximum Length of pools: 49.3 Number of pools in sample length: 2.
Maximum Length of riffle: 82.1 Number of riffles in sample length: 2.

Is the site located below a dam or lake? Y
Does the immediate stream area have additional nutrient sources such as fertilized lawns or agricultural runoff, etc.? Y

Percent Overhead Canopy: 58.3

Dominant Water Shed Rock Type: A

G= granite, A= arkose, L= limestone, B= basalt

Flow Stability: 2.

0=intermittent, 1=no flow one out of five years,
2=low flow less than 25 % of average flow, 3=less than 50 %
of average flow, 4=controlled discharge.

POPULATION EVALUATIONS:

Species Name	Number per Hectare	Standard Error of Population Est.
Common Shiner	204.6	3110.1
American Eel	1295.9	294.3
Blacknose Dace	247.7	4816.1
Spottail Shiner	5.4	5.4
Fallfish	18.2	51.1
Grass Pickerel	10.8	18.7
Longnose Dace	287.4	1929.9
Pumpkinseed	5.4	5.4
Redbreast Sunfish	37.7	65.3
Sea Lamprey	5.4	9.3
Smallmouth Bass	59.2	397.4
White Sucker	204.0	293.6
Tessellated darter	43.1	0.0

Totals

Subjective invertebrate population estimates
0= none visible, 1= a few individuals, 2= numerous individuals present

Crayfish: Clams/Mussels:

State of Connecticut, Division of Fisheries
Invertebrate Site Report

Stream Name : STONY BROOK
Site Number : 8 Sample Date: 08/02/88
Total Number of Samples taken: 5

Number and Weight of Invertebrates per square meter.

Taxonomic Group	Average Number	Standard Deviation	Average Weight(g)	Standard Deviation
ELMIDAE	41.60	29.07	0.03	0.07
PSEPHENIDAE	54.40	63.60	0.45	0.74
CHIRONOMIDAE	86.40	79.68	0.03	0.07
EMPIDIDAE	3.20	7.16	0.00	0.00
SIMULIIDAE	6.40	14.31	0.00	0.00
BAETIDAE	99.20	170.23	0.13	0.21
CAENIDAE	12.80	28.62	0.00	0.00
EPHEMERELLIDAE	28.80	32.79	0.00	0.00
HEPTAGENIIDAE	6.40	8.76	0.00	0.00
GERRIDAE	6.40	14.31	0.00	0.00
LEPIDOPTERA	9.60	14.31	0.00	0.00
SIALIDAE	3.20	7.16	0.00	0.00
COENAGRIONIDAE	3.20	7.16	0.06	0.14
HYDROPSYCHIDAE	99.20	77.89	0.35	0.44
HYDROPTILIDAE	9.60	14.31	0.00	0.00
PHILOPOTAMIDAE	41.60	69.37	0.06	0.14
TOTALS	512.00	333.90	1.60	1.47

SPECIES	SPELLOUT	COMMON
AE	Anguilla rostrata	American Eel
AH	Brevoortia tyrannus	MENHADEN
AL	Alosa pseudiharengus	Alewife
AN	Anchoa mitchilli	Bay Anchovy
AS	Alosa sapidissima	American Shad
ASL	Ammodytes americanus	American sand lance
ATH	Clupea harengus	Atlanatic herring
BA	Morone saxatilis	Striped Bass
BB	Ameiurus nebulosus	Brown Bullhead
BC	Pomoxis nigromaculatus	Black Crappie
BD	Notropis bifrenatus	Bridled Shiner
BES	Selar crumenophthalmus	BIGEYE SCAD
BG	Lepomis macrochirus	Bluegill
BH	Alosa aestivalis	Blueback Herring
BK	Salvelinus fontinalis	Brook Trout
BKF	Tautoga onitus	tautog
BL	Rhinichthys atratulus	Blacknose Dace
BLF	Pomatomus saltatrix	Bluefish
SPECIES	SPELLOUT	COMMON
BM	Pimephales notatus	Bluntnose Minnow
BN	Salmo trutta	Brown Trout
BO	Culaea inconstans	Brook Stickleback
BON	Sarda sarda	ATLANTIC BONITO
BS	Enneacanthus obesus	Banded Sunfish
BSB	Centropristes striatus	BLACK SEA BASS
BSC	Fistularia tabacaria	BLUESPOTTED CORNET
BSS	Gasterosteus wheatland	Blackspotted stickleback
BU	Ameiurus melas	Black Bullhead
BUT	Poronotus triacanthus	BUTTERFISH
BW	Amia calva	Bowfin
CA	Cyprinus carpio	Common Carp
CBE	Priacanthus arenatus	BIGEYE
CC	Ictalurus punctatus	Channel Catfish
CE	Unknown Centrarchid	Unknow Sunfish
CH	Erimyzon oblongus	Creek Chubsucker
CM	Exoglossum maxillingua	Cutlips Minnow
CNS	Raja eglanteria	CLEARNOSE SKATE
SPECIES	SPELLOUT	COMMON
COD	Gadus morhua	ATLANTIC COD
CP	Esox niger	Chain Pickerel
CR	Semotilus atromaculatus	Creek Chub
CRJ	Carnax hippos	Crevalle jack
CS	Luxilus cornutus	Common Shiner
CUN	Tautogolabrus adsperus	Cunner
CY	Unknown Cyprinid	Unknown Minnow
DGF	Upeneus parvus	DWARF GOATFISH
FA	Semotilus corporalis	Fallfish
FIL	Monacanthus hispidus	PLANEHEAD FILEFISH
FM	Pimephales promelas	Fathead Minnow
FS	Apeltes quadracus	Fourspine Stickleback
FSF	Paralichthys oblongus	Fourspot flounder
GC	Ctenopharyngodon idella	Grass Carp
GF	Carasius auratus	Goldfish
GO	Leuciscus idus	Golden Orfe
GOS	Lophius americanus	GOOSEFISH
GP	Esox americanus	Grass Pickerel
SPECIES	SPELLOUT	COMMON
GR	Lepomis gulosus	Green Sunfish

GRB	Myoxocephalus aeneus	GRUBBY
GS	Notemigonus crysoleucas	Golden Shiner
GSN	Lutjanus griseus	GREY SNAPPER
GTF	Balistes capriscus	GRAY TRIGGERFISH
GZ	Dorosoma cepedianum	Gizzard shad
HO	Trinectes maculatus	Hogchoker
HS	Alosa mediocris	Hickory Shad
HY	Hybrid Sunfish	Hybrid Sunfish
ILL	Illex illecebrosus	SHORTFIN SQUID
KI	Fundulus diaphanus	Banded Killifish
KO	Oncorhynchus nerka	Kokanee Salmon
LA	Lampetra lamottei	Brook Lamprey
LD	Rhinichthys cataractae	Longnose Dace
LIZ	Synodus foetens	INSHORE LIZARDFISH
LL	Lota lota	Burbot
LM	Micropterus salmoides	Largemouth Bass
LOB	Homarus americanus	AMERICAN LOBSTER
SPECIES	SPELLOUT	COMMON
LOO	Selene vomer	Lookdown
LSK	Raja erinacea	LITTLE SKATE
LT	Salvelinus namaycush	Lake Trout
LUM	Cyclopterus lumpus	LUMPFISH
MKR	Scomber scombus	Atlantic mackerel
MM	Umbra limi	Central Mudminnow
MOO	Selene setapinnis	MOONFISH
MSC	Triglops murrayi	MOUSTACHE SCULPIN
MSD	Decapterus macarellus	MACKEREL SCAD
MU	Fundulus heteroclitus	Mummichog
NE	Strongylura marina	Atlantic Needlefish
NKG	Gobiosoma bosci	Naked goby
NOS	Sphyraena borealis	NORTHERN SENNET
NP	Esox lucius	Northern Pike
NS	Pungitius pungitius	Ninespine Stickleback
NSG	Astroscopus guttatus	NORTHERN STARGAZER
NSR	Prionotus carolinus	Northern searobin
OCP	Macrozoarces americanus	OCEAN POUT
SPECIES	SPELLOUT	COMMON
ORF	Aluterus schoepfi	ORANGE FILEFISH
PD	Semotilus margarita	Pearl Dace
PGY	Stenotomus chrysops	PORGY (SCUP)
PIP	Syngnathus fuscus	Northern pipefish
POL	Pollachius virens	POLLOCK
POM	Trachinotus carolinus	POMPANO
PS	Lepomis gibbosus	Pumpkinseed
PUF	Sphoeroides maculatus	NORTHERN PUFFER
RB	Ambloplites rupestris	Rock Bass
RCK	Enchelyopus cimbrius	FOURBEARD ROCKLING
RDH	Etrumeus teres	ROUND HERRING
REC	Fistularia petimba	RED CORNETFISH
RED	Urophycis chuss	Red hake
REL	Pholis gunnellus	ROCK GUNNEL
RGF	Mullus auratus	RED GOATFISH
RS	Lepomis auritus	Redbreast Sunfish
RS	Osmerus mordax	RAINBOW SMELT
RUD	Seriola zonata	BANDED RUDDERFISH
SPECIES	SPELLOUT	COMMON
RW	Oncorhynchus mykiss	Rainbow Trout
RWK	Lucania parva	Rainwater killifish
SA	Salmo salar	Atlantic Salmon
SAU	Trachurus lathami	ROUGH SCAD (SAURY)

SB	Morone Saxitilis	Stiped Bass
SBE	Pristigenys alta	SHORT BIGEYE
SBS	Carcharhinus plumbeus	SANDBAR SHARK (BROWN)
SC	Cottus cognatus	Slimy Sculpin
SCE	Ophidion marginatum	STRIPED CUSK-EEL
SCF	SCORPAENIDAE	SCORPION FISH
SCL	Myoxocephalus octodecemspinosus	Longhorn sculpin
SD	Etheostoma fusiforme	Swamp Darter
SDF	Mustelus canis	SMOOTH DOGFISH
SEH	Hippocampus sp.	SEAHORSE
SFL	Paralichthys dentatus	SUMMER FLOUNDER
SI	Menidia menidia	Atlantic Silverside
SK	Fundulus majalis	Striped Killifish
SL	Petromyzon marinus	Sea Lamprey
SPECIES	SPELLOUT	COMMON
SM	Micropterus dolomieu	Smallmouth Bass
SMF	Etropus microstomus	SMALLMOUTH FLOUNDER
SMO	Liopsetta putnami	SMOOTH FLOUNDER
SN	Acipenser brevirostrum	Shortnose Sturgeon
SP	Cyprinodon variegatus	Sheepshead Minnow
SPA	Scomberomorus maculatus	SPANISH MACKEREL
SPD	Squalus acanthias	Spiny dogfish
SPH	Urophycis regia	SPOTTED HAKE
SPT	Leiostomus xanthurus	Spot
SQI	Loligo pealei	LONG-FINNED SQUID
SR	Campostoma anomalum	Stoneroller
SRS	Prionotus spp.	SEA ROBIN
SRV	Hemitripterus americanus	SEA RAVEN
SS	Notropis hudsonius	Spottail Shiner
SSN	Liparis atlanticus	SEASNAIL
SSR	Prionotus evolans	STRIPED SEAROBIN
STR	Acipenser oxyrhynchus	Atlantic sturgeon
TD	Etheostoma olmstedi	Tessellated darter
SPECIES	SPELLOUT	COMMON
TDF	Opsanus tau	OYSTER TOADFISH
TE	Tinca tinca	Tench
TI	Menidia beryllina	Inland Silverside
TO	Microgadus tomcod	Atlantic Tomcod
TS	Gasterosteus aculeatus	Threespine Stickleback
TT	S.fontenalis X S. trutta	Tiger Trout
WA	Stizostedion vitreum	Walleye
WC	Amerius catus	White Catfish
WFL	Pseudopleuronectes americanus	Winter flounder
WH	Pomoxis annularis	White Crappie
WHI	Merluccius bilinearis	SILVER HAKE (WHITING)
WKF	Cynoscion regalis	Weakfish
WML	Mugil curema	White mullet
WP	Morone americanus	White Perch
WPF	Scopthalmus aquosus	WINDOWPANE FLOUNDER
WS	Catastomus commersoni	White Sucker
WSK	Raja ocellata	WINTER SKATE (BIG SKATE)
YB	Ictalurus natalis	Yellow Bullhead
SPECIES	SPELLOUT	COMMON
YJK	Caranx bartholomaei	YELLOW JACK
YP	Perca flavescens	Yellow Perch
YTF	Limanda ferruginea	YELLOWTAIL FLOUNDER
ZZZ	Sans poisson	NO FISH CAUGHT
-0-	Bairdiella chrysouria	Silver perch
-0-	Esox masquinongy	Muskellunge
-0-	Gambusia affinis	Mosquitofish

-0-	Clarias batrachus	Walking catfish
-0-	Notropis rubellus	rosyface shiner
-0-	Mugil cephalus	Striped mullet
-0-	Prosopium cylindraceum	Round whitefish
-0-	Hybopsis amplops	Bigeye chub
-0-	Fundulus luciae	Spotfin killifish
-0-	Oncorhynchus kisutch	Coho salmon
-0-	Percopsis omiscomaycus	Trout-perch
-0-	Arius felis	Hardhead Catfish

¶

APPENDIX K

Doran Memorandum Regarding

Change Orders for Project MD-89-4-L

STATE OF CONNECTICUT
MILITARY DEPARTMENT
STATE ARMORY
HARTFORD, CONNECTICUT
06105-3795

MEMORANDUM FOR: Mr. Dana Crompton, Comptroller, State Armory, Hartford, Connecticut 06105-3795

SUBJECT: Change Orders for Project MD-89-4-L

1. Project MD-89-4-L is the removal of underground storage tanks at the AASF, CSMS, OMS 8, and USP & FO Supply Depot. All four tanks were removed 8 June 89. Change orders are requested to cover the cost of removing contaminated water from the excavation at the AASF.

2. During the course of uncovering the tank at the AASF oil was found in the soil surrounding the fill pipe. When the sides of the tank were uncovered a storm drain was broken. Since it was raining the excavation began to fill with water. This water was contaminated by the oil.

3. On 9 June 89 Mr. Ed Alexander, Field Inspector of the DEP - Oil & Chemical Spills Unit, inspected all four excavations. He gave permission for the excavations at CSMS, OMS 8, and the USP & FO Supply Depot to be backfilled after soil samples were taken from them.

4. Mr. Alexander required that the contaminated water be pumped out of the excavation at the AASF and that absorbent pads be placed at the bottom of the excavation. He said that he would come back the following week to inspect the excavation.

5. The contractor for the project, Mr. Larry Wasserman of Wasserman Mechanical Systems Removal contacted United Industrial Services to pump out and dispose of the water. They came that afternoon and pumped out 4,000 gallons of water and placed absorbent pads in the excavation. Mr. Wasserman will be sending us an invoice for this work. His cost for the removal was $1,402.00. The first change order is requested for this work.

6. Mr. Alexander inspected the excavation again on 28 June 89. There was water in the excavation. He said that the water should be removed along with any visibly contaminated soil and the excavation then could be backfilled. The contaminated soil can be stored on site and he will notify us when he finds a proper disposal site.

7. Mr. Alexander has also asked that monitoring wells be installed at the AASF. This request could conceivably be expanded to include the CSMS, OMS 8, and USP & FO Supply Depot because the analysis of the soil samples form those locations showed contamination. He will be sending a letter describing what is required.

MCTFO
SUBJECT: Change Orders for Project MD-89-4-L

8. The contractor is prepared to remove the contaminated soil and backfill the week of July 10. The broken storm drain will be repai that time. He will arrange to have the water pumped out again with approval. A second change order would be required to cover the cos The cost would be about the same as it was to have the water remove first time.

9. If you have any questions, please call me at 548-3272.

Beth

ELIZABETH F. DORAN
State Environmental Specialist

CF:
P&PO
FMO

APPENDIX L

Letters Regarding Installation Air Permits

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

April 11, 1994

Mr. Larry Fritch
Hartford Armory - FMO
360 Broad St.
Hartford, CT 06105

Dear Mr. Fritch:

This letter is in response to your request for documentation regarding the possible registration of a small spray paint booth at the Army Aviation Support Facility in Windsor Locks.

This source does not need to be registered based on the information that you provided me (usage is limited to a few spray paint cans per day, at most, and no spray gun is used).

Please call me at 566-2690, if you have any further questions.

Sincerely,

Joel Bolduc

Joel Bolduc

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

June 1, 1993

Lawrence Fritch, Env Analyst
State Military Dept. (CFMO-ENV)
360 Broad St.
Hartford, CT 06105

Reference: Registration 1. HB Smith 4500-14 Boiler (Windsor Locks)
2. Portable Rock Crusher (East Lyme)

Dear Sir:

Enclosed please find Registration Certificates for the equipment registered with the Department of Environmental Protection (D.E.P.) under Section 22a-174-2 of the "Administrative Regulations for the Abatement of Air Pollution." The registration application is on file at this office and has been coded onto a computerized inventory of point sources. Periodically, D.E.P. will mail forms to update the information that has been supplied.

The Registration Certificate should be posted on or near the registered equipment in a position facilitating inspection by a D.E.P. representative. Care should be taken to protect the certificate from destruction.

The D.E.P. Stack and Registration Number on the Certificate must be used in all future correspondence with this Department. These identification numbers replace items number 01 and 02 titled "Application No." and "Stack No." on the registration application forms. A D.E.P. Stack Number is assigned for each point of exhaust. All equipment exhausted through the same stack will have the same D.E.P. Stack Number. Each registered equipment is assigned a separate D.E.P. Registration Number. For instance, if two identical boilers, exhausted through the same stack, are registered, D.E.P. will issue a certificate for each boiler with separate D.E.P. Registration Numbers and the same D.E.P. Stack Number.

Thank you for your cooperation in making Connecticut's Registration Program a success. If you have any questions regarding registration, please call me at 566-2690 in Hartford.

Sincerely,

Ron Freeto

Ronald C. Freeto
EP APCE III
Emissions Inventory Section

REGISTRATION CERTIFICATE
EPAC-10 REV. 7-73

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

STACK NO. 213-0050-001

EQUIPMENT CLASSIFICATION: [X] FUEL BURNING [ ] INCINERATOR [ ] PROCESS MFG. [ ] AIR POLLUTION CONTROL	REGISTRATION NO. 213-0114
FIRM NAME: STATE MILITARY DEPT. - ARMY AVIATION FACILITY	DATE ISSUED 05/27/93
LOCATION OF EQUIPMENT (No. & Street, Town, Zip): WINDSOR LOCKS, CT 06096	
COMMISSIONER OR HIS REPRESENTATIVE: Timothy R. P. Keeney	

BOILER APPLICANT

Q-576

DEPARTMENT OF THE ARMY
U.S. ARMY CENTER FOR HEALTH PROMOTION AND PREVENTIVE MEDICINE
5158 BLACKHAWK ROAD
ABERDEEN PROVING GROUND, MARYLAND 21010-5422

REPLY TO ATTENTION OF

MCHB-DC-EGW (40)

24 JAN 1997

MEMORANDUM FOR Chief, National Guard Bureau, ATTN: NGB-ARE-PR
Building E-4430, Aberdeen Proving Ground
21010-5420

SUBJECT: Narrative Report, Site Inspection No. 38-EH-2651-96, Army Aviation Support Facility, Bradley Field, Windsor Locks, Connecticut, 8-11 July 1996

Eight copies of the subject report with an executive summary are enclosed.

FOR THE COMMANDER:

JOHN W. BAUER, P.G.
Program Manager
Ground Water and Solid Waste

CF:
USACPW, ATTN: CECPW-ES
CDR, MEDCOM, ATTN: MCHO-CL-W
CDR, NA RMC
CDR, WRAMC: PVNTMED SVC
CDR, USMA, ATTN: PVNTMED SVC (2 cy)
CDR, USAEC, ATTN: SFIM-AEC-EC
CDR, DSA-N

Readiness thru Health

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KENT ARMY NATIONAL GUARD FACILITY (INSTALLATION 53065)
24410 MILITARY ROAD, KENT, WASHINGTON, 1-12 APRIL 1996
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DEPARTMENT OF THE ARMY
U.S. ARMY CENTER FOR HEALTH PROMOTION AND PREVENTIVE MEDICINE
ABERDEEN PROVING GROUND, MARYLAND 21010-5422

REPLY TO
ATTENTION OF

MCHB-DC-EGW

NARRATIVE REPORT
SITE INSPECTION NO. 38-EH-2651-96
ARMY AVIATION SUPPORT FACILITY
BRADLEY FIELD
WINDSOR LOCKS, CONNECTICUT
8-11 JULY 1996

1. INTRODUCTION.

1.1 Authority.

1.1.1 AEHA Form 250-R, 20 September 1994, Request for USAEHA Field Services, Project No. 38-EH-2651-96.

1.1.2 Memorandum, USACHPPM, MCHB-CS-PIO, 9 April 1996, subject: USACHPPM Schedule of Field Services, FY 96.

1.2 Purpose. Under the authority stated above, and in accordance with U.S. Environmental Protection Agency (EPA) guidance for performing site inspections under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 and the Superfund Amendments and Reauthorization Act of 1986, the U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM) conducted this focused site inspection (SI) at the Army Aviation Support Facility (AASF), Bradley Field, Windsor Locks, Hartford County, Connecticut. The SI is intended to evaluate the possibility of any release of hazardous substances to soil or surface water, and, if such a release is found to have occurred, whether it poses a threat to human health or the environment. Metals from battery electrolyte neutralization, spent solvents, and petroleum hydrocarbons are the major concerns raised in the Preliminary Assessment (PA) (reference 1) performed by Engineering Technology Associates. The scope of this SI is limited to sampling the sediment in one storm drain manhole; sampling surface water and sediment at nine strategic locations upstream, downstream, and within the AASF; and sampling soil at seven underground storage tank (UST) sites (five UST removal sites and two sites at the fuel farm) which were identified in the PA.

2. SITE DESCRIPTION.

2.1 Location.

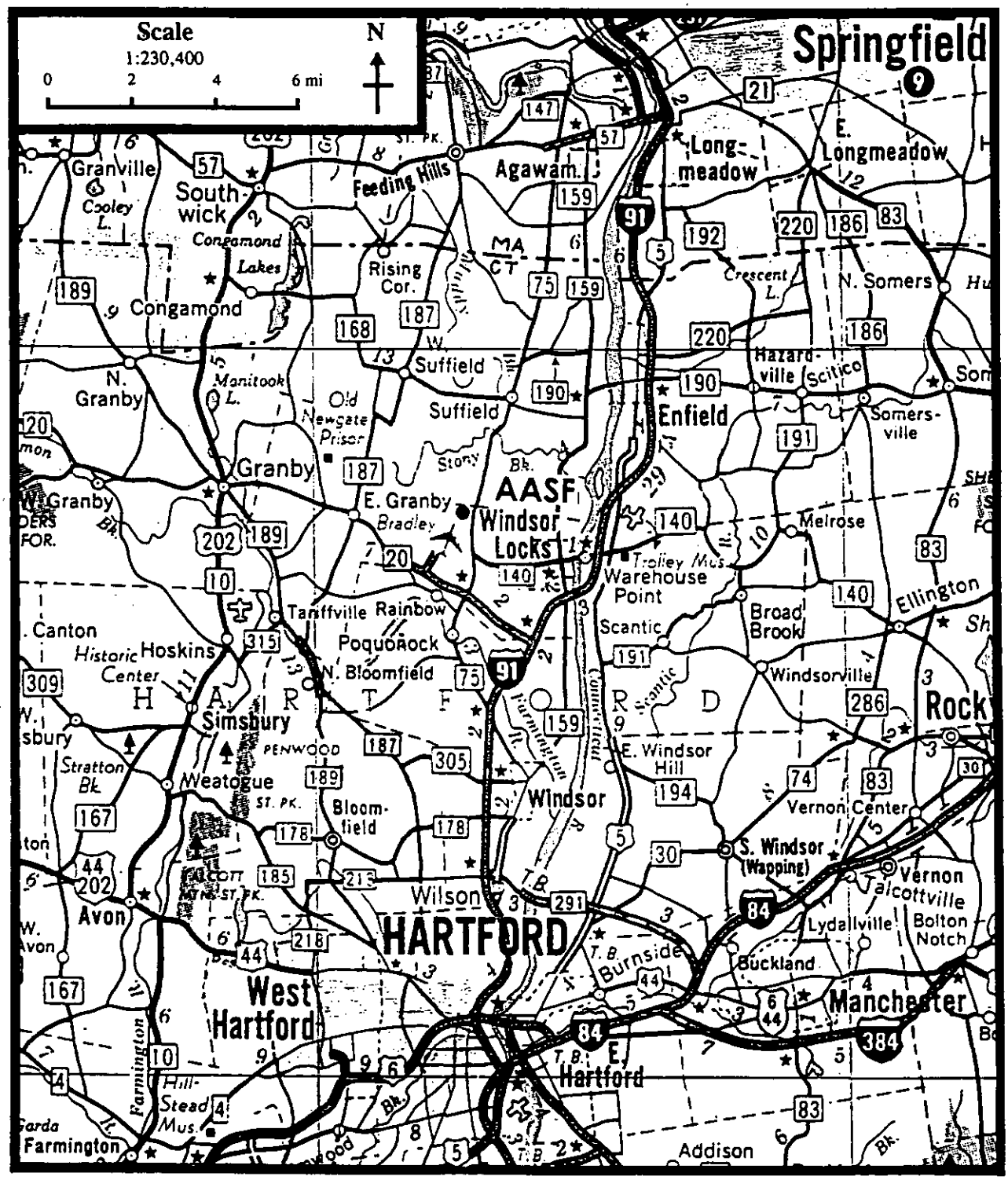
2.1.1 Physical. The AASF is located at Bradley International Airport (Bradley Field) within the Town of Windsor Locks, Hartford County, Connecticut. The site occupies about 36.1 acres within the boundaries of Bradley Field. It is located on the east side of the airport and on the west side of State Route 75 (Figure 1). Geographically, the site is located at 41° 56' 39.1" N latitude and 72° 40' 24.4" W longitude, and it is on the Windsor Locks 7½' topographic quadrangle. The AASF is situated roughly midway between the cities of Hartford, Connecticut (15 road miles to the south) and Springfield, Massachusetts (20 road miles to the north).

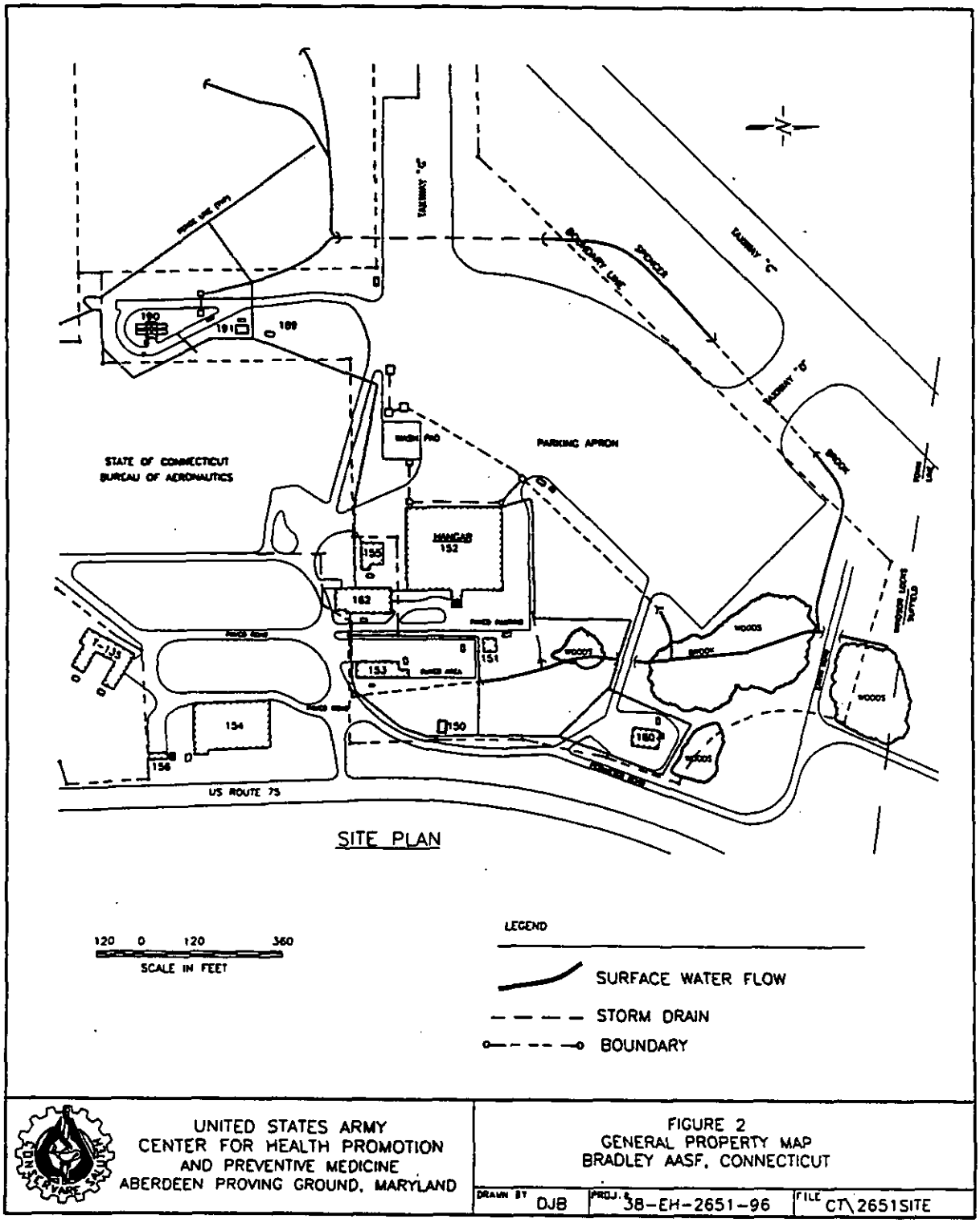
2.1.2 Climate. Bradley Field is located in the temperate zone. Mean monthly temperatures vary from 27 °F in January to 74 °F in July. Average annual rainfall is about 40.5 inches with March being the wettest month (average of 3.81 inches) and February the driest (average of 2.57 inches). Precipitation is evenly distributed throughout the year with the wettest and driest months accounting for 9.41% and 6.35%, respectively.

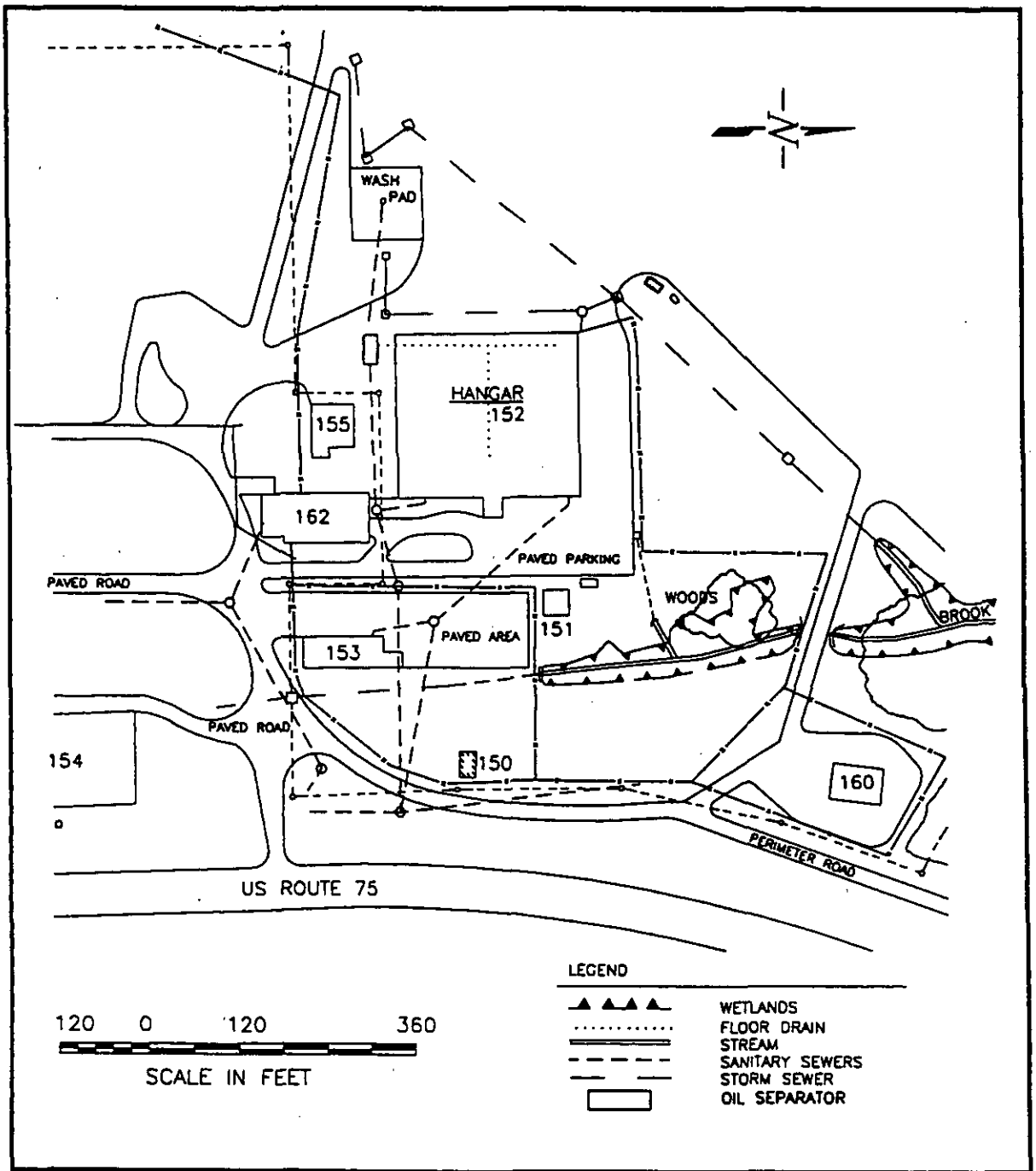
2.2 Site Description. Bradley Field was acquired by the Federal Government in the 1940's and deeded to the State of Connecticut in 1948. The Connecticut Department of Aeronautics leases the property that includes the AASF site to the Federal government. The U.S. Army licenses the property to the Connecticut Military Department. The 36.1-acre parcel was used by the Connecticut Air National Guard prior to September 1986 (reference 1), and it has since been used by the Connecticut Army National Guard (CTARNG). The AASF site includes six permanent buildings, several small storage buildings, and surrounding appurtenant lands (Figure 2). The major structure is hangar building 152, which houses the helicopter maintenance activities and the AASF offices.

2.3 Operational History and Waste Characteristics. The past practices reported in the PA (reference 1) that have resulted in this focused SI relate to the maintenance activities, especially within building 152, and the removals and replacements of several USTs. These practices consisted of the pouring of diluted and neutralized battery electrolytes and spent solvents into a floor drain in the battery room. The authors of the PA thought that this floor drain, which is located in the northeast corner of building 152, was connected to the storm drain system that runs north along the west side of building 152 to the east branch of Spencer Brook (Figure 3). No plans were found in the CTARNG files to confirm this connection, but neither were plans found that showed where the sewer line would have discharged. The wash rack off the southwest corner of building 152 and on the south edge of the apron was connected to the same storm drain, which received runoff from the major part of the helicopter parking apron. The floor drain in the battery room is now connected to the sanitary sewer at the northeast corner of building 152. The floor drains in the hangar bay and the wash rack

Figure 1. Location Map.




STATE OF CONNECTICUT
BUREAU OF AERONAUTICS
PARKING APRON
HANGAR
152
US ROUTE 75
SITE PLAN
120 0 120 360
SCALE IN FEET
LEGEND
SURFACE WATER FLOW
STORM DRAIN
BOUNDARY
UNITED STATES ARMY
CENTER FOR HEALTH PROMOTION
AND PREVENTIVE MEDICINE
ABERDEEN PROVING GROUND, MARYLAND
FIGURE 2
GENERAL PROPERTY MAP
BRADLEY AASF, CONNECTICUT
DRAWN BY DJB
PROJ. # 38-EH-2651-96
FILE CT\2651SITE



UNITED STATES ARMY
CENTER FOR HEALTH PROMOTION
AND PREVENTIVE MEDICINE
ABERDEEN PROVING GROUND, MARYLAND

FIGURE 3
STORM AND SANITARY SEWERS
BRADLEY AASF, CONNECTICUT

DRAWN BY DJB | PROJ. # 38-EH-2651-96 | FILE CT\2651SEWR

are now connected to the municipal sanitary sewer via an oil/water separator (Figure 3). The storm drains on the west side of the hangar now receive surface water only from the helicopter parking area. All surface runoff from the facility drains into Spencer Brook, the east branch of Spencer Brook, and its small tributaries both directly and via the storm drains (Figure 4).

3. SAMPLING RATIONALE. There are two objectives of this focused SI. The first is to determine whether or not there has been a release of hazardous substances (solvents or metals) or hydrocarbons to wetland sediments and/or surface water. Source sampling was limited to one sediment sample from Site Number 1, the manhole in the storm drain off the northwest corner of building 152. This appears to be the most likely place for any remnant metals-contaminated solids to be found that could relate to the battery room floor drain prior to the connection to the municipal sanitary sewer. This sample was analyzed for target analyte list (TAL) metals. Nine surface water and nine sediment samples were collected at nine sites on Spencer Book and its tributaries. These samples were analyzed for target compound list (TCL) volatile organic compounds (VOCs), TCL semivolatile organic compounds (SVOCs), pesticides/PCBs, TAL metals, and total petroleum hydrocarbons (TPH) - diesel range. The second objective is to determine whether or not there has been a release of hydrocarbons to the soil and/or ground water. No monitoring wells exist on the site that are suitable for ground-water sampling, and no wells were installed for this study. Thirty soil samples from seven sites were collected. Five sites are at former UST locations, and the other two sites are at the fuel farm. Four former heating oil UST sites were sampled and analyzed for TPH - diesel. One former gasoline UST and four replaced JP-4/JP-8 USTs were sampled and analyzed for TPH - gasoline range. Four samples were collected at each site, one surface soil (0-1.5 feet deep) and one subsurface soil (10.5-12 feet deep) at each of two locations. The two locations were at the northerly and southerly ends of the former UST sites, and on the east and west sides of the USTs at the fuel farm. Table 1 is a summary of the samples that were collected, showing the sample number, sample type, location, date of collection, and time of collection. Figure 5 shows the actual locations of the samples that were collected.

4. WASTE/SOURCE SAMPLING.

4.1 Description. Source sampling was intended to investigate possible contamination by the past practice of disposing of neutralized battery electrolytes into the floor drain of the battery room in building 152. It was intended to see if metals might remain in the storm sewer to which the battery room floor drain may have been connected in the past.

4.2 Sample Location. Source sampling was limited to one sediment sample (WS-1) from the manhole in the storm sewer off the northwest corner of building 152 (Figures 3 and 5). This appears to be the only possible place for any remnant contaminated solids to be found. The storm sewer discharges to the tributary of Spencer Brook on the east side of the AASF

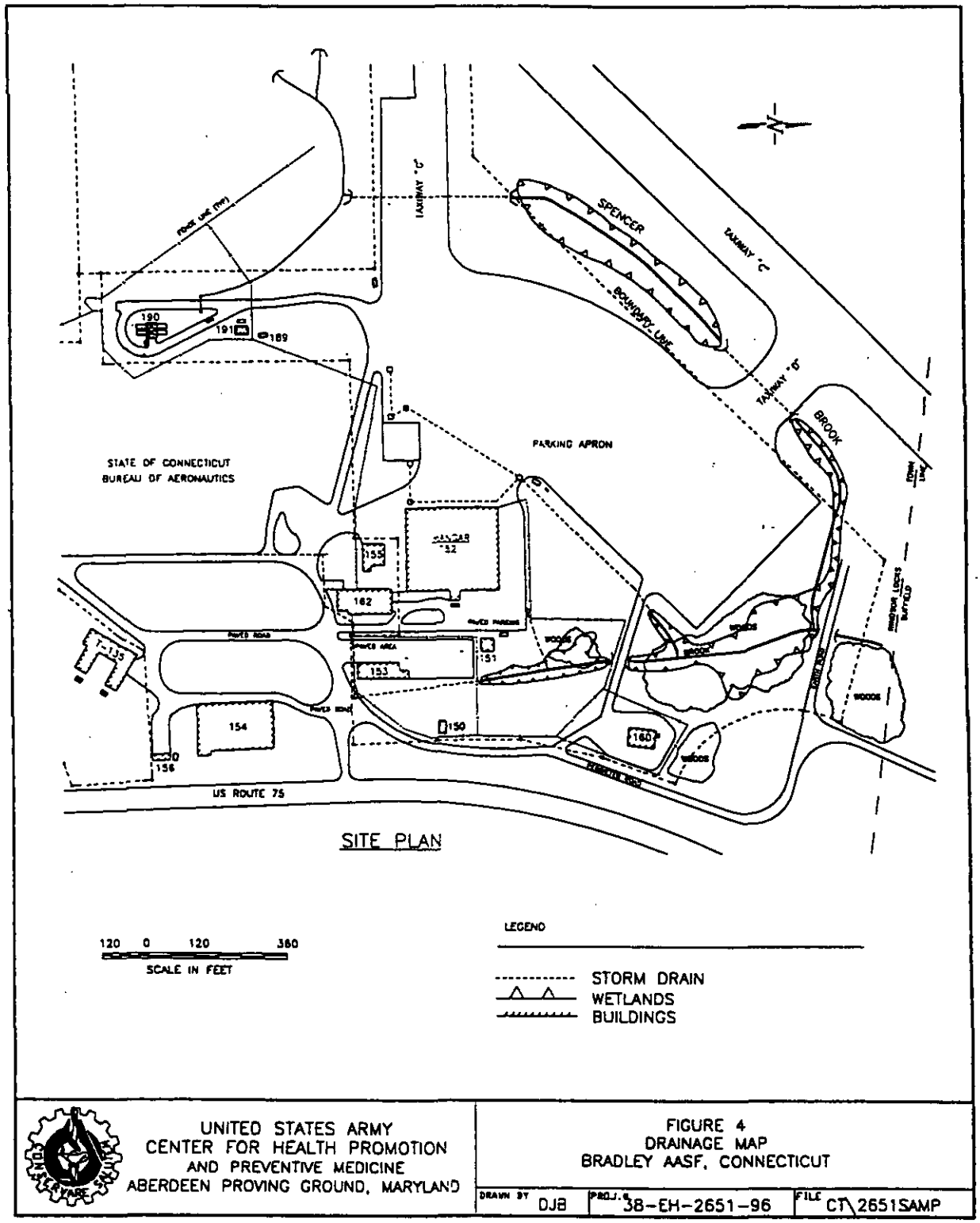

SPENCER
TAXIWAY "C"
TAXIWAY "D"
BROOK
PARKING APRON
STATE OF CONNECTICUT
BUREAU OF AERONAUTICS
US ROUTE 75
SITE PLAN
120 0 120 360
SCALE IN FEET
LEGEND
STORM DRAIN
WETLANDS
BUILDINGS
UNITED STATES ARMY
CENTER FOR HEALTH PROMOTION
AND PREVENTIVE MEDICINE
ABERDEEN PROVING GROUND, MARYLAND
FIGURE 4
DRAINAGE MAP
BRADLEY AASF, CONNECTICUT
DRAWN BY DJB
PROJ. # 38-EH-2651-96
FILE CT\2651SAMP

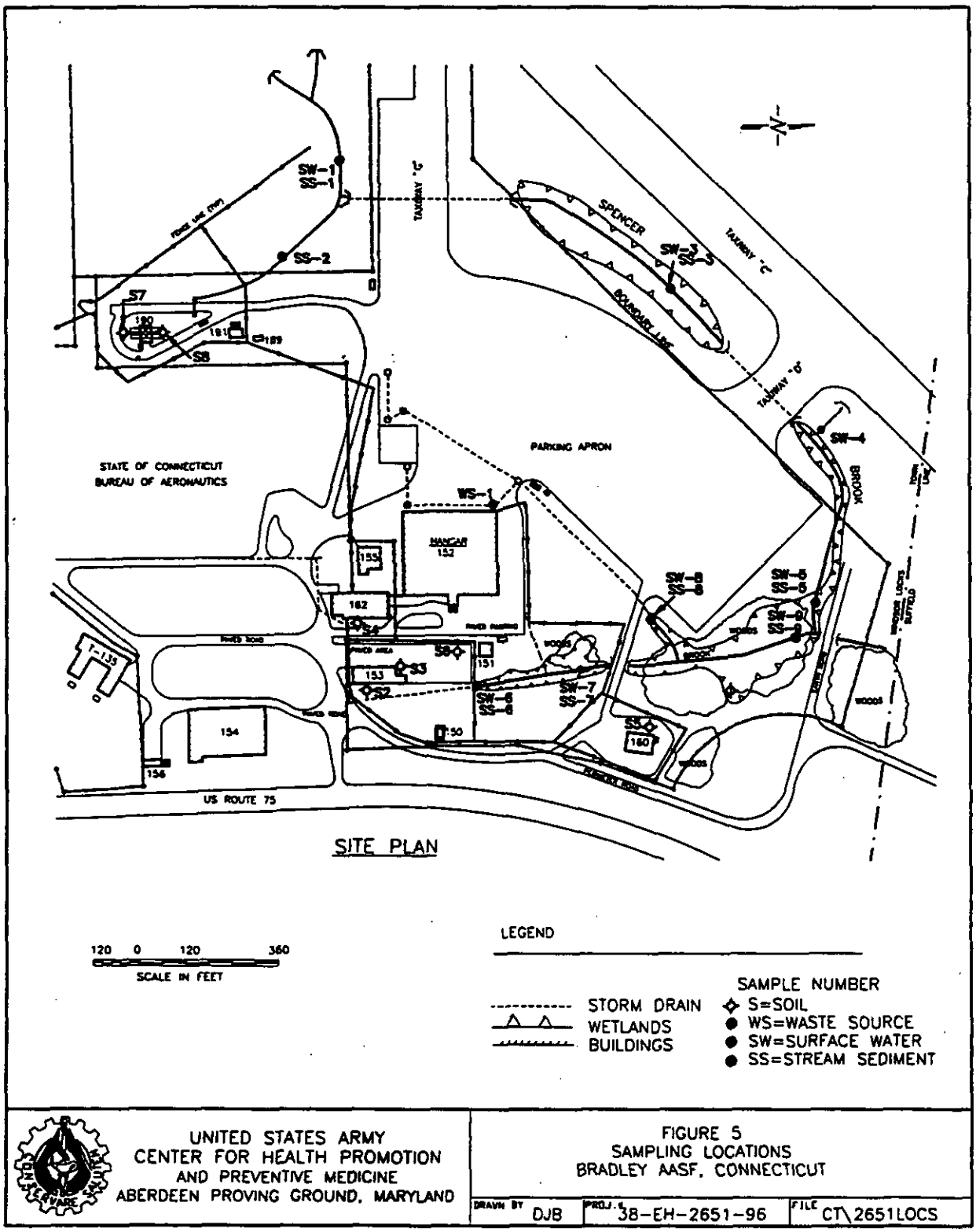
TABLE 1. SAMPLES COLLECTED

Sample ID	Sample Type	Location	Date	Time
WS-1	Sediment	Site 1. Sediment. Storm-sewer manhole at building 152.	7/10/96	1000
S2-N-A	Surface Soil	Site 2. North end of former waste-oil UST site off southeast corner of building 153.	7/10/96	1020
S2-N-B	Subsurface Soil		7/10/96	1030
S2-S-A	Surface Soil	Site 2. South end of former waste-oil UST site off southeast corner of building 153.	7/10/96	0950
S2-S-B	Subsurface Soil		7/10/96	1005
S3-N-A	Surface Soil	Site 3. North end of former heating-oil UST site off northwest corner of building 153.	7/10/96	1055
S3-N-B	Subsurface Soil		7/10/96	1125
S3-S-A	Surface Soil	Site 3. South end of former heating-oil UST site off northwest corner of building 153.	7/10/96	1300
S3-S-B	Subsurface Soil		7/10/96	1310
S4-N-A	Surface Soil	Site 4. North end of former heating oil UST site off southeast corner of building 162.	7/10/96	1400
S4-N-B	Subsurface Soil		7/10/96	1405
S4-S-A	Surface Soil	Site 4. South end of former heating oil UST site off southeast corner of building 162.	7/10/96	1330
S4-S-B	Subsurface Soil		7/10/96	1340
S5-N-A	Surface Soil	Site 5. North end of former heating oil UST site off northwest corner of building 160.	7/10/96	1525
S5-N-B	Subsurface Soil		7/10/96	1550
S5-S-A	Surface Soil	Site 5. South end of former heating oil UST site off northwest corner of building 160.	7/10/96	1455
S5-S-B	Subsurface Soil		7/10/96	1510
S6-N-A	Surface Soil	Site 6. North end of former gasoline UST site south of building 151.	7/9/96	1540
S6-N-B	Subsurface Soil		7/9/96	1600
S6-S-A	Surface Soil	Site 6. South end of former gasoline UST site south of building 151.	7/9/96	1615
S6-S-B	Subsurface Soil		7/9/96	1635
S7-E-A	Surface Soil	Site 7. East side of former JP-4, current JP-8, USTs off south end of building 190 (fuel farm).	7/9/96	0925
S7-E-B	Subsurface Soil		7/9/96	0950
S7-W-A	Surface Soil	Site 7. West side of former JP-4, current JP-8, USTs off south end of building 190 (fuel farm).	7/9/96	1005
S7-W-B	Subsurface Soil		7/9/96	1025
S8-E-A	Surface Soil	Site 8. East side of former JP-4, current JP-8, USTs off north end of building 190 (fuel farm).	7/9/96	1410
S8-E-B	Subsurface Soil		7/9/96	1435

TABLE 1. SAMPLES COLLECTED (CONT.)

Sample ID	Sample Type	Location	Date	Time
S8-W-A	Surface Soil	Site 8. West side of former JP-4, current JP-8, USTs off north end of building 190 (fuel farm).	7/9/96	1145
S8-W-B	Subsurface Soil		7/9/96	1155
SD-1	Subsurface Soil	QA/QC. Duplicate sample of S5-N-B.	7/10/96	1550
SD-2	Subsurface Soil	QA/QC. Duplicate sample of S8-W-B.	7/9/96	1210
SL-E	Water	QA/QC. Equipment blank to evaluate decontamination of non-dedicated equipment for TPH-gasoline samples.	7/10/96	0900
SW-1	Surface Water	Site 9. Spencer Brook upstream of all AASF activities.	7/10/96	1300
SS-1	Sediment		7/10/96	1315
SS-2	Sediment	Site 10. Dry tributary downstream of fuel farm.	7/10/96	1230
SW-3	Surface Water	Site 11. Spencer Brook between taxiways G and D.	7/10/96	0915
SS-3	Sediment		7/10/96	0930
SW-4	Surface Water	Site 12. Storm water outfall downstream of taxiway D.	7/10/96	0845
SW-5	Surface Water	Site 13. Spencer Brook downstream of all AASF activities, and upstream of 48" culverts.	7/10/96	1430
SS-5	Sediment		7/10/96	1445
SW-6	Surface Water	Site 14. Spencer Brook tributary at storm drain outfall and head of wetland behind building 151.	7/9/96	1345
SS-6	Sediment		7/9/96	1400
SW-7	Surface Water	Site 15. Spencer Brook tributary downstream of AASF parking area storm drain.	7/9/96	1300
SS-7	Sediment		7/9/96	1315
SW-8	Surface Water	Site 16. Spencer Brook tributary at storm drain outfall from apron area west of hangar building 152.	7/9/96	1030
SS-8	Sediment		7/9/96	1100
SW-9	Surface Water	Site 17. Spencer Brook tributary downstream of all AASF activities, and upstream of 48" culverts	7/9/96	0930
SS-9	Sediment		7/9/96	1000
SW-D	Surface Water	QA/QC. Duplicate of sample SW-5.	7/9/96	1515
SS-D	Sediment	QA/QC. Duplicate of sample SS-5.	7/9/96	1530
SS-T	Water	QA/QC. Trip blank for VOCs and TPH-gasoline.	7/10/96	NA

NA = not applicable.



UNITED STATES ARMY
CENTER FOR HEALTH PROMOTION
AND PREVENTIVE MEDICINE
ABERDEEN PROVING GROUND, MARYLAND

FIGURE 5
SAMPLING LOCATIONS
BRADLEY AASF, CONNECTICUT

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property. This storm sewer also previously received wastewater from the helicopter wash pad, and continues to receive runoff from the parking apron area. Collection of sample WS-1 was made difficult by the small amount of sediment in the manhole and connecting pipes. There was just enough media present to fill the 8-ounce sample container.

4.3 Analytical Results. The analytical results for this sample are summarized in Table 2, and the laboratory reports are presented in Appendix C. The metals detected in sample WS-1 include arsenic, barium, cadmium, chromium, lead, nickel, selenium, silver, vanadium, and zinc. These metals were also detected in the sediment samples collected from stream beds at various locations around the AASF with the exception of silver, which was detected only in sediment samples from the east branch of Spencer Brook.

4.4 Conclusions. Sample WS-1 is not a reliable indicator of past waste sources because the flow of water through the pipe is quite high and the quantity of sediment was barely enough to collect the sample.

5. GROUND-WATER PATHWAY.

5.1 Hydrogeology. The United States Geological Survey (USGS) has published maps of the geology of the Windsor Locks Quadrangle (references 3, 4, 5, 6, and 7). The bedrock below the site is the Portland Arkose, a thick sequence of reddish-brown siltstone and sandstone beds of Upper Triassic to Lower Jurassic age (reference 3). The bedrock surface is very irregular having been subjected to severe glacial erosion. The bedrock surface lies at depths of between 100 and 150 feet below the site (reference 4), or at elevations of about 0-50 feet above sea level (reference 5). Overlying the bedrock is a series of sedimentary deposits left by the last Pleistocene glaciation (reference 6). These deposits, from the bedrock to the surface, consist of glacial till, lacustrine and deltaic silt and clay, and delta sands. They total 100 to 150 feet in thickness. The rock surface is generally covered by a layer of till mostly 20 or more feet thick, but occasionally less than 10 feet or even absent. Till is a mixture of sizes from clay through cobbles or boulders, compact and dense, having been deposited beneath the glacier itself. As the ice retreated northward, sediments were left in a variety of environments of deposition. The Connecticut River Valley was dammed by a pile of sediment at Rocky Hill about 16 miles south of Windsor Locks. This dam caused the entire valley north to northern Massachusetts to be occupied by a large lake. The result of this situation is that the sediments at Bradley Field are lake deposits dominated by silt and clay. As these fine materials were accumulating on the bottom of the lake, the larger streams, such as the Farmington River, were building deltas out from the valley sides. Bradley Field is located on the northeast edge of the delta built into the lake by the Farmington River. In general, the sediment size becomes coarser from the bottom to the top of the delta. Thus, the sediments at the AASF site and most of Bradley Field, as described in reference 7, consist of as much as 50 feet of

TABLE 2. ANALYTICAL RESULTS FOR SEDIMENT SAMPLES--TAL METALS

DEC Soil (mg/kg) RES	I/C	Detections	WS-1 D9946 mg/kg	SS-1 D9937 mg/kg	SS-2 D9938 mg/kg	SS-3 D9939 mg/kg	SS-5 D9940 mg/kg	SS-6 D9942 mg/kg	SS-7 D9943 mg/kg	SS-8 D9944 mg/kg	SS-9 D9945 mg/kg	SS-D[1] D9941 mg/kg
27	82.00	Antimony (Sb)	ND	ND	0.7	2.9	0.3	ND	ND	ND	ND	ND
10	10	Arsenic (As)	7.6	0.9	6.1	6.3	1.9	3.9	7.4	5.3	11	1.1
4700	140,000	Barium (Ba)	340	14	110	100	86	210	260	180	240	43
2	2	Beryllium (Be)	ND	ND	0.8	ND	ND	1.4	ND	ND	ND	ND
34	1000	Cadmium (Cd)	3.1	3.2	3.8	460	6.4	ND	5.5	3.3	99	3.1
100	100	Chromium (Cr)	11	23	26	460	17	44	52	35	50	9
500	12 1000	Lead (Pb)	27	130	97	540	18	27	80	120	140	9.1
20	610	Mercury (Hg)	ND	ND	ND	0.8	ND	ND	ND	ND	0.4	ND
400	75000	Nickel (Ni)	4.8	38	19	44	7.0	32	34	9.1	30	5.6
340	10,000	Selenium (Se)	0.8	0.6	0.6	2.5	0.6	0.5	1.3	0.8	2.9	0.3
340	10,000	Silver (Ag)	8.0	ND	ND	ND	ND	2.2	ND	32	6.0	ND
5.4	160	Thallium (Tl)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
470	14,000	Vanadium (V)	23	21	48	190	19	72	95	37	94	17
20,000	610,000	Zinc (Zn)	99	60	140	540	120	120	740	88	580	66

ND = not detected. [1] = Duplicate of SS-5.

fine to medium sand, with coarse sand to gravel in some places, overlying thick deposits of very fine sand, silt, and clay. Complicating this otherwise fairly simple picture are numerous hills, called drumlins, sticking up through the lake deposits. These drumlins may be rock-cored or entirely till. The tip of one such drumlin is located between the AASF apron and the fuel farm (references 6 and 7). Sands at the fuel farm are thin with the glacial till of the drumlin lying at about 3 to 5 feet below the surface. The surface delta sands at the AASF are close to the thin edge and are not used for water supply. Ground water in these sands is perched on the underlying thick lake and delta silt and clay deposits. The water table is at a depth of 4-6 feet on the property, and flow is toward the north and east. This shallow ground water discharges to the surface via the storm drains on the site and sustains the flow in Spencer Brook. The nearest well, identified in the PA as a private well located more than 6,000 feet to the north, undoubtedly produces from the bedrock aquifer below the silt and clay deposits, and cannot draw water from the perched ground water at the AASF since the sand does not occur that far to the north (references 6 and 7).

5.2 Targets. There are no ground-water targets. No wells, public or private, within 4 miles of the site are hydrologically situated so as to be threatened by any contamination from the site. That is, all are in an aquifer that is not connected to the perched ground water at the AASF. No wellhead protection areas have been delineated within 4 miles of the site.

5.3 Sample Locations. No ground-water samples were collected during this study.

5.4 Analytical Results. There were no samples analyzed.

5.5 Conclusions. There are no threats to ground-water supplies from this facility, but the ground water does discharge to the upper reaches of Spencer Brook (see Section 6.1).

6. SURFACE WATER PATHWAY.

6.1 Hydrology. The site is located in the Stony Brook subbasin of the Connecticut River drainage basin. Surface runoff from this facility and adjacent areas flows northward through the AASF property to Stony Brook via Spencer Brook and its tributaries (Figure 4). At first most of Spencer Brook and its small tributaries remained open channels, but they have become increasingly enclosed in pipes to accommodate road and taxiway crossings and to permit expansion of helicopter and vehicle parking. Most of this enclosure occurred between 1975 and 1980 as can be seen on aerial photos of the site on file at the Connecticut Department of Environmental Protection (CTDEP) maps and publications store in Hartford. Stony Brook flows easterly to join the south-flowing Connecticut River north of Windsor Locks. The flow in Spencer Brook is sustained by ground-water discharge from the shallow delta sands.

6.2 Targets. There are no potable water intakes on either Spencer Brook, Stony Brook, or the Connecticut River within the 15-mile downstream target distance limit, but all three have been designated by the CTDEP as Class B Cold-Water Fisheries. Stony Brook and the Connecticut River are used for boating and fishing, and the Connecticut River is considered a sensitive environment since it is habitat for the Shortnose sturgeon, an endangered species, and the Atlantic sturgeon, a threatened species. There are more than 20 miles of wetland frontage along the 15-mile downstream target distance limit (reference 1).

6.3 Sample Locations. Nine water and nine sediment samples were collected from nine locations on Spencer Brook and its tributary streams as shown on Figure 5. Surface water samples were collected from well mixed portions of the stream. Sediment samples were collected from stream bottoms at depths of 0 to 4 inches.

6.4 Analytical Results. The analytical results for these samples are summarized in Tables 2, 3, 4, and 5, and the laboratory reports are presented in Appendix C. Field measurements of pH, conductivity, and temperature are shown in Table 6. No sediment quality criteria exist with which to compare the sediment results. The sediment data is used qualitatively to provide an indication of the constituents that have passed through the streams and storm-water pipes over time, and to compare with constituents detected in the surface water. Surface-water data are compared with applicable Connecticut Fresh Water Aquatic Life Criteria listed in Table 7.

6.4.1 VOCs.

6.4.1.1 Sediments. Acetone was detected in all samples except SS-2 and SS-8, but it was above reporting limits only in samples SS-3, SS-7, and SS-9. Concentrations in these three samples were 2.9, 63, and 84 micrograms per kilogram (μg/kg), respectively. Concentrations in the other four samples were estimated between 13 and 25 μg/kg. The only other compound detected at concentrations above the reporting limit was 1,1,1-trichloroethane, which was detected only in samples SS-1 and SS-2 at 2.6 and 2.9 μg/kg, respectively. Three other VOCs were detected in one sample each and below the reporting limits. Sample SS-9 had an estimated concentration of 18 μg/kg of 2-butanone; and sample SS-1 had an estimated concentration of 2.4 μg/kg of 1,1-dichloroethane; and sample SS-8 had an estimated concentration of 1.5 μg/kg of trichlorofluoromethane. Methylene chloride was detected in all samples plus two laboratory blanks and is considered to be laboratory contamination.

6.4.1.2 Surface Water. Only three VOCs were detected in the water samples collected at three sites. 1,1,1-trichloroethane was detected above reporting limits in samples SW-1 (8.3 μg/kg) and SW-3 (7.8 μg/kg), and below reporting limits in sample SW-5 and its duplicate SW-D (both 1.6 μg/kg estimated). 1,1-dichloroethane was detected below reporting

TABLE 3. ANALYTICAL RESULTS FOR SEDIMENT SAMPLES--ORGANIC

Detections	SS-1 D9937 µg/kg	SS-2 D9938 µg/kg	SS-3 D9939 µg/kg	SS-5 D9940 µg/kg	SS-6 D9942 µg/kg	SS-7 D9943 µg/kg	SS-8 D9944 µg/kg	SS-9 D9945 µg/kg	SS-D[2] D9941 µg/kg
VOCs									
acetone	**25***	ND	**29**	**15***	**14***	**63**	ND	**84**	**13***
2-butanone	ND	ND	ND	ND	ND	ND	ND	**18***	ND
1,1-dichloroethane	**2.4***	ND	ND	ND	ND	ND	ND	ND	ND
methylene chloride[1]	3.7	1.1*	4.8	2.5	3	3.6	2*	3.2	2.9
1,1,1-trichloroethane	**2.7**	**2.9**	ND	ND	ND	ND	ND	ND	ND
trichlorofluromethane	ND	ND	ND	ND	ND	ND	**1.5***	ND	ND
SVOCs									
Phenol	ND	ND	ND	ND	ND	ND	ND	**640***	ND
Benzyl alcohol	ND	**250***	**430***	ND	ND	**610***	ND	**830***	ND
4-Methylphenol	ND	ND	ND	ND	ND	ND	ND	**9,100**	ND
Acenaphthylene	ND	ND	ND	ND	ND	**990***	ND	ND	ND
Acenaphthene	ND	ND	ND	ND	**330***	ND	ND	ND	ND
Phenanthrene	**620**	**400***	**860**	ND	**3,600**	**6,500**	**1,700**	**3,700**	**410***
Anthracene	ND	ND	ND	ND	**670**	**1,300**	ND	ND	ND
Di-n-butylphthalate	ND	ND	ND	ND	ND	**1,300**	ND	ND	ND
Fluoranthene	**1,100**	**970**	**2,200**	**380***	**10,000[3]**	**2,100**	**3,800**	**10,000**	**1100**
Pyrene	**840**	**910**	**2,100**	**320***	**4,500**	**15,000**	**2,200**	**6,400**	**790**
Butylbenzylphthalate	ND	ND	**1,700**	ND	ND	ND	ND	ND	ND

TABLE 3. ANALYTICAL RESULTS FOR SEDIMENT SAMPLES--ORGANIC (CONT.)

Detections	SS-1 D9937 µg/kg	SS-2 D9938 µg/kg	SS-3 D9939 µg/kg	SS-5 D9940 µg/kg	SS-6 D9942 µg/kg	SS-7 D9943 µg/kg	SS-8 D9944 µg/kg	SS-9 D9945 µg/kg	SS-D[2] D9941 µg/kg
SVOCs (continued)									
Benzo[a]anthracene	360*	510	1,100	ND	2,600	7,600	1,100	3,400	500
Chrysene	570	740	1,500	230*	2,700	8,000	1,600	4,900	560
bis(2-Ethylhexyl)phthalate[1]	230*	ND	4,700	ND	480*	ND	1,000,000[3]	1,600	450
Benzo[b]fluoranthene	760	1,300	3,100	370*	4,300	21,000	2,700	8,400	750
Benzo[k]fluoranthene	250*	360*	1,100	ND	1,500	5,000	880	2,400	260*
Benzo[a]pyrene	340*	600	1,500	240*	2,400	7,100	1,400	3,600	450
Indeno[1,2,3-cd]pyrene	400*	540	1,100	ND	1,800	7,100	970	ND	310*
Dibenz[a,h]anthracene	ND	ND	ND	ND	500	1,600	ND	660*	ND
Benzo[g,h,i]perylene	370*	510	950	ND	1,800	7,500	910	2,700	260*
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PESTICIDES/PCBs									
DDD,p,p'	ND	ND	0.040	ND	ND	0.031	ND	0.023	ND
DDE,p,p'	ND	ND	ND	ND	ND	0.015	ND	0.012	ND
DDT,p,p'	ND	0.12	ND	ND	ND	0.34	ND	0.23	ND
PCB (1260)	0.14	ND	1.39	ND	ND	ND	ND	ND	ND
TPH-DIESEL	29	ND	ND	ND	33	54	57	30	26

ND = not detected. * = Estimated value, below reporting limit. [1] = Probable lab contamination. [2] = Duplicate of SS-5. [3] = Diluted.

TABLE 4. ANALYTICAL RESULTS FOR AQUEOUS SAMPLES--TAL METALS

Detections	SW-1 D9928 µg/L	SW-3 D9934 µg/L	SW-4 D9935 µg/L	SW-5 D9926 µg/L	SW-6 D9930 µg/L	SW-7 D9931 µg/L	SW-8 D9932 µg/L	SW-9 D9926 µg/L	SW-D[1] D9930 µg/L
Aluminum (Al)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Antimony (Sb)	ND	ND	ND	ND	ND	DN	ND	ND	ND
Arsenic (As)	1	1	ND	ND	ND	1	ND	1	ND
Barium (Ba)	48	39	160	37	55	48	49	40	34
Beryllium (Be)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium (Cd)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Calcium (Ca)	23,000	20,000	41,000	19,000	33,000	26,000	29,000	23,000	19,000
Chromium (Cr)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt (Co)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Copper (Cu)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iron (Fe)	3,000	1,300	280	500	240	230	710	450	510
Lead (Pb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Magnesium (Mg)	5,200	4,400	8,600	4,500	8,300	6,600	9,900	6,800	4,400

TABLE 4. ANALYTICAL RESULTS FOR AQUEOUS SAMPLES--TAL METALS (CONT.)

Detections	SW-1 D9928 µg/L	SW-3 D9934 µg/L	SW-4 D9935 µg/L	SW-5 D9926 µg/L	SW-6 D9930 µg/L	SW-7 D9931 µg/L	SW-8 D9932 µg/L	SW-9 D9926 µg/L	SW-D[1] D9930 µg/L
Manganese (Mn)	3,000	1,400	1,100	260	130	89	270	130	250
Mercury (Hg)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel (Ni)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Potassium (K)	1,600	1,400	2,400	1,400	2,000	1,300	1,700	1,300	1,300
Selenium (Se)	ND	ND	ND	ND	ND	1	ND	ND	ND
Silver (Ag)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium (Na)	4,700	4,600	2,200	1,400	2,000	25,000	4,700	10,000	2,900
Thallium (Tl)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium (V)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc (Zn)	51	58	76	31	90	78	10	39	52

ND = not detected. [1] = Duplicate of SW-5.

TABLE 5. ANALYTICAL RESULTS FOR AQUEOUS SAMPLES--ORGANIC

Detections	SW-1 D9928 µg/L	SW-3 D9934 µg/L	SW-4 D9935 µg/L	SW-5 D9926 µg/L	SW-6 D9930 µg/L	SW-7 D9931 µg/L	SW-8 D9932 µg/L	SW-9 D9933 µg/L	SW-D[1] D9927 µg/L
VOCs									
1,1-dichloroethane	**1.2***	**1.6***	ND	ND	ND	ND	ND	ND	ND
1,2,4-trichlorobenzene	ND	ND	ND	**1.1***	ND	ND	ND	ND	ND
1,1,1-trichloroethane	**8.3**	**7.8**	ND	**1.6***	ND	ND	ND	ND	**1.6***
SVOCs	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pesticides/PCBs	ND	ND	ND	ND	ND	ND	ND	ND	ND
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
TPH-diesel	**0.022**	**0.014**	**0.024**	**0.082**	**0.024**	**0.010**	**0.012**	**0.033**	**0.049**

ND = not detected. * = Estimated value, below reporting limit. [1] = Duplicate of SW-5.

TABLE 6. FIELD MEASUREMENTS FOR AQUEOUS SAMPLES

Parameter	SW-1	SW-3	SW-4	SW-5	SW-6	SW-7	SW-8	SW-9	SW-D[1]
pH	6.5	6.3	6.6	6.7	6.5	4.5	4.5	6.0	6.7
Conductivity, μmhos/cm	190	260	480	160	480	1,000	270	1,000	160
Temperature, °C	18	20	19	25	19	20	21	20	25

[1] = Duplicate of SW-5.

TABLE 7. FRESH WATER AQUATIC LIFE CRITERIA

Metal/Compound	Connecticut Fresh Water Aquatic Life Criteria for Chemical Constituents (μg/L) (reference 9)		EPA Fresh Water Aquatic Life Criteria (μg/L) (reference 10)[1]	
	Acute	Chronic	Acute	Chronic
Arsenic (As)	360	190	360	190
Selenium (Se)	20	5	20	5
Zinc (Zn)	35.3	12.3	65.0	58.9
1,1-dichloroethane	None	None	None	None
1,2,4-trichlorobenzene	None	None	None	None
1,1,1-trichloroethane	None	None	None	None

[1] = EPA criteria for metals is derived assuming a statewide average of 50 milligrams per liter as calcium carbonate.

limits in samples SW-1 and SW-3 (1.2 and 1.6 μg/kg estimated, respectively). 1,2,4-trichloro- benzene was detected in sample SW-5 (1.1 μg/kg estimated), but was not detected in sample SW-D. No VOCs were detected in excess of Connecticut fresh-water aquatic life criteria (Table 7).

6.4.2 SVOCs.

6.4.2.1 Sediments. Twenty SVOCs were detected in at least one sediment sample. Nine of the twenty were detected in all samples, and six were detected in only one sample each. Most of the twenty compounds detected are polynuclear aromatic hydrocarbons. One compound, bis(2-ethylhexyl)phthalate, was detected in six of the samples plus the laboratory blank and is due to laboratory contamination. The highest concentrations of SVOCs were detected in samples SS-6, SS-7, SS-8, and SS-9 along the east branch of Spencer Brook, and in sample SS-3 on Spencer Brook.

6.4.2.2 Surface Water. No SVOCs were detected in any of the surface water samples.

6.4.3 Pesticides/PCBs.

6.4.3.1 Sediments. Residual pesticides (DDD, DDE, and DDT) were detected in samples SS-7 and SS-9. DDT only was detected in sample SS-2; DDD and PCB (1260) were detected in sample SS-3; PCB (1260) was detected in sample SS-1. No pesticides/PCBs were detected in samples SS-5 (or its duplicate SS-D), SS-6, and SS-8.

6.4.3.2 Surface Water. No pesticides/PCBs were detected in any of the surface water samples.

6.4.4 TPH-diesel.

6.4.4.1 Sediments. Diesel range petroleum hydrocarbon compounds were detected in samples SW-6, SW-7, SW-8, and SW-9 on the east branch of Spencer Brook, and in samples SW-1 and SW-D (duplicate of SW-5) along Spencer Brook. The detections ranged between 26 and 57 milligrams/kilogram (mg/kg).

6.4.4.2 Surface Water. Diesel range petroleum hydrocarbon compounds were detected in all of the surface water samples. Concentrations ranged between 0.01 and 0.082 milligrams per liter (mg/L). There are no quality criteria for TPH in surface water.

6.4.5 Metals.

6.4.5.1 Sediments. Detections were reported for thirteen of the fourteen target analyte list metals analyzed. Only thallium was not detected in any of the sediment samples. Eight of the thirteen metals were detected in all of the samples. There are no criteria for allowable concentrations of metals in sediment, and there are no published values for typical metal concentrations in stream sediments in the state of Connecticut. However, sample SS-3 on Spencer Brook appears to be something of an anomaly in that several metals are present at concentrations notably higher than the other samples. Cadmium (460 mg/kg), chromium (460 mg/kg), lead (540 mg/kg), and vanadium (190 mg/kg) are particularly elevated. Also, antimony (2.9 mg/kg), arsenic (6.3 mg/kg), mercury (0.8 mg/kg), selenium (2.5 mg/kg), and zinc (540 mg/kg) appear to be relatively elevated.

6.4.5.2 Surface Water. Aside from calcium, magnesium, sodium, and potassium, which were detected at reasonable concentrations, only barium, iron, manganese, and zinc were detected in all of the surface water samples. Although the concentrations of iron and manganese in a few samples are quite high, there are no fresh water aquatic life criteria for either of these metals or for barium. The Connecticut Fresh Water Aquatic Life Criteria for zinc are 35.3 μg/L for acute exposure and 12.3 μg/L for chronic exposure (Table 7). These criteria are exceeded in all samples except SW-5 (31 μg/L) and SW-8 (10 μg/L) for acute exposure and in all except SW-8 for chronic exposure. There does not appear to be any source of zinc that is specific to the AASF as the highest concentration is at the upstream sample point on the east branch of Spencer Brook and the lowest is at the outfall of the storm drain from the hangar area. Arsenic was detected in four samples, and selenium was detected in one sample, all at 1 μg/L. These are all well below the fresh water aquatic life criteria (Table 7).

6.5 Conclusions.

6.5.1 Several VOCs were detected in the sediment and surface water samples, but the concentrations are low and do not exceed any Connecticut Fresh Water Aquatic Life criteria.

6.5.2 Several SVOCs were found in most of the sediment samples, but they appear to be immobilized there with no effect on the surface water, since no SVOCs were detected in the water samples.

6.5.3 Pesticide and PCB residues were detected at very low concentrations in a few sediment samples, but they have no effect on the surface water since no pesticides or PCBs were detected in the water samples.

6.5.4 TPH (diesel range) compounds were detected in both sediment and surface water samples at low concentrations. There are no Fresh Water Aquatic Life Criteria for petroleum hydrocarbon compounds. Sources are probably oil and fuel drips washed by rain from both aircraft and motor vehicle parking and operating areas outside as well as within the AASF.

6.5.5 Several TAL metals were detected in both sediment and surface water samples, but there appears to be little or no transfer from sediment to water. Only zinc exceeds any Fresh Water Aquatic Life Criteria, but the concentrations indicate a source upstream of the AASF.

6.5.6 Upstream sources of contamination, especially for petroleum hydrocarbons, are indicated. None of the elements or compounds detected appears to be specific to the AASF operations, and no corrective actions are warranted.

7. SOIL EXPOSURE AND AIR PATHWAYS.

7.1 Physical Conditions. The AASF property has been extensively disturbed by construction of the airfield and the AASF. About 70 percent of the soils are mapped as made land, and the other 30 percent is composed of four sandy soils, one loam, and one silty soil (reference 1). Much of the AASF property is covered by pavement and buildings.

7.2 Soil and Air Targets. There are no soil and air targets identified in the PA.

7.3 Soil Sample Locations. Thirty soil samples were collected from fourteen direct-push borings at seven UST sites (Figure 5). Sites S2, S3, S4, and S5 are former heating oil UST sites from which the tanks were removed between 1991 and 1995. Site S6 is a former UST site from which a tank believed to have contained gasoline was removed in 1993. Sites S7 and S8 are adjacent to the four existing JP-8 USTs at the fuel farm. The tanks at the fuel farm replaced four JP-4 USTs that were removed in 1991. Surface samples (0 to 1.5 feet below surface [fbs]) and subsurface samples (10.5 to 12 fbs) were collected at all seven sites. Two duplicate samples, one each from sites S5 and S8, were collected for QA/QC purposes.

7.4 Soil Analytical Results. The analytical results for the soil samples are summarized in Table 8, and the laboratory reports are presented in Appendix C.

7.4.1 Former UST Sites. The seventeen soil samples from sites S2, S3, S4, and S5 were analyzed for TPH-diesel range as the tanks at these sites held heating oil for the adjacent buildings. TPH-diesel range compounds were detected in all four samples at site S2, but the surface sample at the south end was highest at 200 mg/kg. TPH-diesel range compounds were

TABLE 8. ANALYTICAL RESULTS FOR SOIL SAMPLES--TOTAL PETROLEUM HYDROCARBONS

DEC soil (mg/kg)
RES I/C
500 2500

PMC (GA/GMA mg/kg)
500

Detections	S2-N-A D9949 mg/kg	S2-N-B D9950 mg/kg	S2-S-A D9947 mg/kg	S2-S-B D9948 mg/kg	S3-N-A D9953 mg/kg	S3-N-B D9954 mg/kg	S3-S-A D9951 mg/kg	S3-S-B D9952 mg/kg	S4-N-A D9957 mg/kg	S4-N-B D9958 mg/kg
TPH-Diesel	**30**	**28**	**200**	**30**	**27**	ND	**28**	ND	ND	ND
TPH-Gasoline	na	na	na	na	na	na	na	na	na	na

Detections	S4-S-A D9955 mg/kg	S4-S-B D9956 mg/kg	S5-N-A D9961 mg/kg	S5-N-B D9962 mg/kg	S5-S-A D9959 mg/kg	S5-S-B D9960 mg/kg	S6-N-A D9965 mg/kg	S6-N-B D9966 mg/kg	S6-S-A D9963 mg/kg	S6-S-B D9964 mg/kg
TPH-Diesel	ND	ND	**93**	**43**	**150**	**51**	na	na	na	na
TPH-Gasoline	na	na	na	na	na	na	ND	ND	ND	ND

Detections	S7-E-A D9967 mg/kg	S7-E-B D9968 mg/kg	S7-W-A D9969 mg/kg	S7-W-B D9970 mg/kg	S8-E-A D9971 mg/kg	S8-E-B D9972 mg/kg	S8-W-A D9973 mg/kg	S8-W-B D9974 mg/kg	SD-1[1] D9975 mg/kg	SD-2[2] D9976 mg/kg
TPH-Diesel	na	na	na	na	na	na	na	na	ND	na
TPH-Gasoline	ND	ND	ND	ND	ND	ND	ND	ND	na	ND

na = not analyzed. ND = not detected. [1] = Duplicate of S5-N-B. [2] = Duplicate of S8-W-B.

detected in four of the five samples at site S5. The surface samples had concentrations of 93 and 150 mg/kg, which were two and three times as high as the respective subsurface samples. Sample SD-1 was a duplicate of sample S5-N-B, but no TPH-diesel compounds were detected in it. Samples SD-1 and S5-N-B were duplicates in that they came from the same depth, but they were separate samples taken about 6 inches apart horizontally, and they were not mixed. TPH-diesel range compounds were detected only in the surface samples at site S3. This site is an area of asphalt pavement, which is the most likely source of this contamination, and the removal site itself is clean. TPH-diesel range compounds were not detected in any of the four samples at site S4. The four soil samples from site S6 were analyzed for TPH-gasoline range as the UST was believed to have contained gasoline (reference 1). No TPH-gasoline range compounds were detected in any of these four samples.

7.4.2 Fuel Farm USTs. The nine soil samples from sites S7 and S8 were analyzed for TPH-gasoline range as the previous tanks contained JP-4 and the current tanks contain JP-8. No TPH-gasoline range compounds were detected in any of these nine samples.

7.5 Air Monitoring. No air monitoring was planned or conducted as a part of this SI.

7.6 Conclusions.

7.6.1 TPH-diesel compounds were detected in the soil samples at the heating-oil UST removal sites at building 160 and the southeast corner of building 153, with the highest concentrations in the surface samples. The heating-oil UST removal sites at the southeast corner of building 162 and the northwest corner of building 153 are clean.

7.6.2 The gasoline UST removal site adjacent to the south side of building 151 is clean. The CT DEP should approve the removal of the passive vent when construction of the new facilities begins.

7.6.3 The soil around the replaced JP-8 USTs at the fuel farm (building 190) is clean. The cleanup of JP-4 during the replacement of the four tanks was apparently complete.

8. SUMMARY AND CONCLUSIONS. This focused SI was conducted to determine whether any soil or surface water contamination has occurred at the Bradley Field AASF, Windsor Locks, Connecticut, as the result of past activities at the AASF. One sediment sample was collected as a possible waste source indicator in a storm drain manhole. Thirty soil samples were collected at seven former and current UST sites. Nine stream sediment and nine surface water samples were collected at nine locations on Spencer Brook and its unnamed east branch. Evaluation of the analytical results leads to the following conclusions:

8.1 Waste Source. Sample WS-1 is not a reliable indicator of past waste sources because the flow of water through the pipe is quite high and the quantity of sediment was barely enough to collect the sample.

8.2 Ground-Water Pathway. There are no threats to ground-water supplies from this facility, but the ground water does discharge to the upper reaches of Spencer Brook.

8.3 Surface Water Pathway. Upstream sources of contamination are indicated. None of the elements or compounds detected in the stream sediment or surface water samples appear to be specific to the AASF operations, and no corrective actions are warranted.

8.4 Soil and Air Pathway.

8.4.1 Two heating-oil UST removal sites at the northwest corner of building 153 and at building 162 are clean. Some diesel range petroleum hydrocarbon compounds were detected at the heating-oil UST removal sites at the southeast corner of building 153 and at building 160. No corrective actions are warranted.

8.4.2 The gasoline UST removal site adjacent to the south side of building 151 is clean. The CT DEP should approve the removal of the passive vent when construction of the new facilities begins.

8.4.3 The soil around the replaced JP-8 USTs at the fuel farm (building 190) is clean. The cleanup of JP-4 during the replacement of the four tanks was apparently complete.

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Narrative Report, Site Inspection No. 38-EH-2651-96, 8-11 Jul 96

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APPENDIX A

REFERENCES

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4. Depth to Bedrock, Windsor Locks Quadrangle, Connecticut, USGS Miscellaneous Field Studies Map MF-450B, Elinor H. Handiman, 1973.

5. Contour Map of the Bedrock Surface, Windsor Locks Quadrangle, Connecticut, USGS Miscellaneous Field Studies Map MF-450A, Robert B. Ryder and Elinor H. Handiman, 1972.

6. Surficial Geology of the Windsor Locks Quadrangle, Connecticut, USGS Geologic Quadrangle Map GQ-137, Roger B. Colton, 1960.

7. Map Showing Unconsolidated Materials, Windsor Locks Quadrangle, Connecticut, USGS Miscellaneous Field Studies Map MF-450E, Janet Radway Stone, 1976.

8. EPA/540/G-91/009, Management of Investigation-Derived Wastes During Site Inspections, Office of Research and Development, May 1991.

9. Water Quality Standards, State of Connecticut, Department of Environmental Protection, Water Management Bureau, January 1992.

10. EPA-823-B-94-005a, Water Quality Standards Handbook, 2nd Edition, August 1994.

APPENDIX B

SI DATA SUMMARY

The investigator may use the SI Data Summary to compile analytical data and non-sampling information concerning the site. The Data Summary can be a checklist to:

- Summarize previous and newly-collected information
- Identify factors that have not been fully evaluated
- Focus additional data collection efforts

A completed SI Data Summary may facilitate entering data into *PREscore* or other SI scoring and HRS documentation tools.

Responses on the SI Data Summary need not be typed; legible handwriting is acceptable.

The Data Summary is not a mandatory requirement for SI reporting; EPA Regional guidelines may recommend using other mechanisms to summarize information collected during the SI or to compile previous information about the site.

SI Data Summary entries marked with an asterisk (*) are optional during a focused SI. For pathways investigated during an expanded SI, all Data Summary entries should be completed.

If necessary, continuation pages to summarize additional analytical results should be photocopied and included with the Data Summary. A sample location map should be provided or referenced for all analytical results.

The last page of the Data Summary may be used to describe additional site information regarding a specific data element. In addition, this page may be used to describe or summarize site information that has not been collected, is not available, or is not well documented.

SI Data Summary **Site Name** Bradley Field AASF

Site Name Bradley Field AASF **EPA Region** 1 **Date** Jul 96

Contractor Name or State Office and Address USACHPPM, ATTN: MCHB-DC-EGW

5158 Blackhawk Road, Aberdeen Proving Ground (EA), MD 21010-5422

GENERAL SITE INFORMATION

1. **CERCLIS ID No.** None

   Address Bradley Field, Route #75 City Windsor Locks

   County Hartford State CT Zip Code 06096 Congressional District _____

2. **Owner Name** U.S. Department of Defense **Operator Name** CT Army National Guard

   Address _____ Address 360 Broad Street

   City Arlington State VA City Hartford State CT

3. **Type of Ownership** (check all that apply):
   [ ] Private [X] Federal/Agency U.S. DoD [ ] State [ ] County [ ] Municipal
   [ ] Other _____ Reference(s) 1

4. **Approximate size of property:** 36 acres Reference(s) 1

5. **Latitude** 41 ° 56 ' 39.1 " **Longitude** 72 ° 40 ' 24.4 " Reference(s) 1

6. **Site Status:** [X] Active [ ] Inactive [ ] Unknown Reference(s) 1

7. **Years of Operation:** From: 1950 to: Present [ ] Unknown Reference(s) 1

8. **Previous Investigations:**

Type	Agency/State/Contractor	Date	
PA	Engineering Technologies Assocs.	1994	Reference(s) 1
			Reference(s)
			Reference(s)
			Reference(s)
			Reference(s)
			Reference(s)

WASTE SOURCE INFORMATION

1. **Waste source types** (check all that apply)

[ ] Constituent
[X] Wastestream (type) storm sewer
[ ] Landfill
[ ] Drums
[ ] Contaminated soil
[ ] Land treatment
[X] Tanks or non-drum containers (type) USTs removed or replaced
[ ] Pile (type) _____
[ ] Surface impoundment (buried)
[ ] Surface impoundment (backfilled)
[ ] Other _____

Reference(s) 1

2. **Types of wastes** (check all that apply)

[X] Organic chemicals
[X] Inorganic chemicals
[ ] Municipal wastes
[ ] Radionuclides
[X] Metals
[ ] Pesticides/Herbicides
[X] Solvents
[X] Other Fuels

Reference(s) 1

3. **Summarize history of waste disposal operations:**

Floor drains in building 152 (hangar) (possibly including in the battery room prior to hookup to sanitary sewer) discharged to storm drains on the west side of building 152, thence to the east branch of Spencer Brook. Oils, solvents, and metals (from battery electrolyte disposal) may have been disposed pf by this route.

Reference(s) 1. This report

SI Data Summary **Site Name** Bradley Field AASF

4. **Source characterization** (Attach pages to show quantity and calculations.)

Source 1 name: Storm sewer manhole Source type Wastestream

Describe source: Sediment in manhole off northwest corner of building 152

Ground water migration containment: Ground water discharges into drain

Surface water migration containment: None

Air migration (gas and migration) containment: Manhole cover

Physical states of wastes: [ ] Liquid [ ] Solid [X] Sludge/Slurry [ ] Gas [ ] Unknown
Constituent quantity of hazardous substances: _____ (specify units)
Wastestream quantity containing hazardous substances: Unknown/small (specify units)
Volume of source (yd^3): ± 0.01 Area of source (ft^2): ± 7

Hazardous substances associated with source 1:

Metals

Reference(s) This report

Source 2 name: UST removal and replacement areas Source type Contaminated soil

Describe source: Possibly contaminated soil remaining from UST removals

Ground water migration containment: None

Surface water migration containment: Subsurface contamination

Air migration (gas and migration) containment: Subsurface contamination

Physical states of wastes: [X] Liquid [ ] Solid [ ] Sludge/Slurry [ ] Gas [ ] Unknown
Constituent quantity of hazardous substances: _____ (specify units)
Wastestream quantity containing hazardous substances: NA (specify units)
Volume of source (yd^3): 10-25 Area of source (ft^2): 30-70

Hazardous substances associated with source 2:

Petroleum hydrocarbons

Reference(s) 1. This report

SI Data Summary **Site Name** Bradley Field AASF

CONTINUATION PAGE FOR SOURCE CHARACTERIZATION

Source 3 name: None Source type _____

Describe source: _____

Ground water migration containment: _____

Surface water migration containment: _____

Air migration (gas and migration) containment: _____

Physical states of wastes: [ ] Liquid [ ] Solid [ ] Sludge/Slurry [ ] Gas [ ] Unknown
Constituent quantity of hazardous substances: _____ (specify units)
Wastestream quantity containing hazardous substances: _____ (specify units)
Volume of source (yd^3): _____ Area of source (ft^2): _____

Hazardous substances associated with source 3:

Reference(s) _____

Source 4 name: None Source type _____

Describe source: _____

Ground water migration containment: _____

Surface water migration containment: _____

Air migration (gas and migration) containment: _____

Physical states of wastes: [ ] Liquid [ ] Solid [ ] Sludge/Slurry [ ] Gas [ ] Unknown
Constituent quantity of hazardous substances: _____ (specify units)
Wastestream quantity containing hazardous substances: _____ (specify units)
Volume of source (yd^3): _____ Area of source (ft^2): _____

Hazardous substances associated with source 4:

Reference(s) _____

5. Description of removal or remedial activities

If a removal has occurred, identify the removal authority and describe the activities. Specify the date(s) of the removal.

Four heating-oil USTs were removed between 1991 and 1995.

One probable gasoline UST was removed in 1993.

Four JP-4 USTs were removed at the fuel frm (bldg. 190) in 1991 and replaced with four smaller JP-8 USTS.

Hangar floor drains and wash rack are connected to the sanitary sewer via grit and oil separator. Battery room floor drain connects directly to the sanitary sewer.

Reference(s) 1. This report

GROUND WATER INFORMATION

1. **Ground water drinking water use within 4 miles of site sources:**
   [ ] Municipal [ ] Private [X] Both [ ] No Drinking Water Use

   Reference(s) 1

2. **Is ground water contaminated?**
   [ ] Yes [ ] No [ ] Uncertain but likely [X] Uncertain but not likely
   [ ] Additional sampling required
   Is analytical evidence available? [ ] Yes [X] No Reference(s) 1, 6

3. **Is ground water contamination attributable to the site?**
   [ ] Yes [X] No [ ] Additional sampling required Reference(s) This report

4. **Are drinking water wells contaminated?**
   [ ] Yes [ ] No [ ] Uncertain but likely [X] Uncertain but not likely
   [ ] Additional sampling required
   Is analytical evidence available? [ ] Yes [X] No Reference(s) 1, 6

5.* **Net precipitation** (HRS Section 3.1.2.2): 18 inches Reference(s) 1

6. **County average number of persons per residence:** unknown Reference(s) 1

7. **Discuss general stratigraphy underlying the site.** Attach sketch of stratigraphic column.

The site is on the edge of topset sands of the Farmington delta built into glacial lake Hitchcock during the late Pleistocene glacial retreat. Below the sands are finer deposits of silt and sand of the delta foreset beds, then lacustrine clay and silt (probably varved). Irregular layer of glacial till between the lake deposits and bedrock. Bedrock is upper Triassic-lower Jurassic sandstone and siltstone (Portland arkose) dipping east.

Reference(s) 3, 7

8. **Using Table GW-1 (next page), summarize geology underlying the site** (starting with formation #1 as closest to ground surface). Indicate if formation is interconnected with overlying formation.

TABLE GW-1: SITE GEOLOGY

NAME OF FORMATION	INTER-CONNECT? (yes/no)	TYPE OF MATERIAL	AVERAGE THICKNESS (FEET)	HYDRAULIC CONDUCTIVITY (CM/SEC)	USED FOR DRINKING WATER?
1. Delta sand	NA	Sand	10-50	10^{-1}	No
2. Delta and lake silt and clay.	No	Silt and clay	150	10^{-7} - 10^{-8}	No
3. Till	No	Silt to cobbles	20	10^{-6}	No
4. Portland arkose	Yes	Sandstone and siltstone	2,000	10^{-4}	Yes
5.					
6.					

Reference(s) 3, 4, 6, 7

9. **Does a karst aquifer underlie any site source?**
[ ] Yes [X] No Reference(s) 3

10. **Depth to top of aquifer:** 150 feet **Elevation:** 0 Reference(s) 4

11. **In the table below, enter the number of people obtaining drinking water from wells located within 4 miles of the site.** For each aquifer, attach population calculation sheets. Key aquifer to formations listed in Table GW-1.

POPULATION SERVED BY WELLS WITHIN DISTANCE CATEGORIES BY AQUIFER

DISTANCE OF WELL(S) FROM SITE SOURCES	AQUIFER A: INCLUDES FORMATIONS 4	AQUIFER B: INCLUDES FORMATIONS	AQUIFER C: INCLUDES FORMATIONS
1/4 mile or less	No wells		
>1/4 to ½ mile	No wells		
>½ to 1 mile	No wells		
>1 to 2 miles	Unknown		
>2 to 3 miles	Unknown		
>3 to 4 miles	Unknown		

Reference(s) 1

12. **Is ground water from multiple wells blended prior to distribution?**
[ ] Yes [X] No Reference(s) 1

SI Data Summary **Site Name** Bradley Field AASF

13. **Is ground water blended with surface water?**
[ ] Yes [X] No Reference(s) 1

Briefly describe: _____

14. **Distance from any incompletely contained source available to ground water to nearest drinking water well** (HRS Section 3.3.1); NA feet Reference(s) 1, This report

15. **Briefly describe standby drinking water wells within 4 miles of sources at the site:**

None

Reference(s) 1

16. **Using Table GW-2, summarize ground water analytical results for all sampling investigations.** Include and identify background ground water sample results.

17.* **Ground water resources within 4 miles of site sources** (HRS Section 3.3.3):
[ ] Irrigation (5-acre minimum) of commercial food or commercial forage crops
[ ] Commercial livestock watering
[ ] Ingredient in commercial food preparation
[ ] Supply for commercial aquaculture
[ ] Supply for major or designated water recreation area, excluding drinking water use
[ ] Water usable for drinking water but no drinking water wells are within 4 miles
[X] None of the above

Reference(s) 1

18. **Wellhead protection area (WHPA) within 4 miles of site sources** (HRS Section 3.3.4):
[ ] Source with non-zero containment factor value lies within or above WHPA
[ ] Observed ground water contamination attributable to site source(s) lies within WHPA
[ ] WHPA lies within 4 miles of site sources
[X] None

Reference(s) 1

Additional ground water pathway description:

Delta sand at surface of site pinches out to north and east before any wells.

Reference(s) 6

TABLE GW-2: ANALYTICAL RESULTS FOR GROUND WATER PATHWAY

SAMPLE ID & DATE	TYPE OF WELL	SCREENED INTERVAL	HAZARDOUS SUBSTANCE	CONCENTRATION (SPECIFY UNITS)	DETECTION LIMIT	REFERENCES
None	[ ] Irrigation [ ] Monitoring [ ] Drinking water People served _____ [ ] Other _____					
	[ ] Irrigation [ ] Monitoring [ ] Drinking water People served _____ [ ] Other _____					
	[ ] Irrigation [ ] Monitoring [ ] Drinking water People served _____ [ ] Other _____					
	[ ] Irrigation [ ] Monitoring [ ] Drinking water People served _____ [ ] Other _____					
	[ ] Irrigation [ ] Monitoring [ ] Drinking water People served _____ [ ] Other _____					
	[ ] Irrigation [ ] Monitoring [ ] Drinking water People served _____ [ ] Other _____					
	[ ] Irrigation [ ] Monitoring [ ] Drinking water People served _____ [ ] Other _____					
	[ ] Irrigation [ ] Monitoring [ ] Drinking water People served _____ [ ] Other _____					

SURFACE WATER INFORMATION

Complete this section of the data summary for each watershed if there are multiple watersheds. Photocopy this page if necessary.

1. **Describe surface water migration path from site sources to at least 15 miles downstream.** Attach a sketch of the surface water migration route.

The site is in the Stony Brook subbasin of the Connecticut River basin. Runoff from the AASF and adjacent areas flows northward through the AASF property via Spencer Brook and its tributaries to join Stony Brook more than 1 mile north. Stony Brook flows east to join the Connecticut River north of Windsor Locks. The Connecticut River flows south.

Reference(s) 1, this report

2. **Is surface water contaminated?**
[ ] Yes [X] No [ ] Uncertain but likely [ ] Uncertain but not likely [ ] Additional sampling required
Is analytical evidence available? [X] Yes [ ] No Reference(s) This report

3. **Is surface water contamination attributable to the site?**
[ ] Yes [X] No [ ] Additional sampling required Reference(s) This report

4. **Floodplain category in which site sources are located** (check all that apply):
[ ] 1-year [ ] 10-year [ ] 100-year [ ] 500-year [X] None Reference(s) 1

5. **Describe flood containment for each source** (HRS Section 4.1.2.1.2.2): NA

Source #1 _____ Flood containment _____

Source #2 _____ Flood containment _____

Source #3 _____ Flood containment _____

Source #4 _____ Flood containment _____

Source #5 _____ Flood containment _____

Source #6 _____ Flood containment _____

Source #7 _____ Flood containment _____

Reference(s) _____

6. **Shortest overland distance to surface water from any source** (HRS Section 4.1.2.1.2.1.3):
0 feet Reference(s) 1

SI Data Summary **Site Name** Bradley Field AASF

7.* **Size of drainage area** (HRS Section 4.4.3): 89 acres Reference(s) 1

8.* **Describe predominant soil group within the drainage area** (HRS Section 4.1.2.1.2.1.2):

Artificial fill.

Reference(s) 1

9.* **2-year 24-hour rainfall** (HRS Section 4.1.2.1.2.1.2):
3.2 inches Reference(s) 1

10.* **Elevation of the bottom of nearest surface water body:**
150 feet above sea level Reference(s) 1

11.* **Elevation of top of uppermost aquifer:**
0 feet above sea level Reference(s) 1

12. **Predominant type of water body between probable point of entry to surface water and nearest drinking water intake:**
[X] River [ ] Lake Reference(s) 1

13. **Identify all drinking water intakes, fisheries, and sensitive environments within 15 miles downstream.**

TARGET NAME/TYPE	WATER BODY TYPE	DISTANCE FROM PPE	FLOW (CFS)	TARGET CHARACTERISTICS[1]	TARGET SAMPLED?
Connecticut River	River	6.5 miles	16,640	Sturgeon	No

[1] If target is a drinking water intake, provide number of people served by intake.
If target is a fishery, provide species and annual production of human food chain organisms (pounds per year).
If target is a wetland, specify wetland frontage (in miles). Attach calculation pages.

Reference(s) 1

14. **Is surface water drinking water blended prior to distribution?**
[ ] Yes [X] No Reference(s) 1

15. **Describe any standby drinking water intakes within 15 miles downstream.**

None

Reference(s) 1

16. ***Surface water resources within 15 miles downstream** (HRS section 4.1.2.3.3):
[ ] Irrigation (5-acre minimum) of commercial food or commercial forage crops
[ ] Commercial livestock watering
[ ] Ingredient in commercial food preparation
[ ] Major or designated water recreation area, excluding drinking water use
[ ] Water designated by the state for drinking water use but is not currently used
[ ] Water usable for drinking water but no drinking water intakes within 15 miles downstream
[X] None of the above

Reference(s) 1

17. **Using Table SW-1, summarize surface water analytical results for all sampling investigations.** Include and identify background sample results.

SW-1 and SS-1 are upstream samples on Spencer Brook.
SW-6 and SS-6 are upstream samples on the east branch of Spencer Brook.
These samples are no less contaminated than the others.

TABLE SW-1: SUMMARY OF ANALYTICAL RESULTS FOR SURFACE WATER PATHWAY

SAMPLE ID & DATE	SAMPLE TYPE	SAMPLE OBJECTIVE	TARGET NAME	HAZARDOUS SUBSTANCE	CONCENTRATION (SPECIFY UNITS)	DETECTION LIMIT	REFERENCES
SW-1 SW-3 SW-5 7/10/96	[X] Aqueous [ ] Sediment [ ] Other	[X] Release [ ] Fishery [ ] Drinking water [ ] Sensitive environment Distance from PPE _____	Spencer Brook	1,1,1-trichloroetane 1,1-dichloroethane 1,2,4-trichlorobenzene	1.2 - 8.3 μg/L	<1μg/L	This report
SW-4, 6, 7, SW-8, 9 7/10-11/96	[X] Aqueous [ ] Sediment [ ] Other	[X]Release [ ] Fishery [ ] Drinking water [ ] Sensitive environment Distance from PPE _____	Spencer Brook and east branch	None detected	NA	<1 μg/L	This report
SS-1, 2, 3, 5, 6, 7, 8, 9 7/9-10/96	[ ] Aqueous [X] Sediment [ ] Other	[X] Release [ ] Fishery [ ] Drinking water [ ] Sensitive environment Distance from PPE _____	Spencer Brook and east branch	VOCs, SVOCs (mostly PAH), pesticides/PCB, TPH-diesel, and metals.	2.4 μg/L to 10 mg/L	<1 μmg/L	This report
	[ ] Aqueous [ ] Sediment [ ] Other	[ ] Release [ ] Fishery [ ] Drinking water [ ] Sensitive environment Distance from PPE _____					
	[ ] Aqueous [ ] Sediment [ ] Other	[ ] Release [ ] Fishery [ ] Drinking water [ ] Sensitive environment Distance from PPE _____					
	[ ] Aqueous [ ] Sediment [ ] Other	[ ] Release [ ] Fishery [ ] Drinking water [ ] Sensitive environment Distance from PPE _____					
	[ ] Aqueous [ ] Sediment [ ] Other	[ ] Release [ ] Fishery [ ] Drinking water [ ] Sensitive environment Distance from PPE _____					
	[ ] Aqueous [ ] Sediment [ ] Other	[ ] Release [ ] Fishery [ ] Drinking water [ ] Sensitive environment Distance from PPE _____					
	[ ] Aqueous [ ] Sediment [ ] Other	[ ] Release [ ] Fishery [ ] Drinking water [ ] Sensitive environment Distance from PPE _____					

SOIL INFORMATION

1. **Is surficial or soil contamination present at the site?**
   [X] Yes [ ] No [ ] Uncertain but likely [ ] Uncertain but not likely
   [ ] Additional sampling required
   Is analytical evidence available? [X] Yes [ ] No Reference(s) This report

2. **Is surficial or soil contamination attributable to the site?**
   [X] Yes [ ] No [ ] Additional sampling required

3. **Is surficial contamination on the property and within 200 feet of a residence, school, daycare center, or workplace?**
   [X] Yes [ ] No [ ] Uncertain but likely [ ] Uncertain but not likely
   [ ] Additional sampling required
   Is analytical evidence available? [X] Yes [ ] No Reference(s) This report

4.* **Total area of surficial contamination** (HRS Section 5.2.1.2):
   _____ square feet Reference(s) _____

5.* **Attractiveness/accessibility of the areas of observed contamination** (HRS Section 5.2.1.1).
   Check all that apply:

   [ ] Designated recreational area
   [ ] Used regularly, or accessible and unique recreational area
   [ ] Moderately accessible with some use
   [ ] Slightly accessible with some use
   [ ] Accessible with no use
   [ ] Inaccessible with some use
   [ ] Inaccessible with no use

   Reference(s) _____

6. **Using Table SE-1, summarize analytical results detecting surficial contamination within 200 feet of a residence, school, daycare center, or workplace.** Include and identify background sample results.

7. **Using Table SE-2, summarize analytical results detecting surficial contamination within the boundary of a resource or a terrestrial sensitive environment.** Include and identify background sample results if not listed in Table SE-1.

8. **Population within 1-mile travel distance from site.** Do not include populations from Table SE-1.

DISTANCE FROM SITE SOURCES	POPULATION
1/4 mile or less	Unknown
>1/4 to ½ mile	Unknown
>½ to 1 mile	Unknown

Reference(s) 1

TABLE SE-1: ANALYTICAL RESULTS FOR SOIL EXPOSURE PATHWAY

SAMPLE ID & DATE	SAMPLE DEPTH	TYPE OF PROPERTY	POPULATION	HAZARDOUS SUBSTANCE	CONCENTRATION (SPECIFY UNITS)	DETECTION LIMIT	REFERENCES
S2-N-A & B S2-S-A & B 7/10/96	A: 0-1.5 ft B: 5-6.5 ft	[ ] Residence [ ] School [ ] Daycare Center [X] Workplace	60-275	TPH-diesel	28-200 mg/kg	<1 mg/kg	This report
S3-N-A S3-S-A 7/10/96	A: 0-1.5 ft	[ ] Residence [ ] School [ ] Daycare Center [X] Workplace	60-275	TPH-diesel	27-28 mg/kg	<1 mg/kg	This report
S5-N-A & B S5-S-A & B 7/10/96	A: 0-1.5 ft B: 5-6.5 ft	[ ] Residence [ ] School [ ] Daycare Center [X] Workplace	60-275	TPH-diesel	43-150mg/kg	<1 mg/kg	This report
		[ ] Residence [ ] School [ ] Daycare Center [ ] Workplace					
		[ ] Residence [ ] School [ ] Daycare Center [ ] Workplace					
		[ ] Residence [ ] School [ ] Daycare Center [ ] Workplace					
		[ ] Residence [ ] School [ ] Daycare Center [ ] Workplace					
		[ ] Residence [ ] School [ ] Daycare Center [ ] Workplace					

TABLE SE-2: ANALYTICAL RESULTS FOR SOIL EXPOSURE PATHWAY

SAMPLE ID & DATE	SAMPLE DEPTH	TYPE OF TARGET	HAZARDOUS SUBSTANCE	CONCENTRATION (SPECIFY UNITS)	DETECTION LIMIT	REFERENCES
None		[ ] Terrestrial sensitive environment [ ] Resources* [ ] Commercial agriculture [ ] Commercial silviculture [ ] Commercial livestock production or grazing				
		[ ] Terrestrial sensitive environment [ ] Resources* [ ] Commercial agriculture [ ] Commercial silviculture [ ] Commercial livestock production or grazing				
		[ ] Terrestrial sensitive environment [ ] Resources* [ ] Commercial agriculture [ ] Commercial silviculture [ ] Commercial livestock production or grazing				
		[ ] Terrestrial sensitive environment [ ] Resources* [ ] Commercial agriculture [ ] Commercial silviculture [ ] Commercial livestock production or grazing				

AIR INFORMATION

1. **Is air contamination present at the site?**
   [ ] Yes [X] No [ ] Uncertain but likely [ ] Uncertain but not likely
   [ ] Additional sampling required
   Is analytical evidence available? [ ] Yes [X] No References 1. This report

2. **Is air contamination attributable to the site?**
   [ ] Yes [X] No [ ] additional sampling required

3. **Are populations, sensitive environments, or wetlands exposed to airborne hazardous substances released from the site?**
   [ ] Yes [X] No [ ] Uncertain but likely [ ] Uncertain but not likely
   [ ] Additional sampling required
   Is analytical evidence available? [ ] Yes [X] No Reference(s) 1. This report

4. **Evidence of biogas release from any of the following source types at the site:** None
   [ ] Below-ground containers or tanks [ ] Landfill [ ] Buried surface impoundment
   Reference(s) 1. This report

5.* **Particulate migration potential factor value:** _____ (HRS Figure 6-2)

6.* **Particulate mobility factor value:** _____ (HRS Figure 6-3)

7. **Distance from any incompletely contained source to nearest residence or regularly occupied area:** 1 miles Reference(s) 1

8. **Population within 4 miles of site sources.**

DISTANCE FROM SITE SOURCES	POPULATION
0 (within site sources)	60
1/4 mile or less	93
>1/4 to ½ mile	225
>½ to 1 mile	531
>1 to 2 miles	5,913
>2 to 3 miles	11,601
>3 to 4 miles	7,976

Reference(s) 1

9.* **Resources within ½ mile of site sources** (HRS Section 6.3.3):
   [ ] Commercial agriculture
   [ ] Commercial silviculture
   [ ] Major or designated recreation area
   [X] None of the above
   Reference(s) 1

10. **Sensitive environments and wetlands within 4 miles of the site.**

NAME/DESCRIPTION/LOCATION OF SENSITIVE ENVIRONMENT OR WETLAND	DISTANCE FROM SITE (MILES)	TYPE OF SENSITIVE ENVIRONMENT	WETLAND SIZE (ACRES)
on site	0	Wetlands	1.5
0-¼ mile	¼	Wetlands	3
¼-½ mile	½	Wetlands	5

Reference(s) 1

11. **Using Table Air-1, summarize air analytical results for all sampling investigations.** Include and identify background sample results.

TABLE AIR-1: SUMMARY OF ANALYTICAL RESULTS FOR AIR PATHWAY

SAMPLE ID & DATE	SAMPLE TYPE	DISTANCE FROM SITE (MILES)	TARGET(S) WITHIN DISTANCE CATEGORY	HAZARDOUS SUBSTANCE	CONCENTRATION (SPECIFY UNITS)	DETECTION LIMIT	REFERENCES
None			[ ] Number of people _____ [ ] Name of sens. environment _____ _____ [ ] Wetland acreage _____				
			[ ] Number of people _____ [ ] Name of sens. environment _____ _____ [ ] Wetland acreage _____				
			[ ] Number of people _____ [ ] Name of sens. environment _____ _____ [ ] Wetland acreage _____				
			[ ] Number of people _____ [ ] Name of sens. environment _____ _____ [ ] Wetland acreage _____				
			[ ] Number of people _____ [ ] Name of sens. environment _____ _____ [ ] Wetland acreage _____				
			[ ] Number of people _____ [ ] Name of sens. environment _____ _____ [ ] Wetland acreage _____				
			[ ] Number of people _____ [ ] Name of sens. environment _____ _____ [ ] Wetland acreage _____				

ADDITIONAL INFORMATION AND COMMENTS

Reference(s)

APPENDIX C

LABORATORY ANALYSIS REPORTS

Analysis		Medium	Page
Volatile Organic Compounds (VOCs)		Sediment	C-2
		Water	C-73
Semivolatile Organic Compounds (SVOCs)		Sediment	C-137
		Water	C-193
Pesticides/PCBs		Sediment	C-226
		Water	C-241
Total Petroleum Hydrocarbons (TPH) -	diesel range	Sediment & Soil	C-263
	gasoline range	Soil	C-270
	diesel range	Water	C-283
Metals		Sediment	C-293
		Water	C-303

ANALYSIS REPORT

U.S. ARMY CENTER FOR HEALTH PROMOTION AND PREVENTIVE MEDICINE
BUILDING E2100
ABERDEEN PROVING GROUND, MARYLAND 21010
ANALYTICAL SPECTROMETRY DIVISION
GC/MS TEAM

Installation: Bradley Field AASF

Project Number: 38-EH-2651

Job Number: 6A5600

Number of Samples: 9

Matrix: Soil

Analyzed for: Volatiles

Method: 8260A

LAB NUMBER	FIELD NUMBER	DATA FILE #
D9937	SS-1	S1S87096.D
D9938	SS-2	S1S87113.D
		M1S87129.D
		M1S87130.D
D9939	SS-3	S1S87098.D
D9940	SS-5	S1S87099.D
D9941	SS-D	S1S87100.D
D9942	SS-6	S1S87101.D
D9943	SS-7	S1S87102.D
D9944	SS-8	S1S87103.D
D9945	SS-9	S1S87104.D

Analyst: Louise Stotland Date: 1 Aug 96

Reviewed by: [illegible] Date: 2AUG96

Reviewed by: [illegible] Date: 2AUG96

Release Authorized by: [illegible] for Dr. Charles Stone Date: 2Aug96

This report shall not be reproduced except in full without the written approval of the laboratory. The results relate only to the specific samples identified within this report.

SUMMARY OF RESULTS

Installation: Bradley Field AASF

Project Number: 38-EH-2651

Project Officer: Moser

Case Narrative:

The samples were collected on 9 & 10 Jul 1996, received on 12 Jul 1996, and EPA Method 8260A analysis was completed on 23 Jul 1996. All analytical holding times were met.

Target compounds were detected in most samples. Methylene chloride was detected in all samples and lab blanks analyzed on 18 and 19 July; its presence should be attributed to laboratory contamination. All surrogate recoveries were acceptable with all values meeting the QC limits imposed. All internal standard area counts and retention times complied with method QC requirements. A matrix spike and matrix spike duplicate was analyzed for sample D9938 with acceptable recoveries for every compound spiked. All calibration check standards met method requirements except for K1S87110.D, which just exceeded the maximum % deviation for 1,2-dichloropropane. This is thought to have minimal impact on the data since this compound was not detected in any sample.

Samples were analyzed by EPA method 8260A using DLS SOP #46.2, which is currently being modified to reflect the use of new analytical software and method-required quality control procedures.

Analyst: Louise Stilwell Date: 1 Aug 96

Analysis Data Sheet Qualifier Codes:

B - Indicates analyte was found in the associated blank as well as in the sample

D - Indicates Sample was diluted.

E - Indicates reported value exceeds the upper limit of the quantitation curve.

J - Indicates reported value is an estimate.

U - Indicates compound was analyzed for but not detected.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9937

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: SS-1

Sample wt/vol: 5.1 (g/mL) G Lab File ID: S1S87096.D

Level: (low/med) LOW Date Collected: 7/10/96

% Moisture: not dec. 23 Date Analyzed: 7/18/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
67-64-1	acetone	25	J
107-13-1	acrylonitrile	26	U
107-05-1	allyl chloride	26	U
71-43-2	benzene	2.6	U
108-86-1	bromobenzene	2.6	U
74-97-5	bromochloromethane	2.6	U
75-27-4	bromodichloromethane	2.6	U
75-25-2	bromoform	2.6	U
74-83-9	bromomethane	2.6	U
78-93-3	2-butanone	26	U
104-51-8	n-butylbenzene	2.6	U
135-98-8	sec-butylbenzene	2.6	U
98-06-6	tert-butylbenzene	2.6	U
75-15-0	carbon disulfide	26	U
56-23-5	carbon tetrachloride	2.6	U
107-14-2	chloroacetonitrile	26	U
108-90-7	chlorobenzene	2.6	U
109-69-3	1-chlorobutane	26	U
75-00-3	chloroethane	2.6	U
67-66-3	chloroform	2.6	U
74-87-3	chloromethane	2.6	U
95-49-8	2-chlorotoluene	2.6	U
106-43-4	4-chlorotoluene	2.6	U
124-48-1	dibromochloromethane	2.6	U
96-12-8	1,2-dibromo-3-chloropropane	2.6	U
106-93-4	1,2-dibromoethane	2.6	U
74-95-3	dibromomethane	2.6	U
95-50-1	1,2-dichlorobenzene	2.6	U
541-73-1	1,3-dichlorobenzene	2.6	U
106-46-7	1,4-dichlorobenzene	2.6	U
110-57-6	trans-1,4-dichloro-2-butene	26	U
75-71-8	dichlorodifluoromethane	2.6	U
75-34-3	1,1-dichloroethane	2.4	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9937

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: SS-1

Sample wt/vol: 5.1 (g/mL) G Lab File ID: S1S87096.D

Level: (low/med) LOW Date Collected: 7/10/96

% Moisture: not dec. 23 Date Analyzed: 7/18/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
107-06-2	1,2-dichloroethane	2.6	U
75-35-4	1,1-dichloroethene	2.6	U
156-59-2	cis-1,2-dichloroethene	2.6	U
156-60-5	trans-1,2-dichloroethene	2.6	U
78-87-5	1,2-dichloropropane	2.6	U
142-28-9	1,3-dichloropropane	2.6	U
590-20-7	2,2-dichloropropane	2.6	U
563-58-6	1,1-dichloropropene	2.6	U
10061-01-5	cis-1,3-dichloropropene	2.6	U
10061-02-6	trans-1,3-dichloropropene	2.6	U
100-41-4	ethylbenzene	2.6	U
60-29-7	ethyl ether	26	U
97-63-2	ethyl methacrylate	26	U
87-68-3	hexachlorobutadiene	2.6	U
67-72-1	hexachloroethane	26	U
591-78-6	2-hexanone	26	U
74-88-4	iodomethane	26	U
98-82-8	isopropylbenzene	2.6	U
99-87-6	4-isopropyltoluene	2.6	U
126-98-7	methacrylonitrile	26	U
96-33-3	methyl acrylate	26	U
1634-04-4	methyl-t-butyl ether	26	U
80-62-6	methyl methacrylate	26	U
75-09-2	methylene chloride	3.7	B
108-10-1	4-methyl-2-pentanone	26	U
91-20-3	naphthalene	2.6	U
79-46-9	2-nitropropane	26	U
76-01-7	pentachloroethane	26	U
107-12-0	propionitrile	26	U
103-65-1	n-propylbenzene	2.6	U
100-42-5	styrene	2.6	U
630-20-6	1,1,1,2-tetrachloroethane	2.6	U
79-34-5	1,1,2,2-tetrachloroethane	2.6	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9937

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: SS-1

Sample wt/vol: 5.1 (g/mL) G Lab File ID: S1S87096.D

Level: (low/med) LOW Date Collected: 7/10/96

% Moisture: not dec. 23 Date Analyzed: 7/18/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
127-18-4	tetrachloroethene	2.6	U
109-99-9	tetrahydrofuran	26	U
108-88-3	toluene	2.6	U
87-61-6	1,2,3-trichlorobenzene	2.6	U
120-82-1	1,2,4-trichlorobenzene	2.6	U
71-55-6	1,1,1-trichloroethane	2.7	
79-00-5	1,1,2-trichloroethane	2.6	U
79-01-6	trichloroethene	2.6	U
75-69-4	trichlorofluoromethane	2.6	U
96-18-4	1,2,3-trichloropropane	2.6	U
95-63-6	1,2,4-trimethylbenzene	2.6	U
108-67-8	1,3,5-trimethylbenzene	2.6	U
75-01-4	vinyl chloride	2.6	U
108-38-3;10	m/p-xylene	2.6	U
95-47-6	o-xylene	2.6	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9938

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: SS-2

Sample wt/vol: 5.3 (g/mL) G Lab File ID: S1S87113.D

Level: (low/med) LOW Date Collected: 7/10/96

% Moisture: not dec. 25 Date Analyzed: 7/19/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
67-64-1	acetone	25	U
107-13-1	acrylonitrile	25	U
107-05-1	allyl chloride	25	U
71-43-2	benzene	2.5	U
108-86-1	bromobenzene	2.5	U
74-97-5	bromochloromethane	2.5	U
75-27-4	bromodichloromethane	2.5	U
75-25-2	bromoform	2.5	U
74-83-9	bromomethane	2.5	U
78-93-3	2-butanone	25	U
104-51-8	n-butylbenzene	2.5	U
135-98-8	sec-butylbenzene	2.5	U
98-06-6	tert-butylbenzene	2.5	U
75-15-0	carbon disulfide	25	U
56-23-5	carbon tetrachloride	2.5	U
107-14-2	chloroacetonitrile	25	U
108-90-7	chlorobenzene	2.5	U
109-69-3	1-chlorobutane	25	U
75-00-3	chloroethane	2.5	U
67-66-3	chloroform	2.5	U
74-87-3	chloromethane	2.5	U
95-49-8	2-chlorotoluene	2.5	U
106-43-4	4-chlorotoluene	2.5	U
124-48-1	dibromochloromethane	2.5	U
96-12-8	1,2-dibromo-3-chloropropane	2.5	U
106-93-4	1,2-dibromoethane	2.5	U
74-95-3	dibromomethane	2.5	U
95-50-1	1,2-dichlorobenzene	2.5	U
541-73-1	1,3-dichlorobenzene	2.5	U
106-46-7	1,4-dichlorobenzene	2.5	U
110-57-6	trans-1,4-dichloro-2-butene	25	U
75-71-8	dichlorodifluoromethane	2.5	U
75-34-3	1,1-dichloroethane	2.5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9938

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: SS-2

Sample wt/vol: 5.3 (g/mL) G Lab File ID: S1S87113.D

Level: (low/med) LOW Date Collected: 7/10/96

% Moisture: not dec. 25 Date Analyzed: 7/19/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
107-06-2	1,2-dichloroethane	2.5	U
75-35-4	1,1-dichloroethene	2.5	U
156-59-2	cis-1,2-dichloroethene	2.5	U
156-60-5	trans-1,2-dichloroethene	2.5	U
78-87-5	1,2-dichloropropane	2.5	U
142-28-9	1,3-dichloropropane	2.5	U
590-20-7	2,2-dichloropropane	2.5	U
563-58-6	1,1-dichloropropene	2.5	U
10061-01-5	cis-1,3-dichloropropene	2.5	U
10061-02-6	trans-1,3-dichloropropene	2.5	U
100-41-4	ethylbenzene	2.5	U
60-29-7	ethyl ether	25	U
97-63-2	ethyl methacrylate	25	U
87-68-3	hexachlorobutadiene	2.5	U
67-72-1	hexachloroethane	25	U
591-78-6	2-hexanone	25	U
74-88-4	iodomethane	25	U
98-82-8	isopropylbenzene	2.5	U
99-87-6	4-isopropyltoluene	2.5	U
126-98-7	methacrylonitrile	25	U
96-33-3	methyl acrylate	25	U
1634-04-4	methyl-t-butyl ether	25	U
80-62-6	methyl methacrylate	25	U
75-09-2	methylene chloride	1.1	J
108-10-1	4-methyl-2-pentanone	25	U
91-20-3	naphthalene	2.5	U
79-46-9	2-nitropropane	25	U
76-01-7	pentachloroethane	25	U
107-12-0	propionitrile	25	U
103-65-1	n-propylbenzene	2.5	U
100-42-5	styrene	2.5	U
630-20-6	1,1,1,2-tetrachloroethane	2.5	U
79-34-5	1,1,2,2-tetrachloroethane	2.5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9938

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: SS-2

Sample wt/vol: 5.3 (g/mL) G Lab File ID: S1S87113.D

Level: (low/med) LOW Date Collected: 7/10/96

% Moisture: not dec. 25 Date Analyzed: 7/19/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
127-18-4	tetrachloroethene	2.5	U
109-99-9	tetrahydrofuran	25	U
108-88-3	toluene	2.5	U
87-61-6	1,2,3-trichlorobenzene	2.5	U
120-82-1	1,2,4-trichlorobenzene	2.5	U
71-55-6	1,1,1-trichloroethane	2.9	
79-00-5	1,1,2-trichloroethane	2.5	U
79-01-6	trichloroethene	2.5	U
75-69-4	trichlorofluoromethane	2.5	U
96-18-4	1,2,3-trichloropropane	2.5	U
95-63-6	1,2,4-trimethylbenzene	2.5	U
108-67-8	1,3,5-trimethylbenzene	2.5	U
75-01-4	vinyl chloride	2.5	U
108-38-3;10	m/p-xylene	2.5	U
95-47-6	o-xylene	2.5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9939

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: SS-3

Sample wt/vol: 5.1 (g/mL) G Lab File ID: S1S87098.D

Level: (low/med) LOW Date Collected: 7/10/96

% Moisture: not dec. 32 Date Analyzed: 7/18/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
67-64-1	acetone	29	
107-13-1	acrylonitrile	29	U
107-05-1	allyl chloride	29	U
71-43-2	benzene	2.9	U
108-86-1	bromobenzene	2.9	U
74-97-5	bromochloromethane	2.9	U
75-27-4	bromodichloromethane	2.9	U
75-25-2	bromoform	2.9	U
74-83-9	bromomethane	2.9	U
78-93-3	2-butanone	29	U
104-51-8	n-butylbenzene	2.9	U
135-98-8	sec-butylbenzene	2.9	U
98-06-6	tert-butylbenzene	2.9	U
75-15-0	carbon disulfide	29	U
56-23-5	carbon tetrachloride	2.9	U
107-14-2	chloroacetonitrile	29	U
108-90-7	chlorobenzene	2.9	U
109-69-3	1-chlorobutane	29	U
75-00-3	chloroethane	2.9	U
67-66-3	chloroform	2.9	U
74-87-3	chloromethane	2.9	U
95-49-8	2-chlorotoluene	2.9	U
106-43-4	4-chlorotoluene	2.9	U
124-48-1	dibromochloromethane	2.9	U
96-12-8	1,2-dibromo-3-chloropropane	2.9	U
106-93-4	1,2-dibromoethane	2.9	U
74-95-3	dibromomethane	2.9	U
95-50-1	1,2-dichlorobenzene	2.9	U
541-73-1	1,3-dichlorobenzene	2.9	U
106-46-7	1,4-dichlorobenzene	2.9	U
110-57-6	trans-1,4-dichloro-2-butene	29	U
75-71-8	dichlorodifluoromethane	2.9	U
75-34-3	1,1-dichloroethane	2.9	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9939

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: SS-3

Sample wt/vol: 5.1 (g/mL) G Lab File ID: S1S87098.D

Level: (low/med) LOW Date Collected: 7/10/96

% Moisture: not dec. 32 Date Analyzed: 7/18/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
107-06-2	1,2-dichloroethane	2.9	U
75-35-4	1,1-dichloroethene	2.9	U
156-59-2	cis-1,2-dichloroethene	2.9	U
156-60-5	trans-1,2-dichloroethene	2.9	U
78-87-5	1,2-dichloropropane	2.9	U
142-28-9	1,3-dichloropropane	2.9	U
590-20-7	2,2-dichloropropane	2.9	U
563-58-6	1,1-dichloropropene	2.9	U
10061-01-5	cis-1,3-dichloropropene	2.9	U
10061-02-6	trans-1,3-dichloropropene	2.9	U
100-41-4	ethylbenzene	2.9	U
60-29-7	ethyl ether	29	U
97-63-2	ethyl methacrylate	29	U
87-68-3	hexachlorobutadiene	2.9	U
67-72-1	hexachloroethane	29	U
591-78-6	2-hexanone	29	U
74-88-4	iodomethane	29	U
98-82-8	isopropylbenzene	2.9	U
99-87-6	4-isopropyltoluene	2.9	U
126-98-7	methacrylonitrile	29	U
96-33-3	methyl acrylate	29	U
1634-04-4	methyl-t-butyl ether	29	U
80-62-6	methyl methacrylate	29	U
75-09-2	methylene chloride	4.8	B
108-10-1	4-methyl-2-pentanone	29	U
91-20-3	naphthalene	2.9	U
79-46-9	2-nitropropane	29	U
76-01-7	pentachloroethane	29	U
107-12-0	propionitrile	29	U
103-65-1	n-propylbenzene	2.9	U
100-42-5	styrene	2.9	U
630-20-6	1,1,1,2-tetrachloroethane	2.9	U
79-34-5	1,1,2,2-tetrachloroethane	2.9	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9939

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: SS-3

Sample wt/vol: 5.1 (g/mL) G Lab File ID: S1S87098.D

Level: (low/med) LOW Date Collected: 7/10/96

% Moisture: not dec. 32 Date Analyzed: 7/18/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
127-18-4	tetrachloroethene	2.9	U
109-99-9	tetrahydrofuran	29	U
108-88-3	toluene	2.9	U
87-61-6	1,2,3-trichlorobenzene	2.9	U
120-82-1	1,2,4-trichlorobenzene	2.9	U
71-55-6	1,1,1-trichloroethane	2.9	U
79-00-5	1,1,2-trichloroethane	2.9	U
79-01-6	trichloroethene	2.9	U
75-69-4	trichlorofluoromethane	2.9	U
96-18-4	1,2,3-trichloropropane	2.9	U
95-63-6	1,2,4-trimethylbenzene	2.9	U
108-67-8	1,3,5-trimethylbenzene	2.9	U
75-01-4	vinyl chloride	2.9	U
108-38-3;10	m/p-xylene	2.9	U
95-47-6	o-xylene	2.9	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9940

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: SS-5

Sample wt/vol: 5.8 (g/mL) G Lab File ID: S1S87099.D

Level: (low/med) LOW Date Collected: 7/9/96

% Moisture: not dec. 6 Date Analyzed: 7/18/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
67-64-1	acetone	15	J
107-13-1	acrylonitrile	18	U
107-05-1	allyl chloride	18	U
71-43-2	benzene	1.8	U
108-86-1	bromobenzene	1.8	U
74-97-5	bromochloromethane	1.8	U
75-27-4	bromodichloromethane	1.8	U
75-25-2	bromoform	1.8	U
74-83-9	bromomethane	1.8	U
78-93-3	2-butanone	18	U
104-51-8	n-butylbenzene	1.8	U
135-98-8	sec-butylbenzene	1.8	U
98-06-6	tert-butylbenzene	1.8	U
75-15-0	carbon disulfide	18	U
56-23-5	carbon tetrachloride	1.8	U
107-14-2	chloroacetonitrile	18	U
108-90-7	chlorobenzene	1.8	U
109-69-3	1-chlorobutane	18	U
75-00-3	chloroethane	1.8	U
67-66-3	chloroform	1.8	U
74-87-3	chloromethane	1.8	U
95-49-8	2-chlorotoluene	1.8	U
106-43-4	4-chlorotoluene	1.8	U
124-48-1	dibromochloromethane	1.8	U
96-12-8	1,2-dibromo-3-chloropropane	1.8	U
106-93-4	1,2-dibromoethane	1.8	U
74-95-3	dibromomethane	1.8	U
95-50-1	1,2-dichlorobenzene	1.8	U
541-73-1	1,3-dichlorobenzene	1.8	U
106-46-7	1,4-dichlorobenzene	1.8	U
110-57-6	trans-1,4-dichloro-2-butene	18	U
75-71-8	dichlorodifluoromethane	1.8	U
75-34-3	1,1-dichloroethane	1.8	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9940

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: SS-5

Sample wt/vol: 5.8 (g/mL) G Lab File ID: S1S87099.D

Level: (low/med) LOW Date Collected: 7/9/96

% Moisture: not dec. 6 Date Analyzed: 7/18/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
107-06-2	1,2-dichloroethane	1.8	U
75-35-4	1,1-dichloroethene	1.8	U
156-59-2	cis-1,2-dichloroethene	1.8	U
156-60-5	trans-1,2-dichloroethene	1.8	U
78-87-5	1,2-dichloropropane	1.8	U
142-28-9	1,3-dichloropropane	1.8	U
590-20-7	2,2-dichloropropane	1.8	U
563-58-6	1,1-dichloropropene	1.8	U
10061-01-5	cis-1,3-dichloropropene	1.8	U
10061-02-6	trans-1,3-dichloropropene	1.8	U
100-41-4	ethylbenzene	1.8	U
60-29-7	ethyl ether	18	U
97-63-2	ethyl methacrylate	18	U
87-68-3	hexachlorobutadiene	1.8	U
67-72-1	hexachloroethane	18	U
591-78-6	2-hexanone	18	U
74-88-4	iodomethane	18	U
98-82-8	isopropylbenzene	1.8	U
99-87-6	4-isopropyltoluene	1.8	U
126-98-7	methacrylonitrile	18	U
96-33-3	methyl acrylate	18	U
1634-04-4	methyl-t-butyl ether	18	U
80-62-6	methyl methacrylate	18	U
75-09-2	methylene chloride	2.5	B
108-10-1	4-methyl-2-pentanone	18	U
91-20-3	naphthalene	1.8	U
79-46-9	2-nitropropane	18	U
76-01-7	pentachloroethane	18	U
107-12-0	propionitrile	18	U
103-65-1	n-propylbenzene	1.8	U
100-42-5	styrene	1.8	U
630-20-6	1,1,1,2-tetrachloroethane	1.8	U
79-34-5	1,1,2,2-tetrachloroethane	1.8	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9940

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: SS-5

Sample wt/vol: 5.8 (g/mL) G Lab File ID: S1S87099.D

Level: (low/med) LOW Date Collected: 7/9/96

% Moisture: not dec. 6 Date Analyzed: 7/18/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
127-18-4	tetrachloroethene	1.8	U
109-99-9	tetrahydrofuran	18	U
108-88-3	toluene	1.8	U
87-61-6	1,2,3-trichlorobenzene	1.8	U
120-82-1	1,2,4-trichlorobenzene	1.8	U
71-55-6	1,1,1-trichloroethane	1.8	U
79-00-5	1,1,2-trichloroethane	1.8	U
79-01-6	trichloroethene	1.8	U
75-69-4	trichlorofluoromethane	1.8	U
96-18-4	1,2,3-trichloropropane	1.8	U
95-63-6	1,2,4-trimethylbenzene	1.8	U
108-67-8	1,3,5-trimethylbenzene	1.8	U
75-01-4	vinyl chloride	1.8	U
108-38-3;10	m/p-xylene	1.8	U
95-47-6	o-xylene	1.8	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9941

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: SS-D

Sample wt/vol: 5.1 (g/mL) G Lab File ID: S1S87100.D

Level: (low/med) LOW Date Collected: 7/9/96

% Moisture: not dec. 5 Date Analyzed: 7/18/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
67-64-1	acetone	13	J
107-13-1	acrylonitrile	21	U
107-05-1	allyl chloride	21	U
71-43-2	benzene	2.1	U
108-86-1	bromobenzene	2.1	U
74-97-5	bromochloromethane	2.1	U
75-27-4	bromodichloromethane	2.1	U
75-25-2	bromoform	2.1	U
74-83-9	bromomethane	2.1	U
78-93-3	2-butanone	21	U
104-51-8	n-butylbenzene	2.1	U
135-98-8	sec-butylbenzene	2.1	U
98-06-6	tert-butylbenzene	2.1	U
75-15-0	carbon disulfide	21	U
56-23-5	carbon tetrachloride	2.1	U
107-14-2	chloroacetonitrile	21	U
108-90-7	chlorobenzene	2.1	U
109-69-3	1-chlorobutane	21	U
75-00-3	chloroethane	2.1	U
67-66-3	chloroform	2.1	U
74-87-3	chloromethane	2.1	U
95-49-8	2-chlorotoluene	2.1	U
106-43-4	4-chlorotoluene	2.1	U
124-48-1	dibromochloromethane	2.1	U
96-12-8	1,2-dibromo-3-chloropropane	2.1	U
106-93-4	1,2-dibromoethane	2.1	U
74-95-3	dibromomethane	2.1	U
95-50-1	1,2-dichlorobenzene	2.1	U
541-73-1	1,3-dichlorobenzene	2.1	U
106-46-7	1,4-dichlorobenzene	2.1	U
110-57-6	trans-1,4-dichloro-2-butene	21	U
75-71-8	dichlorodifluoromethane	2.1	U
75-34-3	1,1-dichloroethane	2.1	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9941

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: SS-D

Sample wt/vol: 5.1 (g/mL) G Lab File ID: S1S87100.D

Level: (low/med) LOW Date Collected: 7/9/96

% Moisture: not dec. 5 Date Analyzed: 7/18/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
107-06-2	1,2-dichloroethane	2.1	U
75-35-4	1,1-dichloroethene	2.1	U
156-59-2	cis-1,2-dichloroethene	2.1	U
156-60-5	trans-1,2-dichloroethene	2.1	U
78-87-5	1,2-dichloropropane	2.1	U
142-28-9	1,3-dichloropropane	2.1	U
590-20-7	2,2-dichloropropane	2.1	U
563-58-6	1,1-dichloropropene	2.1	U
10061-01-5	cis-1,3-dichloropropene	2.1	U
10061-02-6	trans-1,3-dichloropropene	2.1	U
100-41-4	ethylbenzene	2.1	U
60-29-7	ethyl ether	21	U
97-63-2	ethyl methacrylate	21	U
87-68-3	hexachlorobutadiene	2.1	U
67-72-1	hexachloroethane	21	U
591-78-6	2-hexanone	21	U
74-88-4	iodomethane	21	U
98-82-8	isopropylbenzene	2.1	U
99-87-6	4-isopropyltoluene	2.1	U
126-98-7	methacrylonitrile	21	U
96-33-3	methyl acrylate	21	U
1634-04-4	methyl-t-butyl ether	21	U
80-62-6	methyl methacrylate	21	U
75-09-2	methylene chloride	2.9	B
108-10-1	4-methyl-2-pentanone	21	U
91-20-3	naphthalene	2.1	U
79-46-9	2-nitropropane	21	U
76-01-7	pentachloroethane	21	U
107-12-0	propionitrile	21	U
103-65-1	n-propylbenzene	2.1	U
100-42-5	styrene	2.1	U
630-20-6	1,1,1,2-tetrachloroethane	2.1	U
79-34-5	1,1,2,2-tetrachloroethane	2.1	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9941

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: SS-D

Sample wt/vol: 5.1 (g/mL) G Lab File ID: S1S87100.D

Level: (low/med) LOW Date Collected: 7/9/96

% Moisture: not dec. 5 Date Analyzed: 7/18/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
127-18-4	tetrachloroethene	2.1	U
109-99-9	tetrahydrofuran	21	U
108-88-3	toluene	2.1	U
87-61-6	1,2,3-trichlorobenzene	2.1	U
120-82-1	1,2,4-trichlorobenzene	2.1	U
71-55-6	1,1,1-trichloroethane	2.1	U
79-00-5	1,1,2-trichloroethane	2.1	U
79-01-6	trichloroethene	2.1	U
75-69-4	trichlorofluoromethane	2.1	U
96-18-4	1,2,3-trichloropropane	2.1	U
95-63-6	1,2,4-trimethylbenzene	2.1	U
108-67-8	1,3,5-trimethylbenzene	2.1	U
75-01-4	vinyl chloride	2.1	U
108-38-3;10	m/p-xylene	2.1	U
95-47-6	o-xylene	2.1	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9942

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: SS-6

Sample wt/vol: 5.1 (g/mL) G Lab File ID: S1S87101.D

Level: (low/med) LOW Date Collected: 7/9/96

% Moisture: not dec. 7 Date Analyzed: 7/18/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
67-64-1	acetone	14	J
107-13-1	acrylonitrile	21	U
107-05-1	allyl chloride	21	U
71-43-2	benzene	2.1	U
108-86-1	bromobenzene	2.1	U
74-97-5	bromochloromethane	2.1	U
75-27-4	bromodichloromethane	2.1	U
75-25-2	bromoform	2.1	U
74-83-9	bromomethane	2.1	U
78-93-3	2-butanone	21	U
104-51-8	n-butylbenzene	2.1	U
135-98-8	sec-butylbenzene	2.1	U
98-06-6	tert-butylbenzene	2.1	U
75-15-0	carbon disulfide	21	U
56-23-5	carbon tetrachloride	2.1	U
107-14-2	chloroacetonitrile	21	U
108-90-7	chlorobenzene	2.1	U
109-69-3	1-chlorobutane	21	U
75-00-3	chloroethane	2.1	U
67-66-3	chloroform	2.1	U
74-87-3	chloromethane	2.1	U
95-49-8	2-chlorotoluene	2.1	U
106-43-4	4-chlorotoluene	2.1	U
124-48-1	dibromochloromethane	2.1	U
96-12-8	1,2-dibromo-3-chloropropane	2.1	U
106-93-4	1,2-dibromoethane	2.1	U
74-95-3	dibromomethane	2.1	U
95-50-1	1,2-dichlorobenzene	2.1	U
541-73-1	1,3-dichlorobenzene	2.1	U
106-46-7	1,4-dichlorobenzene	2.1	U
110-57-6	trans-1,4-dichloro-2-butene	21	U
75-71-8	dichlorodifluoromethane	2.1	U
75-34-3	1,1-dichloroethane	2.1	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9942

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: SS-6

Sample wt/vol: 5.1 (g/mL) G Lab File ID: S1S87101.D

Level: (low/med) LOW Date Collected: 7/9/96

% Moisture: not dec. 7 Date Analyzed: 7/18/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
107-06-2	1,2-dichloroethane	2.1	U
75-35-4	1,1-dichloroethene	2.1	U
156-59-2	cis-1,2-dichloroethene	2.1	U
156-60-5	trans-1,2-dichloroethene	2.1	U
78-87-5	1,2-dichloropropane	2.1	U
142-28-9	1,3-dichloropropane	2.1	U
590-20-7	2,2-dichloropropane	2.1	U
563-58-6	1,1-dichloropropene	2.1	U
10061-01-5	cis-1,3-dichloropropene	2.1	U
10061-02-6	trans-1,3-dichloropropene	2.1	U
100-41-4	ethylbenzene	2.1	U
60-29-7	ethyl ether	21	U
97-63-2	ethyl methacrylate	21	U
87-68-3	hexachlorobutadiene	2.1	U
67-72-1	hexachloroethane	21	U
591-78-6	2-hexanone	21	U
74-88-4	iodomethane	21	U
98-82-8	isopropylbenzene	2.1	U
99-87-6	4-isopropyltoluene	2.1	U
126-98-7	methacrylonitrile	21	U
96-33-3	methyl acrylate	21	U
1634-04-4	methyl-t-butyl ether	21	U
80-62-6	methyl methacrylate	21	U
75-09-2	methylene chloride	3	B
108-10-1	4-methyl-2-pentanone	21	U
91-20-3	naphthalene	2.1	U
79-46-9	2-nitropropane	21	U
76-01-7	pentachloroethane	21	U
107-12-0	propionitrile	21	U
103-65-1	n-propylbenzene	2.1	U
100-42-5	styrene	2.1	U
630-20-6	1,1,1,2-tetrachloroethane	2.1	U
79-34-5	1,1,2,2-tetrachloroethane	2.1	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9942

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: SS-6

Sample wt/vol: 5.1 (g/mL) G Lab File ID: S1S87101.D

Level: (low/med) LOW Date Collected: 7/9/96

% Moisture: not dec. 7 Date Analyzed: 7/18/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
127-18-4	tetrachloroethene	2.1	U
109-99-9	tetrahydrofuran	21	U
108-88-3	toluene	2.1	U
87-61-6	1,2,3-trichlorobenzene	2.1	U
120-82-1	1,2,4-trichlorobenzene	2.1	U
71-55-6	1,1,1-trichloroethane	2.1	U
79-00-5	1,1,2-trichloroethane	2.1	U
79-01-6	trichloroethene	2.1	U
75-69-4	trichlorofluoromethane	2.1	U
96-18-4	1,2,3-trichloropropane	2.1	U
95-63-6	1,2,4-trimethylbenzene	2.1	U
108-67-8	1,3,5-trimethylbenzene	2.1	U
75-01-4	vinyl chloride	2.1	U
108-38-3;10	m/p-xylene	2.1	U
95-47-6	o-xylene	2.1	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9943

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: SS-7

Sample wt/vol: 5.2 (g/mL) G Lab File ID: S1S87102.D

Level: (low/med) LOW Date Collected: 7/9/96

% Moisture: not dec. 39 Date Analyzed: 7/18/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
67-64-1	acetone	63	
107-13-1	acrylonitrile	31	U
107-05-1	allyl chloride	31	U
71-43-2	benzene	3.1	U
108-86-1	bromobenzene	3.1	U
74-97-5	bromochloromethane	3.1	U
75-27-4	bromodichloromethane	3.1	U
75-25-2	bromoform	3.1	U
74-83-9	bromomethane	3.1	U
78-93-3	2-butanone	31	U
104-51-8	n-butylbenzene	3.1	U
135-98-8	sec-butylbenzene	3.1	U
98-06-6	tert-butylbenzene	3.1	U
75-15-0	carbon disulfide	31	U
56-23-5	carbon tetrachloride	3.1	U
107-14-2	chloroacetonitrile	31	U
108-90-7	chlorobenzene	3.1	U
109-69-3	1-chlorobutane	31	U
75-00-3	chloroethane	3.1	U
67-66-3	chloroform	3.1	U
74-87-3	chloromethane	3.1	U
95-49-8*	2-chlorotoluene	3.1	U
106-43-4	4-chlorotoluene	3.1	U
124-48-1	dibromochloromethane	3.1	U
96-12-8	1,2-dibromo-3-chloropropane	3.1	U
106-93-4	1,2-dibromoethane	3.1	U
74-95-3	dibromomethane	3.1	U
95-50-1	1,2-dichlorobenzene	3.1	U
541-73-1	1,3-dichlorobenzene	3.1	U
106-46-7	1,4-dichlorobenzene	3.1	U
110-57-6	trans-1,4-dichloro-2-butene	31	U
75-71-8	dichlorodifluoromethane	3.1	U
75-34-3	1,1-dichloroethane	3.1	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9943

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: SS-7

Sample wt/vol: 5.2 (g/mL) G Lab File ID: S1S87102.D

Level: (low/med) LOW Date Collected: 7/9/96

% Moisture: not dec. 39 Date Analyzed: 7/18/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
107-06-2	1,2-dichloroethane	3.1	U
75-35-4	1,1-dichloroethene	3.1	U
156-59-2	cis-1,2-dichloroethene	3.1	U
156-60-5	trans-1,2-dichloroethene	3.1	U
78-87-5	1,2-dichloropropane	3.1	U
142-28-9	1,3-dichloropropane	3.1	U
590-20-7	2,2-dichloropropane	3.1	U
563-58-6	1,1-dichloropropene	3.1	U
10061-01-5	cis-1,3-dichloropropene	3.1	U
10061-02-6	trans-1,3-dichloropropene	3.1	U
100-41-4	ethylbenzene	3.1	U
60-29-7	ethyl ether	31	U
97-63-2	ethyl methacrylate	31	U
87-68-3	hexachlorobutadiene	3.1	U
67-72-1	hexachloroethane	31	U
591-78-6	2-hexanone	31	U
74-88-4	iodomethane	31	U
98-82-8	isopropylbenzene	3.1	U
99-87-6	4-isopropyltoluene	3.1	U
126-98-7	methacrylonitrile	31	U
96-33-3	methyl acrylate	31	U
1634-04-4	methyl-t-butyl ether	31	U
80-62-6	methyl methacrylate	31	U
75-09-2	methylene chloride	3.6	B
108-10-1	4-methyl-2-pentanone	31	U
91-20-3	naphthalene	3.1	U
79-46-9	2-nitropropane	31	U
76-01-7	pentachloroethane	31	U
107-12-0	propionitrile	31	U
103-65-1	n-propylbenzene	3.1	U
100-42-5	styrene	3.1	U
630-20-6	1,1,1,2-tetrachloroethane	3.1	U
79-34-5	1,1,2,2-tetrachloroethane	3.1	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9943

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: SS-7

Sample wt/vol: 5.2 (g/mL) G Lab File ID: S1S87102.D

Level: (low/med) LOW Date Collected: 7/9/96

% Moisture: not dec. 39 Date Analyzed: 7/18/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
127-18-4	tetrachloroethene	3.1	U
109-99-9	tetrahydrofuran	31	U
108-88-3	toluene	3.1	U
87-61-6	1,2,3-trichlorobenzene	3.1	U
120-82-1	1,2,4-trichlorobenzene	3.1	U
71-55-6	1,1,1-trichloroethane	3.1	U
79-00-5	1,1,2-trichloroethane	3.1	U
79-01-6	trichloroethene	3.1	U
75-69-4	trichlorofluoromethane	3.1	U
96-18-4	1,2,3-trichloropropane	3.1	U
95-63-6	1,2,4-trimethylbenzene	3.1	U
108-67-8	1,3,5-trimethylbenzene	3.1	U
75-01-4	vinyl chloride	3.1	U
108-38-3;10	m/p-xylene	3.1	U
95-47-6	o-xylene	3.1	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9944

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: SS-8

Sample wt/vol: 5.5 (g/mL) G Lab File ID: S1S87103.D

Level: (low/med) LOW Date Collected: 7/9/96

% Moisture: not dec. 34 Date Analyzed: 7/18/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
67-64-1	acetone	28	U
107-13-1	acrylonitrile	28	U
107-05-1	allyl chloride	28	U
71-43-2	benzene	2.8	U
108-86-1	bromobenzene	2.8	U
74-97-5	bromochloromethane	2.8	U
75-27-4	bromodichloromethane	2.8	U
75-25-2	bromoform	2.8	U
74-83-9	bromomethane	2.8	U
78-93-3	2-butanone	28	U
104-51-8	n-butylbenzene	2.8	U
135-98-8	sec-butylbenzene	2.8	U
98-06-6	tert-butylbenzene	2.8	U
75-15-0	carbon disulfide	28	U
56-23-5	carbon tetrachloride	2.8	U
107-14-2	chloroacetonitrile	28	U
108-90-7	chlorobenzene	2.8	U
109-69-3	1-chlorobutane	28	U
75-00-3	chloroethane	2.8	U
67-66-3	chloroform	2.8	U
74-87-3	chloromethane	2.8	U
95-49-8	2-chlorotoluene	2.8	U
106-43-4	4-chlorotoluene	2.8	U
124-48-1	dibromochloromethane	2.8	U
96-12-8	1,2-dibromo-3-chloropropane	2.8	U
106-93-4	1,2-dibromoethane	2.8	U
74-95-3	dibromomethane	2.8	U
95-50-1	1,2-dichlorobenzene	2.8	U
541-73-1	1,3-dichlorobenzene	2.8	U
106-46-7	1,4-dichlorobenzene	2.8	U
110-57-6	trans-1,4-dichloro-2-butene	28	U
75-71-8	dichlorodifluoromethane	2.8	U
75-34-3	1,1-dichloroethane	2.8	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9944

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: SS-8

Sample wt/vol: 5.5 (g/mL) G Lab File ID: S1S87103.D

Level: (low/med) LOW Date Collected: 7/9/96

% Moisture: not dec. 34 Date Analyzed: 7/18/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
107-06-2	1,2-dichloroethane	2.8	U
75-35-4	1,1-dichloroethene	2.8	U
156-59-2	cis-1,2-dichloroethene	2.8	U
156-60-5	trans-1,2-dichloroethene	2.8	U
78-87-5	1,2-dichloropropane	2.8	U
142-28-9	1,3-dichloropropane	2.8	U
590-20-7	2,2-dichloropropane	2.8	U
563-58-6	1,1-dichloropropene	2.8	U
10061-01-5	cis-1,3-dichloropropene	2.8	U
10061-02-6	trans-1,3-dichloropropene	2.8	U
100-41-4	ethylbenzene	2.8	U
60-29-7	ethyl ether	28	U
97-63-2	ethyl methacrylate	28	U
87-68-3	hexachlorobutadiene	2.8	U
67-72-1	hexachloroethane	28	U
591-78-6	2-hexanone	28	U
74-88-4	iodomethane	28	U
98-82-8	isopropylbenzene	2.8	U
99-87-6	4-isopropyltoluene	2.8	U
126-98-7	methacrylonitrile	28	U
96-33-3	methyl acrylate	28	U
1634-04-4	methyl-t-butyl ether	28	U
80-62-6	methyl methacrylate	28	U
75-09-2	methylene chloride	2	JB
108-10-1	4-methyl-2-pentanone	28	U
91-20-3	naphthalene	2.8	U
79-46-9	2-nitropropane	28	U
76-01-7	pentachloroethane	28	U
107-12-0	propionitrile	28	U
103-65-1	n-propylbenzene	2.8	U
100-42-5	styrene	2.8	U
630-20-6	1,1,1,2-tetrachloroethane	2.8	U
79-34-5	1,1,2,2-tetrachloroethane	2.8	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9944

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: SS-8

Sample wt/vol: 5.5 (g/mL) G Lab File ID: S1S87103.D

Level: (low/med) LOW Date Collected: 7/9/96

% Moisture: not dec. 34 Date Analyzed: 7/18/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
127-18-4	tetrachloroethene	2.8	U
109-99-9	tetrahydrofuran	28	U
108-88-3	toluene	2.8	U
87-61-6	1,2,3-trichlorobenzene	2.8	U
120-82-1	1,2,4-trichlorobenzene	2.8	U
71-55-6	1,1,1-trichloroethane	2.8	U
79-00-5	1,1,2-trichloroethane	2.8	U
79-01-6	trichloroethene	2.8	U
75-69-4	trichlorofluoromethane	1.5	J
96-18-4	1,2,3-trichloropropane	2.8	U
95-63-6	1,2,4-trimethylbenzene	2.8	U
108-67-8	1,3,5-trimethylbenzene	2.8	U
75-01-4	vinyl chloride	2.8	U
108-38-3;10	m/p-xylene	2.8	U
95-47-6	o-xylene	2.8	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9945

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: SS-9

Sample wt/vol: 5.5 (g/mL) G Lab File ID: S1S87104.D

Level: (low/med) LOW Date Collected: 7/9/96

% Moisture: not dec. 38 Date Analyzed: 7/18/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
67-64-1	acetone	84	
107-13-1	acrylonitrile	29	U
107-05-1	allyl chloride	29	U
71-43-2	benzene	2.9	U
108-86-1	bromobenzene	2.9	U
74-97-5	bromochloromethane	2.9	U
75-27-4	bromodichloromethane	2.9	U
75-25-2	bromoform	2.9	U
74-83-9	bromomethane	2.9	U
78-93-3	2-butanone	18	J
104-51-8	n-butylbenzene	2.9	U
135-98-8	sec-butylbenzene	2.9	U
98-06-6	tert-butylbenzene	2.9	U
75-15-0	carbon disulfide	29	U
56-23-5	carbon tetrachloride	2.9	U
107-14-2	chloroacetonitrile	29	U
108-90-7	chlorobenzene	2.9	U
109-69-3	1-chlorobutane	29	U
75-00-3	chloroethane	2.9	U
67-66-3	chloroform	2.9	U
74-87-3	chloromethane	2.9	U
95-49-8	2-chlorotoluene	2.9	U
106-43-4	4-chlorotoluene	2.9	U
124-48-1	dibromochloromethane	2.9	U
96-12-8	1,2-dibromo-3-chloropropane	2.9	U
106-93-4	1,2-dibromoethane	2.9	U
74-95-3	dibromomethane	2.9	U
95-50-1	1,2-dichlorobenzene	2.9	U
541-73-1	1,3-dichlorobenzene	2.9	U
106-46-7	1,4-dichlorobenzene	2.9	U
110-57-6	trans-1,4-dichloro-2-butene	29	U
75-71-8	dichlorodifluoromethane	2.9	U
75-34-3	1,1-dichloroethane	2.9	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9945

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: SS-9

Sample wt/vol: 5.5 (g/mL) G Lab File ID: S1S87104.D

Level: (low/med) LOW Date Collected: 7/9/96

% Moisture: not dec. 38 Date Analyzed: 7/18/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
107-06-2	1,2-dichloroethane	2.9	U
75-35-4	1,1-dichloroethene	2.9	U
156-59-2	cis-1,2-dichloroethene	2.9	U
156-60-5	trans-1,2-dichloroethene	2.9	U
78-87-5	1,2-dichloropropane	2.9	U
142-28-9	1,3-dichloropropane	2.9	U
590-20-7	2,2-dichloropropane	2.9	U
563-58-6	1,1-dichloropropene	2.9	U
10061-01-5	cis-1,3-dichloropropene	2.9	U
10061-02-6	trans-1,3-dichloropropene	2.9	U
100-41-4	ethylbenzene	2.9	U
60-29-7	ethyl ether	29	U
97-63-2	ethyl methacrylate	29	U
87-68-3	hexachlorobutadiene	2.9	U
67-72-1	hexachloroethane	29	U
591-78-6	2-hexanone	29	U
74-88-4	iodomethane	29	U
98-82-8	isopropylbenzene	2.9	U
99-87-6	4-isopropyltoluene	2.9	U
126-98-7	methacrylonitrile	29	U
96-33-3	methyl acrylate	29	U
1634-04-4	methyl-t-butyl ether	29	U
80-62-6	methyl methacrylate	29	U
75-09-2	methylene chloride	3.2	B
108-10-1	4-methyl-2-pentanone	29	U
91-20-3	naphthalene	2.9	U
79-46-9	2-nitropropane	29	U
76-01-7	pentachloroethane	29	U
107-12-0	propionitrile	29	U
103-65-1	n-propylbenzene	2.9	U
100-42-5	styrene	2.9	U
630-20-6	1,1,1,2-tetrachloroethane	2.9	U
79-34-5	1,1,2,2-tetrachloroethane	2.9	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9945

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: SS-9

Sample wt/vol: 5.5 (g/mL) G Lab File ID: S1S87104.D

Level: (low/med) LOW Date Collected: 7/9/96

% Moisture: not dec. 38 Date Analyzed: 7/18/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
127-18-4	tetrachloroethene	2.9	U
109-99-9	tetrahydrofuran	29	U
108-88-3	toluene	2.9	U
87-61-6	1,2,3-trichlorobenzene	2.9	U
120-82-1	1,2,4-trichlorobenzene	2.9	U
71-55-6	1,1,1-trichloroethane	2.9	U
79-00-5	1,1,2-trichloroethane	2.9	U
79-01-6	trichloroethene	2.9	U
75-69-4	trichlorofluoromethane	2.9	U
96-18-4	1,2,3-trichloropropane	2.9	U
95-63-6	1,2,4-trimethylbenzene	2.9	U
108-67-8	1,3,5-trimethylbenzene	2.9	U
75-01-4	vinyl chloride	2.9	U
108-38-3;10	m/p-xylene	2.9	U
95-47-6	o-xylene	2.9	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
VBLK02

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: BLK7/18

Sample wt/vol: 5.0 (g/mL) G Lab File ID: B1S87095.D

Level: (low/med) LOW Date Collected: 7/18/96

% Moisture: not dec. 0 Date Analyzed: 7/18/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
67-64-1	acetone	20	U
107-13-1	acrylonitrile	20	U
107-05-1	allyl chloride	20	U
71-43-2	benzene	2	U
108-86-1	bromobenzene	2	U
74-97-5	bromochloromethane	2	U
75-27-4	bromodichloromethane	2	U
75-25-2	bromoform	2	U
74-83-9	bromomethane	2	U
78-93-3	2-butanone	20	U
104-51-8	n-butylbenzene	2	U
135-98-8	sec-butylbenzene	2	U
98-06-6	tert-butylbenzene	2	U
75-15-0	carbon disulfide	20	U
56-23-5	carbon tetrachloride	2	U
107-14-2	chloroacetonitrile	20	U
108-90-7	chlorobenzene	2	U
109-69-3	1-chlorobutane	20	U
75-00-3	chloroethane	2	U
67-66-3	chloroform	2	U
74-87-3	chloromethane	2	U
95-49-8	2-chlorotoluene	2	U
106-43-4	4-chlorotoluene	2	U
124-48-1	dibromochloromethane	2	U
96-12-8	1,2-dibromo-3-chloropropane	2	U
106-93-4	1,2-dibromoethane	2	U
74-95-3	dibromomethane	2	U
95-50-1	1,2-dichlorobenzene	2	U
541-73-1	1,3-dichlorobenzene	2	U
106-46-7	1,4-dichlorobenzene	2	U
110-57-6	trans-1,4-dichloro-2-butene	20	U
75-71-8	dichlorodifluoromethane	2	U
75-34-3	1,1-dichloroethane	2	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
VBLK02

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: BLK7/18

Sample wt/vol: 5.0 (g/mL) G Lab File ID: B1S87095.D

Level: (low/med) LOW Date Collected: 7/18/96

% Moisture: not dec. 0 Date Analyzed: 7/18/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS No.	Compound		Q
107-06-2	1,2-dichloroethane	2	U
75-35-4	1,1-dichloroethene	2	U
156-59-2	cis-1,2-dichloroethene	2	U
156-60-5	trans-1,2-dichloroethene	2	U
78-87-5	1,2-dichloropropane	2	U
142-28-9	1,3-dichloropropane	2	U
590-20-7	2,2-dichloropropane	2	U
563-58-6	1,1-dichloropropene	2	U
10061-01-5	cis-1,3-dichloropropene	2	U
10061-02-6	trans-1,3-dichloropropene	2	U
100-41-4	ethylbenzene	2	U
60-29-7	ethyl ether	20	U
97-63-2	ethyl methacrylate	20	U
87-68-3	hexachlorobutadiene	2	U
67-72-1	hexachloroethane	20	U
591-78-6	2-hexanone	20	U
74-88-4	iodomethane	20	U
98-82-8	isopropylbenzene	2	U
99-87-6	4-isopropyltoluene	2	U
126-98-7	methacrylonitrile	20	U
96-33-3	methyl acrylate	20	U
1634-04-4	methyl-t-butyl ether	20	U
80-62-6	methyl methacrylate	20	U
75-09-2	methylene chloride	3.8	
108-10-1	4-methyl-2-pentanone	20	U
91-20-3	naphthalene	2	U
79-46-9	2-nitropropane	20	U
76-01-7	pentachloroethane	20	U
107-12-0	propionitrile	20	U
103-65-1	n-propylbenzene	2	U
100-42-5	styrene	2	U
630-20-6	1,1,1,2-tetrachloroethane	2	U
79-34-5	1,1,2,2-tetrachloroethane	2	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
VBLK02

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: BLK7/18

Sample wt/vol: 5.0 (g/mL) G Lab File ID: B1S87095.D

Level: (low/med) LOW Date Collected: 7/18/96

% Moisture: not dec. 0 Date Analyzed: 7/18/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
127-18-4	tetrachloroethene	2	U
109-99-9	tetrahydrofuran	20	U
108-88-3	toluene	2	U
87-61-6	1,2,3-trichlorobenzene	2	U
120-82-1	1,2,4-trichlorobenzene	2	U
71-55-6	1,1,1-trichloroethane	2	U
79-00-5	1,1,2-trichloroethane	2	U
79-01-6	trichloroethene	2	U
75-69-4	trichlorofluoromethane	2	U
96-18-4	1,2,3-trichloropropane	2	U
95-63-6	1,2,4-trimethylbenzene	2	U
108-67-8	1,3,5-trimethylbenzene	2	U
75-01-4	vinyl chloride	2	U
108-38-3:10	m/p-xylene	2	U
95-47-6	o-xylene	2	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
VBLK03

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: BLK7/19

Sample wt/vol: 5.0 (g/mL) G Lab File ID: B1S87112.D

Level: (low/med) LOW Date Collected: 7/19/96

% Moisture: not dec. 0 Date Analyzed: 7/19/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
67-64-1	acetone	20	U
107-13-1	acrylonitrile	20	U
107-05-1	allyl chloride	20	U
71-43-2	benzene	2	U
108-86-1	bromobenzene	2	U
74-97-5	bromochloromethane	2	U
75-27-4	bromodichloromethane	2	U
75-25-2	bromoform	2	U
74-83-9	bromomethane	2	U
78-93-3	2-butanone	20	U
104-51-8	n-butylbenzene	2	U
135-98-8	sec-butylbenzene	2	U
98-06-6	tert-butylbenzene	2	U
75-15-0	carbon disulfide	20	U
56-23-5	carbon tetrachloride	2	U
107-14-2	chloroacetonitrile	20	U
108-90-7	chlorobenzene	2	U
109-69-3	1-chlorobutane	20	U
75-00-3	chloroethane	2	U
67-66-3	chloroform	2	U
74-87-3	chloromethane	2	U
95-49-8	2-chlorotoluene	2	U
106-43-4	4-chlorotoluene	2	U
124-48-1	dibromochloromethane	2	U
96-12-8	1,2-dibromo-3-chloropropane	2	U
106-93-4	1,2-dibromoethane	2	U
74-95-3	dibromomethane	2	U
95-50-1	1,2-dichlorobenzene	2	U
541-73-1	1,3-dichlorobenzene	2	U
106-46-7	1,4-dichlorobenzene	2	U
110-57-6	trans-1,4-dichloro-2-butene	20	U
75-71-8	dichlorodifluoromethane	2	U
75-34-3	1,1-dichloroethane	2	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
VBLK03

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: BLK7/19

Sample wt/vol: 5.0 (g/mL) G Lab File ID: B1S87112.D

Level: (low/med) LOW Date Collected: 7/19/96

% Moisture: not dec. 0 Date Analyzed: 7/19/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
107-06-2	1,2-dichloroethane	2	U
75-35-4	1,1-dichloroethene	2	U
156-59-2	cis-1,2-dichloroethene	2	U
156-60-5	trans-1,2-dichloroethene	2	U
78-87-5	1,2-dichloropropane	2	U
142-28-9	1,3-dichloropropane	2	U
590-20-7	2,2-dichloropropane	2	U
563-58-6	1,1-dichloropropene	2	U
10061-01-5	cis-1,3-dichloropropene	2	U
10061-02-6	trans-1,3-dichloropropene	2	U
100-41-4	ethylbenzene	2	U
60-29-7	ethyl ether	20	U
97-63-2	ethyl methacrylate	20	U
87-68-3	hexachlorobutadiene	2	U
67-72-1	hexachloroethane	20	U
591-78-6	2-hexanone	20	U
74-88-4	iodomethane	20	U
98-82-8	isopropylbenzene	2	U
99-87-6	4-isopropyltoluene	2	U
126-98-7	methacrylonitrile	20	U
96-33-3	methyl acrylate	20	U
1634-04-4	methyl-t-butyl ether	20	U
80-62-6	methyl methacrylate	20	U
75-09-2	methylene chloride	4.1	
108-10-1	4-methyl-2-pentanone	20	U
91-20-3	naphthalene	2	U
79-46-9	2-nitropropane	20	U
76-01-7	pentachloroethane	20	U
107-12-0	propionitrile	20	U
103-65-1	n-propylbenzene	2	U
100-42-5	styrene	2	U
630-20-6	1,1,1,2-tetrachloroethane	2	U
79-34-5	1,1,2,2-tetrachloroethane	2	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
VBLK03

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: BLK7/19

Sample wt/vol: 5.0 (g/mL) G Lab File ID: B1S87112.D

Level: (low/med) LOW Date Collected: 7/19/96

% Moisture: not dec. 0 Date Analyzed: 7/19/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
127-18-4	tetrachloroethene	2	U
109-99-9	tetrahydrofuran	20	U
108-88-3	toluene	2	U
87-61-6	1,2,3-trichlorobenzene	2	U
120-82-1	1,2,4-trichlorobenzene	2	U
71-55-6	1,1,1-trichloroethane	2	U
79-00-5	1,1,2-trichloroethane	2	U
79-01-6	trichloroethene	2	U
75-69-4	trichlorofluoromethane	2	U
96-18-4	1,2,3-trichloropropane	2	U
95-63-6	1,2,4-trimethylbenzene	2	U
108-67-8	1,3,5-trimethylbenzene	2	U
75-01-4	vinyl chloride	2	U
108-38-3;10	m/p-xylene	2	U
95-47-6	o-xylene	2	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
VBLK04

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: BLK7/23

Sample wt/vol: 5.0 (g/mL) G Lab File ID: B1S87134.D

Level: (low/med) LOW Date Collected: 7/23/96

% Moisture: not dec. 0 Date Analyzed: 7/23/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
67-64-1	acetone	20	U
107-13-1	acrylonitrile	20	U
107-05-1	allyl chloride	20	U
71-43-2	benzene	2	U
108-86-1	bromobenzene	2	U
74-97-5	bromochloromethane	2	U
75-27-4	bromodichloromethane	2	U
75-25-2	bromoform	2	U
74-83-9	bromomethane	2	U
78-93-3	2-butanone	20	U
104-51-8	n-butylbenzene	2	U
135-98-8	sec-butylbenzene	2	U
98-06-6	tert-butylbenzene	2	U
75-15-0	carbon disulfide	20	U
56-23-5	carbon tetrachloride	2	U
107-14-2	chloroacetonitrile	20	U
108-90-7	chlorobenzene	2	U
109-69-3	1-chlorobutane	20	U
75-00-3	chloroethane	2	U
67-66-3	chloroform	2	U
74-87-3	chloromethane	2	U
95-49-8	2-chlorotoluene	2	U
106-43-4	4-chlorotoluene	2	U
124-48-1	dibromochloromethane	2	U
96-12-8	1,2-dibromo-3-chloropropane	2	U
106-93-4	1,2-dibromoethane	2	U
74-95-3	dibromomethane	2	U
95-50-1	1,2-dichlorobenzene	2	U
541-73-1	1,3-dichlorobenzene	2	U
106-46-7	1,4-dichlorobenzene	2	U
110-57-6	trans-1,4-dichloro-2-butene	20	U
75-71-8	dichlorodifluoromethane	2	U
75-34-3	1,1-dichloroethane	2	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
VBLK04

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: BLK7/23

Sample wt/vol: 5.0 (g/mL) G Lab File ID: B1S87134.D

Level: (low/med) LOW Date Collected: 7/23/96

% Moisture: not dec. 0 Date Analyzed: 7/23/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
107-06-2	1,2-dichloroethane	2	U
75-35-4	1,1-dichloroethene	2	U
156-59-2	cis-1,2-dichloroethene	2	U
156-60-5	trans-1,2-dichloroethene	2	U
78-87-5	1,2-dichloropropane	2	U
142-28-9	1,3-dichloropropane	2	U
590-20-7	2,2-dichloropropane	2	U
563-58-6	1,1-dichloropropene	2	U
10061-01-5	cis-1,3-dichloropropene	2	U
10061-02-6	trans-1,3-dichloropropene	2	U
100-41-4	ethylbenzene	2	U
60-29-7	ethyl ether	20	U
97-63-2	ethyl methacrylate	20	U
87-68-3	hexachlorobutadiene	2	U
67-72-1	hexachloroethane	20	U
591-78-6	2-hexanone	20	U
74-88-4	iodomethane	20	U
98-82-8	isopropylbenzene	2	U
99-87-6	4-isopropyltoluene	2	U
126-98-7	methacrylonitrile	20	U
96-33-3	methyl acrylate	20	U
1634-04-4	methyl-t-butyl ether	20	U
80-62-6	methyl methacrylate	20	U
75-09-2	methylene chloride	2	U
108-10-1	4-methyl-2-pentanone	20	U
91-20-3	naphthalene	2	U
79-46-9	2-nitropropane	20	U
76-01-7	pentachloroethane	20	U
107-12-0	propionitrile	20	U
103-65-1	n-propylbenzene	2	U
100-42-5	styrene	2	U
630-20-6	1,1,1,2-tetrachloroethane	2	U
79-34-5	1,1,2,2-tetrachloroethane	2	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
VBLK04

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: BLK7/23

Sample wt/vol: 5.0 (g/mL) G Lab File ID: B1S87134.D

Level: (low/med) LOW Date Collected: 7/23/96

% Moisture: not dec. 0 Date Analyzed: 7/23/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
127-18-4	tetrachloroethene	2	U
109-99-9	tetrahydrofuran	20	U
108-88-3	toluene	2	U
87-61-6	1,2,3-trichlorobenzene	2	U
120-82-1	1,2,4-trichlorobenzene	2	U
71-55-6	1,1,1-trichloroethane	2	U
79-00-5	1,1,2-trichloroethane	2	U
79-01-6	trichloroethene	2	U
75-69-4	trichlorofluoromethane	2	U
96-18-4	1,2,3-trichloropropane	2	U
95-63-6	1,2,4-trimethylbenzene	2	U
108-67-8	1,3;5-trimethylbenzene	2	U
75-01-4	vinyl chloride	2	U
108-38-3;10	m/p-xylene	2	U
95-47-6	o-xylene	2	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9938MS

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: SS-2MS

Sample wt/vol: 5.0 (g/mL) G Lab File ID: M1S87129.D

Level: (low/med) LOW Date Collected: 7/10/96

% Moisture: not dec. 0 Date Analyzed: 7/23/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
67-64-1	acetone	21	
107-13-1	acrylonitrile	20	U
107-05-1	allyl chloride	20	U
71-43-2	benzene	20	
108-86-1	bromobenzene	21	
74-97-5	bromochloromethane	22	
75-27-4	bromodichloromethane	20	
75-25-2	bromoform	20	
74-83-9	bromomethane	2	U
78-93-3	2-butanone	20	U
104-51-8	n-butylbenzene	22	
135-98-8	sec-butylbenzene	22	
98-06-6	tert-butylbenzene	12	
75-15-0	carbon disulfide	20	U
56-23-5	carbon tetrachloride	26	
107-14-2	chloroacetonitrile	20	U
108-90-7	chlorobenzene	21	
109-69-3	1-chlorobutane	20	U
75-00-3	chloroethane	2	U
67-66-3	chloroform	20	
74-87-3	chloromethane	2	U
95-49-8	2-chlorotoluene	20	
106-43-4	4-chlorotoluene	21	
124-48-1	dibromochloromethane	21	
96-12-8	1,2-dibromo-3-chloropropane	21	
106-93-4	1,2-dibromoethane	20	
74-95-3	dibromomethane	21	
95-50-1	1,2-dichlorobenzene	20	
541-73-1	1,3-dichlorobenzene	20	
106-46-7	1,4-dichlorobenzene	21	
110-57-6	trans-1,4-dichloro-2-butene	12	J
75-71-8	dichlorodifluoromethane	2	U
75-34-3	1,1-dichloroethane	18	

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9938MS

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: SS-2MS

Sample wt/vol: 5.0 (g/mL) G Lab File ID: M1S87129.D

Level: (low/med) LOW Date Collected: 7/10/96

% Moisture: not dec. 0 Date Analyzed: 7/23/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
107-06-2	1,2-dichloroethane	22	
75-35-4	1,1-dichloroethene	27	
156-59-2	cis-1,2-dichloroethene	20	
156-60-5	trans-1,2-dichloroethene	22	
78-87-5	1,2-dichloropropane	17	
142-28-9	1,3-dichloropropane	20	
590-20-7	2,2-dichloropropane	21	
563-58-6	1,1-dichloropropene	25	
10061-01-5	cis-1,3-dichloropropene	8.3	
10061-02-6	trans-1,3-dichloropropene	9	
100-41-4	ethylbenzene	21	
60-29-7	ethyl ether	20	U
97-63-2	ethyl methacrylate	20	U
87-68-3	hexachlorobutadiene	17	
67-72-1	hexachloroethane	20	U
591-78-6	2-hexanone	20	U
74-88-4	iodomethane	20	U
98-82-8	isopropylbenzene	26	
99-87-6	4-isopropyltoluene	22	
126-98-7	methacrylonitrile	20	U
96-33-3	methyl acrylate	20	U
1634-04-4	methyl-t-butyl ether	20	U
80-62-6	methyl methacrylate	20	U
75-09-2	methylene chloride	25	
108-10-1	4-methyl-2-pentanone	1.3	J
91-20-3	naphthalene	21	
79-46-9	2-nitropropane	20	U
76-01-7	pentachloroethane	20	U
107-12-0	propionitrile	20	U
103-65-1	n-propylbenzene	21	
100-42-5	styrene	20	
630-20-6	1,1,1,2-tetrachloroethane	23	
79-34-5	1,1,2,2-tetrachloroethane	21	

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9938MS

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: SS-2MS

Sample wt/vol: 5.0 (g/mL) G Lab File ID: M1S87129.D

Level: (low/med) LOW Date Collected: 7/10/96

% Moisture: not dec. 0 Date Analyzed: 7/23/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
127-18-4	tetrachloroethene	10	
109-99-9	tetrahydrofuran	20	U
108-88-3	toluene	19	
87-61-6	1,2,3-trichlorobenzene	18	
120-82-1	1,2,4-trichlorobenzene	18	
71-55-6	1,1,1-trichloroethane	23	
79-00-5	1,1,2-trichloroethane	19	
79-01-6	trichloroethene	21	
75-69-4	trichlorofluoromethane	1.1	J
96-18-4	1,2,3-trichloropropane	6.9	
95-63-6	1,2,4-trimethylbenzene	22	
108-67-8	1,3,5-trimethylbenzene	22	
75-01-4	vinyl chloride	2	U
108-38-3:10	m/p-xylene	42	
95-47-6	o-xylene	20	

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9938MSD

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: SS-2MSD

Sample wt/vol: 5.0 (g/mL) G Lab File ID: M1S87130.D

Level: (low/med) LOW Date Collected: 7/10/96

% Moisture: not dec. 0 Date Analyzed: 7/23/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
67-64-1	acetone	9.8	J
107-13-1	acrylonitrile	20	U
107-05-1	allyl chloride	20	U
71-43-2	benzene	20	
108-86-1	bromobenzene	22	
74-97-5	bromochloromethane	22	
75-27-4	bromodichloromethane	20	
75-25-2	bromoform	19	
74-83-9	bromomethane	2	U
78-93-3	2-butanone	20	U
104-51-8	n-butylbenzene	20	
135-98-8	sec-butylbenzene	21	
98-06-6	tert-butylbenzene	13	
75-15-0	carbon disulfide	20	U
56-23-5	carbon tetrachloride	26	
107-14-2	chloroacetonitrile	20	U
108-90-7	chlorobenzene	21	
109-69-3	1-chlorobutane	20	U
75-00-3	chloroethane	2	U
67-66-3	chloroform	20	
74-87-3	chloromethane	2	U
95-49-8	2-chlorotoluene	21	
106-43-4	4-chlorotoluene	21	
124-48-1	dibromochloromethane	21	
96-12-8	1,2-dibromo-3-chloropropane	19	
106-93-4	1,2-dibromoethane	20	
74-95-3	dibromomethane	20	
95-50-1	1,2-dichlorobenzene	20	
541-73-1	1,3-dichlorobenzene	20	
106-46-7	1,4-dichlorobenzene	20	
110-57-6	trans-1,4-dichloro-2-butene	13	J
75-71-8	dichlorodifluoromethane	2	U
75-34-3	1,1-dichloroethane	18	

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9938MSD

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: SS-2MSD

Sample wt/vol: 5.0 (g/mL) G Lab File ID: M1S87130.D

Level: (low/med) LOW Date Collected: 7/10/96

% Moisture: not dec. 0 Date Analyzed: 7/23/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
107-06-2	1,2-dichloroethane	22	
75-35-4	1,1-dichloroethene	28	
156-59-2	cis-1,2-dichloroethene	21	
156-60-5	trans-1,2-dichloroethene	22	
78-87-5	1,2-dichloropropane	17	
142-28-9	1,3-dichloropropane	20	
590-20-7	2,2-dichloropropane	21	
563-58-6	1,1-dichloropropene	25	
10061-01-5	cis-1,3-dichloropropene	8.2	
10061-02-6	trans-1,3-dichloropropene	8.8	
100-41-4	ethylbenzene	21	
60-29-7	ethyl ether	20	U
97-63-2	ethyl methacrylate	20	U
87-68-3	hexachlorobutadiene	17	
67-72-1	hexachloroethane	20	U
591-78-6	2-hexanone	20	U
74-88-4	iodomethane	20	U
98-82-8	isopropylbenzene	27	
99-87-6	4-isopropyltoluene	21	
126-98-7	methacrylonitrile	20	U
96-33-3	methyl acrylate	20	U
1634-04-4	methyl-t-butyl ether	20	U
80-62-6	methyl methacrylate	20	U
75-09-2	methylene chloride	25	
108-10-1	4-methyl-2-pentanone	1.1	J
91-20-3	naphthalene	15	
79-46-9	2-nitropropane	20	U
76-01-7	pentachloroethane	20	U
107-12-0	propionitrile	20	U
103-65-1	n-propylbenzene	21	
100-42-5	styrene	20	
630-20-6	1,1,1,2-tetrachloroethane	22	
79-34-5	1,1,2,2-tetrachloroethane	21	

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9938MSD

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260ASOI

Matrix: (soil/water) SOIL Lab Sample ID: SS-2MSD

Sample wt/vol: 5.0 (g/mL) G Lab File ID: M1S87130.D

Level: (low/med) LOW Date Collected: 7/10/96

% Moisture: not dec. 0 Date Analyzed: 7/23/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
127-18-4	tetrachloroethene	11	
109-99-9	tetrahydrofuran	20	U
108-88-3	toluene	19	
87-61-6	1,2,3-trichlorobenzene	14	
120-82-1	1,2,4-trichlorobenzene	14	
71-55-6	1,1,1-trichloroethane	23	
79-00-5	1,1,2-trichloroethane	18	
79-01-6	trichloroethene	21	
75-69-4	trichlorofluoromethane	2	U
96-18-4	1,2,3-trichloropropane	6.6	
95-63-6	1,2,4-trimethylbenzene	21	
108-67-8	1,3,5-trimethylbenzene	21	
75-01-4	vinyl chloride	2	U
108-38-3;10	m/p-xylene	42	
95-47-6	o-xylene	20	

2B

SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY FIELD Date: _____ Group: 8260ASOIL

Level: (low/med) LOW

	SAMPLE NO.	SMC1 DBF #	SMC2 TOL #	SMC3 BFB #	OTHER #	TOT OUT
01	VBLK02	101	94	96		
02	D9937	103	96	92		
03	D9939	106	93	99		
04	D9940	104	97	94		
05	D9941	102	96	87		
06	D9942	102	95	86		
07	D9943	103	93	99		
08	D9944	101	94	90		
09	D9945	104	93	102		
10	VBLK03	103	98	90		
11	D9938	107	94	95		
12	D9938MS	110	95	91		
13	D9938MSD	108	94	96		
14	VBLK04	103	97	95		
15						
16						
17						
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19						
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23						
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25						
26						
27						
28						
29						
30						

	QC LIMITS
SMC1 DBF = DIBROMOFLUOROMETHANE	(80-120)
SMC2 TOL = TOLUENE-D8	(81-117)
SMC3 BFB = 4-BROMOFLUOROBENZENE	(74-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: _____ Group: 8260ASOIL

Matrix Spike - Sample No.: D9938 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
benzene	20	0	20	100	(66-142)
chlorobenzene	20	0	21	105	(60-133)
1,1-dichloroethene	20	0	27	135	(59-172)
toluene	20	0	19	95	(59-139)
trichloroethene	20	0	21	105	(62-137)

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MS % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
benzene	20	20	100	0	20	(66-142)
chlorobenzene	20	21	105	0	20	(60-133)
1,1-dichloroethene	20	28	140	4	20	(59-172)
toluene	20	19	95	0	20	(59-139)
trichloroethene	20	21	105	0	20	(62-137)

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

Comments: _____

4A

VOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

VBLK02

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY FIELDLocation: Group: 8260ASOIL

Lab File ID: B1S87095.D Lab Sample ID: BLK7/18

Date Analyzed: 7/18/96 Time Analyzed: 1718

GC Column: DB624 ID: 0.53 (mm) Heated Purge: (Y/N) Y

Instrument ID: VOC1

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	D9937	SS-1	S1S87096.D	1757
02	D9939	SS-3	S1S87098.D	1915
03	D9940	SS-5	S1S87099.D	1954
04	D9941	SS-D	S1S87100.D	2034
05	D9942	SS-6	S1S87101.D	2113
06	D9943	SS-7	S1S87102.D	2152
07	D9944	SS-8	S1S87103.D	2232
08	D9945	SS-9	S1S87104.D	2311
09				
10				
11				
12				
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COMMENTS:

4A

VOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

VBLK03

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY FIELDLocation: Group: 8260ASOIL

Lab File ID: B1S87112.D Lab Sample ID: BLK7/19

Date Analyzed: 7/19/96 Time Analyzed: 0855

GC Column: DB624 ID: 0.53 (mm) Heated Purge: (Y/N) Y

Instrument ID: VOC1

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	D9938	SS-2	S1S87113.D	0935
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
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COMMENTS:

4A

VOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

VBLK04

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY FIELDLocation: Group: 8260ASOIL

Lab File ID: B1S87134.D Lab Sample ID: BLK7/23

Date Analyzed: 7/23/96 Time Analyzed: 1726

GC Column: DB624 ID: 0.53 (mm) Heated Purge: (Y/N) Y

Instrument ID: VOC1

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	D9938MS	SS-2MS	M1S87129.D	1402
02	D9938MSD	SS-2MSD	M1S87130.D	1441
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
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COMMENTS:

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY FIELD AASFion: _____ Group: 8260ASOIL

Lab File ID: T1W87002.D BFB Injection Date: 7/9/96

Instrument ID: VOC1 BFB Injection Time: 1236

GC Column: DB624 ID: 0.53 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	25.1
75	30.0 - 60.0% of mass 95	45.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.3
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50% of mass 95	72.9
175	5.0 - 9.0% of mass 174	5.3 (7.3)1
176	95.0 - 101.0% of mass 174	70.9 (97.2)1
177	5.0 - 9.0% of mass 176	4.6 (6.5)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD010	2PPBSTD	C1S87010.D	7/9/96	1829
02	VSTD020	10PPBSTD	C1S87012.D	7/9/96	1956
03	VSTD050	20PPBSTD	C1S87013.D	7/9/96	2039
04	VSTD100	50PPBSTD	C1S87014.D	7/9/96	2123
05	VSTD200	100PPBST	C1S87015.D	7/9/96	2208
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY FIELD AASFion: _____ Group: 8260ASOIL

Lab File ID: T1S87092.D BFB Injection Date: 7/18/96

Instrument ID: VOC1 BFB Injection Time: 1525

GC Column: DB624 ID: 0.53 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	31.7
75	30.0 - 60.0% of mass 95	53.6
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.5
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50% of mass 95	79.7
175	5.0 - 9.0% of mass 174	6.2 (7.8)1
176	95.0 - 101.0% of mass 174	78.3 (98.3)1
177	5.0 - 9.0% of mass 176	6.7 (8.5)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	CC20PPB1	K1S87093.D	7/18/96	1601
02	VBLK02	BLK7/18	B1S87095.D	7/18/96	1718
03	D9937	SS-1	S1S87096.D	7/18/96	1757
04	D9939	SS-3	S1S87098.D	7/18/96	1915
05	D9940	SS-5	S1S87099.D	7/18/96	1954
06	D9941	SS-D	S1S87100.D	7/18/96	2034
07	D9942	SS-6	S1S87101.D	7/18/96	2113
08	D9943	SS-7	S1S87102.D	7/18/96	2152
09	D9944	SS-8	S1S87103.D	7/18/96	2232
10	D9945	SS-9	S1S87104.D	7/18/96	2311
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5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY FIELD AASEtion: _____ Group: 8260ASOIL

Lab File ID: T1S87109.D BFB Injection Date: 7/19/96

Instrument ID: VOC1 BFB Injection Time: 0654

GC Column: DB624 ID: 0.53 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	29.3
75	30.0 - 60.0% of mass 95	51.6
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50% of mass 95	85.4
175	5.0 - 9.0% of mass 174	5.4 (6.3)1
176	95.0 - 101.0% of mass 174	83.6 (97.8)1
177	5.0 - 9.0% of mass 176	4.5 (5.3)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	CC20PPB2	K1S87110.D	7/19/96	0736
02	VBLK03	BLK7/19	B1S87112.D	7/19/96	0855
03	D9938	SS-2	S1S87113.D	7/19/96	0935
04					
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5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY FIELD AASEfion: _____ Group: 8260ASOIL

Lab File ID: T1W87123.D BFB Injection Date: 7/23/96

Instrument ID: VOC1 BFB Injection Time: 0853

GC Column: DB624 ID: 0.53 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	31.5
75	30.0 - 60.0% of mass 95	54.4
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.6
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50% of mass 95	86.6
175	5.0 - 9.0% of mass 174	5.6 (6.5)1
176	95.0 - 101.0% of mass 174	87.1 (100.6)1
177	5.0 - 9.0% of mass 176	6.0 (6.9)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	CC20PPB3	K1S87127.D	7/23/96	1115
02	D9938MS	SS-2MS	M1S87129.D	7/23/96	1402
03	D9938MSD	SS-2MSD	M1S87130.D	7/23/96	1441
04	VBLK04	BLK7/23	B1S87134.D	7/23/96	1726
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6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY FIELD AASEation: Group: 8260ASOIL

Instrument ID: VOC1 Calibration Date(s): 7/9/96 7/9/96

Heated Purge: (Y/N) Y Calibration Times: 1829 2208

GC Column DB624 ID: 0.53 (mm)

Lab File ID: RRF10 = C1S87010.D RRF20 = C1S87012.D
RRF50 = C1S87013.D RRF100 = C1S87014.D RRF200 = C1S87015.D

COMPOUND	RRF10	RRF20	RRF50	RRF100	RRF200	$\overline{RRF}$	% RSD	
acetone	0.309	0.280	0.271	0.267	0.241	0.273	9.1	
acrylonitrile	0.235	0.250	0.255	0.247	0.234	0.244	3.8	
allyl chloride	0.198	0.203	0.173	0.195	0.183	0.190	6.4	
benzene	1.421	1.259	1.111	1.192	1.137	1.224	10.1	
bromobenzene	1.003	0.936	0.884	0.945	0.944	0.942	4.5	
bromochloromethane	0.262	0.282	0.266	0.281	0.275	0.273	3.3	
bromodichloromethane	0.706	0.681	0.646	0.681	0.669	0.676	3.2	
bromoform *	0.582	0.576	0.598	0.661	0.644	0.612	6.2	*
bromomethane	0.343	0.242	0.228	0.271	0.278	0.272	16.3	
2-butanone	0.495	0.529	0.524	0.529	0.508	0.517	2.9	
n-butylbenzene	1.966	2.005	1.806	2.095	1.913	1.957	5.5	
sec-butylbenzene	2.952	2.893	2.508	2.988	2.935	2.855	6.9	
tert-butylbenzene	6.316	4.130	3.813	4.009	3.718	4.397	24.7	
carbon disulfide	1.389	1.442	1.157	1.363	1.290	1.328	8.3	
carbon tetrachloride	0.579	0.518	0.430	0.495	0.444	0.493	12.1	
chloroacetonitrile	0.027	0.030	0.031	0.028	0.026	0.028	6.3	
chlorobenzene *	1.251	1.137	1.009	1.110	1.073	1.116	8.0	*
1-chlorobutane	0.950	0.906	0.737	0.793	0.711	0.819	12.8	
chloroethane	0.278	0.284	0.247	0.275	0.301	0.277	7.1	
chloroform *	1.131	1.042	0.942	1.089	1.102	1.061	7.0	*
chloromethane *	0.781	0.715	0.616	0.791	0.839	0.748	11.5	*
2-chlorotoluene	2.788	2.523	2.160	2.404	2.473	2.470	9.1	
4-chlorotoluene	3.233	2.810	2.546	2.757	2.677	2.804	9.2	
dibromochloromethane	0.690	0.687	0.668	0.744	0.732	0.704	4.6	
1,2-dibromo-3-chloropropane	0.305	0.327	0.348	0.359	0.363	0.340	7.1	
1,2-dibromoethane	0.680	0.634	0.606	0.653	0.629	0.640	4.4	
dibromomethane	0.405	0.361	0.368	0.366	0.350	0.370	5.7	
1,2-dichlorobenzene	1.775	1.529	1.400	1.490	1.511	1.541	9.1	
1,3-dichlorobenzene	1.842	1.588	1.505	1.598	1.619	1.630	7.7	
1,4-dichlorobenzene	1.893	1.606	1.468	1.592	1.550	1.622	9.9	
trans-1,4-dichloro-2-butene	0.201	0.215	0.211	0.221	0.218	0.213	3.7	
dichlorodifluoromethane	0.679	0.671	0.500	0.699	0.672	0.644	12.6	
1,1-dichloroethane *	1.249	1.121	0.967	1.143	1.163	1.129	9.1	*
1,2-dichloroethane	0.754	0.718	0.692	0.696	0.664	0.705	4.7	
1,1-dichloroethene *	0.281	0.279	0.229	0.286	0.291	0.273	9.2	*
cis-1,2-dichloroethene	0.526	0.494	0.435	0.496	0.502	0.491	6.9	

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

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FORM VI VOA 3/90

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY FIELD AASEation: Group: 8260ASOIL

Instrument ID: VOC1 Calibration Date(s): 7/9/96 7/9/96

Heated Purge: (Y/N) Y Calibration Times: 1829 2208

GC Column DB624 ID: 0.53 (mm)

Lab File ID: RRF10 = C1S87010.D RRF20 = C1S87012.D
RRF50 = C1S87013.D RRF100 = C1S87014.D RRF200 = C1S87015.D

COMPOUND	RRF10	RRF20	RRF50	RRF100	RRF200	$\overline{RRF}$	% RSD	
trans-1,2-dichloroethene	0.444	0.413	0.358	0.427	0.423	0.413	7.9	
1,2-dichloropropane *	0.584	0.503	0.463	0.483	0.460	0.498	10.2	*
1,3-dichloropropane	0.937	0.862	0.824	0.833	0.799	0.851	6.2	
2,2-dichloropropane	0.727	0.697	0.580	0.743	0.760	0.701	10.2	
1,1-dichloropropene	0.165	0.159	0.130	0.143	0.131	0.146	11.1	
cis-1,3-dichloropropene	1.450	1.350	1.291	1.361	1.309	1.352	4.6	
trans-1,3-dichloropropene	1.234	1.144	1.142	1.201	1.186	1.181	3.3	
ethylbenzene *	2.164	1.915	1.651	1.848	1.746	1.865	10.5	*
ethyl ether	0.394	0.404	0.379	0.393	0.383	0.391	2.5	
ethyl methacrylate	0.870	0.844	0.813	0.781	0.718	0.805	7.4	
hexachlorobutadiene	0.726	0.715	0.602	0.719	0.805	0.713	10.2	
hexachloroethane	0.748	0.755	0.647	0.692	0.642	0.696	7.7	
2-hexanone	0.327	0.346	0.338	0.327	0.297	0.327	5.7	
iodomethane	0.606	0.653	0.588	0.632	0.574	0.611	5.2	
isopropylbenzene	2.662	2.471	2.150	2.511	2.543	2.467	7.8	
4-isopropyltoluene	2.153	2.083	1.859	2.189	2.108	2.078	6.2	
methacrylonitrile	0.213	0.228	0.226	0.225	0.215	0.221	3.1	
methyl acrylate	0.611	0.659	0.654	0.665	0.656	0.649	3.3	
methyl-t-butyl ether	1.420	1.450	1.352	1.407	1.386	1.403	2.6	
methyl methacrylate	0.325	0.338	0.331	0.310	0.280	0.317	7.3	
methylene chloride	0.400	0.382	0.326	0.382	0.368	0.372	7.5	
4-methyl-2-pentanone	0.242	0.240	0.240	0.220	0.196	0.228	8.6	
naphthalene	1.576	1.626	1.709	1.567	1.259	1.547	11.0	
2-nitropropane	0.217	0.241	0.241	0.239	0.222	0.232	4.9	
pentachloroethane	0.469	0.476	0.446	0.471	0.441	0.461	3.5	
propionitrile	0.091	0.101	0.116	0.101	0.111	0.104	9.1	
n-propylbenzene	4.183	3.688	3.156	3.711	3.986	3.745	10.4	
styrene	1.137	1.042	0.968	1.014	0.959	1.024	7.0	
1,1,1,2-tetrachloroethane	0.474	0.487	0.444	0.479	0.472	0.471	3.4	
1,1,2,2-tetrachloroethane *	1.252	1.296	1.277	1.299	1.274	1.280	1.5	*
tetrachloroethene	2.165	1.342	1.098	1.077	0.935	1.323	37.2	
tetrahydrofuran	0.069	0.081	0.080	0.080	0.075	0.077	6.1	
toluene *	0.778	0.712	0.617	0.672	0.635	0.683	9.5	*
1,2,3-trichlorobenzene	0.865	0.849	0.891	0.884	0.783	0.854	5.0	
1,2,4-trichlorobenzene	0.902	0.897	0.894	0.931	0.824	0.890	4.4	
1,1,1-trichloroethane	0.788	0.749	0.624	0.781	0.801	0.749	9.7	

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

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6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY FIELD AASEation: Group: 8260ASOIL

Instrument ID: VOC1 Calibration Date(s): 7/9/96 7/9/96

Heated Purge: (Y/N) Y Calibration Times: 1829 2208

GC Column DB624 ID: 0.53 (mm)

Lab File ID: RRF10 = C1S87010.D RRF20 = C1S87012.D
RRF50 = C1S87013.D RRF100 = C1S87014.D RRF200 = C1S87015.D

COMPOUND	RRF10	RRF20	RRF50	RRF100	RRF200	$\overline{RRF}$	% RSD
1,1,2-trichloroethane	0.382	0.336	0.333	0.326	0.311	0.337	7.9
trichloroethene	0.497	0.435	0.373	0.412	0.386	0.421	11.7
trichlorofluoromethane	0.628	0.636	0.498	0.632	0.534	0.585	11.1
1,2,3-trichloropropane	5.381	3.418	3.407	3.401	3.323	3.786	23.6
1,2,4-trimethylbenzene	2.141	2.098	2.007	2.238	2.052	2.107	4.2
1,3,5-trimethylbenzene	2.410	2.301	2.061	2.321	2.149	2.248	6.3
vinyl chloride *	0.555	0.573	0.455	0.590	0.577	0.550	10.0 *
m/p-xylene	0.706	0.637	0.559	0.604	0.553	0.612	10.3
o-xylene	0.712	0.614	0.547	0.600	0.548	0.604	11.2
DIBROMOFLUOROMETHANE	0.631	0.636	0.649	0.682	0.718	0.663	5.5
TOLUENE-D8	1.017	1.026	1.033	1.014	1.030	1.024	0.8
4-BROMOFLUOROBENZENE	1.348	1.327	1.354	1.364	1.478	1.374	4.3

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

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7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No. 38-EH-2651 Site: BRADLEY FIELD AASEation: Group: 8260ASOIL

Instrument ID: VOC1 Calibration Date: 7/18/96 Time: 1601

Lab File ID: K1S87093.D Init. Calib. Date(s): 7/9/96 7/9/96

Heated Purge: (Y/N) Y Init. Calib. Times: 1829 2208

GC Column: DB624 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
acetone	0.273	0.258		5.5	
acrylonitrile	0.244	0.193		20.9	
allyl chloride	0.190	0.214		-12.6	
benzene	1.224	1.202		1.8	
bromobenzene	0.942	1.005		-6.7	
bromochloromethane	0.273	0.289		-5.9	
bromodichloromethane	0.676	0.706		-4.4	
bromoform	0.612	0.622	0.100	-1.6	
bromomethane	0.272	0.384		-41.2	
2-butanone	0.517	0.379		26.7	
n-butylbenzene	1.957	1.923		1.7	
sec-butylbenzene	2.855	2.997		-5.0	
tert-butylbenzene	4.397	4.472		-1.7	
carbon disulfide	1.328	1.468		-10.5	
carbon tetrachloride	0.493	0.586		-18.9	
chloroacetonitrile	0.028	0.025		10.7	
chlorobenzene	1.116	1.161	0.300	-4.0	
1-chlorobutane	0.819	0.795		2.9	
chloroethane	0.277	0.370		-33.6	
chloroform	1.061	1.069		-0.8	20.0
chloromethane	0.748	0.807	0.100	-7.9	
2-chlorotoluene	2.470	2.579		-4.4	
4-chlorotoluene	2.804	2.911		-3.8	
dibromochloromethane	0.704	0.741		-5.3	
1,2-dibromo-3-chloropropane	0.340	0.305		10.3	
1,2-dibromoethane	0.640	0.629		1.7	
dibromomethane	0.370	0.391		-5.7	
1,2-dichlorobenzene	1.541	1.611		-4.5	
1,3-dichlorobenzene	1.630	1.709		-4.8	
1,4-dichlorobenzene	1.622	1.713		-5.6	
trans-1,4-dichloro-2-butene	0.213	0.223		-4.7	
dichlorodifluoromethane	0.644	0.976		-51.6	
1,1-dichloroethane	1.129	0.984	0.100	12.8	
1,2-dichloroethane	0.705	0.720		-2.1	
1,1-dichloroethene	0.273	0.288		-5.5	20.0
cis-1,2-dichloroethene	0.490	0.476		2.9	

All other compounds must meet a minimum RRF of 0.010.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No. 38-EH-2651 Site: BRADLEY FIELD AASEation: Group: 8260ASOIL

Instrument ID: VOC1 Calibration Date: 7/18/96 Time: 1601

Lab File ID: K1S87093.D Init. Calib. Date(s): 7/9/96 7/9/96

Heated Purge: (Y/N) Y Init. Calib. Times: 1829 2208

GC Column: DB624 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
trans-1,2-dichloroethene	0.413	0.423		-2.4	
1,2-dichloropropane	0.498	0.414		16.9	20.0
1,3-dichloropropane	0.851	0.828		2.7	
2,2-dichloropropane	0.701	0.696		0.7	
1,1-dichloropropene	0.146	0.159		-8.9	
cis-1,3-dichloropropene	1.352	1.278		5.5	
trans-1,3-dichloropropene	1.181	1.105		6.4	
ethylbenzene	1.865	1.893		-1.5	20.0
ethyl ether	0.391	0.391		0.0	
ethyl methacrylate	0.805	0.750		6.8	
hexachlorobutadiene	0.713	0.577		19.1	
hexachloroethane	0.696	0.730		-4.9	
2-hexanone	0.327	0.300		8.3	
iodomethane	0.611	0.752		-23.1	
isopropylbenzene	2.467	2.720		-10.3	
4-isopropyltoluene	2.078	2.125		-2.3	
methacrylonitrile	0.221	0.188		14.9	
methyl acrylate	0.649	0.520		19.9	
methyl-t-butyl ether	1.403	1.305		7.0	
methyl methacrylate	0.317	0.285		10.1	
methylene chloride	0.372	0.522		-40.3	
4-methyl-2-pentanone	0.228	0.185		18.9	
naphthalene	1.547	1.413		8.7	
2-nitropropane	0.232	0.197		15.1	
pentachloroethane	0.461	0.546		-18.4	
propionitrile	0.104	0.081		22.1	
n-propylbenzene	3.745	4.186		-11.8	
styrene	1.024	1.048		-2.3	
1,1,1,2-tetrachloroethane	0.471	0.511		-8.5	
1,1,2,2-tetrachloroethane	1.280	1.275	0.300	0.4	
tetrachloroethene	1.323	1.313		0.8	
tetrahydrofuran	0.077	0.066		14.3	
toluene	0.683	0.670		1.9	20.0
1,2,3-trichlorobenzene	0.854	0.747		12.5	
1,2,4-trichlorobenzene	0.890	0.790		11.2	
1,1,1-trichloroethane	0.748	0.777		-3.9	

All other compounds must meet a minimum RRF of 0.010.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No. 38-EH-2651 Site: BRADLEY FIELD AASEation: Group: 8260ASOIL

Instrument ID: VOC1 Calibration Date: 7/18/96 Time: 1601

Lab File ID: K1S87093.D Init. Calib. Date(s): 7/9/96 7/9/96

Heated Purge: (Y/N) Y Init. Calib. Times: 1829 2208

GC Column: DB624 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
1,1,2-trichloroethane	0.337	0.316		6.2	
trichloroethene	0.421	0.431		-2.4	
trichlorofluoromethane	0.585	0.913		-56.1	
1,2,3-trichloropropane	3.786	3.184		15.9	
1,2,4-trimethylbenzene	2.107	2.104		0.1	
1,3,5-trimethylbenzene	2.248	2.401		-6.8	
vinyl chloride	0.550	0.644		-17.1	20.0
m/p-xylene	0.612	0.650		-6.2	
o-xylene	0.604	0.617		-2.2	
DIBROMOFLUOROMETHANE	0.663	0.677		-2.1	
TOLUENE-D8	1.024	0.998		2.5	
4-BROMOFLUOROBENZENE	1.374	1.257		8.5	

All other compounds must meet a minimum RRF of 0.010.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No. 38-EH-2651 Site: BRADLEY FIELD AASFation: Group: 8260ASOIL

Instrument ID: VOC1 Calibration Date: 7/19/96 Time: 0736

Lab File ID: K1S87110.D Init. Calib. Date(s): 7/9/96 7/9/96

Heated Purge: (Y/N) Y Init. Calib. Times: 1829 2208

GC Column: DB624 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
acetone	0.273	0.218		20.1	
acrylonitrile	0.244	0.177		27.5	
allyl chloride	0.190	0.224		-17.9	
benzene	1.224	1.131		7.6	
bromobenzene	0.942	0.946		-0.4	
bromochloromethane	0.273	0.303		-11.0	
bromodichloromethane	0.676	0.714		-5.6	
bromoform	0.612	0.624	0.100	-2.0	
bromomethane	0.272	0.405		-48.9	
2-butanone	0.517	0.315		39.1	
n-butylbenzene	1.957	2.344		-19.8	
sec-butylbenzene	2.855	3.109		-8.9	
tert-butylbenzene	4.397	4.631		-5.3	
carbon disulfide	1.328	1.492		-12.3	
carbon tetrachloride	0.493	0.598		-21.3	
chloroacetonitrile	0.028	0.023		17.9	
chlorobenzene	1.116	1.135	0.300	-1.7	
1-chlorobutane	0.819	0.755		7.8	
chloroethane	0.277	0.356		-28.5	
chloroform	1.061	1.104		-4.1	20.0
chloromethane	0.748	0.730	0.100	2.4	
2-chlorotoluene	2.470	2.387		3.4	
4-chlorotoluene	2.804	2.818		-0.5	
dibromochloromethane	0.704	0.754		-7.1	
1,2-dibromo-3-chloropropane	0.340	0.297		12.6	
1,2-dibromoethane	0.640	0.627		2.0	
dibromomethane	0.370	0.379		-2.4	
1,2-dichlorobenzene	1.541	1.540		0.1	
1,3-dichlorobenzene	1.630	1.630		0.0	
1,4-dichlorobenzene	1.622	1.659		-2.3	
trans-1,4-dichloro-2-butene	0.213	0.223		-4.7	
dichlorodifluoromethane	0.644	0.997		-54.8	
1,1-dichloroethane	1.129	0.941	0.100	16.7	
1,2-dichloroethane	0.705	0.742		-5.2	
1,1-dichloroethene	0.273	0.299		-9.5	20.0
cis-1,2-dichloroethene	0.490	0.464		5.3	

All other compounds must meet a minimum RRF of 0.010.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No. 38-EH-2651 Site: BRADLEY FIELD AASEation: Group: 8260ASOIL

Instrument ID: VOC1 Calibration Date: 7/19/96 Time: 0736

Lab File ID: K1S87110.D Init. Calib. Date(s): 7/9/96 7/9/96

Heated Purge: (Y/N) Y Init. Calib. Times: 1829 2208

GC Column: DB624 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
trans-1,2-dichloroethene	0.413	0.420		-1.7	
1,2-dichloropropane	0.498	0.394		20.9	20.0
1,3-dichloropropane	0.851	0.819		3.8	
2,2-dichloropropane	0.701	0.722		-3.0	
1,1-dichloropropene	0.146	0.151		-3.4	
cis-1,3-dichloropropene	1.352	1.207		10.7	
trans-1,3-dichloropropene	1.181	1.099		6.9	
ethylbenzene	1.865	1.875		-0.5	20.0
ethyl ether	0.391	0.416		-6.4	
ethyl methacrylate	0.805	0.732		9.1	
hexachlorobutadiene	0.713	0.557		21.9	
hexachloroethane	0.696	0.684		1.7	
2-hexanone	0.327	0.245		25.1	
iodomethane	0.611	0.813		-33.1	
isopropylbenzene	2.467	2.616		-6.0	
4-isopropyltoluene	2.078	2.397		-15.4	
methacrylonitrile	0.221	0.182		17.6	
methyl acrylate	0.649	0.475		26.8	
methyl-t-butyl ether	1.403	1.312		6.5	
methyl methacrylate	0.317	0.269		15.1	
methylene chloride	0.372	0.522		-40.3	
4-methyl-2-pentanone	0.228	0.173		24.1	
naphthalene	1.547	1.777		-14.9	
2-nitropropane	0.232	0.190		18.1	
pentachloroethane	0.461	0.559		-21.3	
propionitrile	0.104	0.074		28.8	
n-propylbenzene	3.745	3.581		4.4	
styrene	1.024	1.037		-1.3	
1,1,1,2-tetrachloroethane	0.471	0.516		-9.6	
1,1,2,2-tetrachloroethane	1.280	1.181	0.300	7.7	
tetrachloroethene	1.323	1.159		12.4	
tetrahydrofuran	0.077	0.060		22.1	
toluene	0.683	0.665		2.6	20.0
1,2,3-trichlorobenzene	0.854	0.895		-4.8	
1,2,4-trichlorobenzene	0.890	0.957		-7.5	
1,1,1-trichloroethane	0.748	0.800		-7.0	

All other compounds must meet a minimum RRF of 0.010.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No. 38-EH-2651 Site: BRADLEY FIELD AASEation: Group: 8260ASOIL

Instrument ID: VOC1 Calibration Date: 7/19/96 Time: 0736

Lab File ID: K1S87110.D Init. Calib. Date(s): 7/9/96 7/9/96

Heated Purge: (Y/N) Y Init. Calib. Times: 1829 2208

GC Column: DB624 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
1,1,2-trichloroethane	0.337	0.318		5.6	
trichloroethene	0.421	0.407		3.3	
trichlorofluoromethane	0.585	0.995		-70.1	
1,2,3-trichloropropane	3.786	2.895		23.5	
1,2,4-trimethylbenzene	2.107	2.529		-20.0	
1,3,5-trimethylbenzene	2.248	2.491		-10.8	
vinyl chloride	0.550	0.580		-5.5	20.0
m/p-xylene	0.612	0.653		-6.7	
o-xylene	0.604	0.628		-4.0	
DIBROMOFLUOROMETHANE	0.663	0.706		-6.5	
TOLUENE-D8	1.024	0.989		3.4	
4-BROMOFLUOROBENZENE	1.374	1.218		11.4	

All other compounds must meet a minimum RRF of 0.010.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No. 38-EH-2651 Site: BRADLEY FIELD AASEation: Group: 8260ASOIL

Instrument ID: VOC1 Calibration Date: 7/23/96 Time: 1115

Lab File ID: K1S87127.D Init. Calib. Date(s): 7/9/96 7/9/96

Heated Purge: (Y/N) Y Init. Calib. Times: 1829 2208

GC Column: DB624 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
acetone	0.273	0.271		0.7	
acrylonitrile	0.244	0.192		21.3	
allyl chloride	0.190	0.234		-23.2	
benzene	1.224	1.169		4.5	
bromobenzene	0.942	1.003		-6.5	
bromochloromethane	0.273	0.312		-14.3	
bromodichloromethane	0.676	0.754		-11.5	
bromoform	0.612	0.634	0.100	-3.6	
bromomethane	0.272	0.394		-44.9	
2-butanone	0.517	0.397		23.2	
n-butylbenzene	1.957	1.695		13.4	
sec-butylbenzene	2.855	2.729		4.4	
tert-butylbenzene	4.397	4.129		6.1	
carbon disulfide	1.328	1.579		-18.9	
carbon tetrachloride	0.493	0.601		-21.9	
chloroacetonitrile	0.028	0.025		10.7	
chlorobenzene	1.116	1.128	0.300	-1.1	
1-chlorobutane	0.819	0.773		5.6	
chloroethane	0.277	0.347		-25.3	
chloroform	1.061	1.182		-11.4	20.0
chloromethane	0.748	0.742	0.100	0.8	
2-chlorotoluene	2.470	2.530		-2.4	
4-chlorotoluene	2.804	2.849		-1.6	
dibromochloromethane	0.704	0.761		-8.1	
1,2-dibromo-3-chloropropane	0.340	0.329		3.2	
1,2-dibromoethane	0.640	0.624		2.5	
dibromomethane	0.370	0.388		-4.9	
1,2-dichlorobenzene	1.541	1.596		-3.6	
1,3-dichlorobenzene	1.630	1.684		-3.3	
1,4-dichlorobenzene	1.622	1.664		-2.6	
trans-1,4-dichloro-2-butene	0.213	0.245		-15.0	
dichlorodifluoromethane	0.644	0.966		-50.0	
1,1-dichloroethane	1.129	0.986	0.100	12.7	
1,2-dichloroethane	0.705	0.773		-9.6	
1,1-dichloroethene	0.273	0.298		-9.2	20.0
cis-1,2-dichloroethene	0.490	0.494		-0.8	

All other compounds must meet a minimum RRF of 0.010.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No. 38-EH-2651 Site: BRADLEY FIELD AASEation: Group: 8260ASOIL

Instrument ID: VOC1 Calibration Date: 7/23/96 Time: 1115

Lab File ID: K1S87127.D Init. Calib. Date(s): 7/9/96 7/9/96

Heated Purge: (Y/N) Y Init. Calib. Times: 1829 2208

GC Column: DB624 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
trans-1,2-dichloroethene	0.413	0.437		-5.8	
1,2-dichloropropane	0.498	0.411		17.5	20.0
1,3-dichloropropane	0.851	0.806		5.3	
2,2-dichloropropane	0.701	0.703		-0.3	
1,1-dichloropropene	0.146	0.153		-4.8	
cis-1,3-dichloropropene	1.352	1.264		6.5	
trans-1,3-dichloropropene	1.181	1.159		1.9	
ethylbenzene	1.865	1.887		-1.2	20.0
ethyl ether	0.391	0.408		-4.3	
ethyl methacrylate	0.805	0.727		9.7	
hexachlorobutadiene	0.713	0.528		25.9	
hexachloroethane	0.696	0.721		-3.6	
2-hexanone	0.327	0.312		4.6	
iodomethane	0.611	0.862		-41.1	
isopropylbenzene	2.467	2.745		-11.3	
4-isopropyltoluene	2.078	1.908		8.2	
methacrylonitrile	0.221	0.194		12.2	
methyl acrylate	0.649	0.506		22.0	
methyl-t-butyl ether	1.403	1.392		0.8	
methyl methacrylate	0.317	0.288		9.1	
methylene chloride	0.372	0.463		-24.5	
4-methyl-2-pentanone	0.228	0.181		20.6	
naphthalene	1.547	1.415		8.5	
2-nitropropane	0.232	0.199		14.2	
pentachloroethane	0.461	0.474		-2.8	
propionitrile	0.104	0.081		22.1	
n-propylbenzene	3.745	4.085		-9.1	
styrene	1.024	1.033		-0.9	
1,1,1,2-tetrachloroethane	0.471	0.513		-8.9	
1,1,2,2-tetrachloroethane	1.280	1.283	0.300	-0.2	
tetrachloroethene	1.323	1.545		-16.8	
tetrahydrofuran	0.077	0.067		13.0	
toluene	0.683	0.666		2.5	20.0
1,2,3-trichlorobenzene	0.854	0.735		13.9	
1,2,4-trichlorobenzene	0.890	0.755		15.2	
1,1,1-trichloroethane	0.748	0.810		-8.3	

All other compounds must meet a minimum RRF of 0.010.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No. 38-EH-2651 Site: BRADLEY FIELD AABEation: Group: 8260ASOIL

Instrument ID: VOC1 Calibration Date: 7/23/96 Time: 1115

Lab File ID: K1S87127.D Init. Calib. Date(s): 7/9/96 7/9/96

Heated Purge: (Y/N) Y Init. Calib. Times: 1829 2208

GC Column: DB624 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
1,1,2-trichloroethane	0.337	0.326		3.3	
trichloroethene	0.421	0.427		-1.4	
trichlorofluoromethane	0.585	1.033		-76.6	
1,2,3-trichloropropane	3.786	3.254		14.1	
1,2,4-trimethylbenzene	2.107	1.992		5.5	
1,3,5-trimethylbenzene	2.248	2.248		0.0	
vinyl chloride	0.550	0.582		-5.8	20.0
m/p-xylene	0.612	0.630		-2.9	
o-xylene	0.604	0.602		0.3	
DIBROMOFLUOROMETHANE	0.663	0.713		-7.5	
TOLUENE-D8	1.024	1.004		2.0	
4-BROMOFLUOROBENZENE	1.374	1.282		6.7	

All other compounds must meet a minimum RRF of 0.010.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY FIELD Date: Group: 8260ASOIL

Lab File ID (Standard): K1S87093.D Date Analyzed: 7/18/96

Instrument ID: VOC1 Time Analyzed: 1601

GC Column: DB624 ID: 0.53 (mm) Heated Purge (Y/N) Y

		IS1 PFL AREA #	RT #	IS2 DFB AREA #	RT #	IS3 CBZ AREA #	RT #
	12 HOUR STD	1313336	13.20	1686247	14.49	1185655	19.78
	UPPER LIMIT	2626672	13.70	3372494	14.99	2371310	20.28
	LOWER LIMIT	656668	12.70	843124	13.99	592828	19.28
	SAMPLE NO.						
01	VBLK02	1320300	13.19	1693651	14.48	1173269	19.78
02	D9937	1304823	13.20	1658679	14.48	1141484	19.79
03	D9939	1219571	13.19	1570281	14.47	1028501	19.78
04	D9940	1286224	13.20	1635652	14.47	1146315	19.78
05	D9941	1286758	13.19	1640463	14.48	1150951	19.79
06	D9942	1327326	13.19	1662168	14.48	1158084	19.79
07	D9943	1240257	13.18	1554976	14.47	1017326	19.78
08	D9944	1279888	13.19	1610254	14.47	1064744	19.79
09	D9945	1242476	13.20	1538356	14.48	1014014	19.79
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IS1 PFL = PENTAFLUOROBENZENE
IS2 DFB = 1,4-DIFLUOROBENZENE
IS3 CBZ = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY FIELD Solution: _____ Group: 8260ASOIL

Lab File ID (Standard): K1S87093.D Date Analyzed: 7/18/96

Instrument ID: VOC1 Time Analyzed: 1601

GC Column: DB624 ID: 0.53 (mm) Heated Purge (Y/N) Y

		IS4 DCB AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	663368	24.33				
	UPPER LIMIT	1326736	24.83				
	LOWER LIMIT	331684	23.83				
	SAMPLE NO.						
01	VBLK02	613044	24.32				
02	D9937	624608	24.32				
03	D9939	487213	24.32				
04	D9940	614966	24.32				
05	D9941	659957	24.32				
06	D9942	656662	24.32				
07	D9943	492147	24.32				
08	D9944	594539	24.32				
09	D9945	475732	24.33				
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IS4 DCB = 1,4-DICHLOROBENZENE-D4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY FIELD Location: Group: 8260ASOIL

Lab File ID (Standard): K1S87110.D Date Analyzed: 7/19/96

Instrument ID: VOC1 Time Analyzed: 0736

GC Column: DB624 ID: 0.53 (mm) Heated Purge (Y/N) Y

		IS1 PFL AREA #	RT #	IS2 DFB AREA #	RT #	IS3 CBZ AREA #	RT #
	12 HOUR STD	1250191	13.20	1614029	14.49	1125062	19.79
	UPPER LIMIT	2500382	13.70	3228058	14.99	2250124	20.29
	LOWER LIMIT	625096	12.70	807015	13.99	562531	19.29
	SAMPLE NO.						
01	VBLK03	1263033	13.19	1596714	14.48	1115377	19.80
02	D9938	1203236	13.20	1548209	14.48	1034498	19.81
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IS1 PFL = PENTAFLUOROBENZENE
IS2 DFB = 1,4-DIFLUOROBENZENE
IS3 CBZ = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY FIELD Location: Group: 8260ASOIL

Lab File ID (Standard): K1S87110.D Date Analyzed: 7/19/96

Instrument ID: VOC1 Time Analyzed: 0736

GC Column: DB624 ID: 0.53 (mm) Heated Purge (Y/N) Y

		IS4 DCB AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	651892	24.32				
	UPPER LIMIT	1303784	24.82				
	LOWER LIMIT	325946	23.82				
	SAMPLE NO.						
01	VBLK03	611311	24.32				
02	D9938	511315	24.33				
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IS4 DCB = 1,4-DICHLOROBENZENE-D4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY FIELD Location: Group: 8260ASOIL

Lab File ID (Standard): K1S87127.D Date Analyzed: 7/23/96

Instrument ID: VOC1 Time Analyzed: 1115

GC Column: DB624 ID: 0.53 (mm) Heated Purge (Y/N) Y

		IS1 PFL AREA #	RT #	IS2 DFB AREA #	RT #	IS3 CBZ AREA #	RT #
	12 HOUR STD	1233558	13.20	1562866	14.48	1143128	19.77
	UPPER LIMIT	2467116	13.70	3125732	14.98	2286256	20.27
	LOWER LIMIT	616779	12.70	781433	13.98	571564	19.27
	SAMPLE NO.						
01	D9938MS	1200654	13.21	1527319	14.49	1041341	19.81
02	D9938MSD	1191202	13.21	1505709	14.49	979058	19.80
03	VBLK04	1243382	13.19	1560946	14.49	1097411	19.78
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IS1 PFL = PENTAFLUOROBENZENE
IS2 DFB = 1,4-DIFLUOROBENZENE
IS3 CBZ = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY FIELD Location: Group: 8260ASOIL

Lab File ID (Standard): K1S87127.D Date Analyzed: 7/23/96

Instrument ID: VOC1 Time Analyzed: 1115

GC Column: DB624 ID: 0.53 (mm) Heated Purge (Y/N) Y

		IS4 DCB AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	619284	24.32				
	UPPER LIMIT	1238568	24.82				
	LOWER LIMIT	309642	23.82				
	SAMPLE NO.						
01	D9938MS	553949	24.34				
02	D9938MSD	500071	24.33				
03	VBLK04	654449	24.32				
04							
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS4 DCB = 1,4-DICHLOROBENZENE-D4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

ANALYSIS REPORT

U.S. ARMY CENTER FOR HEALTH PROMOTION AND PREVENTIVE MEDICINE
BUILDING E2100
ABERDEEN PROVING GROUND, MARYLAND 21010
ANALYTICAL SPECTROMETRY DIVISION
GC/MS TEAM

Installation: Bradley Field AASF

Project Number: 38-EH-2651

Job Number: 6A5600

Number of Samples: 10

Matrix: Water

Analyzed for: Volatiles

Method: 8260A

LAB NUMBER	FIELD NUMBER	DATA FILE #
D9926	SW-5	S1W87076.D
D9927	SW-D	S1W87077.D
D9928	SW-1	S1W87078.D
D9930	SW-6	S1W87079.D
D9931	SW-7	S1W87080.D
D9932	SW-8	S1W87081.D
D9933	SW-9	S1W87082.D
D9934	SW-3	S1W87083.D
D9935	SW-4	S1W87084.D
		M1S87138.D
		M1S87139.D
D9936	Trip Blank	S1W87075.D

Analyst: Louise Stanford Date: 1 Aug 96

Reviewed by: [signature] Date: 1 Aug 96

Reviewed by: [signature] Date: 2 Aug 96

Release Authorized by: [signature] for D. Charles Stoner Date: 2 Aug 96

This report shall not be reproduced except in full without the written approval of the laboratory. The results relate only to the specific samples identified within this report.

SUMMARY OF RESULTS

Installation: Bradley Field AASF

Project Number: 38-EH-2651

Project Officer: Moser

Case Narrative:

The samples were collected on 9 - 10 July 1996, received on 12 July 1996, and EPA Method 8260A analysis was completed on 23 July 1996. All analytical holding times were met.

Target compounds were detected in several samples. All surrogate recoveries were acceptable with all values meeting the QC limits imposed. All internal standard area counts and retention times complied with the QC requirements. A matrix spike and matrix spike duplicate was analyzed for sample D9935 with acceptable recoveries for every compound spiked, except for 1,1-dichloroethene and trichloroethene in M1S87138.D and M1S87139.D, which were high, possibly due to a matrix effect.

The pH of each sample was measured prior to analysis with a result of pH = 2 for all samples. According to EPA Method 8260A, samples are to be acidified to a pH of 2 or less at the time of collection. These pH results indicate that the method preservation requirements were met in all of the samples.

Samples were analyzed by EPA method 8260A using DLS SOP #46.2, which is currently being modified to reflect the use of new analytical software and method-required quality control procedures.

Analyst: Louise Stafford Date: 1 Aug 96

Analysis Data Sheet Qualifier Codes:

B - Indicates analyte was found in the associated blank as well as in the sample

D - Indicates Sample was diluted.

E - Indicates reported value exceeds the upper limit of the quantitation curve.

J - Indicates reported value is an estimate.

U - Indicates compound was analyzed for but not detected.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9926

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: SW-5

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1W87076.D

Level: (low/med) Date Collected: 7/9/96

% Moisture: not dec. 100 Date Analyzed: 7/17/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
67-64-1	acetone	20	U
107-13-1	acrylonitrile	20	U
107-05-1	allyl chloride	20	U
71-43-2	benzene	2	U
108-86-1	bromobenzene	2	U
74-97-5	bromochloromethane	2	U
75-27-4	bromodichloromethane	2	U
75-25-2	bromoform	2	U
74-83-9	bromomethane	2	U
78-93-3	2-butanone	20	U
104-51-8	n-butylbenzene	2	U
135-98-8	sec-butylbenzene	2	U
98-06-6	tert-butylbenzene	2	U
75-15-0	carbon disulfide	20	U
56-23-5	carbon tetrachloride	2	U
107-14-2	chloroacetonitrile	20	U
108-90-7	chlorobenzene	2	U
109-69-3	1-chlorobutane	20	U
75-00-3	chloroethane	2	U
67-66-3	chloroform	2	U
74-87-3	chloromethane	2	U
95-49-8	2-chlorotoluene	2	U
106-43-4	4-chlorotoluene	2	U
124-48-1	dibromochloromethane	2	U
96-12-8	1,2-dibromo-3-chloropropane	2	U
106-93-4	1,2-dibromoethane	2	U
74-95-3	dibromomethane	2	U
95-50-1	1,2-dichlorobenzene	2	U
541-73-1	1,3-dichlorobenzene	2	U
106-46-7	1,4-dichlorobenzene	2	U
110-57-6	trans-1,4-dichloro-2-butene	20	U
75-71-8	dichlorodifluoromethane	2	U
75-34-3	1,1-dichloroethane	2	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9926

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: SW-5

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1W87076.D

Level: (low/med) Date Collected: 7/9/96

% Moisture: not dec. 100 Date Analyzed: 7/17/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
107-06-2	1,2-dichloroethane	2	U
75-35-4	1,1-dichloroethene	2	U
156-59-2	cis-1,2-dichloroethene	2	U
156-60-5	trans-1,2-dichloroethene	2	U
78-87-5	1,2-dichloropropane	2	U
142-28-9	1,3-dichloropropane	2	U
590-20-7	2,2-dichloropropane	2	U
563-58-6	1,1-dichloropropene	2	U
10061-01-5	cis-1,3-dichloropropene	2	U
10061-02-6	trans-1,3-dichloropropene	2	U
100-41-4	ethylbenzene	2	U
60-29-7	ethyl ether	20	U
97-63-2	ethyl methacrylate	20	U
87-68-3	hexachlorobutadiene	2	U
67-72-1	hexachloroethane	20	U
591-78-6	2-hexanone	20	U
74-88-4	iodomethane	20	U
98-82-8	isopropylbenzene	2	U
99-87-6	4-isopropyltoluene	2	U
126-98-7	methacrylonitrile	20	U
96-33-3	methyl acrylate	20	U
1634-04-4	methyl-t-butyl ether	20	U
80-62-6	methyl methacrylate	20	U
75-09-2	methylene chloride	2	U
108-10-1	4-methyl-2-pentanone	20	U
91-20-3	naphthalene	2	U
79-46-9	2-nitropropane	20	U
76-01-7	pentachloroethane	20	U
107-12-0	propionitrile	20	U
103-65-1	n-propylbenzene	2	U
100-42-5	styrene	2	U
630-20-6	1,1,1,2-tetrachloroethane	2	U
79-34-5	1,1,2,2-tetrachloroethane	2	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9926

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: SW-5

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1W87076.D

Level: (low/med) Date Collected: 7/9/96

% Moisture: not dec. 100 Date Analyzed: 7/17/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
127-18-4	tetrachloroethene	2	U
109-99-9	tetrahydrofuran	20	U
108-88-3	toluene	2	U
87-61-6	1,2,3-trichlorobenzene	2	U
120-82-1	1,2,4-trichlorobenzene	1.1	J
71-55-6	1,1,1-trichloroethane	1.6	J
79-00-5	1,1,2-trichloroethane	2	U
79-01-6	trichloroethene	2	U
75-69-4	trichlorofluoromethane	2	U
96-18-4	1,2,3-trichloropropane	2	U
95-63-6	1,2,4-trimethylbenzene	2	U
108-67-8	1,3,5-trimethylbenzene	2	U
75-01-4	vinyl chloride	2	U
108-38-3;10	m/p-xylene	2	U
95-47-6	o-xylene	2	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9927

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: SW-D

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1W87077.D

Level: (low/med) Date Collected: 7/9/96

% Moisture: not dec. 100 Date Analyzed: 7/17/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
67-64-1	acetone	20	U
107-13-1	acrylonitrile	20	U
107-05-1	allyl chloride	20	U
71-43-2	benzene	2	U
108-86-1	bromobenzene	2	U
74-97-5	bromochloromethane	2	U
75-27-4	bromodichloromethane	2	U
75-25-2	bromoform	2	U
74-83-9	bromomethane	2	U
78-93-3	2-butanone	20	U
104-51-8	n-butylbenzene	2	U
135-98-8	sec-butylbenzene	2	U
98-06-6	tert-butylbenzene	2	U
75-15-0	carbon disulfide	20	U
56-23-5	carbon tetrachloride	2	U
107-14-2	chloroacetonitrile	20	U
108-90-7	chlorobenzene	2	U
109-69-3	1-chlorobutane	20	U
75-00-3	chloroethane	2	U
67-66-3	chloroform	2	U
74-87-3	chloromethane	2	U
95-49-8	2-chlorotoluene	2	U
106-43-4	4-chlorotoluene	2	U
124-48-1	dibromochloromethane	2	U
96-12-8	1,2-dibromo-3-chloropropane	2	U
106-93-4	1,2-dibromoethane	2	U
74-95-3	dibromomethane	2	U
95-50-1	1,2-dichlorobenzene	2	U
541-73-1	1,3-dichlorobenzene	2	U
106-46-7	1,4-dichlorobenzene	2	U
110-57-6	trans-1,4-dichloro-2-butene	20	U
75-71-8	dichlorodifluoromethane	2	U
75-34-3	1,1-dichloroethane	2	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9927

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: SW-D

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1W87077.D

Level: (low/med) Date Collected: 7/9/96

% Moisture: not dec. 100 Date Analyzed: 7/17/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
107-06-2	1,2-dichloroethane	2	U
75-35-4	1,1-dichloroethene	2	U
156-59-2	cis-1,2-dichloroethene	2	U
156-60-5	trans-1,2-dichloroethene	2	U
78-87-5	1,2-dichloropropane	2	U
142-28-9	1,3-dichloropropane	2	U
590-20-7	2,2-dichloropropane	2	U
563-58-6	1,1-dichloropropene	2	U
10061-01-5	cis-1,3-dichloropropene	2	U
10061-02-6	trans-1,3-dichloropropene	2	U
100-41-4	ethylbenzene	2	U
60-29-7	ethyl ether	20	U
97-63-2	ethyl methacrylate	20	U
87-68-3	hexachlorobutadiene	2	U
67-72-1	hexachloroethane	20	U
591-78-6	2-hexanone	20	U
74-88-4	iodomethane	20	U
98-82-8	isopropylbenzene	2	U
99-87-6	4-isopropyltoluene	2	U
126-98-7	methacrylonitrile	20	U
96-33-3	methyl acrylate	20	U
1634-04-4	methyl-t-butyl ether	20	U
80-62-6	methyl methacrylate	20	U
75-09-2	methylene chloride	2	U
108-10-1	4-methyl-2-pentanone	20	U
91-20-3	naphthalene	2	U
79-46-9	2-nitropropane	20	U
76-01-7	pentachloroethane	20	U
107-12-0	propionitrile	20	U
103-65-1	n-propylbenzene	2	U
100-42-5	styrene	2	U
630-20-6	1,1,1,2-tetrachloroethane	2	U
79-34-5	1,1,2,2-tetrachloroethane	2	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9927

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: SW-D

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1W87077.D

Level: (low/med) Date Collected: 7/9/96

% Moisture: not dec. 100 Date Analyzed: 7/17/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
127-18-4	tetrachloroethene	2	U
109-99-9	tetrahydrofuran	20	U
108-88-3	toluene	2	U
87-61-6	1,2,3-trichlorobenzene	2	U
120-82-1	1,2,4-trichlorobenzene	2	U
71-55-6	1,1,1-trichloroethane	1.6	J
79-00-5	1,1,2-trichloroethane	2	U
79-01-6	trichloroethene	2	U
75-69-4	trichlorofluoromethane	2	U
96-18-4	1,2,3-trichloropropane	2	U
95-63-6	1,2,4-trimethylbenzene	2	U
108-67-8	1,3,5-trimethylbenzene	2	U
75-01-4	vinyl chloride	2	U
108-38-3;10	m/p-xylene	2	U
95-47-6	o-xylene	2	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9928

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: SW-1

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1W87078.D

Level: (low/med) Date Collected: 7/10/96

% Moisture: not dec. 100 Date Analyzed: 7/17/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
67-64-1	acetone	20	U
107-13-1	acrylonitrile	20	U
107-05-1	allyl chloride	20	U
71-43-2	benzene	2	U
108-86-1	bromobenzene	2	U
74-97-5	bromochloromethane	2	U
75-27-4	bromodichloromethane	2	U
75-25-2	bromoform	2	U
74-83-9	bromomethane	2	U
78-93-3	2-butanone	20	U
104-51-8	n-butylbenzene	2	U
135-98-8	sec-butylbenzene	2	U
98-06-6	tert-butylbenzene	2	U
75-15-0	carbon disulfide	20	U
56-23-5	carbon tetrachloride	2	U
107-14-2	chloroacetonitrile	20	U
108-90-7	chlorobenzene	2	U
109-69-3	1-chlorobutane	20	U
75-00-3	chloroethane	2	U
67-66-3	chloroform	2	U
74-87-3	chloromethane	2	U
95-49-8	2-chlorotoluene	2	U
106-43-4	4-chlorotoluene	2	U
124-48-1	dibromochloromethane	2	U
96-12-8	1,2-dibromo-3-chloropropane	2	U
106-93-4	1,2-dibromoethane	2	U
74-95-3	dibromomethane	2	U
95-50-1	1,2-dichlorobenzene	2	U
541-73-1	1,3-dichlorobenzene	2	U
106-46-7	1,4-dichlorobenzene	2	U
110-57-6	trans-1,4-dichloro-2-butene	20	U
75-71-8	dichlorodifluoromethane	2	U
75-34-3	1,1-dichloroethane	1.2	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9928

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: SW-1

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1W87078.D

Level: (low/med) Date Collected: 7/10/96

% Moisture: not dec. 100 Date Analyzed: 7/17/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
107-06-2	1,2-dichloroethane	2	U
75-35-4	1,1-dichloroethene	2	U
156-59-2	cis-1,2-dichloroethene	2	U
156-60-5	trans-1,2-dichloroethene	2	U
78-87-5	1,2-dichloropropane	2	U
142-28-9	1,3-dichloropropane	2	U
590-20-7	2,2-dichloropropane	2	U
563-58-6	1,1-dichloropropene	2	U
10061-01-5	cis-1,3-dichloropropene	2	U
10061-02-6	trans-1,3-dichloropropene	2	U
100-41-4	ethylbenzene	2	U
60-29-7	ethyl ether	20	U
97-63-2	ethyl methacrylate	20	U
87-68-3	hexachlorobutadiene	2	U
67-72-1	hexachloroethane	20	U
591-78-6	2-hexanone	20	U
74-88-4	iodomethane	20	U
98-82-8	isopropylbenzene	2	U
99-87-6	4-isopropyltoluene	2	U
126-98-7	methacrylonitrile	20	U
96-33-3	methyl acrylate	20	U
1634-04-4	methyl-t-butyl ether	20	U
80-62-6	methyl methacrylate	20	U
75-09-2	methylene chloride	2	U
108-10-1	4-methyl-2-pentanone	20	U
91-20-3	naphthalene	2	U
79-46-9	2-nitropropane	20	U
76-01-7	pentachloroethane	20	U
107-12-0	propionitrile	20	U
103-65-1	n-propylbenzene	2	U
100-42-5	styrene	2	U
630-20-6	1,1,1,2-tetrachloroethane	2	U
79-34-5	1,1,2,2-tetrachloroethane	2	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9928

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: SW-1

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1W87078.D

Level: (low/med) Date Collected: 7/10/96

% Moisture: not dec. 100 Date Analyzed: 7/17/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
127-18-4	tetrachloroethene	2	U
109-99-9	tetrahydrofuran	20	U
108-88-3	toluene	2	U
87-61-6	1,2,3-trichlorobenzene	2	U
120-82-1	1,2,4-trichlorobenzene	2	U
71-55-6	1,1,1-trichloroethane	8.3	
79-00-5	1,1,2-trichloroethane	2	U
79-01-6	trichloroethene	2	U
75-69-4	trichlorofluoromethane	2	U
96-18-4	1,2,3-trichloropropane	2	U
95-63-6	1,2,4-trimethylbenzene	2	U
108-67-8	1,3,5-trimethylbenzene	2	U
75-01-4	vinyl chloride	2	U
108-38-3;10	m/p-xylene	2	U
95-47-6	o-xylene	2	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9930

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: SW-6

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1W87079.D

Level: (low/med) Date Collected: 7/9/96

% Moisture: not dec. 100 Date Analyzed: 7/17/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
67-64-1	acetone	20	U
107-13-1	acrylonitrile	20	U
107-05-1	allyl chloride	20	U
71-43-2	benzene	2	U
108-86-1	bromobenzene	2	U
74-97-5	bromochloromethane	2	U
75-27-4	bromodichloromethane	2	U
75-25-2	bromoform	2	U
74-83-9	bromomethane	2	U
78-93-3	2-butanone	20	U
104-51-8	n-butylbenzene	2	U
135-98-8	sec-butylbenzene	2	U
98-06-6	tert-butylbenzene	2	U
75-15-0	carbon disulfide	20	U
56-23-5	carbon tetrachloride	2	U
107-14-2	chloroacetonitrile	20	U
108-90-7	chlorobenzene	2	U
109-69-3	1-chlorobutane	20	U
75-00-3	chloroethane	2	U
67-66-3	chloroform	2	U
74-87-3	chloromethane	2	U
95-49-8	2-chlorotoluene	2	U
106-43-4	4-chlorotoluene	2	U
124-48-1	dibromochloromethane	2	U
96-12-8	1,2-dibromo-3-chloropropane	2	U
106-93-4	1,2-dibromoethane	2	U
74-95-3	dibromomethane	2	U
95-50-1	1,2-dichlorobenzene	2	U
541-73-1	1,3-dichlorobenzene	2	U
106-46-7	1,4-dichlorobenzene	2	U
110-57-6	trans-1,4-dichloro-2-butene	20	U
75-71-8	dichlorodifluoromethane	2	U
75-34-3	1,1-dichloroethane	2	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9930

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: SW-6

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1W87079.D

Level: (low/med) Date Collected: 7/9/96

% Moisture: not dec. 100 Date Analyzed: 7/17/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
107-06-2	1,2-dichloroethane	2	U
75-35-4	1,1-dichloroethene	2	U
156-59-2	cis-1,2-dichloroethene	2	U
156-60-5	trans-1,2-dichloroethene	2	U
78-87-5	1,2-dichloropropane	2	U
142-28-9	1,3-dichloropropane	2	U
590-20-7	2,2-dichloropropane	2	U
563-58-6	1,1-dichloropropene	2	U
10061-01-5	cis-1,3-dichloropropene	2	U
10061-02-6	trans-1,3-dichloropropene	2	U
100-41-4	ethylbenzene	2	U
60-29-7	ethyl ether	20	U
97-63-2	ethyl methacrylate	20	U
87-68-3	hexachlorobutadiene	2	U
67-72-1	hexachloroethane	20	U
591-78-6	2-hexanone	20	U
74-88-4	iodomethane	20	U
98-82-8	isopropylbenzene	2	U
99-87-6	4-isopropyltoluene	2	U
126-98-7	methacrylonitrile	20	U
96-33-3	methyl acrylate	20	U
1634-04-4	methyl-t-butyl ether	20	U
80-62-6	methyl methacrylate	20	U
75-09-2	methylene chloride	2	U
108-10-1	4-methyl-2-pentanone	20	U
91-20-3	naphthalene	2	U
79-46-9	2-nitropropane	20	U
76-01-7	pentachloroethane	20	U
107-12-0	propionitrile	20	U
103-65-1	n-propylbenzene	2	U
100-42-5	styrene	2	U
630-20-6	1,1,1,2-tetrachloroethane	2	U
79-34-5	1,1,2,2-tetrachloroethane	2	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9930

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: SW-6

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1W87079.D

Level: (low/med) Date Collected: 7/9/96

% Moisture: not dec. 100 Date Analyzed: 7/17/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
127-18-4	tetrachloroethene	2	U
109-99-9	tetrahydrofuran	20	U
108-88-3	toluene	2	U
87-61-6	1,2,3-trichlorobenzene	2	U
120-82-1	1,2,4-trichlorobenzene	2	U
71-55-6	1,1,1-trichloroethane	2	U
79-00-5	1,1,2-trichloroethane	2	U
79-01-6	trichloroethene	2	U
75-69-4	trichlorofluoromethane	2	U
96-18-4	1,2,3-trichloropropane	2	U
95-63-6	1,2,4-trimethylbenzene	2	U
108-67-8	1,3,5-trimethylbenzene	2	U
75-01-4	vinyl chloride	2	U
108-38-3;10	m/p-xylene	2	U
95-47-6	o-xylene	2	U

IA
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9931

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: SW-7

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1W87080.D

Level: (low/med) Date Collected: 7/9/96

% Moisture: not dec. 100 Date Analyzed: 7/17/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
67-64-1	acetone	20	U
107-13-1	acrylonitrile	20	U
107-05-1	allyl chloride	20	U
71-43-2	benzene	2	U
108-86-1	bromobenzene	2	U
74-97-5	bromochloromethane	2	U
75-27-4	bromodichloromethane	2	U
75-25-2	bromoform	2	U
74-83-9	bromomethane	2	U
78-93-3	2-butanone	20	U
104-51-8	n-butylbenzene	2	U
135-98-8	sec-butylbenzene	2	U
98-06-6	tert-butylbenzene	2	U
75-15-0	carbon disulfide	20	U
56-23-5	carbon tetrachloride	2	U
107-14-2	chloroacetonitrile	20	U
108-90-7	chlorobenzene	2	U
109-69-3	1-chlorobutane	20	U
75-00-3	chloroethane	2	U
67-66-3	chloroform	2	U
74-87-3	chloromethane	2	U
95-49-8	2-chlorotoluene	2	U
106-43-4	4-chlorotoluene	2	U
124-48-1	dibromochloromethane	2	U
96-12-8	1,2-dibromo-3-chloropropane	2	U
106-93-4	1,2-dibromoethane	2	U
74-95-3	dibromomethane	2	U
95-50-1	1,2-dichlorobenzene	2	U
541-73-1	1,3-dichlorobenzene	2	U
106-46-7	1,4-dichlorobenzene	2	U
110-57-6	trans-1,4-dichloro-2-butene	20	U
75-71-8	dichlorodifluoromethane	2	U
75-34-3	1,1-dichloroethane	2	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9931

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: SW-7

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1W87080.D

Level: (low/med) Date Collected: 7/9/96

% Moisture: not dec. 100 Date Analyzed: 7/17/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
107-06-2	1,2-dichloroethane	2	U
75-35-4	1,1-dichloroethene	2	U
156-59-2	cis-1,2-dichloroethene	2	U
156-60-5	trans-1,2-dichloroethene	2	U
78-87-5	1,2-dichloropropane	2	U
142-28-9	1,3-dichloropropane	2	U
590-20-7	2,2-dichloropropane	2	U
563-58-6	1,1-dichloropropene	2	U
10061-01-5	cis-1,3-dichloropropene	2	U
10061-02-6	trans-1,3-dichloropropene	2	U
100-41-4	ethylbenzene	2	U
60-29-7	ethyl ether	20	U
97-63-2	ethyl methacrylate	20	U
87-68-3	hexachlorobutadiene	2	U
67-72-1	hexachloroethane	20	U
591-78-6	2-hexanone	20	U
74-88-4	iodomethane	20	U
98-82-8	isopropylbenzene	2	U
99-87-6	4-isopropyltoluene	2	U
126-98-7	methacrylonitrile	20	U
96-33-3	methyl acrylate	20	U
1634-04-4	methyl-t-butyl ether	20	U
80-62-6	methyl methacrylate	20	U
75-09-2	methylene chloride	2	U
108-10-1	4-methyl-2-pentanone	20	U
91-20-3	naphthalene	2	U
79-46-9	2-nitropropane	20	U
76-01-7	pentachloroethane	20	U
107-12-0	propionitrile	20	U
103-65-1	n-propylbenzene	2	U
100-42-5	styrene	2	U
630-20-6	1,1,1,2-tetrachloroethane	2	U
79-34-5	1,1,2,2-tetrachloroethane	2	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9931

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: SW-7

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1W87080.D

Level: (low/med) Date Collected: 7/9/96

% Moisture: not dec. 100 Date Analyzed: 7/17/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
127-18-4	tetrachloroethene	2	U
109-99-9	tetrahydrofuran	20	U
108-88-3	toluene	2	U
87-61-6	1,2,3-trichlorobenzene	2	U
120-82-1	1,2,4-trichlorobenzene	2	U
71-55-6	1,1,1-trichloroethane	2	U
79-00-5	1,1,2-trichloroethane	2	U
79-01-6	trichloroethene	2	U
75-69-4	trichlorofluoromethane	2	U
96-18-4	1,2,3-trichloropropane	2	U
95-63-6	1,2,4-trimethylbenzene	2	U
108-67-8	1,3,5-trimethylbenzene	2	U
75-01-4	vinyl chloride	2	U
108-38-3;10	m/p-xylene	2	U
95-47-6	o-xylene	2	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9932

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: SW-8

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1W87081.D

Level: (low/med) Date Collected: 7/9/96

% Moisture: not dec. 100 Date Analyzed: 7/17/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
67-64-1	acetone	20	U
107-13-1	acrylonitrile	20	U
107-05-1	allyl chloride	20	U
71-43-2	benzene	2	U
108-86-1	bromobenzene	2	U
74-97-5	bromochloromethane	2	U
75-27-4	bromodichloromethane	2	U
75-25-2	bromoform	2	U
74-83-9	bromomethane	2	U
78-93-3	2-butanone	20	U
104-51-8	n-butylbenzene	2	U
135-98-8	sec-butylbenzene	2	U
98-06-6	tert-butylbenzene	2	U
75-15-0	carbon disulfide	20	U
56-23-5	carbon tetrachloride	2	U
107-14-2	chloroacetonitrile	20	U
108-90-7	chlorobenzene	2	U
109-69-3	1-chlorobutane	20	U
75-00-3	chloroethane	2	U
67-66-3	chloroform	2	U
74-87-3	chloromethane	2	U
95-49-8	2-chlorotoluene	2	U
106-43-4	4-chlorotoluene	2	U
124-48-1	dibromochloromethane	2	U
96-12-8	1,2-dibromo-3-chloropropane	2	U
106-93-4	1,2-dibromoethane	2	U
74-95-3	dibromomethane	2	U
95-50-1	1,2-dichlorobenzene	2	U
541-73-1	1,3-dichlorobenzene	2	U
106-46-7	1,4-dichlorobenzene	2	U
110-57-6	trans-1,4-dichloro-2-butene	20	U
75-71-8	dichlorodifluoromethane	2	U
75-34-3	1,1-dichloroethane	2	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9932

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: SW-8

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1W87081.D

Level: (low/med) Date Collected: 7/9/96

% Moisture: not dec. 100 Date Analyzed: 7/17/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
107-06-2	1,2-dichloroethane	2	U
75-35-4	1,1-dichloroethene	2	U
156-59-2	cis-1,2-dichloroethene	2	U
156-60-5	trans-1,2-dichloroethene	2	U
78-87-5	1,2-dichloropropane	2	U
142-28-9	1,3-dichloropropane	2	U
590-20-7	2,2-dichloropropane	2	U
563-58-6	1,1-dichloropropene	2	U
10061-01-5	cis-1,3-dichloropropene	2	U
10061-02-6	trans-1,3-dichloropropene	2	U
100-41-4	ethylbenzene	2	U
60-29-7	ethyl ether	20	U
97-63-2	ethyl methacrylate	20	U
87-68-3	hexachlorobutadiene	2	U
67-72-1	hexachloroethane	20	U
591-78-6	2-hexanone	20	U
74-88-4	iodomethane	20	U
98-82-8	isopropylbenzene	2	U
99-87-6	4-isopropyltoluene	2	U
126-98-7	methacrylonitrile	20	U
96-33-3	methyl acrylate	20	U
1634-04-4	methyl-t-butyl ether	20	U
80-62-6	methyl methacrylate	20	U
75-09-2	methylene chloride	2	U
108-10-1	4-methyl-2-pentanone	20	U
91-20-3	naphthalene	2	U
79-46-9	2-nitropropane	20	U
76-01-7	pentachloroethane	20	U
107-12-0	propionitrile	20	U
103-65-1	n-propylbenzene	2	U
100-42-5	styrene	2	U
630-20-6	1,1,1,2-tetrachloroethane	2	U
79-34-5	1,1,2,2-tetrachloroethane	2	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9932

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: SW-8

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1W87081.D

Level: (low/med) Date Collected: 7/9/96

% Moisture: not dec. 100 Date Analyzed: 7/17/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
127-18-4	tetrachloroethene	2	U
109-99-9	tetrahydrofuran	20	U
108-88-3	toluene	2	U
87-61-6	1,2,3-trichlorobenzene	2	U
120-82-1	1,2,4-trichlorobenzene	2	U
71-55-6	1,1,1-trichloroethane	2	U
79-00-5	1,1,2-trichloroethane	2	U
79-01-6	trichloroethene	2	U
75-69-4	trichlorofluoromethane	2	U
96-18-4	1,2,3-trichloropropane	2	U
95-63-6	1,2,4-trimethylbenzene	2	U
108-67-8	1,3,5-trimethylbenzene	2	U
75-01-4	vinyl chloride	2	U
108-38-3;10	m/p-xylene	2	U
95-47-6	o-xylene	2	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9933

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: SW-9

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1W87082.D

Level: (low/med) Date Collected: 7/9/96

% Moisture: not dec. 100 Date Analyzed: 7/17/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
67-64-1	acetone	20	U
107-13-1	acrylonitrile	20	U
107-05-1	allyl chloride	20	U
71-43-2	benzene	2	U
108-86-1	bromobenzene	2	U
74-97-5	bromochloromethane	2	U
75-27-4	bromodichloromethane	2	U
75-25-2	bromoform	2	U
74-83-9	bromomethane	2	U
78-93-3	2-butanone	20	U
104-51-8	n-butylbenzene	2	U
135-98-8	sec-butylbenzene	2	U
98-06-6	tert-butylbenzene	2	U
75-15-0	carbon disulfide	20	U
56-23-5	carbon tetrachloride	2	U
107-14-2	chloroacetonitrile	20	U
108-90-7	chlorobenzene	2	U
109-69-3	1-chlorobutane	20	U
75-00-3	chloroethane	2	U
67-66-3	chloroform	2	U
74-87-3	chloromethane	2	U
95-49-8	2-chlorotoluene	2	U
106-43-4	4-chlorotoluene	2	U
124-48-1	dibromochloromethane	2	U
96-12-8	1,2-dibromo-3-chloropropane	2	U
106-93-4	1,2-dibromoethane	2	U
74-95-3	dibromomethane	2	U
95-50-1	1,2-dichlorobenzene	2	U
541-73-1	1,3-dichlorobenzene	2	U
106-46-7	1,4-dichlorobenzene	2	U
110-57-6	trans-1,4-dichloro-2-butene	20	U
75-71-8	dichlorodifluoromethane	2	U
75-34-3	1,1-dichloroethane	2	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9933

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: SW-9

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1W87082.D

Level: (low/med) Date Collected: 7/9/96

% Moisture: not dec. 100 Date Analyzed: 7/17/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
107-06-2	1,2-dichloroethane	2	U
75-35-4	1,1-dichloroethene	2	U
156-59-2	cis-1,2-dichloroethene	2	U
156-60-5	trans-1,2-dichloroethene	2	U
78-87-5	1,2-dichloropropane	2	U
142-28-9	1,3-dichloropropane	2	U
590-20-7	2,2-dichloropropane	2	U
563-58-6	1,1-dichloropropene	2	U
10061-01-5	cis-1,3-dichloropropene	2	U
10061-02-6	trans-1,3-dichloropropene	2	U
100-41-4	ethylbenzene	2	U
60-29-7	ethyl ether	20	U
97-63-2	ethyl methacrylate	20	U
87-68-3	hexachlorobutadiene	2	U
67-72-1	hexachloroethane	20	U
591-78-6	2-hexanone	20	U
74-88-4	iodomethane	20	U
98-82-8	isopropylbenzene	2	U
99-87-6	4-isopropyltoluene	2	U
126-98-7	methacrylonitrile	20	U
96-33-3	methyl acrylate	20	U
1634-04-4	methyl-t-butyl ether	20	U
80-62-6	methyl methacrylate	20	U
75-09-2	methylene chloride	2	U
108-10-1	4-methyl-2-pentanone	20	U
91-20-3	naphthalene	2	U
79-46-9	2-nitropropane	20	U
76-01-7	pentachloroethane	20	U
107-12-0	propionitrile	20	U
103-65-1	n-propylbenzene	2	U
100-42-5	styrene	2	U
630-20-6	1,1,1,2-tetrachloroethane	2	U
79-34-5	1,1,2,2-tetrachloroethane	2	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9933

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: SW-9

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1W87082.D

Level: (low/med) Date Collected: 7/9/96

% Moisture: not dec. 100 Date Analyzed: 7/17/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
127-18-4	tetrachloroethene	2	U
109-99-9	tetrahydrofuran	20	U
108-88-3	toluene	2	U
87-61-6	1,2,3-trichlorobenzene	2	U
120-82-1	1,2,4-trichlorobenzene	2	U
71-55-6	1,1,1-trichloroethane	2	U
79-00-5	1,1,2-trichloroethane	2	U
79-01-6	trichloroethene	2	U
75-69-4	trichlorofluoromethane	2	U
96-18-4	1,2,3-trichloropropane	2	U
95-63-6	1,2,4-trimethylbenzene	2	U
108-67-8	1,3,5-trimethylbenzene	2	U
75-01-4	vinyl chloride	2	U
108-38-3;10	m/p-xylene	2	U
95-47-6	o-xylene	2	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9934

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: SW-3

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1W87083.D

Level: (low/med) Date Collected: 7/10/96

% Moisture: not dec. 100 Date Analyzed: 7/17/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
67-64-1	acetone	20	U
107-13-1	acrylonitrile	20	U
107-05-1	allyl chloride	20	U
71-43-2	benzene	2	U
108-86-1	bromobenzene	2	U
74-97-5	bromochloromethane	2	U
75-27-4	bromodichloromethane	2	U
75-25-2	bromoform	2	U
74-83-9	bromomethane	2	U
78-93-3	2-butanone	20	U
104-51-8	n-butylbenzene	2	U
135-98-8	sec-butylbenzene	2	U
98-06-6	tert-butylbenzene	2	U
75-15-0	carbon disulfide	20	U
56-23-5	carbon tetrachloride	2	U
107-14-2	chloroacetonitrile	20	U
108-90-7	chlorobenzene	2	U
109-69-3	1-chlorobutane	20	U
75-00-3	chloroethane	2	U
67-66-3	chloroform	2	U
74-87-3	chloromethane	2	U
95-49-8	2-chlorotoluene	2	U
106-43-4	4-chlorotoluene	2	U
124-48-1	dibromochloromethane	2	U
96-12-8	1,2-dibromo-3-chloropropane	2	U
106-93-4	1,2-dibromoethane	2	U
74-95-3	dibromomethane	2	U
95-50-1	1,2-dichlorobenzene	2	U
541-73-1	1,3-dichlorobenzene	2	U
106-46-7	1,4-dichlorobenzene	2	U
110-57-6	trans-1,4-dichloro-2-butene	20	U
75-71-8	dichlorodifluoromethane	2	U
75-34-3	1,1-dichloroethane	1.6	J

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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9934

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: SW-3

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1W87083.D

Level: (low/med) Date Collected: 7/10/96

% Moisture: not dec. 100 Date Analyzed: 7/17/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
107-06-2	1,2-dichloroethane	2	U
75-35-4	1,1-dichloroethene	2	U
156-59-2	cis-1,2-dichloroethene	2	U
156-60-5	trans-1,2-dichloroethene	2	U
78-87-5	1,2-dichloropropane	2	U
142-28-9	1,3-dichloropropane	2	U
590-20-7	2,2-dichloropropane	2	U
563-58-6	1,1-dichloropropene	2	U
10061-01-5	cis-1,3-dichloropropene	2	U
10061-02-6	trans-1,3-dichloropropene	2	U
100-41-4	ethylbenzene	2	U
60-29-7	ethyl ether	20	U
97-63-2	ethyl methacrylate	20	U
87-68-3	hexachlorobutadiene	2	U
67-72-1	hexachloroethane	20	U
591-78-6	2-hexanone	20	U
74-88-4	iodomethane	20	U
98-82-8	isopropylbenzene	2	U
99-87-6	4-isopropyltoluene	2	U
126-98-7	methacrylonitrile	20	U
96-33-3	methyl acrylate	20	U
1634-04-4	methyl-t-butyl ether	20	U
80-62-6	methyl methacrylate	20	U
75-09-2	methylene chloride	2	U
108-10-1	4-methyl-2-pentanone	20	U
91-20-3	naphthalene	2	U
79-46-9	2-nitropropane	20	U
76-01-7	pentachloroethane	20	U
107-12-0	propionitrile	20	U
103-65-1	n-propylbenzene	2	U
100-42-5	styrene	2	U
630-20-6	1,1,1,2-tetrachloroethane	2	U
79-34-5	1,1,2,2-tetrachloroethane	2	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9934

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: SW-3

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1W87083.D

Level: (low/med) Date Collected: 7/10/96

% Moisture: not dec. 100 Date Analyzed: 7/17/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
127-18-4	tetrachloroethene	2	U
109-99-9	tetrahydrofuran	20	U
108-88-3	toluene	2	U
87-61-6	1,2,3-trichlorobenzene	2	U
120-82-1	1,2,4-trichlorobenzene	2	U
71-55-6	1,1,1-trichloroethane	7.8	
79-00-5	1,1,2-trichloroethane	2	U
79-01-6	trichloroethene	2	U
75-69-4	trichlorofluoromethane	2	U
96-18-4	1,2,3-trichloropropane	2	U
95-63-6	1,2,4-trimethylbenzene	2	U
108-67-8	1,3,5-trimethylbenzene	2	U
75-01-4	vinyl chloride	2	U
108-38-3;10	m/p-xylene	2	U
95-47-6	o-xylene	2	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9935

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: SW-4

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1W87084.D

Level: (low/med) Date Collected: 7/10/96

% Moisture: not dec. 100 Date Analyzed: 7/17/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
67-64-1	acetone	20	U
107-13-1	acrylonitrile	20	U
107-05-1	allyl chloride	20	U
71-43-2	benzene	2	U
108-86-1	bromobenzene	2	U
74-97-5	bromochloromethane	2	U
75-27-4	bromodichloromethane	2	U
75-25-2	bromoform	2	U
74-83-9	bromomethane	2	U
78-93-3	2-butanone	20	U
104-51-8	n-butylbenzene	2	U
135-98-8	sec-butylbenzene	2	U
98-06-6	tert-butylbenzene	2	U
75-15-0	carbon disulfide	20	U
56-23-5	carbon tetrachloride	2	U
107-14-2	chloroacetonitrile	20	U
108-90-7	chlorobenzene	2	U
109-69-3	1-chlorobutane	20	U
75-00-3	chloroethane	2	U
67-66-3	chloroform	2	U
74-87-3	chloromethane	2	U
95-49-8	2-chlorotoluene	2	U
106-43-4	4-chlorotoluene	2	U
124-48-1	dibromochloromethane	2	U
96-12-8	1,2-dibromo-3-chloropropane	2	U
106-93-4	1,2-dibromoethane	2	U
74-95-3	dibromomethane	2	U
95-50-1	1,2-dichlorobenzene	2	U
541-73-1	1,3-dichlorobenzene	2	U
106-46-7	1,4-dichlorobenzene	2	U
110-57-6	trans-1,4-dichloro-2-butene	20	U
75-71-8	dichlorodifluoromethane	2	U
75-34-3	1,1-dichloroethane	2	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9935

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: SW-4

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1W87084.D

Level: (low/med) Date Collected: 7/10/96

% Moisture: not dec. 100 Date Analyzed: 7/17/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
107-06-2	1,2-dichloroethane	2	U
75-35-4	1,1-dichloroethene	2	U
156-59-2	cis-1,2-dichloroethene	2	U
156-60-5	trans-1,2-dichloroethene	2	U
78-87-5	1,2-dichloropropane	2	U
142-28-9	1,3-dichloropropane	2	U
590-20-7	2,2-dichloropropane	2	U
563-58-6	1,1-dichloropropene	2	U
10061-01-5	cis-1,3-dichloropropene	2	U
10061-02-6	trans-1,3-dichloropropene	2	U
100-41-4	ethylbenzene	2	U
60-29-7	ethyl ether	20	U
97-63-2	ethyl methacrylate	20	U
87-68-3	hexachlorobutadiene	2	U
67-72-1	hexachloroethane	20	U
591-78-6	2-hexanone	20	U
74-88-4	iodomethane	20	U
98-82-8	isopropylbenzene	2	U
99-87-6	4-isopropyltoluene	2	U
126-98-7	methacrylonitrile	20	U
96-33-3	methyl acrylate	20	U
1634-04-4	methyl-t-butyl ether	20	U
80-62-6	methyl methacrylate	20	U
75-09-2	methylene chloride	2	U
108-10-1	4-methyl-2-pentanone	20	U
91-20-3	naphthalene	2	U
79-46-9	2-nitropropane	20	U
76-01-7	pentachloroethane	20	U
107-12-0	propionitrile	20	U
103-65-1	n-propylbenzene	2	U
100-42-5	styrene	2	U
630-20-6	1,1,1,2-tetrachloroethane	2	U
79-34-5	1,1,2,2-tetrachloroethane	2	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9935

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: SW-4

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1W87084.D

Level: (low/med) Date Collected: 7/10/96

% Moisture: not dec. 100 Date Analyzed: 7/17/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
127-18-4	tetrachloroethene	2	U
109-99-9	tetrahydrofuran	20	U
108-88-3	toluene	2	U
87-61-6	1,2,3-trichlorobenzene	2	U
120-82-1	1,2,4-trichlorobenzene	2	U
71-55-6	1,1,1-trichloroethane	2	U
79-00-5	1,1,2-trichloroethane	2	U
79-01-6	trichloroethene	2	U
75-69-4	trichlorofluoromethane	2	U
96-18-4	1,2,3-trichloropropane	2	U
95-63-6	1,2,4-trimethylbenzene	2	U
108-67-8	1,3,5-trimethylbenzene	2	U
75-01-4	vinyl chloride	2	U
108-38-3;10	m/p-xylene	2	U
95-47-6	o-xylene	2	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9936

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: TRIPBLK

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1W87075.D

Level: (low/med) Date Collected: 7/10/96

% Moisture: not dec. 100 Date Analyzed: 7/17/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
67-64-1	acetone	20	U
107-13-1	acrylonitrile	20	U
107-05-1	allyl chloride	20	U
71-43-2	benzene	2	U
108-86-1	bromobenzene	2	U
74-97-5	bromochloromethane	2	U
75-27-4	bromodichloromethane	2	U
75-25-2	bromoform	2	U
74-83-9	bromomethane	2	U
78-93-3	2-butanone	20	U
104-51-8	n-butylbenzene	2	U
135-98-8	sec-butylbenzene	2	U
98-06-6	tert-butylbenzene	2	U
75-15-0	carbon disulfide	20	U
56-23-5	carbon tetrachloride	2	U
107-14-2	chloroacetonitrile	20	U
108-90-7	chlorobenzene	2	U
109-69-3	1-chlorobutane	20	U
75-00-3	chloroethane	2	U
67-66-3	chloroform	2	U
74-87-3	chloromethane	2	U
95-49-8	2-chlorotoluene	2	U
106-43-4	4-chlorotoluene	2	U
124-48-1	dibromochloromethane	2	U
96-12-8	1,2-dibromo-3-chloropropane	2	U
106-93-4	1,2-dibromoethane	2	U
74-95-3	dibromomethane	2	U
95-50-1	1,2-dichlorobenzene	2	U
541-73-1	1,3-dichlorobenzene	2	U
106-46-7	1,4-dichlorobenzene	2	U
110-57-6	trans-1,4-dichloro-2-butene	20	U
75-71-8	dichlorodifluoromethane	2	U
75-34-3	1,1-dichloroethane	2	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9936

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: TRIPBLK

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1W87075.D

Level: (low/med) Date Collected: 7/10/96

% Moisture: not dec. 100 Date Analyzed: 7/17/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
107-06-2	1,2-dichloroethane	2	U
75-35-4	1,1-dichloroethene	2	U
156-59-2	cis-1,2-dichloroethene	2	U
156-60-5	trans-1,2-dichloroethene	2	U
78-87-5	1,2-dichloropropane	2	U
142-28-9	1,3-dichloropropane	2	U
590-20-7	2,2-dichloropropane	2	U
563-58-6	1,1-dichloropropene	2	U
10061-01-5	cis-1,3-dichloropropene	2	U
10061-02-6	trans-1,3-dichloropropene	2	U
100-41-4	ethylbenzene	2	U
60-29-7	ethyl ether	20	U
97-63-2	ethyl methacrylate	20	U
87-68-3	hexachlorobutadiene	2	U
67-72-1	hexachloroethane	20	U
591-78-6	2-hexanone	20	U
74-88-4	iodomethane	20	U
98-82-8	isopropylbenzene	2	U
99-87-6	4-isopropyltoluene	2	U
126-98-7	methacrylonitrile	20	U
96-33-3	methyl acrylate	20	U
1634-04-4	methyl-t-butyl ether	20	U
80-62-6	methyl methacrylate	20	U
75-09-2	methylene chloride	2	U
108-10-1	4-methyl-2-pentanone	20	U
91-20-3	naphthalene	2	U
79-46-9	2-nitropropane	20	U
76-01-7	pentachloroethane	20	U
107-12-0	propionitrile	20	U
103-65-1	n-propylbenzene	2	U
100-42-5	styrene	2	U
630-20-6	1,1,1,2-tetrachloroethane	2	U
79-34-5	1,1,2,2-tetrachloroethane	2	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9936

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: TRIPBLK

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: S1W87075.D

Level: (low/med) Date Collected: 7/10/96

% Moisture: not dec. 100 Date Analyzed: 7/17/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
127-18-4	tetrachloroethene	2	U
109-99-9	tetrahydrofuran	20	U
108-88-3	toluene	2	U
87-61-6	1,2,3-trichlorobenzene	2	U
120-82-1	1,2,4-trichlorobenzene	2	U
71-55-6	1,1,1-trichloroethane	2	U
79-00-5	1,1,2-trichloroethane	2	U
79-01-6	trichloroethene	2	U
75-69-4	trichlorofluoromethane	2	U
96-18-4	1,2,3-trichloropropane	2	U
95-63-6	1,2,4-trimethylbenzene	2	U
108-67-8	1,3,5-trimethylbenzene	2	U
75-01-4	vinyl chloride	2	U
108-38-3;10	m/p-xylene	2	U
95-47-6	o-xylene	2	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
VBLK02

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: BLK7/17

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: B1W87074.D

Level: (low/med) Date Collected: 7/17/96

% Moisture: not dec. 100 Date Analyzed: 7/17/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
67-64-1	acetone	20	U
107-13-1	acrylonitrile	20	U
107-05-1	allyl chloride	20	U
71-43-2	benzene	2	U
108-86-1	bromobenzene	2	U
74-97-5	bromochloromethane	2	U
75-27-4	bromodichloromethane	2	U
75-25-2	bromoform	2	U
74-83-9	bromomethane	2	U
78-93-3	2-butanone	20	U
104-51-8	n-butylbenzene	2	U
135-98-8	sec-butylbenzene	2	U
98-06-6	tert-butylbenzene	2	U
75-15-0	carbon disulfide	20	U
56-23-5	carbon tetrachloride	2	U
107-14-2	chloroacetonitrile	20	U
108-90-7	chlorobenzene	2	U
109-69-3	1-chlorobutane	20	U
75-00-3	chloroethane	2	U
67-66-3	chloroform	2	U
74-87-3	chloromethane	2	U
95-49-8	2-chlorotoluene	2	U
106-43-4	4-chlorotoluene	2	U
124-48-1	dibromochloromethane	2	U
96-12-8	1,2-dibromo-3-chloropropane	2	U
106-93-4	1,2-dibromoethane	2	U
74-95-3	dibromomethane	2	U
95-50-1	1,2-dichlorobenzene	2	U
541-73-1	1,3-dichlorobenzene	2	U
106-46-7	1,4-dichlorobenzene	2	U
110-57-6	trans-1,4-dichloro-2-butene	20	U
75-71-8	dichlorodifluoromethane	2	U
75-34-3	1,1-dichloroethane	2	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
VBLK02

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: BLK7/17

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: B1W87074.D

Level: (low/med) Date Collected: 7/17/96

% Moisture: not dec. 100 Date Analyzed: 7/17/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
107-06-2	1,2-dichloroethane	2	U
75-35-4	1,1-dichloroethene	2	U
156-59-2	cis-1,2-dichloroethene	2	U
156-60-5	trans-1,2-dichloroethene	2	U
78-87-5	1,2-dichloropropane	2	U
142-28-9	1,3-dichloropropane	2	U
590-20-7	2,2-dichloropropane	2	U
563-58-6	1,1-dichloropropene	2	U
10061-01-5	cis-1,3-dichloropropene	2	U
10061-02-6	trans-1,3-dichloropropene	2	U
100-41-4	ethylbenzene	2	U
60-29-7	ethyl ether	20	U
97-63-2	ethyl methacrylate	20	U
87-68-3	hexachlorobutadiene	2	U
67-72-1	hexachloroethane	20	U
591-78-6	2-hexanone	20	U
74-88-4	iodomethane	20	U
98-82-8	isopropylbenzene	2	U
99-87-6	4-isopropyltoluene	2	U
126-98-7	methacrylonitrile	20	U
96-33-3	methyl acrylate	20	U
1634-04-4	methyl-t-butyl ether	20	U
80-62-6	methyl methacrylate	20	U
75-09-2	methylene chloride	2	U
108-10-1	4-methyl-2-pentanone	20	U
91-20-3	naphthalene	2	U
79-46-9	2-nitropropane	20	U
76-01-7	pentachloroethane	20	U
107-12-0	propionitrile	20	U
103-65-1	n-propylbenzene	2	U
100-42-5	styrene	2	U
630-20-6	1,1,1,2-tetrachloroethane	2	U
79-34-5	1,1,2,2-tetrachloroethane	2	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
VBLK02

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: BLK7/17

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: B1W87074.D

Level: (low/med) Date Collected: 7/17/96

% Moisture: not dec. 100 Date Analyzed: 7/17/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
127-18-4	tetrachloroethene	2	U
109-99-9	tetrahydrofuran	20	U
108-88-3	toluene	2	U
87-61-6	1,2,3-trichlorobenzene	2	U
120-82-1	1,2,4-trichlorobenzene	2	U
71-55-6	1,1,1-trichloroethane	2	U
79-00-5	1,1,2-trichloroethane	2	U
79-01-6	trichloroethene	2	U
75-69-4	trichlorofluoromethane	2	U
96-18-4	1,2,3-trichloropropane	2	U
95-63-6	1,2,4-trimethylbenzene	2	U
108-67-8	1,3,5-trimethylbenzene	2	U
75-01-4	vinyl chloride	2	U
108-38-3;10	m/p-xylene	2	U
95-47-6	o-xylene	2	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
VBLK03

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: BLK7/23

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: B1W87126.D

Level: (low/med) Date Collected: 7/23/96

% Moisture: not dec. 100 Date Analyzed: 7/23/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
67-64-1	acetone	20	U
107-13-1	acrylonitrile	20	U
107-05-1	allyl chloride	20	U
71-43-2	benzene	2	U
108-86-1	bromobenzene	2	U
74-97-5	bromochloromethane	2	U
75-27-4	bromodichloromethane	2	U
75-25-2	bromoform	2	U
74-83-9	bromomethane	2	U
78-93-3	2-butanone	20	U
104-51-8	n-butylbenzene	2	U
135-98-8	sec-butylbenzene	2	U
98-06-6	tert-butylbenzene	2	U
75-15-0	carbon disulfide	20	U
56-23-5	carbon tetrachloride	2	U
107-14-2	chloroacetonitrile	20	U
108-90-7	chlorobenzene	2	U
109-69-3	1-chlorobutane	20	U
75-00-3	chloroethane	2	U
67-66-3	chloroform	2	U
74-87-3	chloromethane	2	U
95-49-8	2-chlorotoluene	2	U
106-43-4	4-chlorotoluene	2	U
124-48-1	dibromochloromethane	2	U
96-12-8	1,2-dibromo-3-chloropropane	2	U
106-93-4	1,2-dibromoethane	2	U
74-95-3	dibromomethane	2	U
95-50-1	1,2-dichlorobenzene	2	U
541-73-1	1,3-dichlorobenzene	2	U
106-46-7	1,4-dichlorobenzene	2	U
110-57-6	trans-1,4-dichloro-2-butene	20	U
75-71-8	dichlorodifluoromethane	2	U
75-34-3	1,1-dichloroethane	2	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
VBLK03

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: BLK7/23

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: B1W87126.D

Level: (low/med) Date Collected: 7/23/96

% Moisture: not dec. 100 Date Analyzed: 7/23/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
107-06-2	1,2-dichloroethane	2	U
75-35-4	1,1-dichloroethene	2	U
156-59-2	cis-1,2-dichloroethene	2	U
156-60-5	trans-1,2-dichloroethene	2	U
78-87-5	1,2-dichloropropane	2	U
142-28-9	1,3-dichloropropane	2	U
590-20-7	2,2-dichloropropane	2	U
563-58-6	1,1-dichloropropene	2	U
10061-01-5	cis-1,3-dichloropropene	2	U
10061-02-6	trans-1,3-dichloropropene	2	U
100-41-4	ethylbenzene	2	U
60-29-7	ethyl ether	20	U
97-63-2	ethyl methacrylate	20	U
87-68-3	hexachlorobutadiene	2	U
67-72-1	hexachloroethane	20	U
591-78-6	2-hexanone	20	U
74-88-4	iodomethane	20	U
98-82-8	isopropylbenzene	2	U
99-87-6	4-isopropyltoluene	2	U
126-98-7	methacrylonitrile	20	U
96-33-3	methyl acrylate	20	U
1634-04-4	methyl-t-butyl ether	20	U
80-62-6	methyl methacrylate	20	U
75-09-2	methylene chloride	2	U
108-10-1	4-methyl-2-pentanone	20	U
91-20-3	naphthalene	2	U
79-46-9	2-nitropropane	20	U
76-01-7	pentachloroethane	20	U
107-12-0	propionitrile	20	U
103-65-1	n-propylbenzene	2	U
100-42-5	styrene	2	U
630-20-6	1,1,1,2-tetrachloroethane	2	U
79-34-5	1,1,2,2-tetrachloroethane	2	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
VBLK03

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: BLK7/23

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: B1W87126.D

Level: (low/med) Date Collected: 7/23/96

% Moisture: not dec. 100 Date Analyzed: 7/23/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
127-18-4	tetrachloroethene	2	U
109-99-9	tetrahydrofuran	20	U
108-88-3	toluene	2	U
87-61-6	1,2,3-trichlorobenzene	2	U
120-82-1	1,2,4-trichlorobenzene	2	U
71-55-6	1,1,1-trichloroethane	2	U
79-00-5	1,1,2-trichloroethane	2	U
79-01-6	trichloroethene	2	U
75-69-4	trichlorofluoromethane	2	U
96-18-4	1,2,3-trichloropropane	2	U
95-63-6	1,2,4-trimethylbenzene	2	U
108-67-8	1,3,5-trimethylbenzene	2	U
75-01-4	vinyl chloride	2	U
108-38-3;10	m/p-xylene	2	U
95-47-6	o-xylene	2	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9935MS

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: SW-4MS

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: M1S87138.D

Level: (low/med) Date Collected: 7/10/96

% Moisture: not dec. 100 Date Analyzed: 7/23/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
67-64-1	acetone	20	U
107-13-1	acrylonitrile	20	U
107-05-1	allyl chloride	20	U
71-43-2	benzene	22	
108-86-1	bromobenzene	21	
74-97-5	bromochloromethane	23	
75-27-4	bromodichloromethane	22	
75-25-2	bromoform	15	
74-83-9	bromomethane	2	U
78-93-3	2-butanone	20	U
104-51-8	n-butylbenzene	25	
135-98-8	sec-butylbenzene	25	
98-06-6	tert-butylbenzene	13	
75-15-0	carbon disulfide	20	U
56-23-5	carbon tetrachloride	27	
107-14-2	chloroacetonitrile	20	U
108-90-7	chlorobenzene	23	
109-69-3	1-chlorobutane	0.9	J
75-00-3	chloroethane	2	U
67-66-3	chloroform	23	
74-87-3	chloromethane	2	U
95-49-8	2-chlorotoluene	22	
106-43-4	4-chlorotoluene	23	
124-48-1	dibromochloromethane	19	
96-12-8	1,2-dibromo-3-chloropropane	17	
106-93-4	1,2-dibromoethane	21	
74-95-3	dibromomethane	22	
95-50-1	1,2-dichlorobenzene	21	
541-73-1	1,3-dichlorobenzene	22	
106-46-7	1,4-dichlorobenzene	22	
110-57-6	trans-1,4-dichloro-2-butene	12	J
75-71-8	dichlorodifluoromethane	2	U
75-34-3	1,1-dichloroethane	22	

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9935MS

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: SW-4MS

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: M1S87138.D

Level: (low/med) Date Collected: 7/10/96

% Moisture: not dec. 100 Date Analyzed: 7/23/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
107-06-2	1,2-dichloroethane	23	
75-35-4	1,1-dichloroethene	33	
156-59-2	cis-1,2-dichloroethene	24	
156-60-5	trans-1,2-dichloroethene	33	
78-87-5	1,2-dichloropropane	21	
142-28-9	1,3-dichloropropane	21	
590-20-7	2,2-dichloropropane	27	
563-58-6	1,1-dichloropropene	28	
10061-01-5	cis-1,3-dichloropropene	16	
10061-02-6	trans-1,3-dichloropropene	17	
100-41-4	ethylbenzene	24	
60-29-7	ethyl ether	20	U
97-63-2	ethyl methacrylate	20	U
87-68-3	hexachlorobutadiene	23	
67-72-1	hexachloroethane	20	U
591-78-6	2-hexanone	20	U
74-88-4	iodomethane	20	U
98-82-8	isopropylbenzene	27	
99-87-6	4-isopropyltoluene	25	
126-98-7	methacrylonitrile	20	U
96-33-3	methyl acrylate	20	U
1634-04-4	methyl-t-butyl ether	20	U
80-62-6	methyl methacrylate	20	U
75-09-2	methylene chloride	28	
108-10-1	4-methyl-2-pentanone	1.9	J
91-20-3	naphthalene	16	
79-46-9	2-nitropropane	20	U
76-01-7	pentachloroethane	20	U
107-12-0	propionitrile	20	U
103-65-1	n-propylbenzene	24	
100-42-5	styrene	19	
630-20-6	1,1,1,2-tetrachloroethane	23	
79-34-5	1,1,2,2-tetrachloroethane	19	

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9935MS

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: SW-4MS

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: M1S87138.D

Level: (low/med) Date Collected: 7/10/96

% Moisture: not dec. 100 Date Analyzed: 7/23/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
127-18-4	tetrachloroethene	17	
109-99-9	tetrahydrofuran	20	U
108-88-3	toluene	23	
87-61-6	1,2,3-trichlorobenzene	16	
120-82-1	1,2,4-trichlorobenzene	16	
71-55-6	1,1,1-trichloroethane	27	
79-00-5	1,1,2-trichloroethane	20	
79-01-6	trichloroethene	26	
75-69-4	trichlorofluoromethane	2	U
96-18-4	1,2,3-trichloropropane	5.8	
95-63-6	1,2,4-trimethylbenzene	23	
108-67-8	1,3,5-trimethylbenzene	23	
75-01-4	vinyl chloride	2	U
108-38-3;10	m/p-xylene	46	
95-47-6	o-xylene	22	

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9935MSD

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: SW-4MSD

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: M1S87139.D

Level: (low/med) Date Collected: 7/10/96

% Moisture: not dec. 100 Date Analyzed: 7/23/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
67-64-1	acetone	1.1	J
107-13-1	acrylonitrile	20	U
107-05-1	allyl chloride	20	U
71-43-2	benzene	22	
108-86-1	bromobenzene	21	
74-97-5	bromochloromethane	24	
75-27-4	bromodichloromethane	22	
75-25-2	bromoform	15	
74-83-9	bromomethane	2	U
78-93-3	2-butanone	20	U
104-51-8	n-butylbenzene	27	
135-98-8	sec-butylbenzene	25	
98-06-6	tert-butylbenzene	13	
75-15-0	carbon disulfide	20	U
56-23-5	carbon tetrachloride	27	
107-14-2	chloroacetonitrile	20	U
108-90-7	chlorobenzene	23	
109-69-3	1-chlorobutane	20	U
75-00-3	chloroethane	2	U
67-66-3	chloroform	24	
74-87-3	chloromethane	2	U
95-49-8	2-chlorotoluene	23	
106-43-4	4-chlorotoluene	23	
124-48-1	dibromochloromethane	19	
96-12-8	1,2-dibromo-3-chloropropane	19	
106-93-4	1,2-dibromoethane	22	
74-95-3	dibromomethane	22	
95-50-1	1,2-dichlorobenzene	22	
541-73-1	1,3-dichlorobenzene	22	
106-46-7	1,4-dichlorobenzene	22	
110-57-6	trans-1,4-dichloro-2-butene	13	J
75-71-8	dichlorodifluoromethane	2	U
75-34-3	1,1-dichloroethane	22	

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9935MSD

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: SW-4MSD

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: M1S87139.D

Level: (low/med) Date Collected: 7/10/96

% Moisture: not dec. 100 Date Analyzed: 7/23/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
107-06-2	1,2-dichloroethane	23	
75-35-4	1,1-dichloroethene	35	
156-59-2	cis-1,2-dichloroethene	25	
156-60-5	trans-1,2-dichloroethene	33	
78-87-5	1,2-dichloropropane	20	
142-28-9	1,3-dichloropropane	21	
590-20-7	2,2-dichloropropane	27	
563-58-6	1,1-dichloropropene	28	
10061-01-5	cis-1,3-dichloropropene	16	
10061-02-6	trans-1,3-dichloropropene	17	
100-41-4	ethylbenzene	24	
60-29-7	ethyl ether	20	U
97-63-2	ethyl methacrylate	20	U
87-68-3	hexachlorobutadiene	24	
67-72-1	hexachloroethane	20	U
591-78-6	2-hexanone	20	U
74-88-4	iodomethane	20	U
98-82-8	isopropylbenzene	28	
99-87-6	4-isopropyltoluene	25	
126-98-7	methacrylonitrile	20	U
96-33-3	methyl acrylate	20	U
1634-04-4	methyl-t-butyl ether	20	U
80-62-6	methyl methacrylate	20	U
75-09-2	methylene chloride	28	
108-10-1	4-methyl-2-pentanone	20	U
91-20-3	naphthalene	19	
79-46-9	2-nitropropane	20	U
76-01-7	pentachloroethane	20	U
107-12-0	propionitrile	20	U
103-65-1	n-propylbenzene	24	
100-42-5	styrene	21	
630-20-6	1,1,1,2-tetrachloroethane	24	
79-34-5	1,1,2,2-tetrachloroethane	20	

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9935MSD

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: 8260AWAT

Matrix: (soil/water) WATER Lab Sample ID: SW-4MSD

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: M1S87139.D

Level: (low/med) Date Collected: 7/10/96

% Moisture: not dec. 100 Date Analyzed: 7/23/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
127-18-4	tetrachloroethene	17	
109-99-9	tetrahydrofuran	20	U
108-88-3	toluene	23	
87-61-6	1,2,3-trichlorobenzene	18	
120-82-1	1,2,4-trichlorobenzene	19	
71-55-6	1,1,1-trichloroethane	27	
79-00-5	1,1,2-trichloroethane	21	
79-01-6	trichloroethene	25	
75-69-4	trichlorofluoromethane	2	U
96-18-4	1,2,3-trichloropropane	6.5	
95-63-6	1,2,4-trimethylbenzene	24	
108-67-8	1,3,5-trimethylbenzene	24	
75-01-4	vinyl chloride	2	U
108-38-3;10	m/p-xylene	48	
95-47-6	o-xylene	23	

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY FIELD Lab Sample ID: _____ Group: 8260AWATER

	SAMPLE NO.	SMC1 DBF #	SMC2 TOL #	SMC3 BFB #	OTHER #	TOT OUT
01	VBLK02	98	98	98		
02	D9936	100	97	99		
03	D9926	97	96	99		
04	D9927	98	98	99		
05	D9928	99	95	96		
06	D9930	101	98	97		
07	D9931	100	97	95		
08	D9932	100	98	97		
09	D9933	98	98	97		
10	D9934	101	96	93		
11	D9935	101	99	95		
12	VBLK03	105	99	95		
13	D9935MS	106	99	94		
14	D9935MSD	104	96	92		
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

	QC LIMITS
SMC1 DBF = DIBROMOFLUOROMETHANE	(86-118)
SMC2 TOL = TOLUENE-D8	(88-110)
SMC3 BFB = 4-BROMOFLUOROBENZENE	(86-115)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No. 38-EH-2651 Site: BRADLEY Location: _____ Group: 8260AWATER

Matrix Spike - Sample No.: D9935

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
benzene	20	0	22	110	(76-127)
chlorobenzene	20	0	23	115	(75-130)
1,1-dichloroethene	20	0	33	165 *	(61-145)
toluene	20	0	23	115	(76-125)
trichloroethene	20	0	26	130 *	(71-120)

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MS % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
benzene	20	22	110	0	20	(76-127)
chlorobenzene	20	23	115	0	20	(75-130)
1,1-dichloroethene	20	35	175 *	6	20	(61-145)
toluene	20	23	115	0	20	(76-125)
trichloroethene	20	25	125 *	4	20	(71-120)

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 4 out of 10 outside limits

Comments: _____

4A

VOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

VBLK02

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY FIELDLocation: _____ Group: 8260AWAT

Lab File ID: B1W87074.D Lab Sample ID: BLK7/17

Date Analyzed: 7/17/96 Time Analyzed: 1257

GC Column: DB624 ID: 0.53 (mm) Heated Purge: (Y/N) N

Instrument ID: VOC1

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	D9936	TRIPBLK	S1W87075.D	1349
02	D9926	SW-5	S1W87076.D	1433
03	D9927	SW-D	S1W87077.D	1517
04	D9928	SW-1	S1W87078.D	1601
05	D9930	SW-6	S1W87079.D	1646
06	D9931	SW-7	S1W87080.D	1732
07	D9932	SW-8	S1W87081.D	1818
08	D9933	SW-9	S1W87082.D	1905
09	D9934	SW-3	S1W87083.D	1952
10	D9935	SW-4	S1W87084.D	2040
11				
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COMMENTS:

4A

VOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

VBLK03

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY FIELD Location: Group: 8260AWAT

Lab File ID: B1W87126.D Lab Sample ID: BLK7/23

Date Analyzed: 7/23/96 Time Analyzed: 1037

GC Column: DB624 ID: 0.53 (mm) Heated Purge: (Y/N) N

Instrument ID: VOC1

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	D9935MS	SW-4MS	M1S87138.D	2000
02	D9935MSD	SW-4MSD	M1S87139.D	2038
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COMMENTS:

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY FIELD AASFion: _____ Group: 8260AWATE

Lab File ID: T1W87036.D BFB Injection Date: 7/15/96

Instrument ID: VOC1 BFB Injection Time: 0726

GC Column: DB624 ID: 0.53 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	29.4
75	30.0 - 60.0% of mass 95	49.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50% of mass 95	83.4
175	5.0 - 9.0% of mass 174	6.2 (7.5)1
176	95.0 - 101.0% of mass 174	82.0 (98.4)1
177	5.0 - 9.0% of mass 176	5.3 (6.5)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD020	10PPBSTD	C1W87040.D	7/15/96	1215
02	VSTD050	20PPBSTD	C1W87041.D	7/15/96	1255
03	VSTD100	50PPBSTD	C1W87042.D	7/15/96	1335
04	VSTD200	100PPBST	C1W87043.D	7/15/96	1415
05	VSTD010	2PPBSTD	C1W87046.D	7/15/96	1623
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5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY FIELD AASFtion: _____ Group: 8260AWATE

Lab File ID: T1W87071.D BFB Injection Date: 7/17/96

Instrument ID: VOC1 BFB Injection Time: 1103

GC Column: DB624 ID: 0.53 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	29.0
75	30.0 - 60.0% of mass 95	54.0
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.2
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50% of mass 95	78.7
175	5.0 - 9.0% of mass 174	5.9 (7.5)1
176	95.0 - 101.0% of mass 174	79.8 (101.5)1
177	5.0 - 9.0% of mass 176	5.5 (6.9)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	CC20PPB1	K1W87072.D	7/17/96	1131
02	VBLK02	BLK7/17	B1W87074.D	7/17/96	1257
03	D9936	TRIPBLK	S1W87075.D	7/17/96	1349
04	D9926	SW-5	S1W87076.D	7/17/96	1433
05	D9927	SW-D	S1W87077.D	7/17/96	1517
06	D9928	SW-1	S1W87078.D	7/17/96	1601
07	D9930	SW-6	S1W87079.D	7/17/96	1646
08	D9931	SW-7	S1W87080.D	7/17/96	1732
09	D9932	SW-8	S1W87081.D	7/17/96	1818
10	D9933	SW-9	S1W87082.D	7/17/96	1905
11	D9934	SW-3	S1W87083.D	7/17/96	1952
12	D9935	SW-4	S1W87084.D	7/17/96	2040
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5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY FIELD ~~LAS~~ Location: _____ Group: 8260AWATE

Lab File ID: T1W87123.D BFB Injection Date: 7/23/96

Instrument ID: VOC1 BFB Injection Time: 0853

GC Column: DB624 ID: 0.53 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	31.5
75	30.0 - 60.0% of mass 95	54.4
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.6
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50% of mass 95	86.6
175	5.0 - 9.0% of mass 174	5.6 (6.5)1
176	95.0 - 101.0% of mass 174	87.1 (100.6)1
177	5.0 - 9.0% of mass 176	6.0 (6.9)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	CC20PPB2	K1W87124.D	7/23/96	0920
02	VBLK03	BLK7/23	B1W87126.D	7/23/96	1037
03	D9935MS	SW-4MS	M1S87138.D	7/23/96	2000
04	D9935MSD	SW-4MSD	M1S87139.D	7/23/96	2038
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6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY FIELD AASFation: Group: 8260AWAT

Instrument ID: VOC1 Calibration Date(s): 7/15/96 7/15/96

Heated Purge: (Y/N) N Calibration Times: 1215 1623

GC Column DB624 ID: 0.53 (mm)

Lab File ID: RRF10 = C1W87046.D RRF20 = C1W87040.D
RRF50 = C1W87041.D RRF100 = C1W87042.D RRF200 = C1W87043.D

COMPOUND	RRF10	RRF20	RRF50	RRF100	RRF200	$\overline{RRF}$	% RSD	
acetone	0.258	0.270	0.301	0.255	0.262	0.269	6.9	
acrylonitrile	0.159	0.146	0.175	0.148	0.159	0.157	7.3	
allyl chloride	0.155	0.154	0.182	0.159	0.163	0.163	6.9	
benzene	1.099	1.072	1.212	1.087	1.037	1.101	6.0	
bromobenzene	0.841	0.823	0.934	0.896	0.856	0.870	5.1	
bromochloromethane	0.262	0.278	0.328	0.287	0.290	0.289	8.4	
bromodichloromethane	0.564	0.594	0.701	0.654	0.647	0.632	8.5	
bromoform *	0.404	0.525	0.662	0.612	0.631	0.567	18.4	*
bromomethane	0.659	0.409	0.405	0.346	0.365	0.437	29.1	
2-butanone	0.364	0.418	0.510	0.441	0.481	0.443	12.8	
n-butylbenzene	1.946	1.974	2.228	2.130	2.081	2.072	5.6	
sec-butylbenzene	2.272	2.346	2.745	2.569	2.542	2.495	7.5	
tert-butylbenzene	5.843	3.428	4.152	3.830	3.536	4.158	23.7	
carbon disulfide	1.005	1.026	1.195	1.042	1.065	1.066	7.0	
carbon tetrachloride	0.466	0.446	0.520	0.474	0.437	0.468	6.9	
chloroacetonitrile	0.021	0.021	0.028	0.023	0.024	0.023	12.3	
chlorobenzene *	1.026	1.029	1.178	1.017	0.981	1.046	7.3	*
1-chlorobutane	0.716	0.712	0.795	0.679	0.655	0.711	7.5	
chloroethane	0.273	0.278	0.311	0.222	0.170	0.251	22.1	
chloroform *	0.913	0.906	1.054	0.970	1.031	0.975	6.9	*
chloromethane *	0.747	0.697	0.785	0.689	0.705	0.725	5.6	*
2-chlorotoluene	2.110	1.928	2.271	2.056	1.999	2.073	6.3	
4-chlorotoluene	2.512	2.333	2.671	2.412	2.291	2.444	6.2	
dibromochloromethane	0.569	0.629	0.754	0.691	0.695	0.667	10.5	
1,2-dibromo-3-chloropropane	0.093	0.225	0.283	0.273	0.296	0.234	35.7	
1,2-dibromoethane	0.577	0.585	0.706	0.620	0.614	0.620	8.2	
dibromomethane	0.380	0.356	0.422	0.373	0.366	0.380	6.7	
1,2-dichlorobenzene	1.459	1.384	1.559	1.431	1.372	1.441	5.2	
1,3-dichlorobenzene	1.416	1.376	1.585	1.462	1.453	1.458	5.4	
1,4-dichlorobenzene	1.527	1.475	1.638	1.470	1.437	1.509	5.2	
trans-1,4-dichloro-2-butene	0.140	0.173	0.221	0.207	0.197	0.187	17.0	
dichlorodifluoromethane	0.585	0.670	0.733	0.652	0.643	0.656	8.1	
1,1-dichloroethane *	0.879	0.847	0.981	0.929	0.986	0.924	6.6	*
1,2-dichloroethane	0.760	0.692	0.812	0.708	0.694	0.733	7.1	
1,1-dichloroethene *	0.195	0.212	0.243	0.228	0.233	0.222	8.6	*
cis-1,2-dichloroethene	0.405	0.404	0.474	0.436	0.463	0.437	7.4	

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

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6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY FIELD AASFation: Group: 8260AWAT

Instrument ID: VOC1 Calibration Date(s): 7/15/96 7/15/96

Heated Purge: (Y/N) N Calibration Times: 1215 1623

GC Column DB624 ID: 0.53 (mm)

Lab File ID: RRF10 = C1W87046.D RRF20 = C1W87040.D
RRF50 = C1W87041.D RRF100 = C1W87042.D RRF200 = C1W87043.D

COMPOUND	RRF10	RRF20	RRF50	RRF100	RRF200	$\overline{RRF}$	% RSD	
trans-1,2-dichloroethene	0.216	0.218	0.247	0.222	0.234	0.228	5.7	
1,2-dichloropropane *	0.419	0.418	0.474	0.426	0.419	0.431	5.6	*
1,3-dichloropropane	0.779	0.790	0.909	0.779	0.755	0.802	7.6	
2,2-dichloropropane	0.500	0.537	0.607	0.633	0.671	0.590	11.9	
1,1-dichloropropene	0.126	0.138	0.149	0.135	0.126	0.135	7.0	
cis-1,3-dichloropropene	0.542	0.575	0.682	0.634	0.633	0.613	9.0	
trans-1,3-dichloropropene	0.432	0.498	0.602	0.567	0.572	0.534	12.8	
ethylbenzene *	1.632	1.610	1.828	1.621	1.563	1.651	6.2	*
ethyl ether	0.335	0.330	0.389	0.321	0.333	0.342	7.8	
ethyl methacrylate	0.669	0.668	0.810	0.659	0.633	0.688	10.1	
hexachlorobutadiene	0.643	0.432	0.513	0.542	0.490	0.524	14.9	
hexachloroethane	0.518	0.560	0.652	0.565	0.541	0.567	8.9	
2-hexanone	0.205	0.274	0.318	0.272	0.263	0.266	15.3	
iodomethane	0.594	0.611	0.744	0.629	0.638	0.643	9.1	
isopropylbenzene	1.877	1.947	2.324	2.125	2.109	2.076	8.4	
4-isopropyltoluene	1.904	1.935	2.228	2.062	2.051	2.036	6.3	
methacrylonitrile	0.187	0.183	0.227	0.195	0.206	0.199	8.8	
methyl acrylate	0.514	0.502	0.606	0.523	0.582	0.545	8.4	
methyl-t-butyl ether	0.806	0.758	0.902	0.762	0.823	0.810	7.2	
methyl methacrylate	0.268	0.264	0.322	0.265	0.258	0.275	9.5	
methylene chloride	0.339	0.313	0.355	0.317	0.340	0.333	5.3	
4-methyl-2-pentanone	0.160	0.160	0.195	0.164	0.161	0.168	9.0	
naphthalene	1.862	1.830	2.095	1.945	1.955	1.937	5.3	
2-nitropropane	0.161	0.172	0.224	0.197	0.204	0.192	13.2	
pentachloroethane	0.440	0.397	0.508	0.475	0.441	0.452	9.2	
propionitrile	0.067	0.068	0.085	0.072	0.081	0.075	10.5	
n-propylbenzene	3.037	2.904	3.294	3.050	2.994	3.056	4.7	
styrene	0.878	0.909	1.082	0.961	0.915	0.949	8.5	
1,1,1,2-tetrachloroethane	0.420	0.430	0.508	0.463	0.453	0.455	7.5	
1,1,2,2-tetrachloroethane *	1.063	1.075	1.263	1.150	1.146	1.139	7.0	*
tetrachloroethene	1.265	1.164	1.167	0.767	0.722	1.017	24.9	
tetrahydrofuran	0.054	0.051	0.06-	0.054	0.058	0.056	8.6	
toluene *	0.595	0.585	0.673	0.605	0.578	0.607	6.3	*
1,2,3-trichlorobenzene	1.006	0.955	1.098	1.046	1.040	1.029	5.2	
1,2,4-trichlorobenzene	0.998	1.001	1.106	1.080	1.064	1.050	4.6	
1,1,1-trichloroethane	0.595	0.603	0.693	0.672	0.719	0.656	8.4	

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

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FORM VI VOA 3/90

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY FIELD AASEation: Group: 8260AWAT

Instrument ID: VOC1 Calibration Date(s): 7/15/96 7/15/96

Heated Purge: (Y/N) N Calibration Times: 1215 1623

GC Column DB624 ID: 0.53 (mm)

Lab File ID: RRF10 = C1W87046.D RRF20 = C1W87040.D
RRF50 = C1W87041.D RRF100 = C1W87042.D RRF200 = C1W87043.D

COMPOUND	RRF10	RRF20	RRF50	RRF100	RRF200	$\overline{RRF}$	% RSD	
1,1,2-trichloroethane	0.302	0.303	0.364	0.319	0.307	0.319	8.2	
trichloroethene	0.359	0.356	0.402	0.369	0.347	0.367	5.7	
trichlorofluoromethane	0.645	0.671	0.763	0.661	0.685	0.685	6.7	
1,2,3-trichloropropane	3.805	2.546	3.191	2.850	2.896	3.058	15.6	
1,2,4-trimethylbenzene	2.017	2.031	2.371	2.177	2.161	2.152	6.6	
1,3,5-trimethylbenzene	1.903	1.985	2.291	2.107	2.015	2.060	7.2	
vinyl chloride *	0.460	0.471	0.549	0.500	0.512	0.498	7.1	*
m/p-xylene	0.554	0.546	0.625	0.546	0.514	0.557	7.4	
o-xylene	0.534	0.541	0.622	0.552	0.506	0.551	7.9	
DIBROMOFLUOROMETHANE	0.673	0.664	0.667	0.696	0.774	0.695	6.6	
TOLUENE-D8	0.983	0.990	1.013	0.992	1.006	0.997	1.2	
4-BROMOFLUOROBENZENE	1.179	1.178	1.222	1.251	1.311	1.228	4.5	

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No. 38-EH-2651 Site: BRADLEY FIELD AASEation: Group: 8260AWAT

Instrument ID: VOC1 Calibration Date: 7/17/96 Time: 1131

Lab File ID: K1W87072.D Init. Calib. Date(s): 7/15/96 7/15/96

Heated Purge: (Y/N) N Init. Calib. Times: 1215 1623

GC Column: DB624 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
acetone	0.269	0.271		-0.7	
acrylonitrile	0.157	0.159		-1.3	
allyl chloride	0.163	0.160		1.8	
benzene	1.101	1.007		8.5	
bromobenzene	0.870	0.833		4.3	
bromochloromethane	0.289	0.296		-2.4	
bromodichloromethane	0.632	0.630		0.3	
bromoform	0.567	0.591	0.100	-4.2	
bromomethane	0.437	0.329		24.7	
2-butanone	0.443	0.358		19.2	
n-butylbenzene	2.072	1.908		7.9	
sec-butylbenzene	2.495	2.335		6.4	
tert-butylbenzene	4.158	3.828		7.9	
carbon disulfide	1.066	1.022		4.1	
carbon tetrachloride	0.468	0.458		2.1	
chloroacetonitrile	0.023	0.023		0.0	
chlorobenzene	1.046	0.999	0.300	4.5	
1-chlorobutane	0.711	0.629		11.5	
chloroethane	0.251	0.212		15.5	
chloroform	0.975	0.924		5.2	20.0
chloromethane	0.725	0.513	0.100	29.2	
2-chlorotoluene	2.073	1.958		5.5	
4-chlorotoluene	2.444	2.406		1.6	
dibromochloromethane	0.667	0.654		1.9	
1,2-dibromo-3-chloropropane	0.234	0.268		-14.5	
1,2-dibromoethane	0.620	0.599		3.4	
dibromomethane	0.380	0.370		2.6	
1,2-dichlorobenzene	1.441	1.373		4.7	
1,3-dichlorobenzene	1.458	1.400		4.0	
1,4-dichlorobenzene	1.509	1.455		3.6	
trans-1,4-dichloro-2-butene	0.187	0.196		-4.8	
dichlorodifluoromethane	0.656	0.740		-12.8	
1,1-dichloroethane	0.924	0.814	0.100	11.9	
1,2-dichloroethane	0.733	0.711		3.0	
1,1-dichloroethene	0.222	0.215		3.2	20.0
cis-1,2-dichloroethene	0.437	0.422		3.4	

All other compounds must meet a minimum RRF of 0.010.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No. 38-EH-2651 Site: BRADLEY FIELD AASEation: Group: 8260AWAT

Instrument ID: VOC1 Calibration Date: 7/17/96 Time: 1131

Lab File ID: K1W87072.D Init. Calib. Date(s): 7/15/96 7/15/96

Heated Purge: (Y/N) N Init. Calib. Times: 1215 1623

GC Column: DB624 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
trans-1,2-dichloroethene	0.228	0.237		-3.9	
1,2-dichloropropane	0.431	0.366		15.1	20.0
1,3-dichloropropane	0.802	0.776		3.2	
2,2-dichloropropane	0.590	0.574		2.7	
1,1-dichloropropene	0.135	0.123		8.9	
cis-1,3-dichloropropene	0.613	0.568		7.3	
trans-1,3-dichloropropene	0.534	0.499		6.6	
ethylbenzene	1.651	1.583		4.1	20.0
ethyl ether	0.342	0.329		3.8	
ethyl methacrylate	0.688	0.659		4.2	
hexachlorobutadiene	0.524	0.398		24.0	
hexachloroethane	0.567	0.547		3.5	
2-hexanone	0.266	0.213		19.9	
iodomethane	0.643	0.670		-4.2	
isopropylbenzene	2.076	2.014		3.0	
4-isopropyltoluene	2.036	1.903		6.5	
methacrylonitrile	0.199	0.183		8.0	
methyl acrylate	0.545	0.474		13.0	
methyl-t-butyl ether	0.810	0.823		-1.6	
methyl methacrylate	0.275	0.260		5.5	
methylene chloride	0.333	0.329		1.2	
4-methyl-2-pentanone	0.168	0.149		11.3	
naphthalene	1.937	1.631		15.8	
2-nitropropane	0.192	0.188		2.1	
pentachloroethane	0.452	0.507		-12.2	
propionitrile	0.075	0.064		14.7	
n-propylbenzene	3.056	2.937		3.9	
styrene	0.949	0.923		2.7	
1,1,1,2-tetrachloroethane	0.455	0.450		1.1	
1,1,2,2-tetrachloroethane	1.139	1.109	0.300	2.6	
tetrachloroethene	1.017	0.817		19.7	
tetrahydrofuran	0.056	0.053		5.4	
toluene	0.607	0.564		7.1	20.0
1,2,3-trichlorobenzene	1.029	0.794		22.8	
1,2,4-trichlorobenzene	1.050	0.842		19.8	
1,1,1-trichloroethane	0.656	0.627		4.4	

All other compounds must meet a minimum RRF of 0.010.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No. 38-EH-2651 Site: BRADLEY FIELD AASEation: Group: 8260AWAT

Instrument ID: VOC1 Calibration Date: 7/17/96 Time: 1131

Lab File ID: K1W87072.D Init. Calib. Date(s): 7/15/96 7/15/96

Heated Purge: (Y/N) N Init. Calib. Times: 1215 1623

GC Column: DB624 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
1,1,2-trichloroethane	0.319	0.301		5.6	
trichloroethene	0.367	0.345		6.0	
trichlorofluoromethane	0.685	0.733		-7.0	
1,2,3-trichloropropane	3.058	2.703		11.6	
1,2,4-trimethylbenzene	2.152	2.051		4.7	
1,3,5-trimethylbenzene	2.060	2.030		1.5	
vinyl chloride	0.498	0.469		5.8	20.0
m/p-xylene	0.557	0.534		4.1	
o-xylene	0.551	0.525		4.7	
DIBROMOFLUOROMETHANE	0.695	0.712		-2.4	
TOLUENE-D8	0.997	0.978		1.9	
4-BROMOFLUOROBENZENE	1.228	1.193		2.9	

... other compounds must meet a minimum RRF of 0.010.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No. 38-EH-2651 Site: BRADLEY FIELD AASFation: Group: 8260AWAT

Instrument ID: VOC1 Calibration Date: 7/23/96 Time: 0920

Lab File ID: K1W87124.D Init. Calib. Date(s): 7/15/96 7/15/96

Heated Purge: (Y/N) N Init. Calib. Times: 1215 1623

GC Column: DB624 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
acetone	0.269	0.340		-26.4	
acrylonitrile	0.157	0.180		-14.6	
allyl chloride	0.163	0.191		-17.2	
benzene	1.101	1.016		7.7	
bromobenzene	0.870	0.826		5.1	
bromochloromethane	0.289	0.308		-6.6	
bromodichloromethane	0.632	0.691		-9.3	
bromoform	0.567	0.627	0.100	-10.6	
bromomethane	0.437	0.428		2.1	
2-butanone	0.443	0.419		5.4	
n-butylbenzene	2.072	2.048		1.2	
sec-butylbenzene	2.495	2.366		5.2	
tert-butylbenzene	4.158	3.910		6.0	
carbon disulfide	1.066	1.248		-17.1	
carbon tetrachloride	0.468	0.481	-	-2.8	
chloroacetonitrile	0.023	0.024		-4.3	
chlorobenzene	1.046	1.020	0.300	2.5	
1-chlorobutane	0.711	0.664		6.6	
chloroethane	0.251	0.231		8.0	
chloroform	0.975	0.984		-0.9	20.0
chloromethane	0.725	0.708	0.100	2.3	
2-chlorotoluene	2.073	2.023		2.4	
4-chlorotoluene	2.444	2.443		0.0	
dibromochloromethane	0.667	0.728		-9.1	
1,2-dibromo-3-chloropropane	0.234	0.266		-13.7	
1,2-dibromoethane	0.620	0.625		-0.8	
dibromomethane	0.380	0.384		-1.1	
1,2-dichlorobenzene	1.441	1.385		3.9	
1,3-dichlorobenzene	1.458	1.399		4.0	
1,4-dichlorobenzene	1.509	1.462		3.1	
trans-1,4-dichloro-2-butene	0.187	0.222		-18.7	
dichlorodifluoromethane	0.656	0.782		-19.2	
1,1-dichloroethane	0.924	0.851	0.100	7.9	
1,2-dichloroethane	0.733	0.742		-1.2	
1,1-dichloroethene	0.222	0.222		0.0	20.0
cis-1,2-dichloroethene	0.437	0.427		2.3	

All other compounds must meet a minimum RRF of 0.010.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No. 38-EH-2651 Site: BRADLEY FIELD AASEation: Group: 8260AWAT

Instrument ID: VOC1 Calibration Date: 7/23/96 Time: 0920

Lab File ID: K1W87124.D Init. Calib. Date(s): 7/15/96 7/15/96

Heated Purge: (Y/N) N Init. Calib. Times: 1215 1623

GC Column: DB624 ID: 0.53 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
trans-1,2-dichloroethene	0.228	0.256		-12.3	
1,2-dichloropropane	0.431	0.375		13.0	20.0
1,3-dichloropropane	0.802	0.801		0.1	
2,2-dichloropropane	0.590	0.636		-7.8	
1,1-dichloropropene	0.135	0.128		5.2	
cis-1,3-dichloropropene	0.613	0.605		1.3	
trans-1,3-dichloropropene	0.534	0.557		-4.3	
ethylbenzene	1.651	1.625		1.6	20.0
ethyl ether	0.342	0.386		-12.9	
ethyl methacrylate	0.688	0.689		-0.1	
hexachlorobutadiene	0.524	0.392		25.2	
hexachloroethane	0.567	0.557		1.8	
2-hexanone	0.266	0.286		-7.5	
iodomethane	0.643	0.805		-25.2	
isopropylbenzene	2.076	2.003		3.5	
4-isopropyltoluene	2.036	1.959		3.8	
methacrylonitrile	0.199	0.198		0.5	
methyl acrylate	0.545	0.506		7.2	
methyl-t-butyl ether	0.810	0.936		-15.6	
methyl methacrylate	0.275	0.275		0.0	
methylene chloride	0.333	0.354		-6.3	
4-methyl-2-pentanone	0.168	0.158		6.0	
naphthalene	1.937	1.849		4.5	
2-nitropropane	0.192	0.202		-5.2	
pentachloroethane	0.452	0.501		-10.8	
propionitrile	0.075	0.068		9.3	
n-propylbenzene	3.056	2.980		2.5	
styrene	0.949	0.948		0.1	
1,1,1,2-tetrachloroethane	0.455	0.465		-2.2	
1,1,2,2-tetrachloroethane	1.139	1.113	0.300	2.3	
tetrachloroethene	1.017	0.930		8.6	
tetrahydrofuran	0.056	0.055		1.8	
toluene	0.607	0.582		4.1	20.0
1,2,3-trichlorobenzene	1.029	0.868		15.6	
1,2,4-trichlorobenzene	1.050	0.924		12.0	
1,1,1-trichloroethane	0.656	0.655		0.2	

All other compounds must meet a minimum RRF of 0.010.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No. 38-EH-2651 Site: BRADLEY FIELD AASEation: Group: 8260AWAT

Instrument ID: VOC1 Calibration Date: 7/23/96 Time: 0920

Lab File ID: K1W87124.D Init. Calib. Date(s): 7/15/96 7/15/96

Heated Purge: (Y/N) N Init. Calib. Times: 1215 1623

GC Column: DB624 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
1,1,2-trichloroethane	0.319	0.319		0.0	
trichloroethene	0.367	0.355		3.3	
trichlorofluoromethane	0.685	0.838		-22.3	
1,2,3-trichloropropane	3.058	2.878		5.9	
1,2,4-trimethylbenzene	2.152	2.172		-0.9	
1,3,5-trimethylbenzene	2.060	2.056		0.2	
vinyl chloride	0.498	0.521		-4.6	20.0
m/p-xylene	0.557	0.549		1.4	
o-xylene	0.551	0.536		2.7	
DIBROMOFLUOROMETHANE	0.695	0.730		-5.0	
TOLUENE-D8	0.997	0.993		0.4	
4-BROMOFLUOROBENZENE	1.228	1.187		3.3	

All other compounds must meet a minimum RRF of 0.010.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY FIELD Location: Group: 8260AWATE

Lab File ID (Standard): K1W87072.D Date Analyzed: 7/17/96

Instrument ID: VOC1 Time Analyzed: 1131

GC Column: DB624 ID: 0.53 (mm) Heated Purge (Y/N) N

		IS1 PFL AREA #	RT #	IS2 DFB AREA #	RT #	IS3 CBZ AREA #	RT #
	12 HOUR STD	1386351	13.21	1715204	14.51	1244018	19.79
	UPPER LIMIT	2772702	13.71	3430408	15.01	2488036	20.29
	LOWER LIMIT	693176	12.71	857602	14.01	622009	19.29
	SAMPLE NO.						
01	VBLK02	1365413	13.24	1686740	14.51	1228919	19.78
02	D9936	1380875	13.22	1686222	14.50	1248979	19.78
03	D9926	1394026	13.21	1710648	14.49	1217080	19.79
04	D9927	1411146	13.22	1709992	14.51	1245135	19.81
05	D9928	1407594	13.22	1711732	14.50	1260713	19.81
06	D9930	1401887	13.22	1707308	14.51	1239705	19.80
07	D9931	1395472	13.21	1705678	14.50	1258644	19.80
08	D9932	1402975	13.23	1712084	14.51	1245336	19.81
09	D9933	1412841	13.22	1721658	14.50	1270637	19.81
10	D9934	1407614	13.22	1702265	14.51	1254404	19.80
11	D9935	1380483	13.22	1699116	14.51	1238983	19.81
12							
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22							

IS1 PFL = PENTAFLUOROBENZENE
IS2 DFB = 1,4-DIFLUOROBENZENE
IS3 CBZ = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY FIELD Lab Sample ID: Group: 8260AWATE

Lab File ID (Standard): K1W87072.D Date Analyzed: 7/17/96

Instrument ID: VOC1 Time Analyzed: 1131

GC Column: DB624 ID: 0.53 (mm) Heated Purge (Y/N) - N

		IS4 DCB AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	743567	24.34				
	UPPER LIMIT	1487134	24.84				
	LOWER LIMIT	371784	23.84				
	SAMPLE NO.						
01	VBLK02	725633	24.34				
02	D9936	701157	24.35				
03	D9926	706634	24.34				
04	D9927	726223	24.37				
05	D9928	732972	24.36				
06	D9930	735940	24.37				
07	D9931	741381	24.36				
08	D9932	722058	24.36				
09	D9933	743162	24.38				
10	D9934	761610	24.39				
11	D9935	735212	24.35				
12							
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22							

IS4 DCB = 1,4-DICHLOROBENZENE-D4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY FIELD Location: Group: 8260AWATE

Lab File ID (Standard): K1W87124.D Date Analyzed: 7/23/96

Instrument ID: VOC1 Time Analyzed: 0920

GC Column: DB624 ID: 0.53 (mm) Heated Purge (Y/N) N

		IS1 PFL AREA #	RT #	IS2 DFB AREA #	RT #	IS3 CBZ AREA #	RT #
	12 HOUR STD	1259288	13.21	1576687	14.49	1147993	19.77
	UPPER LIMIT	2518576	13.71	3153374	14.99	2295986	20.27
	LOWER LIMIT	629644	12.71	788344	13.99	573997	19.27
	SAMPLE NO.						
01	VBLK03	1210021	13.20	1570225	14.48	1115741	19.80
02	D9935MS	1183629	13.20	1479999	14.48	1055656	19.78
03	D9935MSD	1173466	13.20	1472405	14.48	1029801	19.77
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IS1 PFL = PENTAFLUOROBENZENE
IS2 DFB = 1,4-DIFLUOROBENZENE
IS3 CBZ = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: USACHPPM/DLS/ASD/GC-MS Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY FIELD Lab Sample ID: Group: 8260AWATE

Lab File ID (Standard): K1W87124.D Date Analyzed: 7/23/96

Instrument ID: VOC1 Time Analyzed: 0920

GC Column: DB624 ID: 0.53 (mm) Heated Purge (Y/N) N

		IS4 DCB AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	701235	24.32				
	UPPER LIMIT	1402470	24.82				
	LOWER LIMIT	350618	23.82				
	SAMPLE NO.						
01	VBLK03	652230	24.34				
02	D9935MS	657604	24.33				
03	D9935MSD	650520	24.32				
04							
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22							

IS4 DCB = 1,4-DICHLOROBENZENE-D4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

ANALYSIS REPORT

U.S. ARMY CENTER FOR HEALTH PROMOTION AND PREVENTIVE MEDICINE
Building E2100, APG, MD 21010
ANALYTICAL SPECTROMETRY DIVISION

Installation: BRADLEY

Project Number: 38-EH-2651

Job Number: 6A5600

Project Officer: MOSER

Number of Samples: 9

Matrix: Soil

Analyzed for: Semivolatiles

Method: 8270B

FIELD #	LAB #	DATA FILE #
D9937	SS1	XS800.D, XM811.D, XM812.D
D9938	SS2	XS801.D
D9939	SS3	XS802.D
D9940	SS5	XS803.D
D9941	SSD	XS804.D
D9942	SS6	XS805.D, XE805.D
D9943	SS7	XS806.D, XE806.D
D9944	SS8	XS807.D, XD807.D
D9945	SS9	XS808.D, XM809.D, XM810.D

Analyst: [illegible] Date: [illegible]

Reviewed by: [illegible] for Rosemary Mauricio Date: 16 Aug 96

Reviewed by: [illegible] Date: 16 Aug 96

Release authorized by: [illegible] 16 Aug 96

This report shall not be reproduced except in full without the written approval of the laboratory. The results relate only to the specific samples identified within this report.

SUMMARY OF RESULTS
BRADLEY
38-EH-2651

The samples were collected 9 through 10 June 96, extracted by Lancaster Laboratories on 16 and 18 July 96. The method mandated fourteen day extraction holding time was met for all samples. These samples were received back into DLS 26 July 96 and analyzed 31 July through 13 August 96.

Polynuclear aromatic hydrocarbon compounds were detected in many of the samples. Benzyl alcohol was found in sample SS2, SS3, SS7 and SS9. Phenol and 4-methylphenol were found in sample SS9. Acenapthylene was detected in sample SS7. The 3,3'-dichlorobenzidine reporting level is estimated in all samples because it is expired in the calibration standards. Samples SS6 and SS7 were diluted 1:5 and reanalyzed due to high levels of polynuclear aromatic compounds. Sample SS8 was diluted 1:500 and reanalyzed due to an extreme level of bis(2-ethylhexyl)phthalate. Bis(2-ethylhexyl)phthalate was found in seveal samples and in one of the laboratory blanks and may be the result of laboratory contamination. Phthalate compounds were detected in many of the samples.

A matrix spike and matrix spike duplicate were prepared on samples SS1 and SS9. All matrix spike and matrix spike duplicate recoveries were within the quality control limits for both samples. All sample surrogate recoveries were within the quality control limits for the undiluted samples. All internal standard area counts met the quality control limits for all samples. Both lab blanks and the matrix spike duplicate of sample SS1 missed the 12 hour tuning time limit, however minimal negative impact on the data is expected.

Samples were analyzed by EPA method 8270B using POCP SOP 72-3.

Analyst: _____ Date: 16 Aug 96

Analysis Data Sheet Qualifier codes:

B - Indicates analyte was found in the associated blank as well as in the sample.

D - Indicates sample was diluted.

E - Indicates reported value exceeds the upper limit of the quantitation curve.

J - Indicates reported value is an estimate.

U - Indicates compound was analyzed for but not detected.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
SBLK01

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) SOIL Lab Sample ID: BLK01

Sample wt/vol: 30.0 (g/mL G Lab File ID: XB813.D

Level: (low/med) LOW Date Collected: 7/16/96

% Moisture: 1 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/2/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
62-75-9	N-Nitrosodimethylamine	340	U
111-44-4	bis(2-Chloroethyl)ether	340	U
108-95-2	Phenol	340	U
95-57-8	2-Chlorophenol	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
95-50-1	1,2-Dichlorobenzene	340	U
100-51-6	Benzyl alcohol	340	U
108-60-1	bis(2-chloroisopropyl)ether	340	U
95-48-7	2-Methylphenol	340	U
67-72-1	Hexachloroethane	340	U
621-64-7	N-Nitroso-di-n-propylamine	340	U
106-44-5	4-Methylphenol	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
120-82-1	1,2,4-Trichlorobenzene	340	U
91-20-3	Naphthalene	340	U
106-47-8	4-Chloroaniline	340	U
87-68-3	Hexachlorobutadiene	340	U
59-50-7	4-Chloro-3-methylphenol	340	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	340	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	340	U
208-96-8	Acenaphthylene	340	U
131-11-3	Dimethylphthalate	340	U
606-20-2	2,6-Dinitrotoluene	340	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
SBLK01

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) SOIL Lab Sample ID: BLK01

Sample wt/vol: 30.0 (g/mL G Lab File ID: XB813.D

Level: (low/med) LOW Date Collected: 7/16/96

% Moisture: 1 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/2/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
83-32-9	Acenaphthene	340	U
99-09-2	3-Nitroaniline	340	U
51-28-5	2,4-Dinitrophenol	340	U
132-64-9	Dibenzofuran	340	U
121-14-2	2,4-Dinitrotoluene	340	U
100-02-7	4-Nitrophenol	340	U
86-73-7	Fluorene	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
84-66-2	Diethylphthalate	340	U
100-01-6	4-Nitroaniline	340	U
534-52-1	4,6-Dinitro-2-methylphenol	340	U
86-30-6	n-Nitrosodiphenylamine	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
87-86-5	Pentachlorophenol	340	U
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
84-74-2	Di-n-butylphthalate	340	U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3'-Dichlorobenzidine	340	JU
56-55-3	Benzo[a]anthracene	340	U
218-01-9	Chrysene	340	U
117-81-7	bis(2-Ethylhexyl)phthalate	340	U
117-84-0	Di-n-octylphthalate	340	U
205-99-2	Benzo[b]fluoranthene	340	U
207-08-9	Benzo[k]fluoranthene	340	U
50-32-8	Benzo[a]pyrene	340	U
193-39-5	Indeno[1,2,3-cd]pyrene	340	U
53-70-3	Dibenz[a,h]anthracene	340	U
191-24-2	Benzo[g,h,i]perylene	340	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
SBLK02

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) SOIL Lab Sample ID: BLK02

Sample wt/vol: 30.0 (g/mL G Lab File ID: XB814.D

Level: (low/med) LOW Date Collected: 7/18/96

% Moisture: 1 decanted: (Y/N): N Date Extracted: 7/18/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/2/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
62-75-9	N-Nitrosodimethylamine	340	U
111-44-4	bis(2-Chloroethyl)ether	340	U
108-95-2	Phenol	340	U
95-57-8	2-Chlorophenol	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
95-50-1	1,2-Dichlorobenzene	340	U
100-51-6	Benzyl alcohol	340	U
108-60-1	bis(2-chloroisopropyl)ether	340	U
95-48-7	2-Methylphenol	340	U
67-72-1	Hexachloroethane	340	U
621-64-7	N-Nitroso-di-n-propylamine	340	U
106-44-5	4-Methylphenol	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
120-82-1	1,2,4-Trichlorobenzene	340	U
91-20-3	Naphthalene	340	U
106-47-8	4-Chloroaniline	340	U
87-68-3	Hexachlorobutadiene	340	U
59-50-7	4-Chloro-3-methylphenol	340	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	340	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	340	U
208-96-8	Acenaphthylene	340	U
131-11-3	Dimethylphthalate	340	U
606-20-2	2,6-Dinitrotoluene	340	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
SBLK02

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) SOIL Lab Sample ID: BLK02

Sample wt/vol: 30.0 (g/mL G Lab File ID: XB814.D

Level: (low/med) LOW Date Collected: 7/18/96

% Moisture: 1 decanted: (Y/N): N Date Extracted: 7/18/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/2/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
83-32-9	Acenaphthene	340	U
99-09-2	3-Nitroaniline	340	U
51-28-5	2,4-Dinitrophenol	340	U
132-64-9	Dibenzofuran	340	U
121-14-2	2,4-Dinitrotoluene	340	U
100-02-7	4-Nitrophenol	340	U
86-73-7	Fluorene	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
84-66-2	Diethylphthalate	340	U
100-01-6	4-Nitroaniline	340	U
534-52-1	4,6-Dinitro-2-methylphenol	340	U
86-30-6	n-Nitrosodiphenylamine	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
87-86-5	Pentachlorophenol	340	U
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
84-74-2	Di-n-butylphthalate	340	U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3'-Dichlorobenzidine	340	JU
56-55-3	Benzo[a]anthracene	340	U
218-01-9	Chrysene	340	U
117-81-7	bis(2-Ethylhexyl)phthalate	1200	
117-84-0	Di-n-octylphthalate	340	U
205-99-2	Benzo[b]fluoranthene	340	U
207-08-9	Benzo[k]fluoranthene	340	U
50-32-8	Benzo[a]pyrene	340	U
193-39-5	Indeno[1,2,3-cd]pyrene	340	U
53-70-3	Dibenz[a,h]anthracene	340	U
191-24-2	Benzo[ghi]perylene	340	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9937

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) SOIL Lab Sample ID: SS1

Sample wt/vol: 30.0 (g/mL G Lab File ID: XS800.D

Level: (low/med) LOW Date Collected: 7/10/96

% Moisture: 21 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/1/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
62-75-9	N-Nitrosodimethylamine	420	U
111-44-4	bis(2-Chloroethyl)ether	420	U
108-95-2	Phenol	420	U
95-57-8	2-Chlorophenol	420	U
541-73-1	1,3-Dichlorobenzene	420	U
106-46-7	1,4-Dichlorobenzene	420	U
95-50-1	1,2-Dichlorobenzene	420	U
100-51-6	Benzyl alcohol	420	U
108-60-1	bis(2-chloroisopropyl)ether	420	U
95-48-7	2-Methylphenol	420	U
67-72-1	Hexachloroethane	420	U
621-64-7	N-Nitroso-di-n-propylamine	420	U
106-44-5	4-Methylphenol	420	U
98-95-3	Nitrobenzene	420	U
78-59-1	Isophorone	420	U
88-75-5	2-Nitrophenol	420	U
105-67-9	2,4-Dimethylphenol	420	U
111-91-1	bis(2-Chloroethoxy)methane	420	U
120-83-2	2,4-Dichlorophenol	420	U
120-82-1	1,2,4-Trichlorobenzene	420	U
91-20-3	Naphthalene	420	U
106-47-8	4-Chloroaniline	420	U
87-68-3	Hexachlorobutadiene	420	U
59-50-7	4-Chloro-3-methylphenol	420	U
91-57-6	2-Methylnaphthalene	420	U
77-47-4	Hexachlorocyclopentadiene	420	U
88-06-2	2,4,6-Trichlorophenol	420	U
95-95-4	2,4,5-Trichlorophenol	420	U
91-58-7	2-Chloronaphthalene	420	U
88-74-4	2-Nitroaniline	420	U
208-96-8	Acenaphthylene	420	U
131-11-3	Dimethylphthalate	420	U
606-20-2	2,6-Dinitrotoluene	420	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

D9937

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) SOIL Lab Sample ID: SS1

Sample wt/vol: 30.0 (g/mL G Lab File ID: XS800.D

Level: (low/med) LOW Date Collected: 7/10/96

% Moisture: 21 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/1/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
83-32-9	Acenaphthene	420	U
99-09-2	3-Nitroaniline	420	U
51-28-5	2,4-Dinitrophenol	420	U
132-64-9	Dibenzofuran	420	U
121-14-2	2,4-Dinitrotoluene	420	U
100-02-7	4-Nitrophenol	420	U
86-73-7	Fluorene	420	U
7005-72-3	4-Chlorophenyl-phenylether	420	U
84-66-2	Diethylphthalate	420	U
100-01-6	4-Nitroaniline	420	U
534-52-1	4,6-Dinitro-2-methylphenol	420	U
86-30-6	n-Nitrosodiphenylamine	420	U
101-55-3	4-Bromophenyl-phenylether	420	U
118-74-1	Hexachlorobenzene	420	U
87-86-5	Pentachlorophenol	420	U
85-01-8	Phenanthrene	620	
120-12-7	Anthracene	420	U
84-74-2	Di-n-butylphthalate	420	U
206-44-0	Fluoranthene	1100	
129-00-0	Pyrene	840	
85-68-7	Butylbenzylphthalate	420	U
91-94-1	3,3'-Dichlorobenzidine	420	JU
56-55-3	Benzo[a]anthracene	360	J
218-01-9	Chrysene	570	
117-81-7	bis(2-Ethylhexyl)phthalate	230	J
117-84-0	Di-n-octylphthalate	420	U
205-99-2	Benzo[b]fluoranthene	760	
207-08-9	Benzo[k]fluoranthene	250	J
50-32-8	Benzo[a]pyrene	340	J
193-39-5	Indeno[1,2,3-cd]pyrene	400	J
53-70-3	Dibenz[a,h]anthracene	420	U
191-24-2	Benzo[g,h,i]perylene	370	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9938

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) SOIL Lab Sample ID: SS2

Sample wt/vol: 30.0 (g/mL G Lab File ID: XS801.D

Level: (low/med) LOW Date Collected: 7/10/96

% Moisture: 18 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/1/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
62-75-9	N-Nitrosodimethylamine	410	U
111-44-4	bis(2-Chloroethyl)ether	410	U
108-95-2	Phenol	410	U
95-57-8	2-Chlorophenol	410	U
541-73-1	1,3-Dichlorobenzene	410	U
106-46-7	1,4-Dichlorobenzene	410	U
95-50-1	1,2-Dichlorobenzene	410	U
100-51-6	Benzyl alcohol	250	J
108-60-1	bis(2-chloroisopropyl)ether	410	U
95-48-7	2-Methylphenol	410	U
67-72-1	Hexachloroethane	410	U
621-64-7	N-Nitroso-di-n-propylamine	410	U
106-44-5	4-Methylphenol	410	U
98-95-3	Nitrobenzene	410	U
78-59-1	Isophorone	410	U
88-75-5	2-Nitrophenol	410	U
105-67-9	2,4-Dimethylphenol	410	U
111-91-1	bis(2-Chloroethoxy)methane	410	U
120-83-2	2,4-Dichlorophenol	410	U
120-82-1	1,2,4-Trichlorobenzene	410	U
91-20-3	Naphthalene	410	U
106-47-8	4-Chloroaniline	410	U
87-68-3	Hexachlorobutadiene	410	U
59-50-7	4-Chloro-3-methylphenol	410	U
91-57-6	2-Methylnaphthalene	410	U
77-47-4	Hexachlorocyclopentadiene	410	U
88-06-2	2,4,6-Trichlorophenol	410	U
95-95-4	2,4,5-Trichlorophenol	410	U
91-58-7	2-Chloronaphthalene	410	U
88-74-4	2-Nitroaniline	410	U
208-96-8	Acenaphthylene	[illegible]	U
131-11-3	Dimethylphthalate	410	U
606-20-2	2,6-Dinitrotoluene	410	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

D9938

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) SOIL Lab Sample ID: SS2

Sample wt/vol: 30.0 (g/mL G Lab File ID: XS801.D

Level: (low/med) LOW Date Collected: 7/10/96

% Moisture: 18 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/1/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
83-32-9	Acenaphthene	410	U
99-09-2	3-Nitroaniline	410	U
51-28-5	2,4-Dinitrophenol	410	U
132-64-9	Dibenzofuran	410	U
121-14-2	2,4-Dinitrotoluene	410	U
100-02-7	4-Nitrophenol	410	U
86-73-7	Fluorene	410	U
7005-72-3	4-Chlorophenyl-phenylether	410	U
84-66-2	Diethylphthalate	410	U
100-01-6	4-Nitroaniline	410	U
534-52-1	4,6-Dinitro-2-methylphenol	410	U
86-30-6	n-Nitrosodiphenylamine	410	U
101-55-3	4-Bromophenyl-phenylether	410	U
118-74-1	Hexachlorobenzene	410	U
87-86-5	Pentachlorophenol	410	U
85-01-8	Phenanthrene	400	J
120-12-7	Anthracene	410	U
84-74-2	Di-n-butylphthalate	410	U
206-44-0	Fluoranthene	970	
129-00-0	Pyrene	910	
85-68-7	Butylbenzylphthalate	410	U
91-94-1	3,3'-Dichlorobenzidine	410	JU
56-55-3	Benzo[a]anthracene	510	
218-01-9	Chrysene	740	
117-81-7	bis(2-Ethylhexyl)phthalate	410	U
117-84-0	Di-n-octylphthalate	410	U
205-99-2	Benzo[b]fluoranthene	1300	
207-08-9	Benzo[k]fluoranthene	360	J
50-32-8	Benzo[a]pyrene	600	
193-39-5	Indeno[1,2,3-cd]pyrene	540	
53-70-3	Dibenz[a,h]anthracene	410	
191-24-2	Benzo[g,h,i]perylene	510	

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9939

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) SOIL Lab Sample ID: SS3

Sample wt/vol: 30.0 (g/mL G Lab File ID: XS802.D

Level: (low/med) LOW Date Collected: 7/10/96

% Moisture: 57 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/1/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
62-75-9	N-Nitrosodimethylamine	770	U
111-44-4	bis(2-Chloroethyl)ether	770	U
108-95-2	Phenol	770	U
95-57-8	2-Chlorophenol	770	U
541-73-1	1,3-Dichlorobenzene	770	U
106-46-7	1,4-Dichlorobenzene	770	U
95-50-1	1,2-Dichlorobenzene	770	U
100-51-6	Benzyl alcohol	430	J
108-60-1	bis(2-chloroisopropyl)ether	770	U
95-48-7	2-Methylphenol	770	U
67-72-1	Hexachloroethane	770	U
621-64-7	N-Nitroso-di-n-propylamine	770	U
106-44-5	4-Methylphenol	770	U
98-95-3	Nitrobenzene	770	U
78-59-1	Isophorone	770	U
88-75-5	2-Nitrophenol	770	U
105-67-9	2,4-Dimethylphenol	770	U
111-91-1	bis(2-Chloroethoxy)methane	770	U
120-83-2	2,4-Dichlorophenol	770	U
120-82-1	1,2,4-Trichlorobenzene	770	U
91-20-3	Naphthalene	770	U
106-47-8	4-Chloroaniline	770	U
87-68-3	Hexachlorobutadiene	770	U
59-50-7	4-Chloro-3-methylphenol	770	U
91-57-6	2-Methylnaphthalene	770	U
77-47-4	Hexachlorocyclopentadiene	770	U
88-06-2	2,4,6-Trichlorophenol	770	U
95-95-4	2,4,5-Trichlorophenol	770	U
91-58-7	2-Chloronaphthalene	770	U
88-74-4	2-Nitroaniline	770	U
208-96-8	Acenaphthylene	770	U
131-11-3	Dimethylphthalate	770	U
606-20-2	2,6-Dinitrotoluene	770	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9939

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) SOIL Lab Sample ID: SS3

Sample wt/vol: 30.0 (g/mL G Lab File ID: XS802.D

Level: (low/med) LOW Date Collected: 7/10/96

% Moisture: 57 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/1/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
83-32-9	Acenaphthene	770	U
99-09-2	3-Nitroaniline	770	U
51-28-5	2,4-Dinitrophenol	770	U
132-64-9	Dibenzofuran	770	U
121-14-2	2,4-Dinitrotoluene	770	U
100-02-7	4-Nitrophenol	770	U
86-73-7	Fluorene	770	U
7005-72-3	4-Chlorophenyl-phenylether	770	U
84-66-2	Diethylphthalate	770	U
100-01-6	4-Nitroaniline	770	U
534-52-1	4,6-Dinitro-2-methylphenol	770	U
86-30-6	n-Nitrosodiphenylamine	770	U
101-55-3	4-Bromophenyl-phenylether	770	U
118-74-1	Hexachlorobenzene	770	U
87-86-5	Pentachlorophenol	770	U
85-01-8	Phenanthrene	860	
120-12-7	Anthracene	770	U
84-74-2	Di-n-butylphthalate	770	U
206-44-0	Fluoranthene	2200	
129-00-0	Pyrene	2100	
85-68-7	Butylbenzylphthalate	1700	
91-94-1	3,3'-Dichlorobenzidine	770	JU
56-55-3	Benzo[a]anthracene	1100	
218-01-9	Chrysene	1500	
117-81-7	bis(2-Ethylhexyl)phthalate	4700	
117-84-0	Di-n-octylphthalate	770	U
205-99-2	Benzo[b]fluoranthene	3100	
207-08-9	Benzo[k]fluoranthene	1100	
50-32-8	Benzo[a]pyrene	1500	
193-39-5	Indeno[1,2,3-cd]pyrene	1100	
53-70-3	Dibenz[a,h]anthracene	770	U
191-24-2	Benzo[g,h,i]perylene	950	

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9940

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) SOIL Lab Sample ID: SS5

Sample wt/vol: 30.0 (g/mL G Lab File ID: XS803.D

Level: (low/med) LOW Date Collected: 7/9/96

% Moisture: 25 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/1/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
62-75-9	N-Nitrosodimethylamine	440	U
111-44-4	bis(2-Chloroethyl)ether	440	U
108-95-2	Phenol	440	U
95-57-8	2-Chlorophenol	440	U
541-73-1	1,3-Dichlorobenzene	440	U
106-46-7	1,4-Dichlorobenzene	440	U
95-50-1	1,2-Dichlorobenzene	440	U
100-51-6	Benzyl alcohol	440	U
108-60-1	bis(2-chloroisopropyl)ether	440	U
95-48-7	2-Methylphenol	440	U
67-72-1	Hexachloroethane	440	U
621-64-7	N-Nitroso-di-n-propylamine	440	U
106-44-5	4-Methylphenol	440	U
98-95-3	Nitrobenzene	440	U
78-59-1	Isophorone	440	U
88-75-5	2-Nitrophenol	440	U
105-67-9	2,4-Dimethylphenol	440	U
111-91-1	bis(2-Chloroethoxy)methane	440	U
120-83-2	2,4-Dichlorophenol	440	U
120-82-1	1,2,4-Trichlorobenzene	440	U
91-20-3	Naphthalene	440	U
106-47-8	4-Chloroaniline	440	U
87-68-3	Hexachlorobutadiene	440	U
59-50-7	4-Chloro-3-methylphenol	440	U
91-57-6	2-Methylnaphthalene	440	U
77-47-4	Hexachlorocyclopentadiene	440	U
88-06-2	2,4,6-Trichlorophenol	440	U
95-95-4	2,4,5-Trichlorophenol	440	U
91-58-7	2-Chloronaphthalene	440	U
88-74-4	2-Nitroaniline	440	U
208-96-8	Acenaphthylene	440	U
131-11-3	Dimethylphthalate	440	U
606-20-2	2,6-Dinitrotoluene	440	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9940

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) SOIL Lab Sample ID: SS5

Sample wt/vol: 30.0 (g/mL G Lab File ID: XS803.D

Level: (low/med) LOW Date Collected: 7/9/96

% Moisture: 25 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/1/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
83-32-9	Acenaphthene	440	U
99-09-2	3-Nitroaniline	440	U
51-28-5	2,4-Dinitrophenol	440	U
132-64-9	Dibenzofuran	440	U
121-14-2	2,4-Dinitrotoluene	440	U
100-02-7	4-Nitrophenol	440	U
86-73-7	Fluorene	440	U
7005-72-3	4-Chlorophenyl-phenylether	440	U
84-66-2	Diethylphthalate	440	U
100-01-6	4-Nitroaniline	440	U
534-52-1	4,6-Dinitro-2-methylphenol	440	U
86-30-6	n-Nitrosodiphenylamine	440	U
101-55-3	4-Bromophenyl-phenylether	440	U
118-74-1	Hexachlorobenzene	440	U
87-86-5	Pentachlorophenol	440	U
85-01-8	Phenanthrene	440	U
120-12-7	Anthracene	440	U
84-74-2	Di-n-butylphthalate	440	U
206-44-0	Fluoranthene	380	J
129-00-0	Pyrene	320	J
85-68-7	Butylbenzylphthalate	440	U
91-94-1	3,3'-Dichlorobenzidine	440	JU
56-55-3	Benzo[a]anthracene	440	U
218-01-9	Chrysene	230	J
117-81-7	bis(2-Ethylhexyl)phthalate	440	U
117-84-0	Di-n-octylphthalate	440	U
205-99-2	Benzo[b]fluoranthene	370	J
207-08-9	Benzo[k]fluoranthene	440	U
50-32-8	Benzo[a]pyrene	240	J
193-39-5	Indeno[1,2,3-cd]pyrene	440	U
53-70-3	Dibenz[a,h]anthracene	440	U
191-24-2	Benzo[g,h,i]perylene	440	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9941

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) SOIL Lab Sample ID: SSD

Sample wt/vol: 30.0 (g/mL G Lab File ID: XS804.D

Level: (low/med) LOW Date Collected: 7/9/96

% Moisture: 22 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/1/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
62-75-9	N-Nitrosodimethylamine	430	U
111-44-4	bis(2-Chloroethyl)ether	430	U
108-95-2	Phenol	430	U
95-57-8	2-Chlorophenol	430	U
541-73-1	1,3-Dichlorobenzene	430	U
106-46-7	1,4-Dichlorobenzene	430	U
95-50-1	1,2-Dichlorobenzene	430	U
100-51-6	Benzyl alcohol	430	U
108-60-1	bis(2-chloroisopropyl)ether	430	U
95-48-7	2-Methylphenol	430	U
67-72-1	Hexachloroethane	430	U
621-64-7	N-Nitroso-di-n-propylamine	430	U
106-44-5	4-Methylphenol	430	U
98-95-3	Nitrobenzene	430	U
78-59-1	Isophorone	430	U
88-75-5	2-Nitrophenol	430	U
105-67-9	2,4-Dimethylphenol	430	U
111-91-1	bis(2-Chloroethoxy)methane	430	U
120-83-2	2,4-Dichlorophenol	430	U
120-82-1	1,2,4-Trichlorobenzene	430	U
91-20-3	Naphthalene	430	U
106-47-8	4-Chloroaniline	430	U
87-68-3	Hexachlorobutadiene	430	U
59-50-7	4-Chloro-3-methylphenol	430	U
91-57-6	2-Methylnaphthalene	430	U
77-47-4	Hexachlorocyclopentadiene	430	U
88-06-2	2,4,6-Trichlorophenol	430	U
95-95-4	2,4,5-Trichlorophenol	430	U
91-58-7	2-Chloronaphthalene	430	U
88-74-4	2-Nitroaniline	430	U
208-96-8	Acenaphthylene	430	U
131-11-3	Dimethylphthalate	430	U
606-20-2	2,6-Dinitrotoluene	430	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

D9941

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) SOIL Lab Sample ID: SSD

Sample wt/vol: 30.0 (g/mL G Lab File ID: XS804.D

Level: (low/med) LOW Date Collected: 7/9/96

% Moisture: 22 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/1/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
83-32-9	Acenaphthene	430	U
99-09-2	3-Nitroaniline	430	U
51-28-5	2,4-Dinitrophenol	430	U
132-64-9	Dibenzofuran	430	U
121-14-2	2,4-Dinitrotoluene	430	U
100-02-7	4-Nitrophenol	430	U
86-73-7	Fluorene	430	U
7005-72-3	4-Chlorophenyl-phenylether	430	U
84-66-2	Diethylphthalate	430	U
100-01-6	4-Nitroaniline	430	U
534-52-1	4,6-Dinitro-2-methylphenol	430	U
86-30-6	n-Nitrosodiphenylamine	430	U
101-55-3	4-Bromophenyl-phenylether	430	U
118-74-1	Hexachlorobenzene	430	U
87-86-5	Pentachlorophenol	430	U
85-01-8	Phenanthrene	410	J
120-12-7	Anthracene	430	U
84-74-2	Di-n-butylphthalate	430	U
206-44-0	Fluoranthene	1100	
129-00-0	Pyrene	790	
85-68-7	Butylbenzylphthalate	430	U
91-94-1	3,3'-Dichlorobenzidine	430	JU
56-55-3	Benzo[a]anthracene	500	
218-01-9	Chrysene	560	
117-81-7	bis(2-Ethylhexyl)phthalate	450	
117-84-0	Di-n-octylphthalate	430	U
205-99-2	Benzo[b]fluoranthene	750	
207-08-9	Benzo[k]fluoranthene	260	J
50-32-8	Benzo[a]pyrene	450	
193-39-5	Indeno[1,2,3-cd]pyrene	310	J
53-70-3	Dibenz[a,h]anthracene	430	U
191-24-2	Benzo[g,h,i]perylene	260	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9942

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) SOIL Lab Sample ID: SS6

Sample wt/vol: 30.0 (g/mL G Lab File ID: XS805.D

Level: (low/med) LOW Date Collected: 7/9/96

% Moisture: 32 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/1/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
62-75-9	N-Nitrosodimethylamine	490	U
111-44-4	bis(2-Chloroethyl)ether	490	U
108-95-2	Phenol	490	U
95-57-8	2-Chlorophenol	490	U
541-73-1	1,3-Dichlorobenzene	490	U
106-46-7	1,4-Dichlorobenzene	490	U
95-50-1	1,2-Dichlorobenzene	490	U
100-51-6	Benzyl alcohol	490	U
108-60-1	bis(2-chloroisopropyl)ether	490	U
95-48-7	2-Methylphenol	490	U
67-72-1	Hexachloroethane	490	U
621-64-7	N-Nitroso-di-n-propylamine	490	U
106-44-5	4-Methylphenol	490	U
98-95-3	Nitrobenzene	490	U
78-59-1	Isophorone	490	U
88-75-5	2-Nitrophenol	490	U
105-67-9	2,4-Dimethylphenol	490	U
111-91-1	bis(2-Chloroethoxy)methane	490	U
120-83-2	2,4-Dichlorophenol	490	U
120-82-1	1,2,4-Trichlorobenzene	490	U
91-20-3	Naphthalene	490	U
106-47-8	4-Chloroaniline	490	U
87-68-3	Hexachlorobutadiene	490	U
59-50-7	4-Chloro-3-methylphenol	490	U
91-57-6	2-Methylnaphthalene	490	U
77-47-4	Hexachlorocyclopentadiene	490	U
88-06-2	2,4,6-Trichlorophenol	490	U
95-9[illegible]	2,4,5-Trichlorophenol	490	U
91-58	2-Chloronaphthalene	490	U
88[illegible]	2-Nitroaniline	490	U
20[illegible]	Acenaphthylene	490	U
131-1[illegible]	Dimethylphthalate	490	U
60[illegible]	2,6-Dinitrotoluene	490	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9942

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) SOIL Lab Sample ID: SS6

Sample wt/vol: 30.0 (g/mL G Lab File ID: XS805.D

Level: (low/med) LOW Date Collected: 7/9/96

% Moisture: 32 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/1/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
83-32-9	Acenaphthene	330	J
99-09-2	3-Nitroaniline	490	U
51-28-5	2,4-Dinitrophenol	490	U
132-64-9	Dibenzofuran	490	U
121-14-2	2,4-Dinitrotoluene	490	U
100-02-7	4-Nitrophenol	490	U
86-73-7	Fluorene	490	U
7005-72-3	4-Chlorophenyl-phenylether	490	U
84-66-2	Diethylphthalate	490	U
100-01-6	4-Nitroaniline	490	U
534-52-1	4,6-Dinitro-2-methylphenol	490	U
86-30-6	n-Nitrosodiphenylamine	490	U
101-55-3	4-Bromophenyl-phenylether	490	U
118-74-1	Hexachlorobenzene	490	U
87-86-5	Pentachlorophenol	490	U
85-01-8	Phenanthrene	3600	
120-12-7	Anthracene	670	
84-74-2	Di-n-butylphthalate	490	U
206-44-0	Fluoranthene	6000	E
129-00-0	Pyrene	4500	
85-68-7	Butylbenzylphthalate	490	U
91-94-1	3,3'-Dichlorobenzidine	490	JU
56-55-3	Benzo[a]anthracene	2600	
218-01-9	Chrysene	2700	
117-81-7	bis(2-Ethylhexyl)phthalate	480	J
117-84-0	Di-n-octylphthalate	490	U
205-99 2	Benzo[b]fluoranthene	4300	
207-08-9	Benzo[k]fluoranthene	1500	
50-32-8	Benzo[a]pyrene	2400	
193-39-5	Indeno[1,2,3-cd]pyrene	1800	
53-70-3	Dibenz[a,h]anthracene	500	
191-24-2	Benzo[ghi]perylene	1800	

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

D9942DL

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) SOIL Lab Sample ID: SS6DL

Sample wt/vol: 30.0 (g/mL G Lab File ID: XE805.D

Level: (low/med) LOW Date Collected: 7/9/96

% Moisture: 32 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/8/96

Injection Volume: 1.0 (uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
62-75-9	N-Nitrosodimethylamine	2500	UD
111-44-4	bis(2-Chloroethyl)ether	2500	UD
108-95-2	Phenol	2500	UD
95-57-8	2-Chlorophenol	2500	UD
541-73-1	1,3-Dichlorobenzene	2500	UD
106-46-7	1,4-Dichlorobenzene	2500	UD
95-50-1	1,2-Dichlorobenzene	2500	UD
100-51-6	Benzyl alcohol	2500	UD
108-60-1	bis(2-chloroisopropyl)ether	2500	UD
95-48-7	2-Methylphenol	2500	UD
67-72-1	Hexachloroethane	2500	UD
621-64-7	N-Nitroso-di-n-propylamine	2500	UD
106-44-5	4-Methylphenol	2500	UD
98-95-3	Nitrobenzene	2500	UD
78-59-1	Isophorone	2500	UD
88-75-5	2-Nitrophenol	2500	UD
105-67-9	2,4-Dimethylphenol	2500	UD
111-91-1	bis(2-Chloroethoxy)methane	2500	UD
120-83-2	2,4-Dichlorophenol	2500	UD
120-82-1	1,2,4-Trichlorobenzene	2500	UD
91-20-3	Naphthalene	2500	UD
106-47-8	4-Chloroaniline	2500	UD
87-68-3	Hexachlorobutadiene	2500	UD
59-50-7	4-Chloro-3-methylphenol	2500	UD
91-57-6	2-Methylnaphthalene	2500	UD
77-47-4	Hexachlorocyclopentadiene	2500	UD
88-06-2	2,4,6-Trichlorophenol	2500	UD
95-95-4	2,4,5-Trichlorophenol	2500	UD
91-58-7	2-Chloronaphthalene	2500	UD
88-74-4	2-Nitroaniline	2500	UD
208-96-8	Acenaphthylene	2500	UD
131-11-3	Dimethylphthalate	2500	UD
606-20-2	2,6-Dinitrotoluene	2500	UD

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9942DL

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) SOIL Lab Sample ID: SS6DL

Sample wt/vol: 30.0 (g/mL G Lab File ID: XE805.D

Level: (low/med) LOW Date Collected: 7/9/96

% Moisture: 32 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/8/96

Injection Volume: 1.0 (uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
83-32-9	Acenaphthene	2500	UD
99-09-2	3-Nitroaniline	2500	UD
51-28-5	2,4-Dinitrophenol	2500	UD
132-64-9	Dibenzofuran	2500	UD
121-14-2	2,4-Dinitrotoluene	2500	UD
100-02-7	4-Nitrophenol	2500	UD
86-73-7	Fluorene	2500	UD
7005-72-3	4-Chlorophenyl-phenylether	2500	UD
84-66-2	Diethylphthalate	2500	UD
100-01-6	4-Nitroaniline	2500	UD
534-52-1	4,6-Dinitro-2-methylphenol	2500	UD
86-30-6	n-Nitrosodiphenylamine	2500	UD
101-55-3	4-Bromophenyl-phenylether	2500	UD
118-74-1	Hexachlorobenzene	2500	UD
87-86-5	Pentachlorophenol	2500	UD
85-01-8	Phenanthrene	7000	D
120-12-7	Anthracene	2500	UD
84-74-2	Di-n-butylphthalate	2500	UD
206-44-0	Fluoranthene	10000	D
129-00-0	Pyrene	9200	D
85-68-7	Butylbenzylphthalate	2500	UD
91-94-1	3,3'-Dichlorobenzidine	2500	JUD
56-55-3	Benzo[a]anthracene	3800	D
218-01-9	Chrysene	5100	D
117-81-7	bis(2-Ethylhexyl)phthalate	2500	UD
117-84-0	Di-n-octylphthalate	2500	UD
205-99-2	Benzo[b]fluoranthene	4600	D
207-08-9	Benzo[k]fluoranthene	3800	D
50-32-8	Benzo[a]pyrene	3300	D
193-39-5	Indeno[1,2,3-cd]pyrene	3300	D
53-70-3	Dibenz[a,h]anthracene	2500	UD
191-24-2	Benzo[g,h,i]perylene	3300	D

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9943

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) SOIL Lab Sample ID: SS7

Sample wt/vol: 30.0 (g/mL G Lab File ID: XS806.D

Level: (low/med) LOW Date Collected: 7/9/96

% Moisture: 71 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/1/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
62-75-9	N-Nitrosodimethylamine	1100	U
111-44-4	bis(2-Chloroethyl)ether	1100	U
108-95-2	Phenol	1100	U
95-57-8	2-Chlorophenol	1100	U
541-73-1	1,3-Dichlorobenzene	1100	U
106-46-7	1,4-Dichlorobenzene	1100	U
95-50-1	1,2-Dichlorobenzene	1100	U
100-51-6	Benzyl alcohol	610	J
108-60-1	bis(2-chloroisopropyl)ether	1100	U
95-48-7	2-Methylphenol	1100	U
67-72-1	Hexachloroethane	1100	U
621-64-7	N-Nitroso-di-n-propylamine	1100	U
106-44-5	4-Methylphenol	1100	U
98-95-3	Nitrobenzene	1100	U
78-59-1	Isophorone	1100	U
88-75-5	2-Nitrophenol	1100	U
105-67-9	2,4-Dimethylphenol	1100	U
111-91-1	bis(2-Chloroethoxy)methane	1100	U
120-83-2	2,4-Dichlorophenol	1100	U
120-82-1	1,2,4-Trichlorobenzene	1100	U
91-20-3	Naphthalene	1100	U
106-47-8	4-Chloroaniline	1100	U
87-68-3	Hexachlorobutadiene	1100	U
59-50-7	4-Chloro-3-methylphenol	1100	U
91-57-6	2-Methylnaphthalene	1100	U
77-47-4	Hexachlorocyclopentadiene	1100	U
88-06-2	2,4,6-Trichlorophenol	1100	U
95-95-4	2,4,5-Trichlorophenol	1100	U
91-58-7	2-Chloronaphthalene	1100	U
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	990	J
131-11-3	Dimethylphthalate	1100	U
606-20-2	2,6-Dinitrotoluene	1100	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

D9943

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) SOIL Lab Sample ID: SS7

Sample wt/vol: 30.0 (g/mL G Lab File ID: XS806.D

Level: (low/med) LOW Date Collected: 7/9/96

% Moisture: 71 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/1/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
83-32-9	Acenaphthene	1100	U
99-09-2	3-Nitroaniline	1100	U
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	1100	U
121-14-2	2,4-Dinitrotoluene	1100	U
100-02-7	4-Nitrophenol	1100	U
86-73-7	Fluorene	1100	U
7005-72-3	4-Chlorophenyl-phenylether	1100	U
84-66-2	Diethylphthalate	1100	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	n-Nitrosodiphenylamine	1100	U
101-55-3	4-Bromophenyl-phenylether	1100	U
118-74-1	Hexachlorobenzene	1100	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	6500	
120-12-7	Anthracene	1300	
84-74-2	Di-n-butylphthalate	1300	
206-44-0	Fluoranthene	2100	
129-00-0	Pyrene	15000	
85-68-7	Butylbenzylphthalate	1100	U
91-94-1	3,3'-Dichlorobenzidine	1100	JU
56-55-3	Benzo[a]anthracene	7600	
218-01-9	Chrysene	8000	
117-81-7	bis(2-Ethylhexyl)phthalate	1100	U
117-84-0	Di-n-octylphthalate	1100	U
205-99-2	Benzo[b]fluoranthene	17000	F
207-08-9	Benzo[k]fluoranthene	5000	
50-32-8	Benzo[a]pyrene	7100	
193-39-5	Indeno[1,2,3-cd]pyrene	7100	
53-70-3	Dibenz[a,h]anthracene	1600	
191-24-2	Benzo[g,h,i]perylene	7500	

1B

SAMPLE NO.

D9943DL

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) SOIL Lab Sample ID: SS7DL

Sample wt/vol: 30.0 (g/mL G Lab File ID: XE806.D

Level: (low/med) LOW Date Collected: 7/9/96

% Moisture: 71 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/8/96

Injection Volume: 1.0 (uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
62-75-9	N-Nitrosodimethylamine	5700	UD
111-44-4	bis(2-Chloroethyl)ether	5700	UD
108-95-2	Phenol	5700	UD
95-57-8	2-Chlorophenol	5700	UD
541-73-1	1,3-Dichlorobenzene	5700	UD
106-46-7	1,4-Dichlorobenzene	5700	UD
95-50-1	1,2-Dichlorobenzene	5700	UD
100-51-6	Benzyl alcohol	5700	UD
108-60-1	bis(2-chloroisopropyl)ether	5700	UD
95-48-7	2-Methylphenol	5700	UD
67-72-1	Hexachloroethane	5700	UD
621-64-7	N-Nitroso-di-n-propylamine	5700	UD
106-44-5	4-Methylphenol	5700	UD
98-95-3	Nitrobenzene	5700	UD
78-59-1	Isophorone	5700	UD
88-75-5	2-Nitrophenol	5700	UD
105-67-9	2,4-Dimethylphenol	5700	UD
111-91-1	bis(2-Chloroethoxy)methane	5700	UD
120-83-2	2,4-Dichlorophenol	5700	UD
120-82-1	1,2,4-Trichlorobenzene	5700	UD
91-20-3	Naphthalene	5700	UD
106-47-8	4-Chloroaniline	5700	UD
87-68-3	Hexachlorobutadiene	5700	UD
59-50-7	4-Chloro-3-methylphenol	5700	UD
91-57-6	2-Methylnaphthalene	5700	UD
77-47-4	Hexachlorocyclopentadiene	5700	UD
88-06-2	2,4,6-Trichlorophenol	5700	UD
95-95-4	2,4,5-Trichlorophenol	5700	UD
91-58-7	2-Chloronaphthalene	5700	UD
88-74-4	2-Nitroaniline	5700	UD
208-96-8	Acenaphthylene	5700	UD
131-11-3	Dimethylphthalate	5700	UD
606-20-2	2,6-Dinitrotoluene	5700	UD

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

D9943DL

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) SOIL Lab Sample ID: SS7DL

Sample wt/vol: 30.0 (g/mL G Lab File ID: XE806.D

Level: (low/med) LOW Date Collected: 7/9/96

% Moisture: 71 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/8/96

Injection Volume: 1.0 (uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
83-32-9	Acenaphthene	5700	UD
99-09-2	3-Nitroaniline	5700	UD
51-28-5	2,4-Dinitrophenol	5700	UD
132-64-9	Dibenzofuran	5700	UD
121-14-2	2,4-Dinitrotoluene	5700	UD
100-02-7	4-Nitrophenol	5700	UD
86-73-7	Fluorene	5700	UD
7005-72-3	4-Chlorophenyl-phenylether	5700	UD
84-66-2	Diethylphthalate	5700	UD
100-01-6	4-Nitroaniline	5700	UD
534-52-1	4,6-Dinitro-2-methylphenol	5700	UD
86-30-6	n-Nitrosodiphenylamine	5700	UD
101-55-3	4-Bromophenyl-phenylether	5700	UD
118-74-1	Hexachlorobenzene	5700	UD
87-86-5	Pentachlorophenol	5700	UD
85-01-8	Phenanthrene	9500	D
120-12-7	Anthracene	5700	UD
84-74-2	Di-n-butylphthalate	5700	UD
206-44-0	Fluoranthene	23000	D
129-00-0	Pyrene	30000	D
85-68-7	Butylbenzylphthalate	5700	UD
91-94-1	3,3'-Dichlorobenzidine	5700	J UD
56-55-3	Benzo[a]anthracene	11000	D
218-01-9	Chrysene	18000	D
117-81-7	bis(2-Ethylhexyl)phthalate	6100	D
117-84-0	Di-n-octylphthalate	5700	UD
205-99-2	Benzo[b]fluoranthene	21000	D
207-08-9	Benzo[k]fluoranthene	15000	D
50-32-8	Benzo[a]pyrene	15000	D
193-39-5	Indeno[1,2,3-cd]pyrene	10000	D
53-70-3	Dibenz[a,h]anthracene	3700	JD
191-24-2	Benzo[g,h,i]perylene	9900	D

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9944

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) SOIL Lab Sample ID: SS8

Sample wt/vol: 30.0 (g/mL G Lab File ID: XS807.D

Level: (low/med) LOW Date Collected: 7/9/96

% Moisture: 52 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/1/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
62-75-9	N-Nitrosodimethylamine	700	U
111-44-4	bis(2-Chloroethyl)ether	700	U
108-95-2	Phenol	700	U
95-57-8	2-Chlorophenol	700	U
541-73-1	1,3-Dichlorobenzene	700	U
106-46-7	1,4-Dichlorobenzene	700	U
95-50-1	1,2-Dichlorobenzene	700	U
100-51-6	Benzyl alcohol	700	U
108-60-1	bis(2-chloroisopropyl)ether	700	U
95-48-7	2-Methylphenol	700	U
67-72-1	Hexachloroethane	700	U
621-64-7	N-Nitroso-di-n-propylamine	700	U
106-44-5	4-Methylphenol	700	U
98-95-3	Nitrobenzene	700	U
78-59-1	Isophorone	700	U
88-75-5	2-Nitrophenol	700	U
105-67-9	2,4-Dimethylphenol	700	U
111-91-1	bis(2-Chloroethoxy)methane	700	U
120-83-2	2,4-Dichlorophenol	700	U
120-82-1	1,2,4-Trichlorobenzene	700	U
91-20-3	Naphthalene	700	U
106-47-8	4-Chloroaniline	700	U
87-68-3	Hexachlorobutadiene	700	U
59-50-7	4-Chloro-3-methylphenol	700	U
91-57-6	2-Methylnaphthalene	700	U
77-47-4	Hexachlorocyclopentadiene	700	U
88-06-2	2,4,6-Trichlorophenol	700	U
95-95-4	2,4,5-Trichlorophenol	700	U
91-58-7	2-Chloronaphthalene	700	U
88-74-4	2-Nitroaniline	700	U
208-96-8	Acenaphthylene	700	U
131-11-3	Dimethylphthalate	700	U
606-20-2	2,6-Dinitrotoluene	700	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9944

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) SOIL Lab Sample ID: SS8

Sample wt/vol: 30.0 (g/mL G Lab File ID: XS807.D

Level: (low/med) LOW Date Collected: 7/9/96

% Moisture: 52 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/1/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
83-32-9	Acenaphthene	700	U
99-09-2	3-Nitroaniline	700	U
51-28-5	2,4-Dinitrophenol	700	U
132-64-9	Dibenzofuran	700	U
121-14-2	2,4-Dinitrotoluene	700	U
100-02-7	4-Nitrophenol	700	U
86-73-7	Fluorene	700	U
7005-72-3	4-Chlorophenyl-phenylether	700	U
84-66-2	Diethylphthalate	700	U
100-01-6	4-Nitroaniline	700	U
534-52-1	4,6-Dinitro-2-methylphenol	700	U
86-30-6	n-Nitrosodiphenylamine	700	U
101-55-3	4-Bromophenyl-phenylether	700	U
118-74-1	Hexachlorobenzene	700	U
87-86-5	Pentachlorophenol	700	U
85-01-8	Phenanthrene	1700	
120-12-7	Anthracene	700	U
84-74-2	Di-n-butylphthalate	700	U
206-44-0	Fluoranthene	3800	
129-00-0	Pyrene	2200	
85-68-7	Butylbenzylphthalate	700	U
91-94-1	3,3'-Dichlorobenzidine	700	JU
56-55-3	Benzo[a]anthracene	1100	
218-01-9	Chrysene	1600	
117-81-7	bis(2-Ethylhexyl)phthalate	76000	E
117-84-0	Di-n-octylphthalate	700	U
205-99-2	Benzo[b]fluoranthene	2700	
207-08-9	Benzo[k]fluoranthene	880	
50-32-8	Benzo[a]pyrene	1400	
193-39-5	Indeno[1,2,3-cd]pyrene	970	
53-70-3	Dibenz[a,h]anthracene	700	U
191-24-2	Benzo[g,h,i]perylene	910	

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9944DL

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) SOIL Lab Sample ID: SS8DL

Sample wt/vol: 30.0 (g/mL G Lab File ID: XD807.D

Level: (low/med) LOW Date Collected: 7/9/96

% Moisture: 52 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/13/96

Injection Volume: 1.0 (uL) Dilution Factor: 500.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
62-75-9	N-Nitrosodimethylamine	350000	UD
111-44-4	bis(2-Chloroethyl)ether	350000	UD
108-95-2	Phenol	350000	UD
95-57-8	2-Chlorophenol	350000	UD
541-73-1	1,3-Dichlorobenzene	350000	UD
106-46-7	1,4-Dichlorobenzene	350000	UD
95-50-1	1,2-Dichlorobenzene	350000	UD
100-51-6	Benzyl alcohol	350000	UD
108-60-1	bis(2-chloroisopropyl)ether	350000	UD
95-48-7	2-Methylphenol	350000	UD
67-72-1	Hexachloroethane	350000	UD
621-64-7	N-Nitroso-di-n-propylamine	350000	UD
106-44-5	4-Methylphenol	350000	UD
98-95-3	Nitrobenzene	350000	UD
78-59-1	Isophorone	350000	UD
88-75-5	2-Nitrophenol	350000	UD
105-67-9	2,4-Dimethylphenol	350000	UD
111-91-1	bis(2-Chloroethoxy)methane	350000	UD
120-83-2	2,4-Dichlorophenol	350000	UD
120-82-1	1,2,4-Trichlorobenzene	350000	UD
91-20-3	Naphthalene	350000	UD
106-47-8	4-Chloroaniline	350000	UD
87-68-3	Hexachlorobutadiene	350000	UD
59-50-7	4-Chloro-3-methylphenol	350000	UD
91-57-6	2-Methylnaphthalene	350000	UD
77-47-4	Hexachlorocyclopentadiene	350000	UD
88-06-2	2,4,6-Trichlorophenol	350000	UD
95-95-4	2,4,5-Trichlorophenol	350000	UD
91-58-7	2-Chloronaphthalene	350000	UD
88-74-4	2-Nitroaniline	350000	UD
208-96-8	Acenaphthylene	350000	UD
131-11-3	Dimethylphthalate	350000	UD
606-20-2	2,6-Dinitrotoluene	350000	UD

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

D9944DL

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) SOIL Lab Sample ID: SS8DL

Sample wt/vol: 30.0 (g/mL G Lab File ID: XD807.D

Level: (low/med) LOW Date Collected: 7/9/96

% Moisture: 52 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/13/96

Injection Volume: 1.0 (uL) Dilution Factor: 500.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
83-32-9	Acenaphthene	350000	UD
99-09-2	3-Nitroaniline	350000	UD
51-28-5	2,4-Dinitrophenol	350000	UD
132-64-9	Dibenzofuran	350000	UD
121-14-2	2,4-Dinitrotoluene	350000	UD
100-02-7	4-Nitrophenol	350000	UD
86-73-7	Fluorene	350000	UD
7005-72-3	4-Chlorophenyl-phenylether	350000	UD
84-66-2	Diethylphthalate	350000	UD
100-01-6	4-Nitroaniline	350000	UD
534-52-1	4,6-Dinitro-2-methylphenol	350000	UD
86-30-6	n-Nitrosodiphenylamine	350000	UD
101-55-3	4-Bromophenyl-phenylether	350000	UD
118-74-1	Hexachlorobenzene	350000	UD
87-86-5	Pentachlorophenol	350000	UD
85-01-8	Phenanthrene	350000	UD
120-12-7	Anthracene	350000	UD
84-74-2	Di-n-butylphthalate	350000	UD
206-44-0	Fluoranthene	350000	UD
129-00-0	Pyrene	350000	UD
85-68-7	Butylbenzylphthalate	350000	UD
91-94-1	3,3'-Dichlorobenzidine	350000	JUD
56-55-3	Benzo[a]anthracene	350000	UD
218-01-9	Chrysene	350000	UD
117-81-7	bis(2-Ethylhexyl)phthalate	1E+06	D
117-84-0	Di-n-octylphthalate	350000	UD
205-99-2	Benzo[b]fluoranthene	350000	UD
207-08-9	Benzo[k]fluoranthene	350000	UD
50-32-8	Benzo[a]pyrene	350000	UD
193-39-5	Indeno[1,2,3-cd]pyrene	350000	UD
53-70-3	Dibenz[a,h]anthracene	350000	UD
191-24-2	Benzo[g,h,i]perylene	350000	UD

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
D9945

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) SOIL Lab Sample ID: SS9

Sample wt/vol: 30.0 (g/mL G Lab File ID: XS808.D

Level: (low/med) LOW Date Collected: 7/9/96

% Moisture: 69 decanted: (Y/N): N Date Extracted: 7/18/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/2/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
62-75-9	N-Nitrosodimethylamine	1100	U
111-44-4	bis(2-Chloroethyl)ether	1100	U
108-95-2	Phenol	640	J
95-57-8	2-Chlorophenol	1100	U
541-73-1	1,3-Dichlorobenzene	1100	U
106-46-7	1,4-Dichlorobenzene	1100	U
95-50-1	1,2-Dichlorobenzene	1100	U
100-51-6	Benzyl alcohol	830	J
108-60-1	bis(2-chloroisopropyl)ether	1100	U
95-48-7	2-Methylphenol	1100	U
67-72-1	Hexachloroethane	1100	U
621-64-7	N-Nitroso-di-n-propylamine	1100	U
106-44-5	4-Methylphenol	9100	
98-95-3	Nitrobenzene	1100	U
78-59-1	Isophorone	1100	U
88-75-5	2-Nitrophenol	1100	U
105-67-9	2,4-Dimethylphenol	1100	U
111-91-1	bis(2-Chloroethoxy)methane	1100	U
120-83-2	2,4-Dichlorophenol	1100	U
120-82-1	1,2,4-Trichlorobenzene	1100	U
91-20-3	Naphthalene	1100	U
106-47-8	4-Chloroaniline	1100	U
87-68-3	Hexachlorobutadiene	1100	U
59-50-7	4-Chloro-3-methylphenol	1100	U
91-57-6	2-Methylnaphthalene	1100	U
77-47-4	Hexachlorocyclopentadiene	1100	U
88-06-2	2,4,6-Trichlorophenol	1100	U
95-[illegible]	2,4,5-Trichlorophenol	1100	U
91-[illegible]	2-Chloronaphthalene	1100	U
[illegible]	2-Nitroaniline	1100	U
[illegible]	Acenaphthylene	1100	U
[illegible]	Dimethylphthalate	1100	U
[illegible]	2,6-Dinitrotoluene	1100	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

D9945

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) SOIL Lab Sample ID: SS9

Sample wt/vol: 30.0 (g/mL G Lab File ID: XS808.D

Level: (low/med) LOW Date Collected: 7/9/96

% Moisture: 69 decanted: (Y/N): N Date Extracted: 7/18/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/2/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
83-32-9	Acenaphthene	1100	U
99-09-2	3-Nitroaniline	1100	U
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	1100	U
121-14-2	2,4-Dinitrotoluene	1100	U
100-02-7	4-Nitrophenol	1100	U
86-73-7	Fluorene	1100	U
7005-72-3	4-Chlorophenyl-phenylether	1100	U
84-66-2	Diethylphthalate	1100	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	n-Nitrosodiphenylamine	1100	U
101-55-3	4-Bromophenyl-phenylether	1100	U
118-74-1	Hexachlorobenzene	1100	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	3700	
120-12-7	Anthracene	1100	U
84-74-2	Di-n-butylphthalate	1100	U
206-44-0	Fluoranthene	10000	
129-00-0	Pyrene	6400	
85-68-7	Butylbenzylphthalate	1100	U
91-94-1	3,3'-Dichlorobenzidine	1100	JU
56-55-3	Benzo[a]anthracene	3400	
218-01-9	Chrysene	4900	
117-81-7	bis(2-Ethylhexyl)phthalate	1600	B
117-84-0	Di-n-octylphthalate	1100	U
205-99-2	Benzo[b]fluoranthene	8400	
207-08-9	Benzo[k]fluoranthene	2400	
50-32-8	[illegible]a]pyrene	3600	
193-39-5	[illegible][1,2,3-cd]pyrene	1100	U
53-70-3	[illegible][a,h]anthracene	660	J
191-24-2	[illegible]g,h,i]perylene	2700	

2D

SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: _____ Group: GCMS

Level: (low/med) LOW

	SAMPLE NO.	S1 (2FP)	S2 (PHL)	S3 (NBZ)	S4 (FBP)	S5 (TBP)	S6 (TPH)			TOT OUT
01	D9937	41	63	74	70	28	70			
02	D9938	69	82	85	82	74	85			
03	D9939	65	78	76	77	67	71			
04	D9940	61	71	68	51	60	45			
05	D9941	57	65	60	46	52	42			
06	D9942	51	66	66	64	55	68			
07	D9943	65	77	75	73	81	77			
08	D9944	38	50	50	46	40	38			
09	D9945	67	84	83	79	22	85			
10	D9945MS	73	87	89	86	102	93			
11	D9945MSD	71	80	83	80	92	86			
12	D9937MS	60	74	75	76	61	73			
13	D9937MSD	59	68	72	71	56	72			
14	SBLK01	54	61	66	75	59	71			
15	SBLK02	46	52	54	64	49	60			
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	QC LIMITS
S1 (2FP) = 2-Fluorophenol	(25-121)
S2 (PHL) = Phenol-d5	(24-113)
S3 (NBZ) = Nitrobenzene-d5	(23-120)
S4 (FBP) = 2-Fluorobiphenyl	(30-115)
S5 (TBP) = 2,4,6-Tribromophenol	(19-122)
S6 (TPH) = Terphenyl-d14	(18-137)

Column to be used for recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

3D

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: _____ Group: GCMS

Matrix Spike - Sample No.: D9937 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
Phenol	6300	0	4300	68	(26-90)
2-Chlorophenol	6300	0	4200	67	(25-102)
1,4-Dichlorobenzene	4200	0	3000	71	(28-104)
N-Nitroso-di-n-propylamine	4200	0	3200	76	(41-126)
1,2,4-Trichlorobenzene	4200	0	3000	71	(41-126)
4-Chloro-3-methylphenol	6300	0	4600	73	(26-103)
Acenaphthene	4200	0	3100	74	(31-137)
2,4-Dinitrotoluene	4200	0	3400	81	(28-89)
4-Nitrophenol	6300	0	5300	84	(11-114)
Pentachlorophenol	6300	0	3400	54	(17-109)
Pyrene	4200	840	3200	56	(35-142)

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	6300	3700	59	15	35	(26-90)
2-Chlorophenol	6300	3800	60	10	50	(25-102)
1,4-Dichlorobenzene	4200	2600	62	14	27	(28-104)
N-Nitroso-di-n-propylamine	4200	2900	69	10	38	(41-126)
1,2,4-Trichlorobenzene	4200	2900	69	3	38	(41-126)
4-Chloro-3-methylphenol	6300	4600	73	0	33	(26-103)
Acenaphthene	4200	2800	67	10	19	(31-137)
2,4-Dinitrotoluene	4200	3200	76	6	47	(28-89)
4-Nitrophenol	6300	3800	60	33	50	(11-114)
Pentachlorophenol	6300	3700	59	8	47	(17-109)
Pyrene	4200	2800	56	1	36	(35-142)

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 11 outside limits
Spike Recovery: 13 out of 22 outside limits

Comments: _____

3D

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: _____ Group: GCMS

Matrix Spike - Sample No.: D9945 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
Phenol	16500	640	12000	69	(26-90)
2-Chlorophenol	16500	0	11000	67	(25-102)
1,4-Dichlorobenzene	11000	0	8100	74	(28-104)
N-Nitroso-di-n-propylamine	11000	0	11000	100	(41-126)
1,2,4-Trichlorobenzene	11000	0	8800	80	(41-126)
4-Chloro-3-methylphenol	16500	0	15000	91	(26-103)
Acenaphthene	11000	0	9200	84	(31-137)
2,4-Dinitrotoluene	11000	0	8100	74	(28-89)
4-Nitrophenol	16500	0	13000	79	(11-114)
Pentachlorophenol	16500	0	16000	97	(17-109)
Pyrene	11000	6400	13000	60	(35-142)

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	16500	11000	64	7	35	(26-90)
2-Chlorophenol	16500	11000	67	0	50	(25-102)
1,4-Dichlorobenzene	11000	7500	68	8	27	(28-104)
N-Nitroso-di-n-propylamine	11000	9800	89	12	38	(41-126)
1,2,4-Trichlorobenzene	11000	8200	75	7	38	(41-126)
4-Chloro-3-methylphenol	16500	14000	85	7	33	(26-103)
Acenaphthene	11000	8600	78	7	19	(31-137)
2,4-Dinitrotoluene	11000	7800	71	4	47	(28-89)
4-Nitrophenol	16500	13000	79	0	50	(11-114)
Pentachlorophenol	16500	15000	91	6	47	(17-109)
Pyrene	11000	11000	63	5	36	(35-142)

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 11 outside limits
Spike Recovery: 18 out of 22 outside limits

Comments: _____

4B

SAMPLE NO.

SBLK01

SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Lab File ID: XB813.D Lab Sample ID: BLK01

Instrument ID: ABN2 Date Extracted: 7/16/96

Matrix: (soil/water) SOIL Date Analyzed: 8/2/96

Level: (low/med) LOW Time Analyzed: 0528

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	D9937	SS1	XS800.D	08/01/96
02	D9938	SS2	XS801.D	08/01/96
03	D9939	SS3	XS802.D	08/01/96
04	D9940	SS5	XS803.D	08/01/96
05	D9941	SSD	XS804.D	08/01/96
06	D9942	SS6	XS805.D	08/01/96
07	D9943	SS7	XS806.D	08/01/96
08	D9944	SS8	XS807.D	08/01/96
09	D9937MS	SS1MS	XM811.D	08/02/96
10	D9937MSD	SS1MSD	XM812.D	08/02/96
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COMMENTS:

4B

SAMPLE NO.

SBLK02

SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Lab File ID: XB814.D Lab Sample ID: BLK02

Instrument ID: ABN2 Date Extracted: 7/18/96

Matrix: (soil/water) SOIL Date Analyzed: 8/2/96

Level: (low/med) LOW Time Analyzed: 0623

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	D9945	SS9	XS808.D	08/02/96
02	D9945MS	SS9MS	XM809.D	08/02/96
03	D9945MSD	SS9MSD	XM810.D	08/02/96
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COMMENTS:

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name : USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: _____ Group: GCMS

Lab File ID: ST800.D DFTPP Injection Date: 8/1/96

Instrument ID: ABN2 DFTPP Injection Time: 1031

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	40.0
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	57.2
70	Less than 2.0% of mass 69	0.1 (0.2)1
127	25.0 - 75.0% of mass 198	40.3
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100 % relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.7
275	10.0 - 30.0% of mass 198	19.8
365	Greater than 0.75% of mass 198	2.0
441	Present, but less than mass 443	14.9
442	40.0 - 110.0% of mass 198	99.4
443	15.0 - 24.0% of mass 442	19.0 (19.1)2

1-Value is % mass 69 2-Value is % mass 442

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD160	STD120	SC800.D	8/1/96	1057
02	SSTD120	STD80	SC801.D	8/1/96	1153
03	SSTD80	STD50	SC802.D	8/1/96	1250
04	SSTD50	STD20	SC803.D	8/1/96	1346
05	SSTD20	STD10	SC804.D	8/1/96	1444
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name : USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: _____ Group: GCMS

Lab File ID: ST801.D DFTPP Injection Date: 8/1/96

Instrument ID: ABN2 DFTPP Injection Time: 1549

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	49.5
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	71.5
70	Less than 2.0% of mass 69	0.2 (0.3)1
127	25.0 - 75.0% of mass 198	46.5
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100 % relative abundance	100.0
199	5.0 - 9.0% of mass 198	7.1
275	10.0 - 30.0% of mass 198	12.9
365	Greater than 0.75% of mass 198	1.5
441	Present, but less than mass 443	9.7
442	40.0 - 110.0% of mass 198	67.9
443	15.0 - 24.0% of mass 442	14.3 (21.0)2

1-Value is % mass 69 2-Value is % mass 442

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050	CC50	SK801.D	8/1/96	1617
02	D9937	SS1	XS800.D	8/1/96	1714
03	D9938	SS2	XS801.D	8/1/96	1812
04	D9939	SS3	XS802.D	8/1/96	1910
05	D9940	SS5	XS803.D	8/1/96	2008
06	D9941	SSD	XS804.D	8/1/96	2105
07	D9942	SS6	XS805.D	8/1/96	2201
08	D9943	SS7	XS806.D	8/1/96	2257
09	D9944	SS8	XS807.D	8/1/96	2352
10	D9945	SS9	XS808.D	8/2/96	0049
11	D9945MS	SS9MS	XM809.D	8/2/96	0145
12	D9945MSD	SS9MSD	XM810.D	8/2/96	0241
13	D9937MS	SS1MS	XM811.D	8/2/96	0337
14	D9937MSD	SS1MSD	XM812.D	8/2/96	0432
15	SBLK01	BLK01	XB813.D	8/2/96	0528
16	SBLK02	BLK02	XB814.D	8/2/96	0623
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name : USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: _____ Group: GCMS

Lab File ID: STA801.D DFTPP Injection Date: 7/31/96

Instrument ID: ABN1 DFTPP Injection Time: 0827

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	55.8
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	76.9
70	Less than 2.0% of mass 69	0.3 (0.4)1
127	25.0 - 75.0% of mass 198	41.5
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100 % relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	20.3
365	Greater than 0.75% of mass 198	2.6
441	Present, but less than mass 443	10.7
442	40.0 - 110.0% of mass 198	70.5
443	15.0 - 24.0% of mass 442	13.3 (18.9)2

1-Value is % mass 69 2-Value is % mass 442

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD160	STD120	SCA800.D	7/31/96	0852
02	SSTD120	STD80	SCA801.D	7/31/96	0946
03	SSTD80	STD50	SCA802.D	7/31/96	1040
04	SSTD50	STD20	SCA803.D	7/31/96	1134
05	SSTD20	STD10	SCA804.D	7/31/96	1228
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name : USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: _____ Group: GCMS

Lab File ID: STA805.D DFTPP Injection Date: 8/8/96

Instrument ID: ABN1 DFTPP Injection Time: 0839

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	55.9
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	77.9
70	Less than 2.0% of mass 69	0.4 (0.5)1
127	25.0 - 75.0% of mass 198	49.3
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100 % relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.5
275	10.0 - 30.0% of mass 198	20.1
365	Greater than 0.75% of mass 198	3.2
441	Present, but less than mass 443	9.4
442	40.0 - 110.0% of mass 198	61.7
443	15.0 - 24.0% of mass 442	11.2 (18.2)2

1-Value is % mass 69 2-Value is % mass 442

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050	2CC50	SKA805.D	8/8/96	0958
02	D9942DL	SS6DL	XE805.D	8/8/96	1052
03	D9943DL	SS7DL	XE806.D	8/8/96	1146
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name : USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: _____ Group: GCMS

Lab File ID: STA806.D DFTPP Injection Date: 8/13/96

Instrument ID: ABN1 DFTPP Injection Time: 0814

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	51.5
68	Less than 2.0% of mass 69	0.1 (0.1)1
69	Mass 69 relative abundance	68.2
70	Less than 2.0% of mass 69	0.2 (0.4)1
127	25.0 - 75.0% of mass 198	43.4
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100 % relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	20.4
365	Greater than 0.75% of mass 198	3.2
441	Present, but less than mass 443	9.2
442	40.0 - 110.0% of mass 198	56.7
443	15.0 - 24.0% of mass 442	10.7 (18.8)2

1-Value is % mass 69 2-Value is % mass 442

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050	3CC50	SKA806.D	8/13/96	0839
02	D9944DL	SS8DL	XD807.D	8/13/96	0931
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6B

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: USACHPPM Contract: MOSER

Project No. 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Instrument ID: ABN1 Calibration Date(s): 7/31/96 7/31/96

Calibration Times: 0852 1228

Lab File ID: RRF20 = SCA804.D RRF50 = SCA803.D
RRF80 = SCA802.D RRF120 = SCA801.D RRF160 = SCA800.D

COMPOUND		RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD	
N-Nitrosodimethylamine		0.773	0.735	0.895	0.877	0.954	0.847	10.7	
bis(2-Chloroethyl)ether		1.666	1.575	1.497	1.495	1.403	1.527	6.5	
Phenol	*	2.079	2.081	1.824	1.685	1.520	1.838	13.4	*
2-Chlorophenol		1.480	1.534	1.331	1.243	1.181	1.354	11.1	
1,3-Dichlorobenzene		1.629	1.642	1.502	1.488	1.471	1.546	5.3	
1,4-Dichlorobenzene	*	1.682	1.614	1.512	1.464	1.453	1.545	6.4	*
1,2-Dichlorobenzene		1.677	1.554	1.432	1.469	1.401	1.507	7.4	
Benzyl alcohol		0.803	0.812	0.842	0.849	0.931	0.847	6.0	
bis(2-chloroisopropyl)ether		1.440	1.411	1.279	1.302	1.033	1.293	12.4	
2-Methylphenol		1.342	1.356	1.241	1.188	1.187	1.263	6.5	
Hexachloroethane		0.858	0.849	0.826	0.827	0.794	0.831	3.0	
N-Nitroso-di-n-propylamine	*	1.395	1.383	1.334	1.269	1.279	1.332	4.3	*
4-Methylphenol		1.452	1.495	1.388	1.338	1.280	1.391	6.2	
Nitrobenzene		0.562	0.572	0.543	0.521	0.539	0.547	3.7	
Isophorone		1.061	1.034	1.044	1.065	1.037	1.048	1.3	
2-Nitrophenol	*	0.271	0.273	0.270	0.272	0.280	0.273	1.5	*
2,4-Dimethylphenol		0.483	0.485	0.433	0.460	0.457	0.464	4.6	
bis(2-Chloroethoxy)methane		0.691	0.654	0.628	0.601	0.589	0.633	6.5	
2,4-Dichlorophenol	*	0.416	0.375	0.362	0.351	0.363	0.373	6.8	*
1,2,4-Trichlorobenzene		0.463	0.418	0.389	0.378	0.385	0.407	8.6	
Naphthalene		1.281	1.157	1.070	1.005	0.985	1.100	11.1	
4-Chloroaniline		0.555	0.530	0.511	0.487	0.462	0.509	7.1	
Hexachlorobutadiene	*	0.305	0.281	0.253	0.226	0.214	0.256	14.8	*
4-Chloro-3-methylphenol	*	0.425	0.433	0.409	0.396	0.416	0.416	3.4	*
2-Methylnaphthalene		0.856	0.784	0.702	0.639	0.572	0.711	15.9	
Hexachlorocyclopentadiene	*	0.195	0.238	0.267	0.280	0.314	0.259	17.4	*
2,4,6-Trichlorophenol	*	0.489	0.478	0.445	0.431	0.465	0.462	5.1	*
2,4,5-Trichlorophenol		0.523	0.503	0.495	0.476	0.488	0.497	3.5	
2-Chloronaphthalene		1.326	1.226	1.162	1.041	1.090	1.169	9.6	
2-Nitroaniline		0.537	0.593	0.622	0.622	0.648	0.604	7.0	
Acenaphthylene		1.779	1.714	1.597	1.513	1.610	1.643	6.4	
Dimethylphthalate		1.729	1.654	1.637	1.484	1.553	1.611	5.9	
2,6-Dinitrotoluene		0.371	0.395	0.399	0.391	0.396	0.390	2.9	
Acenaphthene	*	1.297	1.243	1.115	1.018	1.014	1.137	11.3	*
3-Nitroaniline		0.506	0.535	0.557	0.563	0.588	0.550	5.6	
2,4-Dinitrophenol	*	0.077	0.132	0.187	0.215	0.243	0.171	39.0	*
Dibenzofuran		1.823	1.864	1.682	1.575	1.568	1.702	8.1	

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

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SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: USACHPPM Contract: MOSER

Project No. 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Instrument ID: ABN1 Calibration Date(s): 7/31/96 7/31/96

Calibration Times: 0852 1228

Lab File ID: RRF20 = SCA804.D RRF50 = SCA803.D
RRF80 = SCA802.D RRF120 = SCA801.D RRF160 = SCA800.D

COMPOUND		RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD	
2,4-Dinitrotoluene		0.490	0.531	0.547	0.531	0.558	0.531	4.9	
4-Nitrophenol	*	0.155	0.179	0.198	0.203	0.219	0.191	12.9	*
Fluorene		1.370	1.329	1.243	1.136	1.157	1.247	8.2	
4-Chlorophenyl-phenylether		0.698	0.641	0.598	0.544	0.556	0.607	10.4	
Diethylphthalate		1.846	1.742	1.610	1.554	1.550	1.660	7.8	
4-Nitroaniline		0.203	0.236	0.257	0.296	0.397	0.278	26.9	
4,6-Dinitro-2-methylphenol		0.112	0.151	0.170	0.179	0.191	0.161	19.2	
n-Nitrosodiphenylamine	*	0.584	0.549	0.471	0.437	0.393	0.487	16.2	*
4-Bromophenyl-phenylether		0.289	0.296	0.249	0.249	0.246	0.266	9.2	
Hexachlorobenzene		0.490	0.438	0.388	0.372	0.359	0.409	13.2	
Pentachlorophenol	*	0.128	0.172	0.184	0.200	0.231	0.183	20.7	*
Phenanthrene		1.203	1.149	1.019	0.963	1.013	1.069	9.5	
Anthracene		1.116	1.093	0.971	0.938	0.965	1.017	8.0	
Di-n-butylphthalate		2.052	2.113	1.936	1.879	1.951	1.986	4.8	
Fluoranthene	*	1.254	1.222	1.110	1.129	1.161	1.175	5.2	*
Pyrene		1.466	1.444	1.370	1.342	1.437	1.412	3.8	
Butylbenzylphthalate		0.997	1.048	0.960	0.972	1.093	1.014	5.5	
3,3'-Dichlorobenzidine		0.357	0.289	0.320	0.346	0.370	0.336	9.6	
Benzo[a]anthracene		1.221	1.228	1.198	1.205	1.271	1.225	2.3	
Chrysene		1.221	1.193	1.061	1.030	1.039	1.109	8.2	
bis(2-Ethylhexyl)phthalate		1.516	1.507	1.379	1.340	1.389	1.426	5.6	
Di-n-octylphthalate	*	2.350	2.345	2.220	2.286	2.469	2.334	3.9	*
Benzo[b]fluoranthene		1.148	1.189	1.185	1.238	1.437	1.239	9.3	
Benzo[k]fluoranthene		1.073	1.102	1.047	1.001	0.867	1.018	9.1	
Benzo[a]pyrene	*	1.005	0.995	1.008	1.004	1.092	1.021	3.9	*
Indeno[1,2,3-cd]pyrene		0.780	0.788	0.862	0.924	1.018	0.874	11.4	
Dibenz[a,h]anthracene		0.718	0.750	0.795	0.795	0.837	0.779	5.9	
Benzo[g,h,i]perylene		0.774	0.791	0.795	0.839	0.846	0.809	3.9	
2-Fluorophenol		1.240	1.188	1.191	1.311	1.410	1.268	7.4	
Phenol-d5		1.870	1.989	1.836	1.752	1.644	1.818	7.1	
Nitrobenzene-d5		0.533	0.530	0.536	0.539	0.562	0.540	2.4	
2-Fluorobiphenyl		1.445	1.323	1.229	1.096	1.123	1.243	11.6	
2,4,6-Tribromophenol		0.251	0.259	0.227	0.225	0.226	0.238	6.8	
Terphenyl-d14		0.947	0.950	0.833	0.858	0.863	0.890	6.1	

* Compounds wi[illegible] imum RRF and maximum %RSD values.
All other compo[illegible] [illegible]et a minimum RRF of 0.010.

6B

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: USACHPPM Contract: MOSER

Project No. 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Instrument ID: ABN2 Calibration Date(s): 8/1/96 8/1/96

Calibration Times: 1057 1444

Lab File ID: RRF20 = SC804.D RRF50 = SC803.D
RRF80 = SC802.D RRF120 = SC801.D RRF160 = SC800.D

COMPOUND		RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD	
N-Nitrosodimethylamine		0.733	0.801	0.737	0.825	0.793	0.778	5.2	
bis(2-Chloroethyl)ether		1.516	1.529	1.445	1.429	1.353	1.454	4.9	
Phenol	*	1.695	1.841	1.728	1.740	1.674	1.736	3.7	*
2-Chlorophenol		1.375	1.396	1.258	1.284	1.149	1.292	7.7	
1,3-Dichlorobenzene		1.615	1.579	1.433	1.441	1.426	1.499	6.1	
1,4-Dichlorobenzene	*	1.613	1.596	1.480	1.434	1.383	1.501	6.7	*
1,2-Dichlorobenzene		1.534	1.515	1.418	1.364	1.324	1.431	6.4	
Benzyl alcohol		0.570	0.702	0.887	0.914	0.895	0.794	19.1	
bis(2-chloroisopropyl)ether		1.385	1.569	0.880	0.877	0.785	1.099	32.1	
2-Methylphenol		1.328	1.365	1.245	1.248	1.138	1.265	6.9	
Hexachloroethane		0.737	0.718	0.641	0.667	0.631	0.679	6.9	
N-Nitroso-di-n-propylamine	*	1.093	1.169	0.997	1.085	0.981	1.065	7.2	*
4-Methylphenol		1.271	1.388	1.316	1.272	1.228	1.295	4.7	
Nitrobenzene		0.494	0.492	0.482	0.479	0.471	0.484	2.0	
Isophorone		0.942	0.945	0.937	0.967	0.927	0.944	1.6	
2-Nitrophenol	*	0.243	0.259	0.260	0.260	0.264	0.257	3.2	*
2,4-Dimethylphenol		0.453	0.465	0.451	0.437	0.437	0.449	2.6	
bis(2-Chloroethoxy)methane		0.597	0.583	0.570	0.557	0.546	0.571	3.5	
2,4-Dichlorophenol	*	0.361	0.384	0.350	0.339	0.349	0.357	4.8	*
1,2,4-Trichlorobenzene		0.423	0.411	0.384	0.355	0.376	0.390	7.0	
Naphthalene		1.242	1.155	1.082	1.011	0.992	1.096	9.5	
4-Chloroaniline		0.530	0.545	0.489	0.480	0.457	0.500	7.3	
Hexachlorobutadiene	*	0.227	0.233	0.198	0.190	0.171	0.204	12.7	*
4-Chloro-3-methylphenol	*	0.386	0.405	0.410	0.394	0.384	0.396	2.9	*
2-Methylnaphthalene		0.799	0.792	0.742	0.689	0.672	0.739	7.8	
Hexachlorocyclopentadiene	*	0.088	0.143	0.150	0.206	0.178	0.153	28.8	*
2,4,6-Trichlorophenol	*	0.450	0.460	0.427	0.413	0.419	0.434	4.7	*
2,4,5-Trichlorophenol		0.473	0.515	0.478	0.455	0.454	0.475	5.2	
2-Chloronaphthalene		1.274	1.267	1.123	1.037	1.051	1.150	9.9	
2-Nitroaniline		0.399	0.475	0.467	0.489	0.477	0.461	7.8	
Acenaphthylene		1.719	1.761	1.534	1.455	1.402	1.574	10.1	
Dimethylphthalate		1.482	1.512	1.396	1.354	1.331	1.415	5.6	
2,6-Dinitrotoluene		0.324	[illegible].366	0.362	0.349	0.347	0.350	4.7	
Acenaphthene	*	1.275	[illegible].755	1.131	1.049	1.000	1.142	10.7	*
3-Nitroaniline		[illegible]	[illegible].11	0.504	0.521	0.529	0.516	2.1	
2,4-Dinitrophenol	*	[illegible]	[illegible].11	0.163	0.206	0.205	0.171	26.2	*
Dibenzofuran		1.74[illegible]	[illegible].21	1.593	1.527	1.519	1.621	6.6	

* Compounds with required minim[illegible] R[illegible] [illegible]aximum %RSD values.
All other compounds must meet a [illegible] of 0.010.

6B

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: USACHPPM Contract: MOSER

Project No. 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Instrument ID: ABN2 Calibration Date(s): 8/1/96 8/1/96

Calibration Times: 1057 1444

Lab File ID: RRF20 = SC804.D RRF50 = SC803.D
RRF80 = SC802.D RRF120 = SC801.D RRF160 = SC800.D

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD	
2,4-Dinitrotoluene	0.413	0.491	0.487	0.486	0.494	0.474	7.2	
4-Nitrophenol *		0.145	0.160	0.184	0.176	0.166	10.4	*
Fluorene	1.311	1.280	1.090	0.951	0.936	1.114	15.9	
4-Chlorophenyl-phenylether	0.685	0.686	0.631	0.593	0.581	0.635	7.8	
Diethylphthalate	1.558	1.509	1.313	1.122	1.117	1.324	15.7	
4-Nitroaniline		0.313	0.370	0.426	0.409	0.380	13.2	
4,6-Dinitro-2-methylphenol		0.137	0.156	0.175	0.184	0.163	12.8	
n-Nitrosodiphenylamine *	0.564	0.579	0.526	0.472	0.473	0.523	9.5	*
4-Bromophenyl-phenylether	0.277	0.272	0.243	0.223	0.218	0.247	11.0	
Hexachlorobenzene	0.406	0.391	0.348	0.324	0.328	0.359	10.4	
Pentachlorophenol *		0.139	0.163	0.177	0.174	0.163	10.6	*
Phenanthrene	1.219	1.188	1.099	1.007	1.006	1.104	9.0	
Anthracene	1.123	1.150	1.051	0.982	0.976	1.056	7.5	
Di-n-butylphthalate	1.728	1.690	1.589	1.439	1.461	1.581	8.3	
Fluoranthene *	1.275	1.250	1.208	1.131	1.111	1.195	6.0	*
Pyrene	1.833	1.798	1.644	1.673	1.766	1.743	4.7	
Butylbenzylphthalate	1.072	1.044	0.980	0.971	1.078	1.029	4.9	
3,3'-Dichlorobenzidine	0.373	0.354	0.384	0.434	0.485	0.406	13.1	
Benzo[a]anthracene	1.338	1.323	1.260	1.317	1.377	1.323	3.2	
Chrysene	1.365	1.253	1.119	1.172	1.233	1.228	7.6	
bis(2-Ethylhexyl)phthalate	1.561	1.455	1.349	1.275	1.397	1.407	7.7	
Di-n-octylphthalate *	2.540	2.390	2.290	1.896	2.167	2.257	10.8	*
Benzo[b]fluoranthene	1.206	1.190	1.209	1.169	1.302	1.215	4.2	
Benzo[k]fluoranthene	1.298	1.163	1.153	0.975	1.057	1.129	10.8	
Benzo[a]pyrene *	0.996	1.059	1.067	1.002	1.126	1.050	5.1	*
Indeno[1,2,3-cd]pyrene	0.750	0.896	0.807	0.920	0.913	0.857	8.8	
Dibenz[a,h]anthracene	0.673	0.853	0.769	0.840	0.841	0.795	9.5	
Benzo[g,h,i]perylene	0.702	0.834	0.726	0.808	0.800	0.774	7.3	
2-Fluorophenol	1.148	1.223	1.18[illegible]	1.229	1.229	1.203	3.0	
Phenol-d5	1.650	1.700	1.[illegible]	1.655	1.626	1.648	2.1	
Nitrobenzene-d5	0.484	0.493	0.[illegible]	0.492	0.495	0.492	1.0	
2-Fluorobiphenyl	1.383	1.342	[illegible]	1.125	1.120	1.231	10.1	
2,4,6-Tribromophenol	0.134	0.150	[illegible]	0.150	0.165	0.152	7.8	
Terphenyl-d14	1.177	1.1[illegible]0	[illegible]	1.084	1.149	1.129	3.8	

* Compounds with required minimum RRF and m[illegible] values.
All other compounds must meet a minimum RR[illegible] of 0.

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: USACHPPM Contract: MOSER

Project No. 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Instrument ID: ABN1 Calibration Date: 8/8/96 Time: 0958

Lab File ID: SKA805.D Init. Calib. Date(s): 7/31/96 7/31/96

Init. Calib. Times: 0852 1228

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
N-Nitrosodimethylamine	0.847	0.908		-7.2	
bis(2-Chloroethyl)ether	1.527	1.464		4.1	
Phenol	1.838	1.748		4.9	20.0
2-Chlorophenol	1.354	1.378		-1.8	
1,3-Dichlorobenzene	1.546	1.509		2.4	
1,4-Dichlorobenzene	1.545	1.566		-1.4	20.0
1,2-Dichlorobenzene	1.507	1.489		1.2	
Benzyl alcohol	0.847	0.801		5.4	
bis(2-chloroisopropyl)ether	1.293	0.818		36.7	
2-Methylphenol	1.263	1.126		10.8	
Hexachloroethane	0.831	0.739		11.1	
N-Nitroso-di-n-propylamine	1.332	1.040	0.050	21.9	
4-Methylphenol	1.390	1.240		10.8	
Nitrobenzene	0.547	0.501		8.4	
Isophorone	1.048	0.975		7.0	
2-Nitrophenol	0.273	0.264		3.3	20.0
2,4-Dimethylphenol	0.463	0.439		5.2	
bis(2-Chloroethoxy)methane	0.633	0.573		9.5	
2,4-Dichlorophenol	0.374	0.346		7.5	20.0
1,2,4-Trichlorobenzene	0.406	0.381		6.2	
Naphthalene	1.100	1.098		0.2	
4-Chloroaniline	0.509	0.484		4.9	
Hexachlorobutadiene	0.256	0.233		9.0	20.0
4-Chloro-3-methylphenol	0.416	0.374		10.1	20.0
2-Methylnaphthalene	0.710	0.727		-2.4	
Hexachlorocyclopentadiene	0.259	0.271	0.050	-4.6	
2,4,6-Trichlorophenol	0.462	0.430		6.9	20.0
2,4,5-Trichlorophenol	0.497	0.440		11.5	
2-Chloronaphthalene	1.169	1.148		1.8	
2-Nitroaniline	0.605	0.507		16.2	
Acenaphthylene	1.643	1.603		2.4	
Dimethylphthalate	1.611	1.[illegible]49		3.8	
2,6-Dinitrotoluene	0.390	0.[illegible]73		4.4	
Acenaphthene	1.137	1.[illegible]52		-1.3	20.0
3-Nitroaniline	0.550	[illegible].511		7.1	
2,4-Dinitrophenol	0.171	0.171	[illegible]50	0.0	
Dibenzofuran	1.702	1.[illegible]		2.0	

All other compounds must meet a minimum RRF of 0.[illegible]0.

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: USACHPPM Contract: MOSER

Project No. 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Instrument ID: ABN1 Calibration Date: 8/8/96 Time: 0958

Lab File ID: SKA805.D Init. Calib. Date(s): 7/31/96 7/31/96

Init. Calib. Times: 0852 1228

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
2,4-Dinitrotoluene	0.531	0.503		5.3	
4-Nitrophenol	0.191	0.182	0.050	4.7	
Fluorene	1.247	1.243		0.3	
4-Chlorophenyl-phenylether	0.607	0.595		2.0	
Diethylphthalate	1.661	1.614		2.8	
4-Nitroaniline	0.278	0.208		25.2	
4,6-Dinitro-2-methylphenol	0.161	0.172		-6.8	
n-Nitrosodiphenylamine	0.487	0.542		-11.3	20.0
4-Bromophenyl-phenylether	0.266	0.234		12.0	
Hexachlorobenzene	0.410	0.299		27.1	
Pentachlorophenol	0.183	0.153		16.4	20.0
Phenanthrene	1.069	1.105		-3.4	
Anthracene	1.016	1.035		-1.9	
Di-n-butylphthalate	1.986	1.888		4.9	
Fluoranthene	1.175	1.148		2.3	20.0
Pyrene	1.412	1.485		-5.2	
Butylbenzylphthalate	1.014	1.049		-3.5	
3,3'-Dichlorobenzidine	0.336	0.264		21.4	
Benzo[a]anthracene	1.225	1.205		1.6	
Chrysene	1.109	1.167		-5.2	
bis(2-Ethylhexyl)phthalate	1.426	1.469		-3.0	
Di-n-octylphthalate	2.334	2.784		-19.3	20.0
Benzo[b]fluoranthene	1.239	1.218		1.7	
Benzo[k]fluoranthene	1.018	1.146		-12.6	
Benzo[a]pyrene	1.021	1.021		0.0	20.0
Indeno[1,2,3-cd]pyrene	0.874	0.787		10.0	
Dibenz[a,h]anthracene	0.779	0.689		11.6	
Benzo[g,h,i]perylene	0.809	0.729		9.9	
2-Fluorophenol	1.268	1.310		-3.3	
Phenol-d5	1.818	1.700		6.5	
Nitrobenzene-d5	0.540	0.500		7.4	
2-Fluorobiphenyl	1.243	1.289		-3.7	
2,4,6-Tribromophenol	0.238	0.153		35.[illegible]	
Terphenyl-d14	0.890	0.923		-3.7	

All other compounds must meet a minimum RRF of 0.010.

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: USACHPPM Contract: MOSER

Project No. 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Instrument ID: ABN1 Calibration Date: 8/13/96 Time: 0839

Lab File ID: SKA806.D Init. Calib. Date(s): 7/31/96 7/31/96

Init. Calib. Times: 0852 1228

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
N-Nitrosodimethylamine	0.847	0.860		-1.5	
bis(2-Chloroethyl)ether	1.527	1.455		4.7	
Phenol	1.838	1.675		8.9	20.0
2-Chlorophenol	1.354	1.326		2.1	
1,3-Dichlorobenzene	1.546	1.493		3.4	
1,4-Dichlorobenzene	1.545	1.529		1.0	20.0
1,2-Dichlorobenzene	1.507	1.453		3.6	
Benzyl alcohol	0.847	0.795		6.1	
bis(2-chloroisopropyl)ether	1.293	0.800		38.1	
2-Methylphenol	1.263	1.166		7.7	
Hexachloroethane	0.831	0.711		14.4	
N-Nitroso-di-n-propylamine	1.332	1.051	0.050	21.1	
4-Methylphenol	1.390	1.235		11.2	
Nitrobenzene	0.547	0.516		5.7	
Isophorone	1.048	0.957		8.7	
2-Nitrophenol	0.273	0.271		0.7	20.0
2,4-Dimethylphenol	0.463	0.427		7.8	
bis(2-Chloroethoxy)methane	0.633	0.557		12.0	
2,4-Dichlorophenol	0.374	0.367		1.9	20.0
1,2,4-Trichlorobenzene	0.406	0.403		0.7	
Naphthalene	1.100	1.093		0.6	
4-Chloroaniline	0.509	0.510		-0.2	
Hexachlorobutadiene	0.256	0.233		9.0	20.0
4-Chloro-3-methylphenol	0.416	0.372		10.6	20.0
2-Methylnaphthalene	0.710	0.703		1.0	
Hexachlorocyclopentadiene	0.259	0.270	0.050	-4.2	
2,4,6-Trichlorophenol	0.462	0.456		1.3	20.0
2,4,5-Trichlorophenol	0.497	0.481		3.2	
2-Chloronaphthalene	1.169	1.164		0.4	
2-Nitroaniline	0.605	0.515		14.9	
Acenaphthylene	1.643	1.609		2.1	
Dimethylphthalate	1.611	1.526		5.3	
2,6-Dinitrotoluene	0.390	0.380		2.6	
Acenaphthene	1.137	1.107		2.6	0.0
3-Nitroaniline	0.550	0.515		6.4	
2,4-Dinitrophenol	0.171	0.167	0.050	2.3	
Dibenzofuran	1.702	1.632		4.1	

All other compounds must meet a minimum RRF of 0.010.

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: USACHPPM Contract: MOSER

Project No. 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Instrument ID: ABN1 Calibration Date: 8/13/96 Time: 0839

Lab File ID: SKA806.D Init. Calib. Date(s): 7/31/96 7/31/96

Init. Calib. Times: 0852 1228

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
2,4-Dinitrotoluene	0.531	0.502		5.5	
4-Nitrophenol	0.191	0.197	0.050	-3.1	
Fluorene	1.247	1.223		1.9	
4-Chlorophenyl-phenylether	0.607	0.583		4.0	
Diethylphthalate	1.661	1.568		5.6	
4-Nitroaniline	0.278	0.246		11.5	
4,6-Dinitro-2-methylphenol	0.161	0.173		-7.5	
n-Nitrosodiphenylamine	0.487	0.529		-8.6	20.0
4-Bromophenyl-phenylether	0.266	0.246		7.5	
Hexachlorobenzene	0.410	0.313		23.7	
Pentachlorophenol	0.183	0.192		-4.9	20.0
Phenanthrene	1.069	1.117		-4.5	
Anthracene	1.016	1.055		-3.8	
Di-n-butylphthalate	1.986	1.909		3.9	
Fluoranthene	1.175	1.175		0.0	20.0
Pyrene	1.412	1.549		-9.7	
Butylbenzylphthalate	1.014	1.104		-8.9	
3,3'-Dichlorobenzidine	0.336	0.314		6.5	
Benzo[a]anthracene	1.225	1.203		1.8	
Chrysene	1.109	1.183		-6.7	
bis(2-Ethylhexyl)phthalate	1.426	1.526		-7.0	
Di-n-octylphthalate	2.334	2.664		-14.1	20.0
Benzo[b]fluoranthene	1.239	1.201		3.1	
Benzo[k]fluoranthene	1.018	1.069		-5.0	
Benzo[a]pyrene	1.021	1.010		1.1	20.0
Indeno[1,2,3-cd]pyrene	0.874	0.867		0.8	
Dibenz[a,h]anthracene	0.779	0.756		3.0	
Benzo[g,h,i]perylene	0.809	0.837		-3.5	
2-Fluorophenol	1.268	1.282		-1.1	
Phenol-d5	1.818	1.699		6.5	
Nitrobenzene-d5	0.540	0.501		7.2	
2-Fluorobiphenyl	1.243	1.272		-2.3	
2,4,6-Tribromophenol	0.238	0.175		26.5	
Terphenyl-d14	0.890	0.951		-6.9	

All other compounds must meet a minimum RRF of 0.010.

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: USACHPPM Contract: MOSER

Project No. 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Instrument ID: ABN2 Calibration Date: 8/1/96 Time: 1617

Lab File ID: SK801.D Init. Calib. Date(s): 8/1/96 8/1/96

Init. Calib. Times: 1057 1444

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
N-Nitrosodimethylamine	0.778	0.782		-0.5	
bis(2-Chloroethyl)ether	1.454	1.440		1.0	
Phenol	1.736	1.714		1.3	20.0
2-Chlorophenol	1.292	1.273		1.5	
1,3-Dichlorobenzene	1.499	1.444		3.7	
1,4-Dichlorobenzene	1.501	1.465		2.4	20.0
1,2-Dichlorobenzene	1.431	1.419		0.8	
Benzyl alcohol	0.794	0.811		-2.1	
bis(2-chloroisopropyl)ether	1.099	1.496		-36.1	
2-Methylphenol	1.265	1.268		-0.2	
Hexachloroethane	0.679	0.657		3.2	
N-Nitroso-di-n-propylamine	1.065	1.045	0.050	1.9	
4-Methylphenol	1.295	1.320		-1.9	
Nitrobenzene	0.484	0.473		2.3	
Isophorone	0.944	0.917		2.9	
2-Nitrophenol	0.257	0.266		-3.5	20.0
2,4-Dimethylphenol	0.449	0.439		2.2	
bis(2-Chloroethoxy)methane	0.571	0.566		0.9	
2,4-Dichlorophenol	0.356	0.353		0.8	20.0
1,2,4-Trichlorobenzene	0.390	0.370		5.1	
Naphthalene	1.096	1.031		5.9	
4-Chloroaniline	0.500	0.492		1.6	
Hexachlorobutadiene	0.204	0.208		-2.0	20.0
4-Chloro-3-methylphenol	0.396	0.400		-1.0	20.0
2-Methylnaphthalene	0.739	0.713		3.5	
Hexachlorocyclopentadiene	0.153	0.184	0.050	-20.3	
2,4,6-Trichlorophenol	0.434	0.439		-1.2	20.0
2,4,5-Trichlorophenol	0.475	0.495		-4.2	
2-Chloronaphthalene	1.150	1.095		4.8	
2-Nitroaniline	0.462	0.477		-3.2	
Acenaphthylene	1.574	1.630		-3.6	
Dimethylphthalate	1.415	1.442		-1.9	
2,6-Dinitrotoluene	0.350	0.371		-6.0	
Acenaphthene	1.142	1.147		-0.4	20.0
3-Nitroaniline	0.516	0.522		-1.2	
2,4-Dinitrophenol	0.171	0.178	0.050	-4.1	
Dibenzofuran	1.621	1.650		-1.8	

All other compounds must meet a minimum RRF of 0.010.

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: USACHPPM Contract: MOSER

Project No. 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Instrument ID: ABN2 Calibration Date: 8/1/96 Time: 1617

Lab File ID: SK801.D Init. Calib. Date(s): 8/1/96 8/1/96

Init. Calib. Times: 1057 1444

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
2,4-Dinitrotoluene	0.474	0.494		-4.2	
4-Nitrophenol	0.166	0.160	0.050	3.6	
Fluorene	1.114	1.075		3.5	
4-Chlorophenyl-phenylether	0.635	0.632		0.5	
Diethylphthalate	1.324	1.262		4.7	
4-Nitroaniline	0.380	0.392		-3.2	
4,6-Dinitro-2-methylphenol	0.163	0.167		-2.5	
n-Nitrosodiphenylamine	0.523	0.513		1.9	20.0
4-Bromophenyl-phenylether	0.247	0.249		-0.8	
Hexachlorobenzene	0.359	0.370		-3.1	
Pentachlorophenol	0.163	0.156		4.3	20.0
Phenanthrene	1.104	1.097		0.6	
Anthracene	1.056	1.063		-0.7	
Di-n-butylphthalate	1.581	1.562		1.2	
Fluoranthene	1.195	1.186		0.8	20.0
Pyrene	1.743	1.756		-0.7	
Butylbenzylphthalate	1.029	0.999		2.9	
3,3'-Dichlorobenzidine	0.406	0.420		-3.4	
Benzo[a]anthracene	1.323	1.318		0.4	
Chrysene	1.228	1.218		0.8	
bis(2-Ethylhexyl)phthalate	1.407	1.421		-1.0	
Di-n-octylphthalate	2.257	2.097		7.1	20.0
Benzo[b]fluoranthene	1.215	1.195		1.6	
Benzo[k]fluoranthene	1.129	1.066		5.6	
Benzo[a]pyrene	1.050	1.004		4.4	20.0
Indeno[1,2,3-cd]pyrene	0.857	0.832		2.9	
Dibenz[a,h]anthracene	0.795	0.767		3.5	
Benzo[g,h,i]perylene	0.774	0.789		-1.9	
2-Fluorophenol	1.203	1.198		0.4	
Phenol-d5	1.648	1.628		1.2	
Nitrobenzene-d5	0.492	0.493		-0.2	
2-Fluorobiphenyl	1.231	1.206		2.0	
2,4,6-Tribromophenol	0.152	0.156		-2.6	
Terphenyl-d14	1.129	1.176		-4.2	

All other compounds must meet a minimum RRF of 0.010.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Lab File ID (Standard): SK801.D Date Analyzed: 8/1/96

Instrument ID: ABN2 Time Analyzed: 1617

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	670798	9.84	2218804	13.65	1350332	19.10
	UPPER LIMIT	1341596	10.34	4437608	14.15	2700664	19.60
	LOWER LIMIT	335399	9.34	1109402	13.15	675166	18.60
	SAMPLE NO.						
01	D9937	697003	9.86	2232470	13.64	1504171	19.10
02	D9938	656486	9.86	2217521	13.64	1435282	19.09
03	D9939	709732	9.85	2361971	13.64	1517562	19.12
04	D9940	780908	9.86	2528666	13.65	1662512	19.10
05	D9941	714436	9.86	2364592	13.65	1613712	19.10
06	D9942	776662	9.87	2671907	13.64	1783145	19.11
07	D9943	839770	9.87	2909848	13.66	1936368	19.12
08	D9944	790672	9.88	2678854	13.66	1778715	19.14
09	D9945	846589	9.88	2922245	13.67	1966677	19.13
10	D9945MS	837042	9.88	2871965	13.67	1929820	19.14
11	D9945MSD	888351	9.89	3011079	13.68	1969290	19.13
12	D9937MS	813037	9.89	2959339	13.68	1983722	19.14
13	D9937MSD	878087	9.89	3125317	13.68	2091555	19.14
14	SBLK01	875436	9.87	3024345	13.66	2014765	19.13
15	SBLK02	964052	9.87	3403032	13.67	2255697	19.12
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: _____ Group: GCMS

Lab File ID (Standard): SK801.D Date Analyzed: 8/1/96

Instrument ID: ABN2 Time Analyzed: 1617

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	2280605	23.72	1584969	32.04	1842221	36.17
	UPPER LIMIT	4561210	24.22	3169938	32.54	3684442	36.67
	LOWER LIMIT	1140303	23.22	792485	31.54	921111	35.67
	SAMPLE NO.						
01	D9937	2536239	23.72	1832200	32.05	1838289	36.19
02	D9938	2474347	23.73	1754011	32.04	1583567	36.20
03	D9939	2582356	23.74	1699573	32.09	1125873	36.29
04	D9940	2871221	23.74	2208285	32.06	1871108	36.21
05	D9941	2893388	23.74	2393269	32.07	2229156	36.23
06	D9942	3051875	23.75	2196258	32.13	2025686	36.27
07	D9943	2601202	23.76	1830200	32.20	1197777	36.38
08	D9944	2386719	23.77	2505152	32.13	1773952	36.33
09	D9945	2758794	23.77	2217475	32.16	1539263	36.33
10	D9945MS	2760959	23.78	2091648	32.17	1379233	36.35
11	D9945MSD	2946759	23.79	2226865	32.17	1442650	36.35
12	D9937MS	3318760	23.79	2538846	32.15	1825658	36.32
13	D9937MSD	3646703	23.80	2513128	32.14	1910419	36.30
14	SBLK01	3612657	23.79	2618361	32.13	2334153	36.27
15	SBLK02	4122561	23.78	3081875	32.12	2588181	36.27
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: _____ Group: GCMS

Lab File ID (Standard): SKA805.D Date Analyzed: 8/8/96

Instrument ID: ABN1 Time Analyzed: 0958

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	543950	9.63	1707160	13.44	1008434	18.89
	UPPER LIMIT	1087900	10.13	3414320	13.94	2016868	19.39
	LOWER LIMIT	271975	9.13	853580	12.94	504217	18.39
	SAMPLE NO.						
01	D9942DL	599263	9.63	1930885	13.43	1171063	18.88
02	D9943DL	609515	9.63	2027009	13.43	1295795	18.89
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

ARE UPPER LIMIT = +100% of internal standard area
AR OWER LIMIT = - 50% of internal standard area
RT ER LIMIT = +0.50 minutes of internal standard RT
RT ER LIMIT = -0.50 minutes of internal standard RT

used to flag internal standard area values with an asterisk.
* outside of QC limits.

Page

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Lab File ID (Standard): SKA805.D Date Analyzed: 8/8/96

Instrument ID: ABN1 Time Analyzed: 0958

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	1549920	23.41	1240309	31.66	1152669	35.77
	UPPER LIMIT	3099840	23.91	2480618	32.16	2305338	36.27
	LOWER LIMIT	774960	22.91	620155	31.16	576335	35.27
	SAMPLE NO.						
01	D9942DL	1866834	23.40	1377275	31.66	1284833	35.78
02	D9943DL	1988875	23.41	1211898	31.68	974825	35.82
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: _____ Group: GCMS

Lab File ID (Standard): SKA806.D Date Analyzed: 8/13/96

Instrument ID: ABN1 Time Analyzed: 0839

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	650374	9.55	2058087	13.36	1208182	18.80
	UPPER LIMIT	1300748	10.05	4116174	13.86	2416364	19.30
	LOWER LIMIT	325187	9.05	1029044	12.86	604091	18.30
	SAMPLE NO.						
01	D9944DL	661151	9.47	1130939	13.34	995643	18.79
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of i[illegible]ernal standard area
AREA LOWER LIMIT = - 50% [illegible] ernal standard area
RT UPPER LIMIT = +0.50 mi[illegible] of internal standard RT
RT LOWER LIMIT = -0.[illegible]0 [illegible] internal standard RT

Column used to flag inte[illegible] stan[illegible] a values with an asterisk.
* Values outside of QC li[illegible]

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Lab File ID (Standard): SKA806.D Date Analyzed: 8/13/96

Instrument ID: ABN1 Time Analyzed: 0839

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	1795026	23.32	1346849	31.58	1319989	35.68
	UPPER LIMIT	3590052	23.82	2693698	32.08	2639978	36.18
	LOWER LIMIT	897513	22.82	673425	31.08	659995	35.18
	SAMPLE NO.						
01	D9944DL	1951114	23.31	1687694	31.56	1764885	35.67
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standar area
AREA LOWER LIMIT = - 50% of inte[illegible] stand[illegible] [illegible]rea
RT UPPER LIMIT = +0.50 minutes of internal [illegible] [illegible]rd RT
RT LOWER LIMIT = -0.50 minutes of [illegible] [illegible]rd RT

Column used to flag internal standard are [illegible] asterisk.
* Values outside of QC limits.

ANALYSIS REPORT

U.S. ARMY CENTER FOR HEALTH PROMOTION AND PREVENTIVE MEDICINE
Building E2100, APG, MD 21010
ANALYTICAL SPECTROMETRY DIVISION

Installation: BRADLEY

Project Number: 38-EH-2651

Job Number: 6A5600

Project Officer: MOSER

Number of Samples: 9

Matrix: WATER

Analyzed for: Semivolatiles

Method: 8270B

FIELD #	LAB #	DATA FILE #
SW5	D9926	SS815.D
SWD	D9927	SS816.D
SW1	D9928	SS817.D
SW6	D9930	SS818.D
SW7	D9931	SS819.D
SW8	D9932	SS820.D
SW9	D9933	SS821.D
SW3	D9934	SS822.D
SW4	D9935	SS823.D

Analyst: _____ Date: 7 Aug 96

Reviewed by: _____ Date: 7 Aug 96

Reviewed by: _____ Date: 7 Aug 96

Release authorized by: _____ 7 Aug 96

This report shall not be reproduced except in full without the written approval of the laboratory. The results relate only to the specific samples identified within this report.

SUMMARY OF RESULTS
BRADLEY
38-EH-2651

The samples were collected 9 through 10 June 96, extracted by Lancaster Laboratories on 16 July 96. The method mandated seven day extraction holding time was met for all samples. These samples were received back into DLS 26 July 96 and analyzed 31 Jul 96.

There were no target compounds detected in any of the samples. The 3,3'-dichlorobenzidine reporting level is estimated in all samples because it is expired in the calibration standards.

A matrix spike and matrix spike duplicate were prepared on a laboratory blank. One matrix spike recovery failed to meet the quality control limits. Most matrix spike duplicate relative percent differences also exceeded the quality control limits. These failures can be attributed to the fact that the matrix spike sample had evaporated to dryness upon receipt from Lancaster Laboratories. This sample was brought to volume with methylene chloride and analyzed. All sample surrogate recoveries were within the quality control limits. All internal standard area counts met the quality control limits for all samples. The lab blank missed the 12 hour tuning time limit by 4 minutes.

Samples were analyzed by EPA method 8270B using POCP SOP 72-3.

Analyst: _____ Date: 7 Aug 96

Analysis Data Sheet Qualifier codes:

B - Indicates analyte was found in the associated blank as well as in the sample.

D - Indicates sample was diluted.

E - Indicates reported value exceeds the upper limit of the quantitation curve.

J - Indicates reported value is an estimate.

U - Indicates compound was analyzed for but not detected.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SW5

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) WATER Lab Sample ID: D9926

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: SS815.D

Level: (low/med) Date Collected: 7/9/96

% Moisture: 100 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 7/31/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
62-75-9	N-Nitrosodimethylamine	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
108-95-2	Phenol	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
100-51-6	Benzyl alcohol	10	U
108-60-1	bis(2-chloroisopropyl)ether	10	U
95-48-7	2-Methylphenol	10	U
67-72-1	Hexachloroethane	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
106-44-5	4-Methylphenol	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	10	U
208-96-8	Acenaphthylene	10	U
131-11-3	Dimethylphthalate	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1B

SAMPLE NO.

SW5

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) WATER Lab Sample ID: D9926

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: SS815.D

Level: (low/med) Date Collected: 7/9/96

% Moisture: 100 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 7/31/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
83-32-9	Acenaphthene	10	U
99-09-2	3-Nitroaniline	10	U
51-28-5	2,4-Dinitrophenol	10	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
100-02-7	4-Nitrophenol	10	U
86-73-7	Fluorene	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
84-66-2	Diethylphthalate	10	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	n-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	JU
56-55-3	Benzo[a]anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo[b]fluoranthene	10	U
207-08-9	Benzo[k]fluoranthene	10	U
50-32-8	Benzo[a]pyrene	10	U
193-39-5	Indeno[1,2,3-cd]pyrene	10	U
53-70-3	Dibenz[a,h]anthracene	10	U
191-24-2	Benzo[g,h,i]perylene	10	U

1B

SAMPLE NO.

SWD

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) WATER Lab Sample ID: D9927

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: SS816.D

Level: (low/med) Date Collected: 7/9/96

% Moisture: 100 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 7/31/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
62-75-9	N-Nitrosodimethylamine	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
108-95-2	Phenol	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
100-51-6	Benzyl alcohol	10	U
108-60-1	bis(2-chloroisopropyl)ether	10	U
95-48-7	2-Methylphenol	10	U
67-72-1	Hexachloroethane	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
106-44-5	4-Methylphenol	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	10	U
208-96-8	Acenaphthylene	10	U
131-11-3	Dimethylphthalate	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1B

SAMPLE NO.

SWD

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) WATER Lab Sample ID: D9927

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: SS816.D

Level: (low/med) Date Collected: 7/9/96

% Moisture: 100 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 7/31/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
83-32-9	Acenaphthene	10	U
99-09-2	3-Nitroaniline	10	U
51-28-5	2,4-Dinitrophenol	10	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
100-02-7	4-Nitrophenol	10	U
86-73-7	Fluorene	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
84-66-2	Diethylphthalate	10	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	n-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	JU
56-55-3	Benzo[a]anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo[b]fluoranthene	10	U
207-08-9	Benzo[k]fluoranthene	10	U
50-32-8	Benzo[a]pyrene	10	U
193-39-5	Indeno[1,2,3-cd]pyrene	10	U
53-70-3	Dibenz[a,h]anthracene	10	U
191-24-2	Benzo[g,h,i]perylene	10	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SW1

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) WATER Lab Sample ID: D9928

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: SS817.D

Level: (low/med) Date Collected: 7/10/96

% Moisture: 100 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 7/31/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
62-75-9	N-Nitrosodimethylamine	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
108-95-2	Phenol	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
100-51-6	Benzyl alcohol	10	U
108-60-1	bis(2-chloroisopropyl)ether	10	U
95-48-7	2-Methylphenol	10	U
67-72-1	Hexachloroethane	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
106-44-5	4-Methylphenol	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	10	U
208-96-8	Acenaphthylene	10	U
131-11-3	Dimethylphthalate	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1B

SAMPLE NO.

SW1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) WATER Lab Sample ID: D9928

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: SS817.D

Level: (low/med) Date Collected: 7/10/96

% Moisture: 100 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 7/31/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
83-32-9	Acenaphthene	10	U
99-09-2	3-Nitroaniline	10	U
51-28-5	2,4-Dinitrophenol	10	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
100-02-7	4-Nitrophenol	10	U
86-73-7	Fluorene	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
84-66-2	Diethylphthalate	10	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	n-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	JU
56-55-3	Benzo[a]anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo[b]fluoranthene	10	U
207-08-9	Benzo[k]fluoranthene	10	U
50-32-8	Benzo[a]pyrene	10	U
193-39-5	Indeno[1,2,3-cd]pyrene	10	U
53-70-3	Dibenz[a,h]anthracene	10	U
191-24-2	Benzo[g,h,i]perylene	10	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SW6

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) WATER Lab Sample ID: D9930

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: SS818.D

Level: (low/med) Date Collected: 7/9/96

% Moisture: 100 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 7/31/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
62-75-9	N-Nitrosodimethylamine	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
108-95-2	Phenol	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
100-51-6	Benzyl alcohol	10	U
108-60-1	bis(2-chloroisopropyl)ether	10	U
95-48-7	2-Methylphenol	10	U
67-72-1	Hexachloroethane	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
106-44-5	4-Methylphenol	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	10	U
208-96-8	Acenaphthylene	10	U
131-11-3	Dimethylphthalate	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SW6

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) WATER Lab Sample ID: D9930

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: SS818.D

Level: (low/med) Date Collected: 7/9/96

% Moisture: 100 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 7/31/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
83-32-9	Acenaphthene	10	U
99-09-2	3-Nitroaniline	10	U
51-28-5	2,4-Dinitrophenol	10	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
100-02-7	4-Nitrophenol	10	U
86-73-7	Fluorene	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
84-66-2	Diethylphthalate	10	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	n-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	JU
56-55-3	Benzo[a]anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo[b]fluoranthene	10	U
207-08-9	Benzo[k]fluoranthene	10	U
50-32-8	Benzo[a]pyrene	10	U
193-39-5	Indeno[1,2,3-cd]pyrene	10	U
53-70-3	Dibenz[a,h]anthracene	10	U
191-24-2	Benzo[g,h,i]perylene	10	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
SW7

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) WATER Lab Sample ID: D9931

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: SS819.D

Level: (low/med) Date Collected: 7/9/96

% Moisture: 100 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 7/31/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
62-75-9	N-Nitrosodimethylamine	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
108-95-2	Phenol	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
100-51-6	Benzyl alcohol	10	U
108-60-1	bis(2-chloroisopropyl)ether	10	U
95-48-7	2-Methylphenol	10	U
67-72-1	Hexachloroethane	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
106-44-5	4-Methylphenol	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	10	U
208-96-8	Acenaphthylene	10	U
131-11-3	Dimethylphthalate	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
SW7

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) WATER Lab Sample ID: D9931

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: SS819.D

Level: (low/med) Date Collected: 7/9/96

% Moisture: 100 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 7/31/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
83-32-9	Acenaphthene	10	U
99-09-2	3-Nitroaniline	10	U
51-28-5	2,4-Dinitrophenol	10	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
100-02-7	4-Nitrophenol	10	U
86-73-7	Fluorene	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
84-66-2	Diethylphthalate	10	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	n-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	JU
56-55-3	Benzo[a]anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo[b]fluoranthene	10	U
207-08-9	Benzo[k]fluoranthene	10	U
50-32-8	Benzo[a]pyrene	10	U
193-39-5	Indeno[1,2,3-cd]pyrene	10	U
53-70-3	Dibenz[a,h]anthracene	10	U
191-24-2	Benzo[g,h,i]perylene	10	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
SW8

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) WATER Lab Sample ID: D9932

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: SS820.D

Level: (low/med) Date Collected: 7/9/96

% Moisture: 100 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 7/31/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
62-75-9	N-Nitrosodimethylamine	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
108-95-2	Phenol	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
100-51-6	Benzyl alcohol	10	U
108-60-1	bis(2-chloroisopropyl)ether	10	U
95-48-7	2-Methylphenol	10	U
67-72-1	Hexachloroethane	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
106-44-5	4-Methylphenol	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	10	U
208-96-8	Acenaphthylene	10	U
131-11-3	Dimethylphthalate	10	U
606-20-2	2,6-Dinitrotoluene	10	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
SW8

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) WATER Lab Sample ID: D9932

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: SS820.D

Level: (low/med) Date Collected: 7/9/96

% Moisture: 100 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 7/31/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
83-32-9	Acenaphthene	10	U
99-09-2	3-Nitroaniline	10	U
51-28-5	2,4-Dinitrophenol	10	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
100-02-7	4-Nitrophenol	10	U
86-73-7	Fluorene	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
84-66-2	Diethylphthalate	10	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	n-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	JU
56-55-3	Benzo[a]anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo[b]fluoranthene	10	U
207-08-9	Benzo[k]fluoranthene	10	U
50-32-8	Benzo[a]pyrene	10	U
193-39-5	Indeno[1,2,3-cd]pyrene	10	U
53-70-3	Dibenz[a,h]anthracene	10	U
191-24-2	Benzo[g,h,i]perylene	10	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
SW9

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) WATER Lab Sample ID: D9933

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: SS821.D

Level: (low/med) Date Collected: 7/9/96

% Moisture: 100 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/1/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
62-75-9	N-Nitrosodimethylamine	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
108-95-2	Phenol	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
100-51-6	Benzyl alcohol	10	U
108-60-1	bis(2-chloroisopropyl)ether	10	U
95-48-7	2-Methylphenol	10	U
67-72-1	Hexachloroethane	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
106-44-5	4-Methylphenol	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	10	U
208-96-8	Acenaphthylene	10	U
131-11-3	Dimethylphthalate	10	U
606-20-2	2,6-Dinitrotoluene	10	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
SW9

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) WATER Lab Sample ID: D9933

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: SS821.D

Level: (low/med) Date Collected: 7/9/96

% Moisture: 100 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/1/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
83-32-9	Acenaphthene	10	U
99-09-2	3-Nitroaniline	10	U
51-28-5	2,4-Dinitrophenol	10	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
100-02-7	4-Nitrophenol	10	U
86-73-7	Fluorene	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
84-66-2	Diethylphthalate	10	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	n-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	JU
56-55-3	Benzo[a]anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo[b]fluoranthene	10	U
207-08-9	Benzo[k]fluoranthene	10	U
50-32-8	Benzo[a]pyrene	10	U
193-39-5	Indeno[1,2,3-cd]pyrene	10	U
53-70-3	Dibenz[a,h]anthracene	10	U
191-24-2	Benzo[g,h,i]perylene	10	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SW3

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) WATER Lab Sample ID: D9934

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: SS822.D

Level: (low/med) Date Collected: 7/10/96

% Moisture: 100 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/1/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
62-75-9	N-Nitrosodimethylamine	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
108-95-2	Phenol	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
100-51-6	Benzyl alcohol	10	U
108-60-1	bis(2-chloroisopropyl)ether	10	U
95-48-7	2-Methylphenol	10	U
67-72-1	Hexachloroethane	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
106-44-5	4-Methylphenol	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	10	U
208-96-8	Acenaphthylene	10	U
131-11-3	Dimethylphthalate	10	U
606-20-2	2,6-Dinitrotoluene	10	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
SW3

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) WATER Lab Sample ID: D9934

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: SS822.D

Level: (low/med) Date Collected: 7/10/96

% Moisture: 100 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/1/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
83-32-9	Acenaphthene	10	U
99-09-2	3-Nitroaniline	10	U
51-28-5	2,4-Dinitrophenol	10	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
100-02-7	4-Nitrophenol	10	U
86-73-7	Fluorene	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
84-66-2	Diethylphthalate	10	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	n-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	JU
56-55-3	Benzo[a]anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo[b]fluoranthene	10	U
207-08-9	Benzo[k]fluoranthene	10	U
50-32-8	Benzo[a]pyrene	10	U
193-39-5	Indeno[1,2,3-cd]pyrene	10	U
53-70-3	Dibenz[a,h]anthracene	10	U
191-24-2	Benzo[g,h,i]perylene	10	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SW4

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) WATER Lab Sample ID: D9935

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: SS823.D

Level: (low/med) Date Collected: 7/10/96

% Moisture: 100 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/1/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
62-75-9	N-Nitrosodimethylamine	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
108-95-2	Phenol	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
100-51-6	Benzyl alcohol	10	U
108-60-1	bis(2-chloroisopropyl)ether	10	U
95-48-7	2-Methylphenol	10	U
67-72-1	Hexachloroethane	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
106-44-5	4-Methylphenol	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	10	U
208-96-8	Acenaphthylene	10	U
131-11-3	Dimethylphthalate	10	U
606-20-2	2,6-Dinitrotoluene	10	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
SW4

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) WATER Lab Sample ID: D9935

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: SS823.D

Level: (low/med) Date Collected: 7/10/96

% Moisture: 100 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/1/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
83-32-9	Acenaphthene	10	U
99-09-2	3-Nitroaniline	10	U
51-28-5	2,4-Dinitrophenol	10	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
100-02-7	4-Nitrophenol	10	U
86-73-7	Fluorene	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
84-66-2	Diethylphthalate	10	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	n-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	JU
56-55-3	Benzo[a]anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo[b]fluoranthene	10	U
207-08-9	Benzo[k]fluoranthene	10	U
50-32-8	Benzo[a]pyrene	10	U
193-39-5	Indeno[1,2,3-cd]pyrene	10	U
53-70-3	Dibenz[a,h]anthracene	10	U
191-24-2	Benzo[g,h,i]perylene	10	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SBLK01

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) WATER Lab Sample ID: BLK01

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: SB824.D

Level: (low/med) Date Collected: 7/16/96

% Moisture: 100 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/1/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
62-75-9	N-Nitrosodimethylamine	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
108-95-2	Phenol	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
100-51-6	Benzyl alcohol	10	U
108-60-1	bis(2-chloroisopropyl)ether	10	U
95-48-7	2-Methylphenol	10	U
67-72-1	Hexachloroethane	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
106-44-5	4-Methylphenol	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	10	U
208-96-8	Acenaphthylene	10	U
131-11-3	Dimethylphthalate	10	U
606-20-2	2,6-Dinitrotoluene	10	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
SBLK01

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix: (soil/water) WATER Lab Sample ID: BLK01

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: SB824.D

Level: (low/med) Date Collected: 7/16/96

% Moisture: 100 decanted: (Y/N): N Date Extracted: 7/16/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 8/1/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
83-32-9	Acenaphthene	10	U
99-09-2	3-Nitroaniline	10	U
51-28-5	2,4-Dinitrophenol	10	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
100-02-7	4-Nitrophenol	10	U
86-73-7	Fluorene	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
84-66-2	Diethylphthalate	10	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	n-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	JU
56-55-3	Benzo[a]anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo[b]fluoranthene	10	U
207-08-9	Benzo[k]fluoranthene	10	U
50-32-8	Benzo[a]pyrene	10	U
193-39-5	Indeno[1,2,3-cd]pyrene	10	U
53-70-3	Dibenz[a,h]anthracene	10	U
191-24-2	Benzo[g,h,i]perylene	10	U

2C

WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: _____ Group: GCMS

	SAMPLE NO.	S1 (2FP)	#	S2 (PHL)	#	S3 (NBZ)	#	S4 (FBP)	#	S5 (TBP)	#	S6 (TPH)	#	#	#	TOT OUT
01	SPIKE	64		43		90		82		83		100				
02	SPIKEMS	25		25		50		52		51		59				
03	SPIKEMSD	60		41		89		79		76		94				
04	SW5	51		36		82		68		68		67				
05	SWD	58		39		84		78		79		80				
06	SW1	22		15		83		74		18		67				
07	SW6	50		37		76		75		73		83				
08	SW7	48		37		84		79		68		82				
09	SW8	58		40		84		77		78		88				
10	SW9	76		54		100		101		103		108				
11	SW3	54		38		82		81		72		76				
12	SW4	51		35		86		81		64		76				
13	SBLK01	29		19		41		42	*	38		44				1
14																
15																
16																
17																
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	QC LIMITS
S1 (2FP) = 2-Fluorophenol	(21-100)
S2 (PHL) = Phenol-d5	(10-94)
S3 (NBZ) = Nitrobenzene-d5	(35-114)
S4 (FBP) = 2-Fluorobiphenyl	(43-116)
S5 (TBP) = 2,4,6-Tribromophenol	(10-123)
S6 (TPH) = Terphenyl-d14	(33-141)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

3C

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Matrix Spike - Sample No.: SPIKE

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Phenol	150	0	37	25	(12-110)
2-Chlorophenol	150	0	72	48	(27-123)
1,4-Dichlorobenzene	100	0	30	30 *	(36-97)
N-Nitroso-di-n-propylamine	100	0	50	50	(41-116)
1,2,4-Trichlorobenzene	100	0	43	43	(39-98)
4-Chloro-3-methylphenol	150	0	78	52	(23-97)
Acenaphthene	100	0	57	57	(46-118)
2,4-Dinitrotoluene	100	0	50	50	(24-96)
4-Nitrophenol	150	0	27	18	(10-80)
Pentachlorophenol	150	0	58	39	(9-103)
Pyrene	100	0	49	49	(26-127)

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	150	56	37	41	42	(12-110)
2-Chlorophenol	150	120	80	50 *	40	(27-123)
1,4-Dichlorobenzene	100	70	70	80 *	28	(36-97)
N-Nitroso-di-n-propylamine	100	84	84	51 *	38	(41-116)
1,2,4-Trichlorobenzene	100	71	71	49 *	28	(39-98)
4-Chloro-3-methylphenol	150	110	73	34	42	(23-97)
Acenaphthene	100	88	88	43 *	31	(46-118)
2,4-Dinitrotoluene	100	92	92	59 *	38	(24-96)
4-Nitrophenol	150	56	37	70 *	50	(10-80)
Pentachlorophenol	150	110	73	62 *	50	(9-103)
Pyrene	100	83	83	52 *	31	(26-127)

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 9 out of 11 outside limits
Spike Recovery: 9 out of 22 outside limits

Comments:

4B

SAMPLE NO.

SBLK01

SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Lab File ID: SB824.D Lab Sample ID: BLK01

Instrument ID: ABN1 Date Extracted: 7/16/96

Matrix: (soil/water) WATER Date Analyzed: 8/1/96

Level: (low/med) Time Analyzed: 0304

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SPIKE	SPIKE	SS812.D	07/31/96
02	SPIKEMS	SPIKEMS	SM813.D	07/31/96
03	SPIKEMSD	SPIKEMSD	SM814.D	07/31/96
04	SW5	D9926	SS815.D	07/31/96
05	SWD	D9927	SS816.D	07/31/96
06	SW1	D9928	SS817.D	07/31/96
07	SW6	D9930	SS818.D	07/31/96
08	SW7	D9931	SS819.D	07/31/96
09	SW8	D9932	SS820.D	07/31/96
10	SW9	D9933	SS821.D	08/01/96
11	SW3	D9934	SS822.D	08/01/96
12	SW4	D9935	SS823.D	08/01/96
13				
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COMMENTS:

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name : USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: _____ Group: GCMS

Lab File ID: STA801.D DFTPP Injection Date: 7/31/96

Instrument ID: ABN1 DFTPP Injection Time: 0827

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	55.8
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	76.9
70	Less than 2.0% of mass 69	0.3 (0.4)1
127	25.0 - 75.0% of mass 198	41.5
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100 % relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	20.3
365	Greater than 0.75% of mass 198	2.6
441	Present, but less than mass 443	10.7
442	40.0 - 110.0% of mass 198	70.5
443	15.0 - 24.0% of mass 442	13.3 (18.9)2

1-Value is % mass 69 2-Value is % mass 442

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD160	STD120	SCA800.D	7/31/96	0852
02	SSTD120	STD80	SCA801.D	7/31/96	0946
03	SSTD80	STD50	SCA802.D	7/31/96	1040
04	SSTD50	STD20	SCA803.D	7/31/96	1134
05	SSTD20	STD10	SCA804.D	7/31/96	1228
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name : USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: _____ Group: GCMS

Lab File ID: STA802.D DFTPP Injection Date: 7/31/96

Instrument ID: ABN1 DFTPP Injection Time: 1500

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	53.6
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	74.4
70	Less than 2.0% of mass 69	0.3 (0.4)1
127	25.0 - 75.0% of mass 198	40.5
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100 % relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.2
275	10.0 - 30.0% of mass 198	20.4
365	Greater than 0.75% of mass 198	2.7
441	Present, but less than mass 443	13.6
442	40.0 - 110.0% of mass 198	79.6
443	15.0 - 24.0% of mass 442	15.3 (19.2)2

1-Value is % mass 69 2-Value is % mass 442

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050	CC50	SKA802.D	7/31/96	1526
02	SPIKE	SPIKE	SS812.D	7/31/96	1620
03	SPIKEMS	SPIKEMS	SM813.D	7/31/96	1714
04	SPIKEMSD	SPIKEMSD	SM814.D	7/31/96	1809
05	SW5	D9926	SS815.D	7/31/96	1903
06	SWD	D9927	SS816.D	7/31/96	1957
07	SW1	D9928	SS817.D	7/31/96	2051
08	SW6	D9930	SS818.D	7/31/96	2144
09	SW7	D9931	SS819.D	7/31/96	2238
10	SW8	D9932	SS820.D	7/31/96	2331
11	SW9	D9933	SS821.D	8/1/96	0024
12	SW3	D9934	SS822.D	8/1/96	0118
13	SW4	D9935	SS823.D	8/1/96	0211
14	SBLK01	BLK01	SB824.D	8/1/96	0304
15					
16					
17					
18					
19					
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22					

Page 1 of 1

6B

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: USACHPPM Contract: MOSER

Project No. 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Instrument ID: ABN1 Calibration Date(s): 7/31/96 7/31/96

Calibration Times: 0852 1228

Lab File ID: RRF20 = SCA804.D RRF50 = SCA803.D
RRF80 = SCA802.D RRF120 = SCA801.D RRF160 = SCA800.D

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD	
N-Nitrosodimethylamine	0.773	0.735	0.895	0.877	0.954	0.847	10.7	
bis(2-Chloroethyl)ether	1.666	1.575	1.497	1.495	1.403	1.527	6.5	
Phenol *	2.079	2.081	1.824	1.685	1.520	1.838	13.4	*
2-Chlorophenol	1.480	1.534	1.331	1.243	1.181	1.354	11.1	
1,3-Dichlorobenzene	1.629	1.642	1.502	1.488	1.471	1.546	5.3	
1,4-Dichlorobenzene *	1.682	1.614	1.512	1.464	1.453	1.545	6.4	*
1,2-Dichlorobenzene	1.677	1.554	1.432	1.469	1.401	1.507	7.4	
Benzyl alcohol	0.803	0.812	0.842	0.849	0.931	0.847	6.0	
bis(2-chloroisopropyl)ether	1.440	1.411	1.279	1.302	1.033	1.293	12.4	
2-Methylphenol	1.342	1.356	1.241	1.188	1.187	1.263	6.5	
Hexachloroethane	0.858	0.849	0.826	0.827	0.794	0.831	3.0	
N-Nitroso-di-n-propylamine *	1.395	1.383	1.334	1.269	1.279	1.332	4.3	*
4-Methylphenol	1.452	1.495	1.388	1.338	1.280	1.391	6.2	
Nitrobenzene	0.562	0.572	0.543	0.521	0.539	0.547	3.7	
Isophorone	1.061	1.034	1.044	1.065	1.037	1.048	1.3	
2-Nitrophenol *	0.271	0.273	0.270	0.272	0.280	0.273	1.5	*
2,4-Dimethylphenol	0.483	0.485	0.433	0.460	0.457	0.464	4.6	
bis(2-Chloroethoxy)methane	0.691	0.654	0.628	0.601	0.589	0.633	6.5	
2,4-Dichlorophenol *	0.416	0.375	0.362	0.351	0.363	0.373	6.8	*
1,2,4-Trichlorobenzene	0.463	0.418	0.389	0.378	0.385	0.407	8.6	
Naphthalene	1.281	1.157	1.070	1.005	0.985	1.100	11.1	
4-Chloroaniline	0.555	0.530	0.511	0.487	0.462	0.509	7.1	
Hexachlorobutadiene *	0.305	0.281	0.253	0.226	0.214	0.256	14.8	*
4-Chloro-3-methylphenol *	0.425	0.433	0.409	0.396	0.416	0.416	3.4	*
2-Methylnaphthalene	0.856	0.784	0.702	0.639	0.572	0.711	15.9	
Hexachlorocyclopentadiene *	0.195	0.238	0.267	0.280	0.314	0.259	17.4	*
2,4,6-Trichlorophenol *	0.489	0.478	0.445	0.431	0.465	0.462	5.1	*
2,4,5-Trichlorophenol	0.523	0.503	0.495	0.476	0.488	0.497	3.5	
2-Chloronaphthalene	1.326	1.226	1.162	1.041	1.090	1.169	9.6	
2-Nitroaniline	0.537	0.593	0.622	0.622	0.648	0.604	7.0	
Acenaphthylene	1.779	1.714	1.597	1.513	1.610	1.643	6.4	
Dimethylphthalate	1.729	1.654	1.637	1.484	1.553	1.611	5.9	
2,6-Dinitrotoluene	0.371	0.395	0.399	0.391	0.396	0.390	2.9	
Acenaphthene *	1.297	1.243	1.115	1.018	1.014	1.137	11.3	*
3-Nitroaniline	0.506	0.535	0.557	0.563	0.588	0.550	5.6	
2,4-Dinitrophenol *	0.077	0.132	0.187	0.215	0.243	0.171	39.0	*
Dibenzofuran	1.823	1.864	1.682	1.575	1.568	1.702	8.1	

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

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6B

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: USACHPPM Contract: MOSER

Project No. 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Instrument ID: ABN1 Calibration Date(s): 7/31/96 7/31/96

Calibration Times: 0852 1228

Lab File ID: RRF20 = SCA804.D RRF50 = SCA803.D
RRF80 = SCA802.D RRF120 = SCA801.D RRF160 = SCA800.D

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD	
2,4-Dinitrotoluene	0.490	0.531	0.547	0.531	0.558	0.531	4.9	
4-Nitrophenol *	0.155	0.179	0.198	0.203	0.219	0.191	12.9	*
Fluorene	1.370	1.329	1.243	1.136	1.157	1.247	8.2	
4-Chlorophenyl-phenylether	0.698	0.641	0.598	0.544	0.556	0.607	10.4	
Diethylphthalate	1.846	1.742	1.610	1.554	1.550	1.660	7.8	
4-Nitroaniline	0.203	0.236	0.257	0.296	0.397	0.278	26.9	
4,6-Dinitro-2-methylphenol	0.112	0.151	0.170	0.179	0.191	0.161	19.2	
n-Nitrosodiphenylamine *	0.584	0.549	0.471	0.437	0.393	0.487	16.2	*
4-Bromophenyl-phenylether	0.289	0.296	0.249	0.249	0.246	0.266	9.2	
Hexachlorobenzene	0.490	0.438	0.388	0.372	0.359	0.409	13.2	
Pentachlorophenol *	0.128	0.172	0.184	0.200	0.231	0.183	20.7	*
Phenanthrene	1.203	1.149	1.019	0.963	1.013	1.069	9.5	
Anthracene	1.116	1.093	0.971	0.938	0.965	1.017	8.0	
Di-n-butylphthalate	2.052	2.113	1.936	1.879	1.951	1.986	4.8	
Fluoranthene *	1.254	1.222	1.110	1.129	1.161	1.175	5.2	*
Pyrene	1.466	1.444	1.370	1.342	1.437	1.412	3.8	
Butylbenzylphthalate	0.997	1.048	0.960	0.972	1.093	1.014	5.5	
3,3'-Dichlorobenzidine	0.357	0.289	0.320	0.346	0.370	0.336	9.6	
Benzo[a]anthracene	1.221	1.228	1.198	1.205	1.271	1.225	2.3	
Chrysene	1.221	1.193	1.061	1.030	1.039	1.109	8.2	
bis(2-Ethylhexyl)phthalate	1.516	1.507	1.379	1.340	1.389	1.426	5.6	
Di-n-octylphthalate *	2.350	2.345	2.220	2.286	2.469	2.334	3.9	*
Benzo[b]fluoranthene	1.148	1.189	1.185	1.238	1.437	1.239	9.3	
Benzo[k]fluoranthene	1.073	1.102	1.047	1.001	0.867	1.018	9.1	
Benzo[a]pyrene *	1.005	0.995	1.008	1.004	1.092	1.021	3.9	*
Indeno[1,2,3-cd]pyrene	0.780	0.788	0.862	0.924	1.018	0.874	11.4	
Dibenz[a,h]anthracene	0.718	0.750	0.795	0.795	0.837	0.779	5.9	
Benzo[g,h,i]perylene	0.774	0.791	0.795	0.839	0.846	0.809	3.9	
2-Fluorophenol	1.240	1.188	1.191	1.311	1.410	1.268	7.4	
Phenol-d5	1.870	1.989	1.836	1.752	1.644	1.818	7.1	
Nitrobenzene-d5	0.533	0.530	0.536	0.539	0.562	0.540	2.4	
2-Fluorobiphenyl	1.445	1.323	1.229	1.096	1.123	1.243	11.6	
2,4,6-Tribromophenol	0.251	0.259	0.227	0.225	0.226	0.238	6.8	
Terphenyl-d14	0.947	0.950	0.833	0.858	0.863	0.890	6.1	

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: USACHPPM Contract: MOSER

Project No. 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Instrument ID: ABN1 Calibration Date: 7/31/96 Time: 1526

Lab File ID: SKA802.D Init. Calib. Date(s): 7/31/96 7/31/96

Init. Calib. Times: 0852 1228

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
N-Nitrosodimethylamine	0.847	0.850		-0.4	
bis(2-Chloroethyl)ether	1.527	1.466		4.0	
Phenol	1.838	1.823		0.8	20.0
2-Chlorophenol	1.354	1.333		1.6	
1,3-Dichlorobenzene	1.546	1.508		2.5	
1,4-Dichlorobenzene	1.545	1.517		1.8	20.0
1,2-Dichlorobenzene	1.507	1.502		0.3	
Benzyl alcohol	0.847	0.863		-1.9	
bis(2-chloroisopropyl)ether	1.293	1.284		0.7	
2-Methylphenol	1.263	1.294		-2.5	
Hexachloroethane	0.831	0.845		-1.7	
N-Nitroso-di-n-propylamine	1.332	1.285	0.050	3.5	
4-Methylphenol	1.390	1.430		-2.9	
Nitrobenzene	0.547	0.547		0.0	
Isophorone	1.048	1.033		1.4	
2-Nitrophenol	0.273	0.270		1.1	20.0
2,4-Dimethylphenol	0.463	0.461		0.4	
bis(2-Chloroethoxy)methane	0.633	0.647		-2.2	
2,4-Dichlorophenol	0.374	0.363		2.9	20.0
1,2,4-Trichlorobenzene	0.406	0.403		0.7	
Naphthalene	1.100	1.098		0.2	
4-Chloroaniline	0.509	0.523		-2.8	
Hexachlorobutadiene	0.256	0.252		1.6	20.0
4-Chloro-3-methylphenol	0.416	0.440		-5.8	20.0
2-Methylnaphthalene	0.710	0.728		-2.5	
Hexachlorocyclopentadiene	0.259	0.257	0.050	0.8	
2,4,6-Trichlorophenol	0.462	0.443		4.1	20.0
2,4,5-Trichlorophenol	0.497	0.482		3.0	
2-Chloronaphthalene	1.169	1.198		-2.5	
2-Nitroaniline	0.605	0.599		1.0	
Acenaphthylene	1.643	1.561		5.0	
Dimethylphthalate	1.611	1.545		4.1	
2,6-Dinitrotoluene	0.390	0.402		-3.1	
Acenaphthene	1.137	1.101		3.2	20.0
3-Nitroaniline	0.550	0.542		1.5	
2,4-Dinitrophenol	0.171	0.169	0.050	1.2	
Dibenzofuran	1.702	1.684		1.1	

All other compounds must meet a minimum RRF of 0.010.

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: USACHPPM Contract: MOSER

Project No. 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Instrument ID: ABN1 Calibration Date: 7/31/96 Time: 1526

Lab File ID: SKA802.D Init. Calib. Date(s): 7/31/96 7/31/96

Init. Calib. Times: 0852 1228

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
2,4-Dinitrotoluene	0.531	0.516		2.8	
4-Nitrophenol	0.191	0.185	0.050	3.1	
Fluorene	1.247	1.225		1.8	
4-Chlorophenyl-phenylether	0.607	0.570		6.1	
Diethylphthalate	1.661	1.615		2.8	
4-Nitroaniline	0.278	0.276		0.7	
4,6-Dinitro-2-methylphenol	0.161	0.164		-1.9	
n-Nitrosodiphenylamine	0.487	0.513		-5.3	20.0
4-Bromophenyl-phenylether	0.266	0.261		1.9	
Hexachlorobenzene	0.410	0.379		7.6	
Pentachlorophenol	0.183	0.194		-6.0	20.0
Phenanthrene	1.069	1.029		3.7	
Anthracene	1.016	0.975		4.0	
Di-n-butylphthalate	1.986	2.034		-2.4	
Fluoranthene	1.175	1.087		7.5	20.0
Pyrene	1.412	1.354		4.1	
Butylbenzylphthalate	1.014	1.039		-2.5	
3,3'-Dichlorobenzidine	0.336	0.332		1.2	
Benzo[a]anthracene	1.225	1.204		1.7	
Chrysene	1.109	1.103		0.5	
bis(2-Ethylhexyl)phthalate	1.426	1.453		-1.9	
Di-n-octylphthalate	2.334	2.456		-5.2	20.0
Benzo[b]fluoranthene	1.239	1.188		4.1	
Benzo[k]fluoranthene	1.018	1.096		-7.7	
Benzo[a]pyrene	1.021	0.986		3.4	20.0
Indeno[1,2,3-cd]pyrene	0.874	0.821		6.1	
Dibenz[a,h]anthracene	0.779	0.746		4.2	
Benzo[g,h,i]perylene	0.809	0.786		2.8	
2-Fluorophenol	1.268	1.303		-2.8	
Phenol-d5	1.818	1.782		2.0	
Nitrobenzene-d5	0.540	0.558		-3.3	
2-Fluorobiphenyl	1.243	1.199		3.5	
2,4,6-Tribromophenol	0.238	0.230		3.4	
Terphenyl-d14	0.890	0.870		2.2	

All other compounds must meet a minimum RRF of 0.010.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Lab File ID (Standard): SKA802.D Date Analyzed: 7/31/96

Instrument ID: ABN1 Time Analyzed: 1526

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	640932	9.68	2122089	13.49	1358808	18.94
	UPPER LIMIT	1281864	10.18	4244178	13.99	2717616	19.44
	LOWER LIMIT	320466	9.18	1061045	12.99	679404	18.44
	SAMPLE NO.						
01	SPIKE	545591	9.67	1887701	13.48	1090635	18.93
02	SPIKEMS	616247	9.67	2082521	13.48	1274961	18.94
03	SPIKEMSD	669154	9.68	2260639	13.49	1362669	18.94
04	SW5	962709	9.69	3162328	13.49	1970885	18.95
05	SWD	593738	9.68	2010871	13.48	1229738	18.94
06	SW1	771176	9.68	2527258	13.49	1535686	18.94
07	SW6	568340	9.67	2010131	13.48	1200224	18.93
08	SW7	646733	9.67	2162984	13.47	1303303	18.94
09	SW8	546202	9.67	1761769	13.48	1100958	18.93
10	SW9	420684	9.67	1436648	13.47	881558	18.93
11	SW3	600493	9.67	2140747	13.48	1308806	18.93
12	SW4	598256	9.67	1967594	13.48	1237383	18.93
13	SBLK01	692380	9.67	2350848	13.48	1432648	18.94
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: USACHPPM Contract: MOSER

Project No.: 38-EH-2651 Site: BRADLEY Location: Group: GCMS

Lab File ID (Standard): SKA802.D Date Analyzed: 7/31/96

Instrument ID: ABN1 Time Analyzed: 1526

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	2151766	23.47	1736101	31.74	1868048	35.85
	UPPER LIMIT	4303532	23.97	3472202	32.24	3736096	36.35
	LOWER LIMIT	1075883	22.97	868051	31.24	934024	35.35
	SAMPLE NO.						
01	SPIKE	1690457	23.45	1281397	31.71	1298460	35.83
02	SPIKEMS	2023930	23.47	1542840	31.72	1601230	35.83
03	SPIKEMSD	2243070	23.47	1656531	31.72	1655445	35.83
04	SW5	3323937	23.47	2634578	31.73	2995672	35.86
05	SWD	1973285	23.46	1493178	31.72	1553028	35.83
06	SW1	2568370	23.46	2066138	31.72	2348545	35.84
07	SW6	1967725	23.45	1625028	31.72	1747204	35.83
08	SW7	2110886	23.46	1718916	31.72	1820912	35.83
09	SW8	1761369	23.45	1435624	31.72	1500364	35.83
10	SW9	1479270	23.45	1267529	31.71	1347544	35.82
11	SW3	2133667	23.46	1757617	31.72	1880462	35.83
12	SW4	2049861	23.46	1757538	31.72	1850566	35.84
13	SBLK01	2516640	23.47	2146967	31.73	2252550	35.84
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

ANALYSIS REPORT

U.S. ARMY CENTER FOR HEALTH PROMOTION AND PREVENTIVE MEDICINE
BUILDING E2100
ABERDEEN PROVING GROUND, MARYLAND 21010

CHROMATOGRAPHIC ANALYSIS DIVISION
PESTICIDES TEAM

Installation: BRADLEY FIELD AASF, CT.

Project Number: 38-EH-2651

Project Officer: John A. Moser

Job Number: 6A5600

Number of Samples : 9

Matrix: SOIL

Analyzed for: Organochlorine Pesticides and PCB's

Method: POCP SOP #114.2

DLS NUMBER	FIELD NUMBER	DLS NUMBER	FIELD NUMBER
D9937	SS-1	D9942	SS-6
D9938	SS-2	D9943	SS-7
D9939	SS-3	D9944	SS-8
D9940	SS-5	D9945	SS-9
D9941	SS-D		

Analyst: Michael Lanahan

Extracted By: Michael Lanahan

Reviewed by: William Patry

Release Authorized by: J. Howard Vinopal
Chief, Chromatographic Analysis Division

Date: 12 Aug 1996

This report shall not be reproduced except in full without the written approval of the laboratory. The results relate only to the specific samples identified within this report.
This report consists of three distinct sections: Narrative, Quality Control, and Results.

SUMMARY OF RESULTS

Installation: Bradlry Field AASF, Ct.

Project Number: 38-EH-2651

Project Officer: John A. Moser

Case Narrative:

1. Attached are the sample and quality control (QC) data summaries for organochlorine pesticides and PCBs.

2. The soil samples were extracted and analyzed using USACHPPM/DLS SOP#: POCP 114.2; Method for the Extraction and Analysis of Pesticides and PCBs in Soil and Sediment for Regulatory Purposes using EPA Methods 3550A and 8080A/8081.

3. All samples were initially extracted into organic solvent within the required holding time of 14 days.

4. Due to a laboratory mishap, the matrix spike of sample D9937 was inadvertently lost during the extraction procedure.

5. All quality control and surrogate results were recovered within acceptable ranges.

7. No other problems were encountered with the extraction and analysis of these samples.

Analyst: Michael Janak Date: 8/12/96

NARRATIVE SECTION
PAGE 1 of 1

QUALITY CONTROL RESULTS

SURROGATE RECOVERIES

INSTALLATION:	BRADLEY FIELD AASF	MATRIX:	SOIL
PROJECT#:	38-EH-2651	EXTRACTION DATE(S):	23-JUL-96
DLS PROCEDURE #:	PES522	ANALYSIS COMPLETED:	05-AUG-96

#	SAMPLE #	SURR1 TCMX	SURR2 DCBP	SURR3	COMMENTS
1	BLANK	60	117		
2	QC C6001	71	119		
3	QCS5020	82	135		
4	D9937	67	84		
5	D9938	71	84		
6	D9938 DUP	73	73		
7	D9939	53	50		
8	D9940	78	65		
9	D9941	75	75		
10	D9942	70	73		
11	D9943	70	57		
12	D9944	78	58		
13	D9945	64	56		
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30					
31					

SURR1 = TETRACHLORO-meta-XYLENE (TCMX)
SURR2 = DECACHLOROBIPHENYL (DCBP)
SURR3 = NOT USED

CONTROL LIMITS
50-150%

* = VALUE OUTSIDE OF CONTROL LIMITS

QUALITY CONTROL RESULTS

QUALITY CONTROL SAMPLE RECOVERIES

CAD QC #: LCS-C6001
TYPE: PESTICIDES

INSTALLATION: BRADLEY FIELD AASF
PROJECT#: 38-EH-2651
DLS PROCEDURE #: PES522

MATRIX: SOIL
EXTRACTION DATE: 23-JUL-96
ANALYSIS COMPLETED: 05-AUG-96

ASSOCIATED SAMPLES	COMPOUND	SPIKING LEVEL, ug/g	PERCENT RECOVERED	CONTROL LIMITS (%)
BLANK	LINDANE	0.027	72	39 - 111
LCS-S5020	HEPTACHLOR	0.027	76	52 - 124
D9937	ALDRIN	0.027	59	34 - 124
D9938	HEPTACHLOR EPOXIDE	0.027	90	51 - 123
D9938 DUP	ENDOSULFAN I	0.067	80	43 - 119
D9939	DIELDRIN	0.067	101	54 - 126
D9940	ENDOSULFAN II	0.067	106	43 - 133
D9941	DDT, p,p'-	0.067	121	47 - 140
D9942	METHOXYCHLOR	0.120	118	42 - 132
D9943	ENDRIN ALDEHYDE	0.067	81	25 - 115
D9944				
D9945				

* = VALUE OUTSIDE OF CONTROL LIMITS

QUALITY CONTROL RESULTS

QUALITY CONTROL SAMPLE RECOVERIES

CAD QC #: LCS-S5020
TYPE: PCB

INSTALLATION: BRADLEY FIELD AASF
PROJECT#: 38-EH-2651
DLS PROCEDURE #: PES522

MATRIX: SOIL
EXTRACTION DATE: 23-JUL-96
ANALYSIS COMPLETED: 05-AUG-96

ASSOCIATED SAMPLES	COMPOUND	SPIKING LEVEL, ug/g	PERCENT RECOVERED	CONTROL LIMITS (%)
BLANK	PCB (AROCLOR 1221)	0.400	63	55 - 130
LCS-C6001	PCB (AROCLOR 1254)	0.400	124	55 - 130
D9937				
D9938				
D9938 DUP				
D9939				
D9940				
D9941				
D9942				
D9943				
D9944				
D9945				

* = VALUE OUTSIDE OF CONTROL LIMITS

REPORT OF ANALYSIS

U.S. Army Center for Health Promotion and Preventive Medicine
Directorate of Laboratory Sciences
Chromatographic Analysis Division

Installation:	BRADLEY FIELD AASF	Date Collected:	10-JUL-96
Project #:	38-EH-2651	Date Received by CAD:	12-JUL-96
Project Officer:	J. MOSER	Extraction Date:	23-JUL-96
DLS JOB#:	6A5600	Analysis Completed:	05-AUG-96
DLS Sample #:	D9937 PAGE 1 OF 1	DLS Procedure #:	PES522
Field #:	SS-1	% Moisture:	21.3
Matrix:	SOIL	Sample Amount:	31.5 g

	TARGET COMPOUNDS	RESULTS, ug/g *	
1	ALDRIN		< 0.010
2	BHC-alpha		< 0.010
3	BHC-beta		< 0.010
4	BHC-delta		< 0.010
5	CHLORDANE, cis-		< 0.010
6	CHLORDANE, TECHNICAL		< 0.050
7	CHLORDANE, trans-		< 0.010
8	DDD, p,p'-		< 0.010
9	DDE, p,p'-		< 0.010
10	DDT, p,p'-		< 0.010
11	DIELDRIN		< 0.010
12	ENDOSULFAN I		< 0.010
13	ENDOSULFAN II		< 0.010
14	ENDOSULFAN SULFATE		< 0.010
15	ENDRIN		< 0.010
16	ENDRIN ALDEHYDE		< 0.010
17	HEPTACHLOR		< 0.010
18	HEPTACHLOR EPOXIDE		< 0.010
19	LINDANE		< 0.010
20	METHOXYCHLOR		< 0.010
21	PCB (AROCLOR 1016)		< 0.10
22	PCB (AROCLOR 1221)		< 0.10
23	PCB (AROCLOR 1232)		< 0.10
24	PCB (AROCLOR 1242)		< 0.10
25	PCB (AROCLOR 1248)		< 0.10
26	PCB (AROCLOR 1254)		< 0.10
27	PCB (AROCLOR 1260)	0.14	
28	TOXAPHENE		< 0.13
29			
30			
31			
32			

(*) - ALL RESULTS REPORTED ON A DRY WEIGHT BASIS

REPORT OF ANALYSIS

U.S. Army Center for Health Promotion and Preventive Medicine
Directorate of Laboratory Sciences
Chromatographic Analysis Division

Installation:	BRADLEY FIELD AASF	Date Collected:	10-JUL-96
Project #:	38-EH-2651	Date Received by CAD:	12-JUL-96
Project Officer:	J. MOSER	Extraction Date:	23-JUL-96
DLS JOB#:	6A5600	Analysis Completed:	05-AUG-96

DLS Sample #:	D9938 PAGE 1 OF 1	DLS Procedure #:	PES522
Field #:	SS-2	% Moisture:	20.6
Matrix:	SOIL	Sample Amount:	30.7 g

	TARGET COMPOUNDS	RESULTS, ug/g*	
1	ALDRIN		< 0.010
2	BHC-alpha		< 0.010
3	BHC-beta		< 0.010
4	BHC-delta		< 0.010
5	CHLORDANE, cis-		< 0.010
6	CHLORDANE, TECHNICAL		< 0.050
7	CHLORDANE, trans-		< 0.010
8	DDD, p,p'-		< 0.010
9	DDE, p,p'-		< 0.010
10	DDT, p,p'-	0.12	
11	DIELDRIN		< 0.010
12	ENDOSULFAN I		< 0.010
13	ENDOSULFAN II		< 0.010
14	ENDOSULFAN SULFATE		< 0.010
15	ENDRIN		< 0.010
16	ENDRIN ALDEHYDE		< 0.010
17	HEPTACHLOR		< 0.010
18	HEPTACHLOR EPOXIDE		< 0.010
19	LINDANE		< 0.010
20	METHOXYCHLOR		< 0.010
21	PCB (AROCLOR 1016)		< 0.10
22	PCB (AROCLOR 1221)		< 0.10
23	PCB (AROCLOR 1232)		< 0.10
24	PCB (AROCLOR 1242)		< 0.10
25	PCB (AROCLOR 1248)		< 0.10
26	PCB (AROCLOR 1254)		< 0.10
27	PCB (AROCLOR 1260)		< 0.10
28	TOXAPHENE		< 0.13
29			
30			
31			
32			

(*) - ALL RESULTS REPORTED ON A DRY WEIGHT BASIS

REPORT OF ANALYSIS

U.S. Army Center for Health Promotion and Preventive Medicine
Directorate of Laboratory Sciences
Chromatographic Analysis Division

Installation:	BRADLEY FIELD AASF	Date Collected:	10-JUL-96
Project #:	38-EH-2651	Date Received by CAD:	12-JUL-96
Project Officer:	J. MOSER	Extraction Date:	23-JUL-96
DLS JOB#:	6A5600	Analysis Completed:	05-AUG-96

DLS Sample #:	D9938 DUP PAGE 1 OF 1	DLS Procedure #:	PES522
Field #:	SS-2	% Moisture:	20.6
Matrix:	SOIL	Sample Amount:	30.6 g

	TARGET COMPOUNDS	RESULTS, ug/g *	
1	ALDRIN		< 0.010
2	BHC-alpha		< 0.010
3	BHC-beta		< 0.010
4	BHC-delta		< 0.010
5	CHLORDANE, cis-		< 0.010
6	CHLORDANE, TECHNICAL		< 0.050
7	CHLORDANE, trans-		< 0.010
8	DDD, p,p'-		< 0.010
9	DDE, p,p'-		< 0.010
10	DDT, p,p'-	0.12	
11	DIELDRIN		< 0.010
12	ENDOSULFAN I		< 0.010
13	ENDOSULFAN II		< 0.010
14	ENDOSULFAN SULFATE		< 0.010
15	ENDRIN		< 0.010
16	ENDRIN ALDEHYDE		< 0.010
17	HEPTACHLOR		< 0.010
18	HEPTACHLOR EPOXIDE		< 0.010
19	LINDANE		< 0.010
20	METHOXYCHLOR		< 0.010
21	PCB (AROCLOR 1016)		< 0.10
22	PCB (AROCLOR 1221)		< 0.10
23	PCB (AROCLOR 1232)		< 0.10
24	PCB (AROCLOR 1242)		< 0.10
25	PCB (AROCLOR 1248)		< 0.10
26	PCB (AROCLOR 1254)		< 0.10
27	PCB (AROCLOR 1260)		< 0.10
28	TOXAPHENE		< 0.13
29			
30			
31			
32			

(*) - ALL RESULTS REPORTED ON A DRY WEIGHT BASIS

REPORT OF ANALYSIS

U.S. Army Center for Health Promotion and Preventive Medicine
Directorate of Laboratory Sciences
Chromatographic Analysis Division

Installation:	BRADLEY FIELD AASF	Date Collected:	10-JUL-96
Project #:	38-EH-2651	Date Received by CAD:	12-JUL-96
Project Officer:	J. MOSER	Extraction Date:	23-JUL-96
DLS JOB#:	6A5600	Analysis Completed:	05-AUG-96
DLS Sample #:	D9939 PAGE 1 OF 1	DLS Procedure #:	PES522
Field #:	SS-3	% Moisture:	56.6
Matrix:	SOIL	Sample Amount:	30.8 g

	TARGET COMPOUNDS	RESULTS, ug/g *	
1	ALDRIN		< 0.010
2	BHC-alpha		< 0.010
3	BHC-beta		< 0.010
4	BHC-delta		< 0.010
5	CHLORDANE, cis-		< 0.010
6	CHLORDANE, TECHNICAL		< 0.050
7	CHLORDANE, trans-		< 0.010
8	DDD, p,p'-	0.040	
9	DDE, p,p'-		< 0.010
10	DDT, p,p'-		< 0.010
11	DIELDRIN		< 0.010
12	ENDOSULFAN I		< 0.010
13	ENDOSULFAN II		< 0.010
14	ENDOSULFAN SULFATE		< 0.010
15	ENDRIN		< 0.010
16	ENDRIN ALDEHYDE		< 0.010
17	HEPTACHLOR		< 0.010
18	HEPTACHLOR EPOXIDE		< 0.010
19	LINDANE		< 0.010
20	METHOXYCHLOR		< 0.010
21	PCB (AROCLOR 1016)		< 0.10
22	PCB (AROCLOR 1221)		< 0.10
23	PCB (AROCLOR 1232)		< 0.10
24	PCB (AROCLOR 1242)		< 0.10
25	PCB (AROCLOR 1248)		< 0.10
26	PCB (AROCLOR 1254)		< 0.10
27	PCB (AROCLOR 1260)	1.39	
28	TOXAPHENE		< 0.13
29			
30			
31			
32			

(*) - ALL RESULTS REPORTED ON A DRY WEIGHT BASIS

REPORT OF ANALYSIS

U.S. Army Center for Health Promotion and Preventive Medicine
Directorate of Laboratory Sciences
Chromatographic Analysis Division

Installation:	BRADLEY FIELD AASF	Date Collected:	9-JUL-96
Project #:	38-EH-2651	Date Received by CAD:	12-JUL-96
Project Officer:	J. MOSER	Extraction Date:	23-JUL-96
DLS JOB#:	6A5600	Analysis Completed:	05-AUG-96

DLS Sample #:	D9940 PAGE 1 OF 1	DLS Procedure #:	PES522
Field #:	SS-5	% Moisture:	27.6
Matrix:	SOIL	Sample Amount:	30.9 g

	TARGET COMPOUNDS		RESULTS, ug/g *
1	ALDRIN		< 0.010
2	BHC-alpha		< 0.010
3	BHC-beta		< 0.010
4	BHC-delta		< 0.010
5	CHLORDANE, cis-		< 0.010
6	CHLORDANE, TECHNICAL		< 0.050
7	CHLORDANE, trans-		< 0.010
8	DDD, p,p'-		< 0.010
9	DDE, p,p'-		< 0.010
10	DDT, p,p'-		< 0.010
11	DIELDRIN		< 0.010
12	ENDOSULFAN I		< 0.010
13	ENDOSULFAN II		< 0.010
14	ENDOSULFAN SULFATE		< 0.010
15	ENDRIN		< 0.010
16	ENDRIN ALDEHYDE		< 0.010
17	HEPTACHLOR		< 0.010
18	HEPTACHLOR EPOXIDE		< 0.010
19	LINDANE		< 0.010
20	METHOXYCHLOR		< 0.010
21	PCB (AROCLOR 1016)		< 0.10
22	PCB (AROCLOR 1221)		< 0.10
23	PCB (AROCLOR 1232)		< 0.10
24	PCB (AROCLOR 1242)		< 0.10
25	PCB (AROCLOR 1248)		< 0.10
26	PCB (AROCLOR 1254)		< 0.10
27	PCB (AROCLOR 1260)		< 0.10
28	TOXAPHENE		< 0.13
29			
30			
31			
32			

(*) - ALL RESULTS REPORTED ON A DRY WEIGHT BASIS

REPORT OF ANALYSIS

U.S. Army Center for Health Promotion and Preventive Medicine
Directorate of Laboratory Sciences
Chromatographic Analysis Division

Installation:	BRADLEY FIELD AASF	Date Collected:	9-JUL-96
Project #:	38-EH-2651	Date Received by CAD:	12-JUL-96
Project Officer:	J. MOSER	Extraction Date:	23-JUL-96
DLS JOB#:	6A5600	Analysis Completed:	05-AUG-96

DLS Sample #:	D9941 PAGE 1 OF 1	DLS Procedure #:	PES522
Field #:	SS-D	% Moisture:	26.0
Matrix:	SOIL	Sample Amount:	30.5 g

	TARGET COMPOUNDS		RESULTS, ug/g *
1	ALDRIN		< 0.010
2	BHC-alpha		< 0.010
3	BHC-beta		< 0.010
4	BHC-delta		< 0.010
5	CHLORDANE, cis-		< 0.010
6	CHLORDANE, TECHNICAL		< 0.050
7	CHLORDANE, trans-		< 0.010
8	DDD, p,p'-		< 0.010
9	DDE, p,p'-		< 0.010
10	DDT, p,p'-		< 0.010
11	DIELDRIN		< 0.010
12	ENDOSULFAN I		< 0.010
13	ENDOSULFAN II		< 0.010
14	ENDOSULFAN SULFATE		< 0.010
15	ENDRIN		< 0.010
16	ENDRIN ALDEHYDE		< 0.010
17	HEPTACHLOR		< 0.010
18	HEPTACHLOR EPOXIDE		< 0.010
19	LINDANE		< 0.010
20	METHOXYCHLOR		< 0.010
21	PCB (AROCLOR 1016)		< 0.10
22	PCB (AROCLOR 1221)		< 0.10
23	PCB (AROCLOR 1232)		< 0.10
24	PCB (AROCLOR 1242)		< 0.10
25	PCB (AROCLOR 1248)		< 0.10
26	PCB (AROCLOR 1254)		< 0.10
27	PCB (AROCLOR 1260)		< 0.10
28	TOXAPHENE		< 0.13
29			
30			
31			
32			

(*) - ALL RESULTS REPORTED ON A DRY WEIGHT BASIS

REPORT OF ANALYSIS

U.S. Army Center for Health Promotion and Preventive Medicine
Directorate of Laboratory Sciences
Chromatographic Analysis Division

Installation:	BRADLEY FIELD AASF	Date Collected:	9-JUL-96
Project #:	38-EH-2651	Date Received by CAD:	12-JUL-96
Project Officer:	J. MOSER	Extraction Date:	23-JUL-96
DLS JOB#:	6A5600	Analysis Completed:	05-AUG-96

DLS Sample #:	D9942 PAGE 1 OF 1	DLS Procedure #:	PES522
Field #:	SS-6	% Moisture:	29.1
Matrix:	SOIL	Sample Amount:	33.3 g

	TARGET COMPOUNDS		RESULTS, ug/g *
1	ALDRIN		< 0.010
2	BHC-alpha		< 0.010
3	BHC-beta		< 0.010
4	BHC-delta		< 0.010
5	CHLORDANE, cis-		< 0.010
6	CHLORDANE, TECHNICAL		< 0.050
7	CHLORDANE, trans-		< 0.010
8	DDD, p,p'-		< 0.010
9	DDE, p,p'-		< 0.010
10	DDT, p,p'-		< 0.010
11	DIELDRIN		< 0.010
12	ENDOSULFAN I		< 0.010
13	ENDOSULFAN II		< 0.010
14	ENDOSULFAN SULFATE		< 0.010
15	ENDRIN		< 0.010
16	ENDRIN ALDEHYDE		< 0.010
17	HEPTACHLOR		< 0.010
18	HEPTACHLOR EPOXIDE		< 0.010
19	LINDANE		< 0.010
20	METHOXYCHLOR		< 0.010
21	PCB (AROCLOR 1016)		< 0.10
22	PCB (AROCLOR 1221)		< 0.10
23	PCB (AROCLOR 1232)		< 0.10
24	PCB (AROCLOR 1242)		< 0.10
25	PCB (AROCLOR 1248)		< 0.10
26	PCB (AROCLOR 1254)		< 0.10
27	PCB (AROCLOR 1260)		< 0.10
28	TOXAPHENE		< 0.13
29			
30			
31			
32			

(*) - ALL RESULTS REPORTED ON A DRY WEIGHT BASIS

REPORT OF ANALYSIS

U.S. Army Center for Health Promotion and Preventive Medicine
Directorate of Laboratory Sciences
Chromatographic Analysis Division

Installation:	BRADLEY FIELD AASF	Date Collected:	9-JUL-96
Project #:	38-EH-2651	Date Received by CAD:	12-JUL-96
Project Officer:	J. MOSER	Extraction Date:	23-JUL-96
DLS JOB#:	6A5600	Analysis Completed:	05-AUG-96
DLS Sample #:	D9943 PAGE 1 OF 1	DLS Procedure #:	PES522
Field #:	SS-7	% Moisture:	68.1
Matrix:	SOIL	Sample Amount:	30.6 g

	TARGET COMPOUNDS	RESULTS, ug/g *	
1	ALDRIN		< 0.010
2	BHC-alpha		< 0.010
3	BHC-beta		< 0.010
4	BHC-delta		< 0.010
5	CHLORDANE, cis-		< 0.010
6	CHLORDANE, TECHNICAL		< 0.050
7	CHLORDANE, trans-		< 0.010
8	DDD, p,p'-	0.031	
9	DDE, p,p'-	0.015	
10	DDT, p,p'-	0.34	
11	DIELDRIN		< 0.010
12	ENDOSULFAN I		< 0.010
13	ENDOSULFAN II		< 0.010
14	ENDOSULFAN SULFATE		< 0.010
15	ENDRIN		< 0.010
16	ENDRIN ALDEHYDE		< 0.010
17	HEPTACHLOR		< 0.010
18	HEPTACHLOR EPOXIDE		< 0.010
19	LINDANE		< 0.010
20	METHOXYCHLOR		< 0.010
21	PCB (AROCLOR 1016)		< 0.10
22	PCB (AROCLOR 1221)		< 0.10
23	PCB (AROCLOR 1232)		< 0.10
24	PCB (AROCLOR 1242)		< 0.10
25	PCB (AROCLOR 1248)		< 0.10
26	PCB (AROCLOR 1254)		< 0.10
27	PCB (AROCLOR 1260)		< 0.10
28	TOXAPHENE		< 0.13
29			
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(*) - ALL RESULTS REPORTED ON A DRY WEIGHT BASIS

REPORT OF ANALYSIS

U.S. Army Center for Health Promotion and Preventive Medicine
Directorate of Laboratory Sciences
Chromatographic Analysis Division

Installation:	BRADLEY FIELD AASF	Date Collected:	9-JUL-96
Project #:	38-EH-2651	Date Received by CAD:	12-JUL-96
Project Officer:	J. MOSER	Extraction Date:	23-JUL-96
DLS JOB#:	6A5600	Analysis Completed:	05-AUG-96

DLS Sample #:	D9944 PAGE 1 OF 1	DLS Procedure #:	PES522
Field #:	SS-8	% Moisture:	42.5
Matrix:	SOIL	Sample Amount:	30.2 g

	TARGET COMPOUNDS	RESULTS, ug/g *	
1	ALDRIN		< 0.010
2	BHC-alpha		< 0.010
3	BHC-beta		< 0.010
4	BHC-delta		< 0.010
5	CHLORDANE, cis-		< 0.010
6	CHLORDANE, TECHNICAL		< 0.050
7	CHLORDANE, trans-		< 0.010
8	DDD, p,p'-		< 0.010
9	DDE, p,p'-		< 0.010
10	DDT, p,p'-		< 0.010
11	DIELDRIN		< 0.010
12	ENDOSULFAN I		< 0.010
13	ENDOSULFAN II		< 0.010
14	ENDOSULFAN SULFATE		< 0.010
15	ENDRIN		< 0.010
16	ENDRIN ALDEHYDE		< 0.010
17	HEPTACHLOR		< 0.010
18	HEPTACHLOR EPOXIDE		< 0.010
19	LINDANE		< 0.010
20	METHOXYCHLOR		< 0.010
21	PCB (AROCLOR 1016)		< 0.10
22	PCB (AROCLOR 1221)		< 0.10
23	PCB (AROCLOR 1232)		< 0.10
24	PCB (AROCLOR 1242)		< 0.10
25	PCB (AROCLOR 1248)		< 0.10
26	PCB (AROCLOR 1254)		< 0.10
27	PCB (AROCLOR 1260)		< 0.10
28	TOXAPHENE		< 0.13
29			
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32			

(*) - ALL RESULTS REPORTED ON A DRY WEIGHT BASIS

REPORT OF ANALYSIS

U.S. Army Center for Health Promotion and Preventive Medicine
Directorate of Laboratory Sciences
Chromatographic Analysis Division

Installation:	BRADLEY FIELD AASF	Date Collected:	9-JUL-96
Project #:	38-EH-2651	Date Received by CAD:	12-JUL-96
Project Officer:	J. MOSER	Extraction Date:	23-JUL-96
DLS JOB#:	6A5600	Analysis Completed:	05-AUG-96
DLS Sample #:	D9945 PAGE 1 OF 1	DLS Procedure #:	PES522
Field #:	SS-9	% Moisture:	72.6
Matrix:	SOIL	Sample Amount:	30.3 g

	TARGET COMPOUNDS	RESULTS, ug/g *	
1	ALDRIN		< 0.010
2	BHC-alpha		< 0.010
3	BHC-beta		< 0.010
4	BHC-delta		< 0.010
5	CHLORDANE, cis-		< 0.010
6	CHLORDANE, TECHNICAL		< 0.050
7	CHLORDANE, trans-		< 0.010
8	DDD, p,p'-	0.023	
9	DDE, p,p'-	0.012	
10	DDT, p,p'-	0.23	
11	DIELDRIN		< 0.010
12	ENDOSULFAN I		< 0.010
13	ENDOSULFAN II		< 0.010
14	ENDOSULFAN SULFATE		< 0.010
15	ENDRIN		< 0.010
16	ENDRIN ALDEHYDE		< 0.010
17	HEPTACHLOR		< 0.010
18	HEPTACHLOR EPOXIDE		< 0.010
19	LINDANE		< 0.010
20	METHOXYCHLOR		< 0.010
21	PCB (AROCLOR 1016)		< 0.10
22	PCB (AROCLOR 1221)		< 0.10
23	PCB (AROCLOR 1232)		< 0.10
24	PCB (AROCLOR 1242)		< 0.10
25	PCB (AROCLOR 1248)		< 0.10
26	PCB (AROCLOR 1254)		< 0.10
27	PCB (AROCLOR 1260)		< 0.10
28	TOXAPHENE		< 0.13
29			
30			
31			
32			

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ANALYSIS REPORT

U.S. ARMY CENTER FOR HEALTH PROMOTION AND PREVENTIVE MEDICINE
BUILDING E-2100
ABERDEEN PROVING GROUND, MARYLAND 21010

CHROMATOGRAPHIC ANALYSIS DIVISION
PESTICIDES TEAM

Installation: Bradley Field AASF, CT

Project Number: 38-EH-2651

Project Officer: John A. Moser

Job Number: 6A5600

Number of Samples: 9

Matrix: Water

Analyzed for: Pesticides & PCBs

Method: CAD SOP# 65.2

LAB NUMBER	FIELD NUMBER
D9926	SW-5
D9927	SW-D
D9928	SW-1
D9930	SW-6
D9931	SW-7
D9932	SW-8
D9933	SW-9
D9934	SW-3
D9935	SW-4

Extracted By: Kim Haibach & Heidi Taylor

Analyzed By: Carmen Adrover-Farraj

Reviewed by: Mike Lanahan

Release Authorized by: J. Howard Vinopal
Chief, Chromatographic Analysis Division

Date: 8 Aug 1996

THIS REPORT SHALL NOT BE REPRODUCED IN FULL WITHOUT THE WRITTEN APPROVAL OF THE LABORATORY. THE RESULTS RELATE ONLY TO THE SPECIFIC SAMPLES IDENTIFIED WITHIN THIS REPORT.
THIS REPORT CONSISTS OF THREE DISTINCT SECTIONS: NARRATIVE, QUALITY CONTROL, AND RESULTS.

SUMMARY OF RESULTS

Installation: Bradley Field AASF, CT

Project Number: 38-EH-2651

Project Officer: John A. Moser

Case Narrative:

Attached are the sample and quality control (QC) data summaries for pesticides and polychlorinated biphenyls (PCBs).

The water samples were extracted and analyzed using USACHPPM/DLS/CAD SOP# 65.2; Analysis of Organochlorine & Organophosphorus Pesticides in RCRA Water. This method is comparable to EPA Methods 3510B/8080A.

All QC and surrogate recoveries fell within CAD's acceptance limits.

No problems were encountered in the extraction and analysis of these samples.

John Suprock is the POC for this project (x-2177).

Analyst: Carmen Adrover-Farraj Date: 8/8/96

QUALITY CONTROL RESULTS

SURROGATE RECOVERIES

INSTALLATION:	BRADLEY FIELD AASF, CT	MATRIX:	WATER
PROJECT#:	38-EH-2651	EXTRACTION DATE(S):	7/16/96
DLS PROCEDURE #:	PES517	ANALYSIS COMPLETED:	-- 8/1/96

#	SAMPLE #	SURR1 PCNB	SURR2 RONNEL	SURR3 cis-NONACHLOR	COMMENTS
1	BLANK	106	108	111	
2	LCS-W5054	93	100	118	
3	D9926	79	98	96	
4	D9927	61	72	73	
5	D9928	66	77	73	
6	D9930	86	113	114	
7	D9931	84	107	106	
8	D9932	90	109	113	
9	D9933	85	105	107	
10	D9934	68	90	92	
11	D9935	88	107	112	
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SURR1 = PENTACHLORONITROBENZENE (PCNB)
SURR2 = RONNEL
SURR3 = cis-NONACHLOR

CONTROL LIMITS
60-120%

* = VALUE OUTSIDE OF CONTROL LIMITS

QUALITY CONTROL RESULTS

QUALITY CONTROL SAMPLE RECOVERIES

CAD QC #: LCS-W5054
TYPE: PESTICIDES

INSTALLATION: BRADLEY FIELD AASF, CT
PROJECT#: 38-EH-2651
DLS PROCEDURE #: PES517

MATRIX: WATER
EXTRACTION DATE: 7/16/96
ANALYSIS COMPLETED: 8/1/96

ASSOCIATED SAMPLES	COMPOUND	SPIKING LEVEL, ug/L	PERCENT RECOVERED	CONTROL LIMITS (%)
BLANK	BHC, alpha-	0.20	95	60 - 120
D9926	BHC, delta-	0.40	100	60 - 120
D9927	HEPTACHLOR EPOXIDE	0.40	115	60 - 120
D9928	CHLORDANE, trans-	0.20	110	60 - 120
D9930	DDE, p,p'-	0.40	105	60 - 120
D9931	DDD, p,p'-	0.40	110	60 - 120
D9932	MALATHION	4.00	95	60 - 120
D9933	CHLORPYRIFOS	2.00	80	60 - 120
D9934				
D9935				

* = VALUE OUTSIDE OF CONTROL LIMITS

REPORT OF ANALYSIS

U.S. Army Center for Health Promotion and Preventive Medicine

Directorate of Laboratory Sciences

Chromatographic Analysis Division

Installation:	BRADLEY FIELD AASF, CT	Date Collected:	9-Jul-96
Project #:	38-EH-2651	Date Received by CAD:	12 Jul-96
Project Officer:	JOHN A. MOSER	Extraction Date:	16-Jul-96
DLS JOB#:	6A5600	Analysis Completed:	1-Aug-96
DLS Sample #:	D9926 PAGE 1 OF 2	DLS Procedure #:	PES517
Field #:	SW-5	% Moisture:	N/A
Matrix:	WATER	Sample Amount:	500 mL

	TARGET COMPOUNDS		RESULTS, ug/L
1	ALDRIN		< 0.050
2	BHC, alpha-		< 0.050
3	BHC, beta-		< 0.050
4	BHC, delta-		< 0.050
5	CHLORDANE, cis-		< 0.050
6	CHLORDANE, TECHNICAL		< 0.40
7	CHLORDANE, trans-		< 0.050
8	CHLORDENE, gamma-		< 0.050
9	CHLORPYRIFOS		< 0.30
10	DDD, o,p'-		< 0.050
11	DDD, p,p'-		< 0.050
12	DDE, o,p'-		< 0.050
13	DDE, p,p'-		< 0.050
14	DDT, o,p'-		< 0.10
15	DDT, p,p'-		< 0.10
16	DIAZINON		< 0.60
17	DIELDRIN		< 0.050
18	ENDOSULFAN I		< 0.050
19	ENDOSULFAN II		< 0.10
20	ENDOSULFAN SULFATE		< 0.10
21	ENDRIN		< 0.040
22	ENDRIN ALDEHYDE		< 0.10
23	HCB		< 0.020
24	HEPTACHLOR		< 0.050
25	HEPTACHLOR EPOXIDE		< 0.050
26	LINDANE		< 0.050
27	MALATHION		< 2.00
28	METHOXYCHLOR		< 0.40
29	MIREX		< 0.10
30	NONACHLOR, trans-		< 0.050
31	OXYCHLORDANE		< 0.050
32	PARATHION		< 0.60

REPORT OF ANALYSIS

U.S. Army Center for Health Promotion and Preventive Medicine
Directorate of Laboratory Sciences
Chromatographic Analysis Division

Installation:	BRADLEY FIELD AASF, CT	Date Collected:	9-Jul-96
Project #:	38-EH-2651	Date Received by CAD:	12 Jul-96
Project Officer:	JOHN A. MOSER	Extraction Date:	16-Jul-96
DLS JOB#:	6A5600	Analysis Completed:	1-Aug-96

DLS Sample #:	D9926 PAGE 2 OF 2	DLS Procedure #:	PES517
Field #:	SW-5	% Moisture:	N/A
Matrix:	WATER	Sample Amount:	500 mL

	TARGET COMPOUNDS		RESULTS, ug/L
33	PARATHION, METHYL		< 0.60
34	PCB (AROCLOR 1016)		< 0.50
35	PCB (AROCLOR 1221)		< 0.50
36	PCB (AROCLOR 1232)		< 0.50
37	PCB (AROCLOR 1242)		< 0.50
38	PCB (AROCLOR 1248)		< 0.50
39	PCB (AROCLOR 1254)		< 0.50
40	PCB (AROCLOR 1260)		< 0.50
41	TOXAPHENE		< 0.50
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REPORT OF ANALYSIS

U.S. Army Center for Health Promotion and Preventive Medicine

Directorate of Laboratory Sciences

Chromatographic Analysis Division

Installation:	BRADLEY FIELD AASF, CT	Date Collected:	9-Jul-96
Project #:	38-EH-2651	Date Received by CAD:	12-Jul-96
Project Officer:	JOHN A. MOSER	Extraction Date:	16-Jul-96
DLS JOB#:	6A5600	Analysis Completed:	1-Aug-96
DLS Sample #:	D9927 PAGE 1 OF 2	DLS Procedure #:	PES517
Field #:	SW-D	% Moisture:	N/A
Matrix:	WATER	Sample Amount:	500 mL

	TARGET COMPOUNDS	RESULTS, ug/L	
1	ALDRIN		< 0.050
2	BHC, alpha-		< 0.050
3	BHC, beta-		< 0.050
4	BHC, delta-		< 0.050
5	CHLORDANE, cis-		< 0.050
6	CHLORDANE, TECHNICAL		< 0.40
7	CHLORDANE, trans-		< 0.050
8	CHLORDENE, gamma-		< 0.050
9	CHLORPYRIFOS		< 0.30
10	DDD, o,p'-		< 0.050
11	DDD, p,p'-		< 0.050
12	DDE, o,p'-		< 0.050
13	DDE, p,p'-		< 0.050
14	DDT, o,p'-		< 0.10
15	DDT, p,p'-		< 0.10
16	DIAZINON		< 0.60
17	DIELDRIN		< 0.050
18	ENDOSULFAN I		< 0.050
19	ENDOSULFAN II		< 0.10
20	ENDOSULFAN SULFATE		< 0.10
21	ENDRIN		< 0.040
22	ENDRIN ALDEHYDE		< 0.10
23	HCB		< 0.020
24	HEPTACHLOR		< 0.050
25	HEPTACHLOR EPOXIDE		< 0.050
26	LINDANE		< 0.050
27	MALATHION		< 2.00
28	METHOXYCHLOR		< 0.40
29	MIREX		< 0.10
30	NONACHLOR, trans-		< 0.050
31	OXYCHLORDANE		< 0.050
32	PARATHION		< 0.60

REPORT OF ANALYSIS

U.S. Army Center for Health Promotion and Preventive Medicine
Directorate of Laboratory Sciences
Chromatographic Analysis Division

Installation:	BRADLEY FIELD AASF, CT	Date Collected:	9-Jul-96
Project #:	38-EH-2651	Date Received by CAD:	12-Jul-96
Project Officer:	JOHN A. MOSER	Extraction Date:	16-Jul-96
DLS JOB#:	6A5600	Analysis Completed:	1-Aug-96
DLS Sample #:	D9927 PAGE 2 OF 2	DLS Procedure #:	PES517
Field #:	SW-D	% Moisture:	N/A
Matrix:	WATER	Sample Amount:	500 mL

	TARGET COMPOUNDS		RESULTS, ug/L
33	PARATHION, METHYL		< 0.60
34	PCB (AROCLOR 1016)		< 0.50
35	PCB (AROCLOR 1221)		< 0.50
36	PCB (AROCLOR 1232)		< 0.50
37	PCB (AROCLOR 1242)		< 0.50
38	PCB (AROCLOR 1248)		< 0.50
39	PCB (AROCLOR 1254)		< 0.50
40	PCB (AROCLOR 1260)		< 0.50
41	TOXAPHENE		< 0.50
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REPORT OF ANALYSIS

U.S. Army Center for Health Promotion and Preventive Medicine
Directorate of Laboratory Sciences
Chromatographic Analysis Division

Installation:	BRADLEY FIELD AASF, CT	Date Collected:	10-Jul-96
Project #:	38-EH-2651	Date Received by CAD:	12 Jul-96
Project Officer:	JOHN A. MOSER	Extraction Date:	16-Jul-96
DLS JOB#:	6A5600	Analysis Completed:	1-Aug-96
DLS Sample #:	D9928 PAGE 1 OF 2	DLS Procedure #:	PES517
Field #:	SW-1	% Moisture:	N/A
Matrix:	WATER	Sample Amount:	500 mL

	TARGET COMPOUNDS		RESULTS, ug/L
1	ALDRIN		< 0.050
2	BHC, alpha-		< 0.050
3	BHC, beta-		< 0.050
4	BHC, delta-		< 0.050
5	CHLORDANE, cis-		< 0.050
6	CHLORDANE, TECHNICAL		< 0.40
7	CHLORDANE, trans-		< 0.050
8	CHLORDENE, gamma-		< 0.050
9	CHLORPYRIFOS		< 0.30
10	DDD, o,p'-		< 0.050
11	DDD, p,p'-		< 0.050
12	DDE, o,p'-		< 0.050
13	DDE, p,p'-		< 0.050
14	DDT, o,p'-		< 0.10
15	DDT, p,p'-		< 0.10
16	DIAZINON		< 0.60
17	DIELDRIN		< 0.050
18	ENDOSULFAN I		< 0.050
19	ENDOSULFAN II		< 0.10
20	ENDOSULFAN SULFATE		< 0.10
21	ENDRIN		< 0.040
22	ENDRIN ALDEHYDE		< 0.10
23	HCB		< 0.020
24	HEPTACHLOR		< 0.050
25	HEPTACHLOR EPOXIDE		< 0.050
26	LINDANE		< 0.050
27	MALATHION		< 2.00
28	METHOXYCHLOR		< 0.40
29	MIREX		< 0.10
30	NONACHLOR, trans-		< 0.050
31	OXYCHLORDANE		< 0.050
32	PARATHION		< 0.60

REPORT OF ANALYSIS

U.S. Army Center for Health Promotion and Preventive Medicine

Directorate of Laboratory Sciences

Chromatographic Analysis Division

Installation:	BRADLEY FIELD AASF, CT	Date Collected:	10-Jul-96
Project #:	38-EH-2651	Date Received by CAD:	12-Jul-96
Project Officer:	JOHN A. MOSER	Extraction Date:	16-Jul-96
DLS JOB#:	6A5600	Analysis Completed:	1-Aug-96
DLS Sample #:	D9928 PAGE 2 OF 2	DLS Procedure #:	PES517
Field #:	SW-1	% Moisture:	N/A
Matrix:	WATER	Sample Amount:	500 mL

	TARGET COMPOUNDS		RESULTS, ug/L
33	PARATHION, METHYL		< 0.60
34	PCB (AROCLOR 1016)		< 0.50
35	PCB (AROCLOR 1221)		< 0.50
36	PCB (AROCLOR 1232)		< 0.50
37	PCB (AROCLOR 1242)		< 0.50
38	PCB (AROCLOR 1248)		< 0.50
39	PCB (AROCLOR 1254)		< 0.50
40	PCB (AROCLOR 1260)		< 0.50
41	TOXAPHENE		< 0.50
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REPORT OF ANALYSIS

U.S. Army Center for Health Promotion and Preventive Medicine

Directorate of Laboratory Sciences

Chromatographic Analysis Division

Installation:	BRADLEY FIELD AASF, CT	Date Collected:	9-Jul-96
Project #:	38-EH-2651	Date Received by CAD:	12 Jul-96
Project Officer:	JOHN A. MOSER	Extraction Date:	16-Jul-96
DLS JOB#:	6A5600	Analysis Completed:	1-Aug-96

DLS Sample #:	D9930 PAGE 1 OF 2	DLS Procedure #:	PES517
Field #:	SW-6	% Moisture:	N/A
Matrix:	WATER	Sample Amount:	500 mL

	TARGET COMPOUNDS		RESULTS, ug/L
1	ALDRIN		< 0.050
2	BHC, alpha-		< 0.050
3	BHC, beta-		< 0.050
4	BHC, delta-		< 0.050
5	CHLORDANE, cis-		< 0.050
6	CHLORDANE, TECHNICAL		< 0.40
7	CHLORDANE, trans-		< 0.050
8	CHLORDENE, gamma-		< 0.050
9	CHLORPYRIFOS		< 0.30
10	DDD, o,p'-		< 0.050
11	DDD, p,p'-		< 0.050
12	DDE, o,p'-		< 0.050
13	DDE, p,p'-		< 0.050
14	DDT, o,p'-		< 0.10
15	DDT, p,p'-		< 0.10
16	DIAZINON		< 0.60
17	DIELDRIN		< 0.050
18	ENDOSULFAN I		< 0.050
19	ENDOSULFAN II		< 0.10
20	ENDOSULFAN SULFATE		< 0.10
21	ENDRIN		< 0.040
22	ENDRIN ALDEHYDE		< 0.10
23	HCB		< 0.020
24	HEPTACHLOR		< 0.050
25	HEPTACHLOR EPOXIDE		< 0.050
26	LINDANE		< 0.050
27	MALATHION		< 2.00
28	METHOXYCHLOR		< 0.40
29	MIREX		< 0.10
30	NONACHLOR, trans-		< 0.050
31	OXYCHLORDANE		< 0.050
32	PARATHION		< 0.60

REPORT OF ANALYSIS

U.S. Army Center for Health Promotion and Preventive Medicine

Directorate of Laboratory Sciences

Chromatographic Analysis Division

Installation:	BRADLEY FIELD AASF, CT	Date Collected:	9-Jul-96
Project #:	38-EH-2651	Date Received by CAD:	12 Jul-96
Project Officer:	JOHN A. MOSER	Extraction Date:	16-Jul-96
DLS JOB#:	6A5600	Analysis Completed:	1-Aug-96

DLS Sample #:	D9930 PAGE 2 OF 2	DLS Procedure #:	PES517
Field #:	SW-6	% Moisture:	N/A
Matrix:	WATER	Sample Amount:	500 mL

	TARGET COMPOUNDS	RESULTS, ug/L	
33	PARATHION, METHYL		< 0.60
34	PCB (AROCLOR 1016)		< 0.50
35	PCB (AROCLOR 1221)		< 0.50
36	PCB (AROCLOR 1232)		< 0.50
37	PCB (AROCLOR 1242)		< 0.50
38	PCB (AROCLOR 1248)		< 0.50
39	PCB (AROCLOR 1254)		< 0.50
40	PCB (AROCLOR 1260)		< 0.50
41	TOXAPHENE		< 0.50
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REPORT OF ANALYSIS

U.S. Army Center for Health Promotion and Preventive Medicine

Directorate of Laboratory Sciences

Chromatographic Analysis Division

Installation:	BRADLEY FIELD AASF, CT	Date Collected:	9-Jul-96
Project #:	38-EH-2651	Date Received by CAD:	12-Jul-96
Project Officer:	JOHN A. MOSER	Extraction Date:	16-Jul-96
DLS JOB#:	6A5600	Analysis Completed:	1-Aug-96
DLS Sample #:	D9931 PAGE 1 OF 2	DLS Procedure #:	PES517
Field #:	SW-7	% Moisture:	N/A
Matrix:	WATER	Sample Amount:	500 mL

	TARGET COMPOUNDS		RESULTS, ug/L
1	ALDRIN		< 0.050
2	BHC, alpha-		< 0.050
3	BHC, beta-		< 0.050
4	BHC, delta-		< 0.050
5	CHLORDANE, cis-		< 0.050
6	CHLORDANE, TECHNICAL		< 0.40
7	CHLORDANE, trans-		< 0.050
8	CHLORDENE, gamma-		< 0.050
9	CHLORPYRIFOS		< 0.30
10	DDD, o,p'-		< 0.050
11	DDD, p,p'-		< 0.050
12	DDE, o,p'-		< 0.050
13	DDE, p,p'-		< 0.050
14	DDT, o,p'-		< 0.10
15	DDT, p,p'-		< 0.10
16	DIAZINON		< 0.60
17	DIELDRIN		< 0.050
18	ENDOSULFAN I		< 0.050
19	ENDOSULFAN II		< 0.10
20	ENDOSULFAN SULFATE		< 0.10
21	ENDRIN		< 0.040
22	ENDRIN ALDEHYDE		< 0.10
23	HCB		< 0.020
24	HEPTACHLOR		< 0.050
25	HEPTACHLOR EPOXIDE		< 0.050
26	LINDANE		< 0.050
27	MALATHION		< 2.00
28	METHOXYCHLOR		< 0.40
29	MIREX		< 0.10
30	NONACHLOR, trans-		< 0.050
31	OXYCHLORDANE		< 0.050
32	PARATHION		< 0.60

REPORT OF ANALYSIS

U.S. Army Center for Health Promotion and Preventive Medicine

Directorate of Laboratory Sciences

Chromatographic Analysis Division

Installation:	BRADLEY FIELD AASF, CT	Date Collected:	9-Jul-96
Project #:	38-EH-2651	Date Received by CAD:	12 Jul-96
Project Officer:	JOHN A. MOSER	Extraction Date:	16-Jul-96
DLS JOB#:	6A5600	Analysis Completed:	1-Aug-96
DLS Sample #:	D9931 PAGE 2 OF 2	DLS Procedure #:	PES517
Field #:	SW-7	% Moisture:	N/A
Matrix:	WATER	Sample Amount:	500 mL

	TARGET COMPOUNDS	RESULTS, ug/L	
33	PARATHION, METHYL		< 0.60
34	PCB (AROCLOR 1016)		< 0.50
35	PCB (AROCLOR 1221)		< 0.50
36	PCB (AROCLOR 1232)		< 0.50
37	PCB (AROCLOR 1242)		< 0.50
38	PCB (AROCLOR 1248)		< 0.50
39	PCB (AROCLOR 1254)		< 0.50
40	PCB (AROCLOR 1260)		< 0.50
41	TOXAPHENE		< 0.50
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REPORT OF ANALYSIS

U.S. Army Center for Health Promotion and Preventive Medicine

Directorate of Laboratory Sciences

Chromatographic Analysis Division

Installation:	BRADLEY FIELD AASF, CT	Date Collected:	9-Jul-96
Project #:	38-EH-2651	Date Received by CAD:	12-Jul-96
Project Officer:	JOHN A. MOSER	Extraction Date:	16-Jul-96
DLS JOB#:	6A5600	Analysis Completed:	1-Aug-96

DLS Sample #:	D9932 PAGE 1 OF 2	DLS Procedure #:	PES517
Field #:	SW-8	% Moisture:	N/A
Matrix:	WATER	Sample Amount:	500 mL

	TARGET COMPOUNDS		RESULTS, ug/L
1	ALDRIN		< 0.050
2	BHC, alpha-		< 0.050
3	BHC, beta-		< 0.050
4	BHC, delta-		< 0.050
5	CHLORDANE, cis-		< 0.050
6	CHLORDANE, TECHNICAL		< 0.40
7	CHLORDANE, trans-		< 0.050
8	CHLORDENE, gamma-		< 0.050
9	CHLORPYRIFOS		< 0.30
10	DDD, o,p'-		< 0.050
11	DDD, p,p'-		< 0.050
12	DDE, o,p'-		< 0.050
13	DDE, p,p'-		< 0.050
14	DDT, o,p'-		< 0.10
15	DDT, p,p'-		< 0.10
16	DIAZINON		< 0.60
17	DIELDRIN		< 0.050
18	ENDOSULFAN I		< 0.050
19	ENDOSULFAN II		< 0.10
20	ENDOSULFAN SULFATE		< 0.10
21	ENDRIN		< 0.040
22	ENDRIN ALDEHYDE		< 0.10
23	HCB		< 0.020
24	HEPTACHLOR		< 0.050
25	HEPTACHLOR EPOXIDE		< 0.050
26	LINDANE		< 0.050
27	MALATHION		< 2.00
28	METHOXYCHLOR		< 0.40
29	MIREX		< 0.10
30	NONACHLOR, trans-		< 0.050
31	OXYCHLORDANE		< 0.050
32	PARATHION		< 0.60

REPORT OF ANALYSIS

U.S. Army Center for Health Promotion and Preventive Medicine

Directorate of Laboratory Sciences

Chromatographic Analysis Division

Installation:	BRADLEY FIELD AASF, CT	Date Collected:	9-Jul-96
Project #:	38-EH-2651	Date Received by CAD:	12 Jul-96
Project Officer:	JOHN A. MOSER	Extraction Date:	16-Jul-96
DLS JOB#:	6A5600	Analysis Completed:	1-Aug-96

DLS Sample #:	D9932 PAGE 2 OF 2	DLS Procedure #:	PES517
Field #:	SW-8	% Moisture:	N/A
Matrix:	WATER	Sample Amount:	500 mL

	TARGET COMPOUNDS		RESULTS, ug/L
33	PARATHION, METHYL		< 0.60
34	PCB (AROCLOR 1016)		< 0.50
35	PCB (AROCLOR 1221)		< 0.50
36	PCB (AROCLOR 1232)		< 0.50
37	PCB (AROCLOR 1242)		< 0.50
38	PCB (AROCLOR 1248)		< 0.50
39	PCB (AROCLOR 1254)		< 0.50
40	PCB (AROCLOR 1260)		< 0.50
41	TOXAPHENE		< 0.50
42			
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REPORT OF ANALYSIS

U.S. Army Center for Health Promotion and Preventive Medicine

Directorate of Laboratory Sciences

Chromatographic Analysis Division

Installation:	BRADLEY FIELD AASF, CT	Date Collected:	9-Jul-96
Project #:	38-EH-2651	Date Received by CAD:	12 Jul-96
Project Officer:	JOHN A. MOSER	Extraction Date:	16-Jul-96
DLS JOB#:	6A5600	Analysis Completed:	1-Aug-96
DLS Sample #:	D9933 PAGE 1 OF 2	DLS Procedure #:	PES517
Field #:	SW-9	% Moisture:	N/A
Matrix:	WATER	Sample Amount:	500 mL

	TARGET COMPOUNDS		RESULTS, ug/L
1	ALDRIN		< 0.050
2	BHC, alpha-		< 0.050
3	BHC, beta-		< 0.050
4	BHC, delta-		< 0.050
5	CHLORDANE, cis-		< 0.050
6	CHLORDANE, TECHNICAL		< 0.40
7	CHLORDANE, trans-		< 0.050
8	CHLORDENE, gamma-		< 0.050
9	CHLORPYRIFOS		< 0.30
10	DDD, o,p'-		< 0.050
11	DDD, p,p'-		< 0.050
12	DDE, o,p'-		< 0.050
13	DDE, p,p'-		< 0.050
14	DDT, o,p'-		< 0.10
15	DDT, p,p'-		< 0.10
16	DIAZINON		< 0.60
17	DIELDRIN		< 0.050
18	ENDOSULFAN I		< 0.050
19	ENDOSULFAN II		< 0.10
20	ENDOSULFAN SULFATE		< 0.10
21	ENDRIN		< 0.040
22	ENDRIN ALDEHYDE		< 0.10
23	HCB		< 0.020
24	HEPTACHLOR		< 0.050
25	HEPTACHLOR EPOXIDE		< 0.050
26	LINDANE		< 0.050
27	MALATHION		< 2.00
28	METHOXYCHLOR		< 0.40
29	MIREX		< 0.10
30	NONACHLOR, trans-		< 0.050
31	OXYCHLORDANE		< 0.050
32	PARATHION		< 0.60

REPORT OF ANALYSIS

U.S. Army Center for Health Promotion and Preventive Medicine

Directorate of Laboratory Sciences

Chromatographic Analysis Division

Installation:	BRADLEY FIELD AASF, CT	Date Collected:	9-Jul-96
Project #:	38-EH-2651	Date Received by CAD:	12 Jul-96
Project Officer:	JOHN A. MOSER	Extraction Date:	16-Jul-96
DLS JOB#:	6A5600	Analysis Completed:	1-Aug-96
DLS Sample #:	D9933 PAGE 2 OF 2	DLS Procedure #:	PES517
Field #:	SW-9	% Moisture:	N/A
Matrix:	WATER	Sample Amount:	500 mL

	TARGET COMPOUNDS		RESULTS, ug/L
33	PARATHION, METHYL		< 0.60
34	PCB (AROCLOR 1016)		< 0.50
35	PCB (AROCLOR 1221)		< 0.50
36	PCB (AROCLOR 1232)		< 0.50
37	PCB (AROCLOR 1242)		< 0.50
38	PCB (AROCLOR 1248)		< 0.50
39	PCB (AROCLOR 1254)		< 0.50
40	PCB (AROCLOR 1260)		< 0.50
41	TOXAPHENE		< 0.50
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REPORT OF ANALYSIS

U.S. Army Center for Health Promotion and Preventive Medicine
Directorate of Laboratory Sciences
Chromatographic Analysis Division

Installation:	BRADLEY FIELD AASF, CT	Date Collected:	10-Jul-96
Project #:	38-EH-2651	Date Received by CAD:	12-Jul-96
Project Officer:	JOHN A. MOSER	Extraction Date:	16-Jul-96
DLS JOB#:	6A5600	Analysis Completed:	1-Aug-96
DLS Sample #:	D9934 PAGE 1 OF 2	DLS Procedure #:	PES517
Field #:	SW-3	% Moisture:	N/A
Matrix:	WATER	Sample Amount:	500 mL

	TARGET COMPOUNDS		RESULTS, ug/L
1	ALDRIN		< 0.050
2	BHC, alpha-		< 0.050
3	BHC, beta-		< 0.050
4	BHC, delta-		< 0.050
5	CHLORDANE, cis-		< 0.050
6	CHLORDANE, TECHNICAL		< 0.40
7	CHLORDANE, trans-		< 0.050
8	CHLORDENE, gamma-		< 0.050
9	CHLORPYRIFOS		< 0.30
10	DDD, o,p'-		< 0.050
11	DDD, p,p'-		< 0.050
12	DDE, o,p'-		< 0.050
13	DDE, p,p'-		< 0.050
14	DDT, o,p'-		< 0.10
15	DDT, p,p'-		< 0.10
16	DIAZINON		< 0.60
17	DIELDRIN		< 0.050
18	ENDOSULFAN I		< 0.050
19	ENDOSULFAN II		< 0.10
20	ENDOSULFAN SULFATE		< 0.10
21	ENDRIN		< 0.040
22	ENDRIN ALDEHYDE		< 0.10
23	HCB		< 0.020
24	HEPTACHLOR		< 0.050
25	HEPTACHLOR EPOXIDE		< 0.050
26	LINDANE		< 0.050
27	MALATHION		< 2.00
28	METHOXYCHLOR		< 0.40
29	MIREX		< 0.10
30	NONACHLOR, trans-		< 0.050
31	OXYCHLORDANE		< 0.050
32	PARATHION		< 0.60

REPORT OF ANALYSIS

U.S. Army Center for Health Promotion and Preventive Medicine
Directorate of Laboratory Sciences
Chromatographic Analysis Division

Installation:	BRADLEY FIELD AASF, CT	Date Collected:	10-Jul-96
Project #:	38-EH-2651	Date Received by CAD:	12 Jul-96
Project Officer:	JOHN A. MOSER	Extraction Date:	16-Jul-96
DLS JOB#:	6A5600	Analysis Completed:	1-Aug-96

DLS Sample #:	D9934 PAGE 2 OF 2	DLS Procedure #:	PES517
Field #:	SW-3	% Moisture:	N/A
Matrix:	WATER	Sample Amount:	500 mL

	TARGET COMPOUNDS		RESULTS, ug/L
33	PARATHION, METHYL		< 0.60
34	PCB (AROCLOR 1016)		< 0.50
35	PCB (AROCLOR 1221)		< 0.50
36	PCB (AROCLOR 1232)		< 0.50
37	PCB (AROCLOR 1242)		< 0.50
38	PCB (AROCLOR 1248)		< 0.50
39	PCB (AROCLOR 1254)		< 0.50
40	PCB (AROCLOR 1260)		< 0.50
41	TOXAPHENE		< 0.50
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REPORT OF ANALYSIS

U.S. Army Center for Health Promotion and Preventive Medicine

Directorate of Laboratory Sciences

Chromatographic Analysis Division

Installation:	BRADLEY FIELD AASF, CT	Date Collected:	10-Jul-96
Project #:	38-EH-2651	Date Received by CAD:	12-Jul-96
Project Officer:	JOHN A. MOSER	Extraction Date:	16-Jul-96
DLS JOB#:	6A5600	Analysis Completed:	1-Aug-96
DLS Sample #:	D9935 PAGE 1 OF 2	DLS Procedure #:	PES517
Field #:	SW-4	% Moisture:	N/A
Matrix:	WATER	Sample Amount:	500 mL

	TARGET COMPOUNDS		RESULTS, ug/L
1	ALDRIN		< 0.050
2	BHC, alpha-		< 0.050
3	BHC, beta-		< 0.050
4	BHC, delta-		< 0.050
5	CHLORDANE, cis-		< 0.050
6	CHLORDANE, TECHNICAL		< 0.40
7	CHLORDANE, trans-		< 0.050
8	CHLORDENE, gamma-		< 0.050
9	CHLORPYRIFOS		< 0.30
10	DDD, o,p'-		< 0.050
11	DDD, p,p'-		< 0.050
12	DDE, o,p'-		< 0.050
13	DDE, p,p'-		< 0.050
14	DDT, o,p'-		< 0.10
15	DDT, p,p'-		< 0.10
16	DIAZINON		< 0.60
17	DIELDRIN		< 0.050
18	ENDOSULFAN I		< 0.050
19	ENDOSULFAN II		< 0.10
20	ENDOSULFAN SULFATE		< 0.10
21	ENDRIN		< 0.040
22	ENDRIN ALDEHYDE		< 0.10
23	HCB		< 0.020
24	HEPTACHLOR		< 0.050
25	HEPTACHLOR EPOXIDE		< 0.050
26	LINDANE		< 0.050
27	MALATHION		< 2.00
28	METHOXYCHLOR		< 0.40
29	MIREX		< 0.10
30	NONACHLOR, trans-		< 0.050
31	OXYCHLORDANE		< 0.050
32	PARATHION		< 0.60

REPORT OF ANALYSIS

U.S. Army Center for Health Promotion and Preventive Medicine
Directorate of Laboratory Sciences
Chromatographic Analysis Division

Installation:	BRADLEY FIELD AASF, CT	Date Collected:	10-Jul-96
Project #:	38-EH-2651	Date Received by CAD:	12 Jul-96
Project Officer:	JOHN A. MOSER	Extraction Date:	16-Jul-96
DLS JOB#:	6A5600	Analysis Completed:	1-Aug-96
DLS Sample #:	D9935 PAGE 2 OF 2	DLS Procedure #:	PES517
Field #:	SW-4	% Moisture:	N/A
Matrix:	WATER	Sample Amount:	500 mL

	TARGET COMPOUNDS		RESULTS, ug/L
33	PARATHION, METHYL		< 0.60
34	PCB (AROCLOR 1016)		< 0.50
35	PCB (AROCLOR 1221)		< 0.50
36	PCB (AROCLOR 1232)		< 0.50
37	PCB (AROCLOR 1242)		< 0.50
38	PCB (AROCLOR 1248)		< 0.50
39	PCB (AROCLOR 1254)		< 0.50
40	PCB (AROCLOR 1260)		< 0.50
41	TOXAPHENE		< 0.50
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United States Army
Center for Health Promotion and Preventive Medicine
Chromatographic Analysis Division
Aberdeen Proving Ground, MD 21010-5422
DSN: 584-2208 Commercial: (410) 671-3739

SUBJECT: ANALYTICAL RESULTS

Provided are the results for the analysis of twenty six soil samples for diesel range organics analyzed 2 August 1996.

analyst: Michael A. Hall reviewed by: RJ Moore

U.S. Army Center for Health Promotion and Preventive Medicine
Directorate of Laboratory Sciences
Aberdeen Proving Grounds, MD 21010-5422

Analytical Results - Final Program Report
(LIMS Generated by rberkshi)

Note: This report shall not be reproduced except in full, without the written approval of the laboratory. The results relate only to the specific samples identified within this report.

DLS Job.....: 6A5600
Proj. Officer.: JOHN MOSER
Timekeeping#..: 38-EH-2651
Installation..: BRADLEY FIELD AASF

Reviewed and released by:

Signature.: _____ 8/14/96
Dr. Howard Vinopal Date
Title.....: Chief, CHPPM - Chromatographic Analysis Division

The following labs performed analyses included in this report:

Lab	Description
IH	CHPPM - CAD Industrial Hygiene Team

DLS Sample#.....: D9937
Field ID.....: SS-1
Sample Description..: Soils
Date/Time Collected.: 10-Jul-96 13:30
Date Received in DLS: 11-Jul-96 15:45

Test	Parameter	Result	Units	Method	Analyzed	Analyst
IH 1121	DRO	29	mg/Kg	SOP 132.1	02-AUG-96	MHABLE

DLS Sample#.....: D9938
Field ID.....: SS-2
Sample Description..: Soils
Date/Time Collected.: 10-Jul-96 12:30
Date Received in DLS: 11-Jul-96 15:45

Test	Parameter	Result	Units	Method	Analyzed	Analyst
IH 1121	DRO	<25	mg/Kg	SOP 132.1	02-AUG-96	mhable

DLS Sample#.....: D9939
Field ID.....: SS-3
Sample Description..: Soils
Date/Time Collected.: 10-Jul-96 09:30
Date Received in DLS: 11-Jul-96 15:45

DLS Sample#.....: D9939
Field ID.....: SS-3
Sample Description..: Soils
Date/Time Collected.: 10-Jul-96 09:30
Date Received in DLS: 11-Jul-96 15:45

Test	Parameter	Result	Units	Method	Analyzed	Analyst
IH 1121	DRO	<25	mg/Kg	SOP 132.1	02-AUG-96	mhable

DLS Sample#.....: D9940
Field ID.....: SS-5
Sample Description..: Soils
Date/Time Collected.: 09-Jul-96 14:30
Date Received in DLS: 11-Jul-96 15:45

Test	Parameter	Result	Units	Method	Analyzed	Analyst
IH 1121	DRO	<25	mg/Kg	SOP 132.1	02-AUG-96	mhable

DLS Sample#.....: D9941
Field ID.....: SS-D
Sample Description..: Soils
Date/Time Collected.: 09-Jul-96 15:30
Date Received in DLS: 11-Jul-96 15:45

Test	Parameter	Result	Units	Method	Analyzed	Analyst
IH 1121	DRO	26	mg/Kg	SOP 132.1	02-AUG-96	mhable

DLS Sample#.....: D9942
Field ID.....: SS-6
Sample Description..: Soils
Date/Time Collected.: 09-Jul-96 13:30
Date Received in DLS: 11-Jul-96 15:45

Test	Parameter	Result	Units	Method	Analyzed	Analyst
IH 1121	DRO	33	mg/Kg	SOP 132.1	02-AUG-96	mhable

DLS Sample#.....: D9943
Field ID.....: SS-7
Sample Description..: Soils
Date/Time Collected.: 09-Jul-96 11:30
Date Received in DLS: 11-Jul-96 15:45

Test	Parameter	Result	Units	Method	Analyzed	Analyst
IH 1121	DRO	54	mg/Kg	SOP 132.1	02-AUG-96	mhable

DLS Sample#.....: D9944
Field ID.....: SS-8
Sample Description..: Soils
Date/Time Collected.: 09-Jul-96 10:00
Date Received in DLS: 11-Jul-96 15:45

DLS Sample#.....: D9944
Field ID.....: SS-8
Sample Description..: Soils
Date/Time Collected.: 09-Jul-96 10:00
Date Received in DLS: 11-Jul-96 15:45

Test	Parameter	Result	Units	Method	Analyzed	Analyst
TH 1121	DRO	57	mg/Kg	SOP 132.1	02-AUG-96	mhable

DLS Sample#.....: D9945
Field ID.....: SS-9
Sample Description..: Soils
Date/Time Collected.: 09-Jul-96 09:30
Date Received in DLS: 11-Jul-96 15:45

Test	Parameter	Result	Units	Method	Analyzed	Analyst
TH 1121	DRO	30	mg/Kg	SOP 132.1	02-AUG-96	mhable

DLS Sample#.....: D9947
Field ID.....: S2-S-A
Sample Description..: Soils
Date/Time Collected.: 10-Jul-96 09:50
Date Received in DLS: 11-Jul-96 15:45

Test	Parameter	Result	Units	Method	Analyzed	Analyst
TH 1121	DRO	200	mg/Kg	SOP 132.1	02-AUG-96	mhable

DLS Sample#.....: D9948
Field ID.....: S2-S-B
Sample Description..: Soils
Date/Time Collected.: 10-Jul-96 09:50
Date Received in DLS: 11-Jul-96 15:45

Test	Parameter	Result	Units	Method	Analyzed	Analyst
TH 1121	DRO	30	mg/Kg	SOP 132.1	02-AUG-96	mhable

DLS Sample#.....: D9949
Field ID.....: S2-N-A
Sample Description..: Soils
Date/Time Collected.: 10-Jul-96 10:20
Date Received in DLS: 11-Jul-96 15:45

Test	Parameter	Result	Units	Method	Analyzed	Analyst
TH 1121	DRO	30	mg/Kg	SOP 132.1	02-AUG-96	mhable

DLS Sample#.....: D9950
Field ID.....: S2-N-B
Sample Description..: Soils
Date/Time Collected.: 10-Jul-96 10:30
Date Received in DLS: 11-Jul-96 15:45

DLS Sample#.....: D9950
Field ID.....: S2-N-B
Sample Description..: Soils
Date/Time Collected.: 10-Jul-96 10:30
Date Received in DLS: 11-Jul-96 15:45

Test	Parameter	Result	Units	Method	Analyzed	Analyst
IH 1121	DRO	28	mg/Kg	SOP 132.1	02-AUG-96	mhable

DLS Sample#.....: D9951
Field ID.....: S3-S-A
Sample Description..: Soils
Date/Time Collected.: 10-Jul-96 13:00
Date Received in DLS: 11-Jul-96 15:45

Test	Parameter	Result	Units	Method	Analyzed	Analyst
IH 1121	DRO	28	mg/Kg	SOP 132.1	02-AUG-96	mhable

DLS Sample#.....: D9952
Field ID.....: S3-S-B
Sample Description..: Soils
Date/Time Collected.: 10-Jul-96 13:10
Date Received in DLS: 11-Jul-96 15:45

Test	Parameter	Result	Units	Method	Analyzed	Analyst
IH 1121	DRO	<25	mg/Kg	SOP 132.1	02-AUG-96	mhable

DLS Sample#.....: D9953
Field ID.....: S3-N-A
Sample Description..: Soils
Date/Time Collected.: 10-Jul-96 10:55
Date Received in DLS: 11-Jul-96 15:45

Test	Parameter	Result	Units	Method	Analyzed	Analyst
IH 1121	DRO	27	mg/Kg	SOP 132.1	02-AUG-96	mhable

DLS Sample#.....: D9954
Field ID.....: S3-N-B
Sample Description..: Soils
Date/Time Collected.: 10-Jul-96 11:25
Date Received in DLS: 11-Jul-96 15:45

Test	Parameter	Result	Units	Method	Analyzed	Analyst
IH 1121	DRO	<25	mg/Kg	SOP 132.1	02-AUG-96	mhable

DLS Sample#.....: D9955
Field ID.....: S4-S-A
Sample Description..: Soils
Date/Time Collected.: 10-Jul-96 13:30
Date Received in DLS: 11-Jul-96 15:45

DLS Sample#.....: D9955
Field ID.....: S4-S-A
Sample Description..: Soils
Date/Time Collected.: 10-Jul-96 13:30
Date Received in DLS: 11-Jul-96 15:45

Test	Parameter	Result	Units	Method	Analyzed	Analyst
IH 1121	DRO	<25	mg/Kg	SOP 132.1	02-AUG-96	mhable

DLS Sample#.....: D9956
Field ID.....: S4-S-B
Sample Description..: Soils
Date/Time Collected.: 10-Jul-96 13:40
Date Received in DLS: 11-Jul-96 15:45

Test	Parameter	Result	Units	Method	Analyzed	Analyst
IH 1121	DRO	<25	mg/Kg	SOP 132.1	02-AUG-96	mhable

DLS Sample#.....: D9957
Field ID.....: S4-N-A
Sample Description..: Soils
Date/Time Collected.: 10-Jul-96 14:00
Date Received in DLS: 11-Jul-96 15:45

Test	Parameter	Result	Units	Method	Analyzed	Analyst
IH 1121	DRO	<25	mg/Kg	SOP 132.1	02-AUG-96	mhable

DLS Sample#.....: D9958
Field ID.....: S4-N-B
Sample Description..: Soils
Date/Time Collected.: 10-Jul-96 14:05
Date Received in DLS: 11-Jul-96 15:45

Test	Parameter	Result	Units	Method	Analyzed	Analyst
IH 1121	DRO	<25	mg/Kg	SOP 132.1	02-AUG-96	mhable

DLS Sample#.....: D9959
Field ID.....: S5-S-A
Sample Description..: Soils
Date/Time Collected.: 10-Jul-96 12:55
Date Received in DLS: 11-Jul-96 15:45

Test	Parameter	Result	Units	Method	Analyzed	Analyst
IH 1121	DRO	150	mg/Kg	SOP 132.1	02-AUG-96	mhable

DLS Sample#.....: D9960
Field ID.....: S5-S-B
Sample Description..: Soils
Date/Time Collected.: 10-Jul-96 12:55
Date Received in DLS: 11-Jul-96 15:45

DLS Sample#.....: D9960
Field ID.....: S5-S-B
Sample Description..: Soils
Date/Time Collected.: 10-Jul-96 12:55
Date Received in DLS: 11-Jul-96 15:45

Test	Parameter	Result	Units	Method	Analyzed	Analyst
IH 1121	DRO	51	mg/Kg	SOP 132.1	02-AUG-96	mhable

DLS Sample#.....: D9961
Field ID.....: S5-N-A
Sample Description..: Soils
Date/Time Collected.: 10-Jul-96 15:25
Date Received in DLS: 11-Jul-96 15:45

Test	Parameter	Result	Units	Method	Analyzed	Analyst
IH 1121	DRO	93	mg/Kg	SOP 132.1	02-AUG-96	mhable

DLS Sample#.....: D9962
Field ID.....: S5-N-B
Sample Description..: Soils
Date/Time Collected.: 10-Jul-96 15:40
Date Received in DLS: 11-Jul-96 15:45

Test	Parameter	Result	Units	Method	Analyzed	Analyst
IH 1121	DRO	43	mg/Kg	SOP 132.1	02-AUG-96	mhable

DLS Sample#.....: D9975
Field ID.....: SD-1
Sample Description..: Soils
Date/Time Collected.: 10-Jul-96 12:00
Date Received in DLS: 11-Jul-96 00:00

Test	Parameter	Result	Units	Method	Analyzed	Analyst
IH 1121	DRO	<25	mg/Kg	SOP 132.1	02-AUG-96	mhable

The listing which follows describes the parameters which appear in this report.

Parameter	Description
DRO	DIESEL RANGE ORGANICS

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	16-JUL-96	3265	A380955
	Complete	PO Number	
	30-JUL-96	W23MWP-5264-S005-	
	Printed	Sampled	
	30-JUL-96	09-JUL-96	

Report To	Bill To
RICHARD PUZNIAK CDR, U.S. ARMY ENVIRONMENTAL HYGIENE AGE BLDG E2100 ABERDEEN PROVING GROUNDS, MD 21010-5423	DAAD05-94-D-7026 DEFENSE FINANCE & ACCT SVC-APG BLDG 310, WING 7 ABERDEEN PROVING GROUNDS, MD 21005-5001

Sample Description

CLIENT ID: D9963
FIELD ID: S6-S-A
PICK-UP/DELIVERY ORDER: P1D8

TOTAL SOLIDS EPA 160.3

Analyst: C. BOYLE Analysis Date: 26-JUL-96 22:45 Test: G401.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	90	0.001	Percent

HYDROCARBON SCAN BY GC:FID SW846-8015A(MOD

Analyst: C. BRODERICK Analysis Date: 19-JUL-96 12:48 Instrument: GC/FID Test: O409.1.0
Prep: PURGE AND TRAP METHOD FOR ORGANIC ANALYTES SW846-5030A P239.1.0

Parameter	Result	Det. Limit	Units
GASOLINE	BDL	0.50	mg/kg
DRY WEIGHT CORRECTED RESULT	BDL	0.56	mg/kg

PURGE AND TRAP METHOD FOR ORGANIC ANALYTES SW846-5030A

Analyst: C. BRODERICK Analysis Date: 19-JUL-96 Instrument: PREP Test: P239.1.0

Parameter	Result	Det. Limit	Units
INITIAL SAMPLE WEIGHT	1.01		Grams
FINAL VOLUME	5		mL

Sample Comments

BDL Below Detection Limit

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Approved : Brenda Lausch

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Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	16-JUL-96	3265	A380960
	Complete	PO Number	
	30-JUL-96	W23MWP-5264-S005-	
	Printed	Sampled	
	30-JUL-96	09-JUL-96	

Report To	Bill To
RICHARD PUZNIAK CDR, U.S. ARMY ENVIRONMENTAL HYGIENE AGE BLDG E2100 ABERDEEN PROVING GROUNDS, MD 21010-5423	DAAD05-94-D-7026 DEFENSE FINANCE & ACCT SVC-APG BLDG 310, WING 7 ABERDEEN PROVING GROUNDS, MD 21005-5001

Sample Description

CLIENT ID: D9964
FIELD ID: S6-S-B
PICK-UP/DELIVERY ORDER: P1D8

TOTAL SOLIDS EPA 160.3
Analyst: C. BOYLE Analysis Date: 26-JUL-96 22:45 Test: G401.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	77	0.001	Percent

HYDROCARBON SCAN BY GC:FID SW846-8015A(MOD
Analyst: C. BRODERICK Analysis Date: 19-JUL-96 14:58 Instrument: GC/FID Test: O409.1.0
Prep: PURGE AND TRAP METHOD FOR ORGANIC ANALYTES SW846-5030A P239.1.0

Parameter	Result	Det. Limit	Units
GASOLINE	BDL	0.50	mg/kg
DRY WEIGHT CORRECTED RESULT	BDL	0.65	mg/kg

PURGE AND TRAP METHOD FOR ORGANIC ANALYTES SW846-5030A
Analyst: C. BRODERICK Analysis Date: 19-JUL-96 Instrument: PREP Test: P239.1.0

Parameter	Result	Det. Limit	Units
INITIAL SAMPLE WEIGHT	1.01		Grams
FINAL VOLUME	5		mL

Sample Comments

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Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	16-JUL-96	3265	A380961
	Complete	PO Number	
	30-JUL-96	W23MWP-5264-S005-	
	Printed	Sampled	
	30-JUL-96	09-JUL-96	

Report To	Bill To
RICHARD PUZNIAK CDR, U.S. ARMY ENVIRONMENTAL HYGIENE AGE BLDG E2100 ABERDEEN PROVING GROUNDS, MD 21010-5423	DAAD05-94-D-7026 DEFENSE FINANCE & ACCT SVC-APG BLDG 310, WING 7 ABERDEEN PROVING GROUNDS, MD 21005-5001

Sample Description

CLIENT ID: D9965
FIELD ID: S6-N-A
PICK-UP/DELIVERY ORDER: P1D8

TOTAL SOLIDS EPA 160.3

Analyst: C. BOYLE Analysis Date: 26-JUL-96 22:45 Test: G401.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	92	0.001	Percent

HYDROCARBON SCAN BY GC:FID SW846-8015A(MOD

Analyst: C. BRODERICK Analysis Date: 19-JUL-96 16:20 Instrument: GC/FID Test: O409.1.0
Prep: PURGE AND TRAP METHOD FOR ORGANIC ANALYTES SW846-5030A P239.1.0

Parameter	Result	Det. Limit	Units
GASOLINE	BDL	0.50	mg/kg
DRY WEIGHT CORRECTED RESULT	BDL	0.54	mg/kg

PURGE AND TRAP METHOD FOR ORGANIC ANALYTES SW846-5030A

Analyst: C. BRODERICK Analysis Date: 19-JUL-96 Instrument: PREP Test: P239.1.0

Parameter	Result	Det. Limit	Units
INITIAL SAMPLE WEIGHT	1.03		Grams
FINAL VOLUME	5		mL

Sample Comments

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Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	16-JUL-96	3265	A380962
	Complete	PO Number	
	30-JUL-96	W23MWP-5264-S005-	
	Printed	Sampled	
	30-JUL-96	09-JUL-96	

Report To	Bill To
RICHARD PUZNIAK CDR, U.S. ARMY ENVIRONMENTAL HYGIENE AGE BLDG E2100 ABERDEEN PROVING GROUNDS, MD 21010-5423	DAAD05-94-D-7026 DEFENSE FINANCE & ACCT SVC-APG BLDG 310, WING 7 ABERDEEN PROVING GROUNDS, MD 21005-5001

Sample Description

CLIENT ID: D9966
FIELD ID: S6-N-B
PICK-UP/DELIVERY ORDER: P1D8

TOTAL SOLIDS EPA 160.3

Analyst: C. BOYLE Analysis Date: 26-JUL-96 22:45 Test: G401.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	81	0.001	Percent

HYDROCARBON SCAN BY GC:FID SW846-8015A(MOD

Analyst: C. BRODERICK Analysis Date: 19-JUL-96 17:34 Instrument: GC/FID Test: 0409.1.0
Prep: PURGE AND TRAP METHOD FOR ORGANIC ANALYTES SW846-5030A P239.1.0

Parameter	Result	Det. Limit	Units
GASOLINE	BDL	0.50	mg/kg
DRY WEIGHT CORRECTED RESULT	BDL	0.62	mg/kg

PURGE AND TRAP METHOD FOR ORGANIC ANALYTES SW846-5030A

Analyst: C. BRODERICK Analysis Date: 19-JUL-96 Instrument: PREP Test: P239.1.0

Parameter	Result	Det. Limit	Units
INITIAL SAMPLE WEIGHT	1.00		Grams
FINAL VOLUME	5		mL

Sample Comments

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Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	16-JUL-96	3265	A380963
	Complete	PO Number	
	30-JUL-96	W23MWP-5264-S005-	
	Printed	Sampled	
	30-JUL-96	09-JUL-96	

Report To	Bill To
RICHARD PUZNIAK CDR, U.S. ARMY ENVIRONMENTAL HYGIENE AGE BLDG E2100 ABERDEEN PROVING GROUNDS, MD 21010-5423	DAAD05-94-D-7026 DEFENSE FINANCE & ACCT SVC-APG BLDG 310, WING 7 ABERDEEN PROVING GROUNDS, MD 21005-5001

Sample Description

CLIENT ID: D9967
FIELD ID: S7-E-A
PICK-UP/DELIVERY ORDER: P1D8

TOTAL SOLIDS EPA 160.3

Analyst: C. BOYLE Analysis Date: 26-JUL-96 22:45 Test: G401.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	92	0.001	Percent

HYDROCARBON SCAN BY GC:FID SW846-8015A(MOD

Analyst: C. BRODERICK Analysis Date: 19-JUL-96 18:16 Instrument: GC/FID Test: O409.1.0
Prep: PURGE AND TRAP METHOD FOR ORGANIC ANALYTES SW846-5030A P239.1.0

Parameter	Result	Det. Limit	Units
GASOLINE	BDL	0.50	mg/kg
DRY WEIGHT CORRECTED RESULT	BDL	0.54	mg/kg

SAMPLE WAS REANALYZED WITH NO IMPROVEMENT OF DODECANE RECOVERY.

PURGE AND TRAP METHOD FOR ORGANIC ANALYTES SW846-5030A

Analyst: C. BRODERICK Analysis Date: 19-JUL-96 Instrument: PREP Test: P239.1.0

Parameter	Result	Det. Limit	Units
INITIAL SAMPLE WEIGHT	1.01		Grams
FINAL VOLUME	5		ml

Sample Comments

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Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	16-JUL-96	3265	A380964
	Complete	PO Number	
	30-JUL-96	W23MWP-5264-S005-	
	Printed	Sampled	
	30-JUL-96	09-JUL-96	

Report To	Bill To
RICHARD PUZNIAK CDR, U.S. ARMY ENVIRONMENTAL HYGIENE AGE BLDG E2100 ABERDEEN PROVING GROUNDS, MD 21010-5423	DAAD05-94-D-7026 DEFENSE FINANCE & ACCT SVC-APG BLDG 310, WING 7 ABERDEEN PROVING GROUNDS, MD 21005-5001

Sample Description

CLIENT ID: D9968
FIELD ID: S7-E-B
PICK-UP/DELIVERY ORDER: P1D8

TOTAL SOLIDS EPA 160.3

Analyst: C. BOYLE Analysis Date: 26-JUL-96 22:45 Test: G401.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	91	0.001	Percent

HYDROCARBON SCAN BY GC:FID SW846-8015A(MOD

Analyst: C. BRODERICK Analysis Date: 19-JUL-96 18:59 Instrument: GC/FID Test: O409.1.0
Prep: PURGE AND TRAP METHOD FOR ORGANIC ANALYTES SW846-5030A P239.1.0

Parameter	Result	Det. Limit	Units
GASOLINE	BDL	0.50	mg/kg
DRY WEIGHT CORRECTED RESULT	BDL	0.55	mg/kg

SAMPLE WAS REANALYZED WITH NO IMPROVEMENT OF DODECANE RECOVERY.

PURGE AND TRAP METHOD FOR ORGANIC ANALYTES SW846-5030A

Analyst: C. BRODERICK Analysis Date: 19-JUL-96 Instrument: PREP Test: P239.1.0

Parameter	Result	Det. Limit	Units
INITIAL SAMPLE WEIGHT	1.00		Grams
FINAL VOLUME	5		mL

Sample Comments

BDL Below Detection Limit

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Approved : Brenda Lauch

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Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	16-JUL-96	3265	A380965
	Complete	PO Number	
	30-JUL-96	W23MWP-5264-S005-	
	Printed	Sampled	
	30-JUL-96	09-JUL-96	

Report To	Bill To
RICHARD PUZNIAK CDR, U.S. ARMY ENVIRONMENTAL HYGIENE AGE BLDG E2100 ABERDEEN PROVING GROUNDS, MD 21010-5423	DAAD05-94-D-7026 DEFENSE FINANCE & ACCT SVC-APG BLDG 310, WING 7 ABERDEEN PROVING GROUNDS, MD 21005-5001

Sample Description

CLIENT ID: D9969
FIELD ID: S7-W-A
PICK-UP/DELIVERY ORDER: P1D8

TOTAL SOLIDS EPA 160.3
Analyst: C. BOYLE Analysis Date: 26-JUL-96 22:45 Test: G401.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	97	0.001	Percent

HYDROCARBON SCAN BY GC:FID SW846-8015A(MOD
Analyst: C. BRODERICK Analysis Date: 19-JUL-96 19:42 Instrument: GC/FID Test: O409.1.0
Prep: PURGE AND TRAP METHOD FOR ORGANIC ANALYTES SW846-5030A P239.1.0

Parameter	Result	Det. Limit	Units
GASOLINE	BDL	0.50	mg/kg
DRY WEIGHT CORRECTED RESULT	BDL	0.52	mg/kg

PURGE AND TRAP METHOD FOR ORGANIC ANALYTES SW846-5030A
Analyst: C. BRODERICK Analysis Date: 19-JUL-96 Instrument: PREP Test: P239.1.0

Parameter	Result	Det. Limit	Units
INITIAL SAMPLE WEIGHT	1.01		Grams
FINAL VOLUME	5		mL

Sample Comments

BDL Below Detection Limit

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Approved : Brenda Rouch

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	16-JUL-96	3265	A380
	Complete	PO Number	
	30-JUL-96	W23MWP-5264-S005	
	Printed	Sampled	
	30-JUL-96	09-JUL-96	

Report To	Bill To
RICHARD PUZNIAK CDR, U.S. ARMY ENVIRONMENTAL HYGIENE AGE BLDG E2100 ABERDEEN PROVING GROUNDS, MD 21010-5423	DAAD05-94-D-7026 DEFENSE FINANCE & ACCT SVC-APG BLDG 310, WING 7 ABERDEEN PROVING GROUNDS, MD 21005-5001

Sample Description

CLIENT ID: D9970
FIELD ID: S7-W-B
PICK-UP/DELIVERY ORDER: P1D8

TOTAL SOLIDS EPA 160.3

Analyst: C. BOYLE Analysis Date: 26-JUL-96 22:45 Test: G401.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	89	0.001	Percent

HYDROCARBON SCAN BY GC:FID SW846-8015A(MOD

Analyst: C. BRODERICK Analysis Date: 22-JUL-96 17:20 Instrument: GC/FID Test: G409.1.0
Prep: PURGE AND TRAP METHOD FOR ORGANIC ANALYTES SW846-5030A P239.1.0

Parameter	Result	Det. Limit	Units
GASOLINE	BDL	0.50	mg/kg
DRY WEIGHT CORRECTED RESULT	BDL	0.56	mg/kg

PURGE AND TRAP METHOD FOR ORGANIC ANALYTES SW846-5030A

Analyst: C. BRODERICK Analysis Date: 19-JUL-96 Instrument: PREP Test: P239.1.0

Parameter	Result	Det. Limit	Units
INITIAL SAMPLE WEIGHT	1.01		Grams
FINAL VOLUME	5		mL

Sample Comments

BDL Below Detection Limit

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Approved : Brenda Lauch

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	16-JUL-96	3265	A380967
	Complete	PO Number	
	30-JUL-96	W23MWP-5264-S005-	
	Printed	Sampled	
	30-JUL-96	09-JUL-96	

Report To	Bill To
RICHARD PUZNIAK CDR, U.S. ARMY ENVIRONMENTAL HYGIENE AGE BLDG E2100 ABERDEEN PROVING GROUNDS, MD 21010-5423	DAAD05-94-D-7026 DEFENSE FINANCE & ACCT SVC-APG BLDG 310, WING 7 ABERDEEN PROVING GROUNDS, MD 21005-5001

Sample Description

CLIENT ID: D9971
FIELD ID: S8-E-A
PICK-UP/DELIVERY ORDER: P1D8

TOTAL SOLIDS EPA 160.3

Analyst: C. BOYLE Analysis Date: 26-JUL-96 22:45 Test: G401.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	94	0.001	Percent

HYDROCARBON SCAN BY GC:FID SW846-8015A(MOD

Analyst: C. BRODERICK Analysis Date: 19-JUL-96 22:15 Instrument: GC/FID Test: O409.1.0
Prep: PURGE AND TRAP METHOD FOR ORGANIC ANALYTES SW846-5030A P239.1.0

Parameter	Result	Det. Limit	Units
GASOLINE	BDL	0.50	mg/kg
DRY WEIGHT CORRECTED RESULT	BDL	0.53	mg/kg

SAMPLE WAS REANALYZED WITH NO IMPROVEMENT OF DODECANE RECOVERY.

PURGE AND TRAP METHOD FOR ORGANIC ANALYTES SW846-5030A

Analyst: C. BRODERICK Analysis Date: 19-JUL-96 Instrument: PREP Test: P239.1.0

Parameter	Result	Det. Limit	Units
INITIAL SAMPLE WEIGHT	1.00		Grams
FINAL VOLUME	5		mL

Sample Comments

BDL Below Detection Limit

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CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	16-JUL-96	3265	A380968
	Complete	PO Number	
	30-JUL-96	W23MWP-5264-S005-	
	Printed	Sampled	
	30-JUL-96	09-JUL-96	

Report To	Bill To
RICHARD PUZNIAK CDR, U.S. ARMY ENVIRONMENTAL HYGIENE AGE BLDG E2100 ABERDEEN PROVING GROUNDS, MD 21010-5423	DAAD05-94-D-7026 DEFENSE FINANCE & ACCT SVC-APG BLDG 310, WING 7 ABERDEEN PROVING GROUNDS, MD 21005-5001

Sample Description

CLIENT ID: D9972
FIELD ID: S8-E-B
PICK-UP/DELIVERY ORDER: P1D8

TOTAL SOLIDS EPA 160.3

Analyst: C. BOYLE Analysis Date: 26-JUL-96 22:45 Test: G401.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	85	0.001	Percent

HYDROCARBON SCAN BY GC:FID SW846-8015A(MOD

Analyst: C. BRODERICK Analysis Date: 19-JUL-96 22:57 Instrument: GC/FID Test: O409.1.0
Prep: PURGE AND TRAP METHOD FOR ORGANIC ANALYTES SW846-5030A P239.1.0

Parameter	Result	Det. Limit	Units
GASOLINE	BDL	0.50	mg/kg
DRY WEIGHT CORRECTED RESULT	BDL	0.59	mg/kg

SAMPLE WAS REANALYZED WITH NO IMPROVEMENT OF DODECANE RECOVERY.

PURGE AND TRAP METHOD FOR ORGANIC ANALYTES SW846-5030A

Analyst: C. BRODERICK Analysis Date: 19-JUL-96 Instrument: PREP Test: P239.1.0

Parameter	Result	Det. Limit	Units
INITIAL SAMPLE WEIGHT			Grams
FINAL VOLUME			mL

Sample Comments

BDL Below Detection Limit

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CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	16-JUL-96	3265	A380969
	Complete: 30-JUL-96	PO Number: W23MWP-5264-S005-	
	Printed: 30-JUL-96	Sampled: 09-JUL-96	

Report To	Bill To
RICHARD PUZNIAK CDR, U.S. ARMY ENVIRONMENTAL HYGIENE AGE BLDG E2100 ABERDEEN PROVING GROUNDS, MD 21010-5423	DAAD05-94-D-7026 DEFENSE FINANCE & ACCT SVC-APG BLDG 310, WING 7 ABERDEEN PROVING GROUNDS, MD 21005-5001

Sample Description

CLIENT ID: D9973
FIELD ID: S8-W-A
PICK-UP/DELIVERY ORDER: P1D8

TOTAL SOLIDS EPA 160.3
Analyst: C. BOYLE Analysis Date: 26-JUL-96 22:45 Test: G401.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	96	0.001	Percent

HYDROCARBON SCAN BY GC:FID SW846-8015A(MOD
Analyst: C. BRODERICK Analysis Date: 19-JUL-96 23:38 Instrument: GC/FID Test: O409.1.0
Prep: PURGE AND TRAP METHOD FOR ORGANIC ANALYTES SW846-5030A P239.1.0

Parameter	Result	Det. Limit	Units
GASOLINE	BDL	0.50	mg/kg
DRY WEIGHT CORRECTED RESULT	BDL	0.52	mg/kg

SAMPLE WAS REANALYZED WITH NO IMPROVEMENT OF DODECANE RECOVERY.

PURGE AND TRAP METHOD FOR ORGANIC ANALYTES SW846-5030A
Analyst: C. BRODERICK Analysis Date: 19-JUL-96 Instrument: PREP Test: P239.1.0

Parameter	Result	Det. Limit	Units
INITIAL SAMPLE WEIGHT	1.01		Grams
FINAL VOLUME	5		mL

Sample Comments

BDL Below Detection Limit

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CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	16-JUL-96	3265	A380971
	Complete: 30-JUL-96	PO Number: W23MWP-5264-S005-	
	Printed: 30-JUL-96	Sampled: 09-JUL-96	

Report To	Bill To
RICHARD PUZNIAK CDR, U.S. ARMY ENVIRONMENTAL HYGIENE AGE BLDG E2100 ABERDEEN PROVING GROUNDS, MD 21010-5423	DAAD05-94-D-7026 DEFENSE FINANCE & ACCT SVC-APG BLDG 310, WING 7 ABERDEEN PROVING GROUNDS, MD 21005-5001

Sample Description

CLIENT ID: D9974
FIELD ID: SB-W-B
PICK-UP/DELIVERY ORDER: P1D8

TOTAL SOLIDS EPA 160.3

Analyst: C. BOYLE Analysis Date: 26-JUL-96 22:45 Test: G401.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	87	0.001	Percent

HYDROCARBON SCAN BY GC:FID SW846-8015A(MOD

Analyst: C. BRODERICK Analysis Date: 20-JUL-96 01:03 Instrument: GC/FID Test: 0409.1.0
Prep: PURGE AND TRAP METHOD FOR ORGANIC ANALYTES SW846-5030A P239.1.0

Parameter	Result	Det. Limit	Units
GASOLINE	BDL	0.50	mg/kg
DRY WEIGHT CORRECTED RESULT	BDL	0.57	mg/kg

SAMPLE WAS REANALYZED WITH NO IMPROVEMENT OF DODECANE RECOVERY.

PURGE AND TRAP METHOD FOR ORGANIC ANALYTES SW846-5030A

Analyst: C. BRODERICK Analysis Date: 19-JUL-96 Instrument: PREP Test: P239.1.0

Parameter	Result	Det. Limit	Units
INITIAL SAMPLE WEIGHT	1.01		Grams
FINAL VOLUME	5		mL

Sample Comments

BDL Below Detection Limit

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CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	16-JUL-96	3265	A380970
	Complete	PO Number	
	30-JUL-96	W23MWP-5264-S005-	
	Printed	Sampled	
	30-JUL-96	09-JUL-96	

Report To	Bill To
RICHARD PUZNIAK CDR, U.S. ARMY ENVIRONMENTAL HYGIENE AGE BLDG E2100 ABERDEEN PROVING GROUNDS, MD 21010-5423	DAAD05-94-D-7026 DEFENSE FINANCE & ACCT SVC-APG BLDG 310, WING 7 ABERDEEN PROVING GROUNDS, MD 21005-5001

Sample Description

CLIENT ID: D9976
FIELD ID: SD-2
PICK-UP/DELIVERY ORDER: P1D8

TOTAL SOLIDS EPA 160.3

Analyst: C. BOYLE Analysis Date: 26-JUL-96 22:45 Test: G401.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	87	0.001	Percent

HYDROCARBON SCAN BY GC:FID SW846-8015A(MOD

Analyst: C. BRODERICK Analysis Date: 20-JUL-96 00:21 Instrument: GC/FID Test: O409.1.0
Prep: PURGE AND TRAP METHOD FOR ORGANIC ANALYTES SW846-5030A P239.1.0

Parameter	Result	Det. Limit	Units
GASOLINE	BDL	0.50	mg/kg
DRY WEIGHT CORRECTED RESULT	BDL	0.57	mg/kg

SAMPLE WAS REANALYZED WITH NO IMPROVEMENT OF DODECANE RECOVERY.

PURGE AND TRAP METHOD FOR ORGANIC ANALYTES SW846-5030A

Analyst: C. BRODERICK Analysis Date: 19-JUL-96 Instrument: PREP Test: P239.1.0

Parameter	Result	Det. Limit	Units
INITIAL SAMPLE WEIGHT	1.00		Grams
FINAL VOLUME	5		mL

Sample Comments

BDL Below Detection Limit

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CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	16-JUL-96	3265	A380975
	Complete	PO Number	
	31-JUL-96	W23MWP-5264-S005-	
	Printed	Sampled	
	31-JUL-96	10-JUL-96	

Report To	Bill To
RICHARD PUZNIAK CDR, U.S. ARMY ENVIRONMENTAL HYGIENE AGE BLDG E2100 ABERDEEN PROVING GROUNDS, MD 21010-5423	DAAD05-94-D-7026 DEFENSE FINANCE & ACCT SVC-APG BLDG 310, WING 7 ABERDEEN PROVING GROUNDS, MD 21005-5001

Sample Description

CLIENT ID: D9928
FIELD ID: SW-1
PICK UP/DELIVERY NO.: P1D8

GOG SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B

Analyst: B. BELL Analysis Date: 17-JUL-96 09:00 Instrument: PREP Test: P233.2.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	1000		mL
FINAL VOLUME	1		mL

HYDROCARBON SCAN BY GC:FID SW846-8015A(MOD

Analyst: E. BINGHAM Analysis Date: 19-JUL-96 02:11 Instrument: GC/FID Test: O409.1.0
Prep: GOG SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B P233.2.0

Parameter	Result	Det. Limit	Units
DIESEL FUEL	0.022	0.01	mg/L
SURROGATE RECOVERY			
1-CHLORO-2-FLUOROBENZENE	118.3		% Rec

Sample Comments

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CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	16-JUL-96	3265	A380980
	Complete	PO Number	
	31-JUL-96	W23MWP-5264-S005-	
	Printed	Sampled	
	31-JUL-96	10-JUL-96	

Report To	Bill To
RICHARD PUZNIAK CDR, U.S. ARMY ENVIRONMENTAL HYGIENE AGE BLDG E2100 ABERDEEN PROVING GROUNDS, MD 21010-5423	DAAD05-94-D-7026 DEFENSE FINANCE & ACCT SVC-APG BLDG 310, WING 7 ABERDEEN PROVING GROUNDS, MD 21005-5001

Sample Description

CLIENT ID: D9934
FIELD ID: SW-3
PICK UP/DELIVERY NO.: P1D8

GOG SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B

Analyst: B. BELL Analysis Date: 17-JUL-96 09:00 Instrument: PREP Test: P233.2.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	990		mL
FINAL VOLUME	1		mL

HYDROCARBON SCAN BY GC:FID SW846-8015A(MOD

Analyst: E. BINGHAM Analysis Date: 19-JUL-96 12:30 Instrument: GC/FID Test: 0409.1.0
Prep: GOG SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B P233.2.0

Parameter	Result	Det. Limit	Units
DIESEL FUEL	0.014	0.01	mg/L
SURROGATE RECOVERY			
1-CHLORO-2-FLUOROBENZENE	110.6		% Rec

Sample Comments

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CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	16-JUL-96	3265	A380981
	Complete	PO Number	
	31-JUL-96	W23MWP-5264-S005-	
	Printed	Sampled	
	31-JUL-96	10-JUL-96	

Report To	Bill To
RICHARD PUZNIAK CDR, U.S. ARMY ENVIRONMENTAL HYGIENE AGE BLDG E2100 ABERDEEN PROVING GROUNDS, MD 21010-5423	DAAD05-94-D-7026 DEFENSE FINANCE & ACCT SVC-APG BLDG 310, WING 7 ABERDEEN PROVING GROUNDS, MD 21005-5001

Sample Description

CLIENT ID: D9935
FIELD ID: SW-4
PICK UP/DELIVERY NO.: P1D8

GOG SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B
Analyst: B. BELL Analysis Date: 17-JUL-96 09:00 Instrument: PREP Test: P233.2.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	980		mL
FINAL VOLUME	1		mL

HYDROCARBON SCAN BY GC:FID SW846-8015A(MOD
Analyst: E. BINGHAM Analysis Date: 19-JUL-96 13:09 Instrument: GC/FID Test: 0409.1.0
Prep: GOG SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B P233.2.0

Parameter	Result	Det. Limit	Units
DIESEL FUEL	0.024	0.01	mg/L
SURROGATE RECOVERY			
1-CHLORO-2-FLUOROBENZENE	119.6		% Rec

Sample Comments

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CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	16-JUL-96	3265	A380973
	Complete	PO Number	
	31-JUL-96	W23MWP-5264-S005-	
	Printed	Sampled	
	31-JUL-96	09-JUL-96	

Report To	Bill To
RICHARD PUZNIAK CDR, U.S. ARMY ENVIRONMENTAL HYGIENE AGE BLDG E2100 ABERDEEN PROVING GROUNDS, MD 21010-5423	DAAD05-94-D-7026 DEFENSE FINANCE & ACCT SVC-APG BLDG 310, WING 7 ABERDEEN PROVING GROUNDS, MD 21005-5001

Sample Description

CLIENT ID: D9926
FIELD ID: SW-5
PICK UP/DELIVERY NO.: P1D8

GOG SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B
Analyst: B. BELL Analysis Date: 17-JUL-96 09:00 Instrument: PREP Test: PZ33.2.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	1000		mL
FINAL VOLUME	1		mL

HYDROCARBON SCAN BY GC:FID SW846-8015A(MOD
Analyst: E. BINGHAM Analysis Date: 19-JUL-96 00:51 Instrument: GC/FID Test: C4D9.1.0

Parameter	Result	Det. Limit	Units
DIESEL FUEL	0.082	0.01	mg/L
SURROGATE RECOVERY			
1-CHLORO-2-FLUOROBENZENE	108.7		% Rec

Sample Comments

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CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	16-JUL-96	3265	A380976
	Complete: 31-JUL-96	PO Number: W23MWP-5264-S005-	
	Printed: 31-JUL-96	Sampled: 09-JUL-96	

Report To	Bill To
RICHARD PUZNIAK CDR, U.S. ARMY ENVIRONMENTAL HYGIENE AGE BLDG E2100 ABERDEEN PROVING GROUNDS, MD 21010-5423	DAAD05-94-D-7026 DEFENSE FINANCE & ACCT SVC-APG BLDG 310, WING 7 ABERDEEN PROVING GROUNDS, MD 21005-5001

Sample Description

CLIENT ID: D9930
FIELD ID: SW-6
PICK UP/DELIVERY NO.: P1D8

GOG SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B
Analyst: B. BELL Analysis Date: 17-JUL-96 09:00 Instrument: PREP Test: P233.2.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	1000		mL
FINAL VOLUME	1		mL

HYDROCARBON SCAN BY GC:FID SW846-8015A(MOD
Analyst: E. BINGHAM Analysis Date: 19-JUL-96 07:50 Instrument: GC/FID Test: 0409.1.D
Prep: GOG SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B P233.2.0

Parameter	Result	Det. Limit	Units
DIESEL FUEL	0.024	0.01	mg/L
SURROGATE RECOVERY			
1-CHLORO-2-FLUOROBENZENE	116.3		% Rec

Sample Comments

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CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	16-JUL-96	3265	A380977
	Complete	PO Number	
	31-JUL-96	W23MWP-5264-S005-	
	Printed	Sampled	
	31-JUL-96	09-JUL-96	

Report To	Bill To
RICHARD PUZNIAK CDR, U.S. ARMY ENVIRONMENTAL HYGIENE AGE BLDG E2100 ABERDEEN PROVING GROUNDS, MD 21010-5423	DAAD05-94-D-7026 DEFENSE FINANCE & ACCT SVC-APG BLDG 310, WING 7 ABERDEEN PROVING GROUNDS, MD 21005-5001

Sample Description

CLIENT ID: D9931
FIELD ID: SW-7
PICK UP/DELIVERY NO.: P1D8

GOG SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B
Analyst: B. BELL Analysis Date: 17-JUL-96 09:00 Instrument: PREP Test: P233.2.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	1000		mL
FINAL VOLUME	1		mL

HYDROCARBON SCAN BY GC:FID SW846-8015A(MOD
Analyst: E. BINGHAM Analysis Date: 19-JUL-96 09:49 Instrument: GC/FID Test: O4D9.1.0
Prep: GOG SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B P233.2.0

Parameter	Result	Det. Limit	Units
DIESEL FUEL	0.010	0.01	mg/L
SURROGATE RECOVERY			
1-CHLORO-2-FLUOROBENZENE	60.6		% Rec

Sample Comments

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CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	16-JUL-96	3265	A380978
	Complete	PO Number	
	31-JUL-96	W23MWP-5264-S005-	
	Printed	Sampled	
	31-JUL-96	09-JUL-96	

Report To	Bill To
RICHARD PUZNIAK CDR, U.S. ARMY ENVIRONMENTAL HYGIENE AGE BLDG E2100 ABERDEEN PROVING GROUNDS, MD 21010-5423	DAAD05-94-D-7026 DEFENSE FINANCE & ACCT SVC-APG BLDG 310, WING 7 ABERDEEN PROVING GROUNDS, MD 21005-5001

Sample Description

CLIENT ID: D9932
FIELD ID: SW-8
PICK UP/DELIVERY NO.: P1D8

GOG SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B

Analyst: B. BELL Analysis Date: 17-JUL-96 09:00 Instrument: PREP Test: P233.2.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	990		mL
FINAL VOLUME	1		mL

HYDROCARBON SCAN BY GC:FID SW846-8015A(MOD

Analyst: E. BINGHAM Analysis Date: 19-JUL-96 10:30 Instrument: GC/FID Test: 0409.1.0
Prep: GOG SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B P233.2.0

Parameter	Result	Det. Limit	Units
DIESEL FUEL	0.012	0.01	mg/L
SURROGATE RECOVERY			
1-CHLORO-2-FLUOROBENZENE	122.2		% Rec

Sample Comments

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CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	16-JUL-96	3265	A380979
	Complete	PO Number	
	31-JUL-96	W23MWP-5264-S005-	
	Printed	Sampled	
	31-JUL-96	09-JUL-96	

Report To	Bill To
RICHARD PUZNIAK CDR, U.S. ARMY ENVIRONMENTAL HYGIENE AGE BLDG E2100 ABERDEEN PROVING GROUNDS, MD 21010-5423	DAAD05-94-D-7026 DEFENSE FINANCE & ACCT SVC-APG BLDG 310, WING 7 ABERDEEN PROVING GROUNDS, MD 21005-5001

Sample Description

CLIENT ID: D9933
FIELD ID: SW-9
PICK UP/DELIVERY NO.: P1D8

GOG SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B
Analyst: B. BELL Analysis Date: 17-JUL-96 09:00 Instrument: PREP Test: P233.2.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	990		mL
FINAL VOLUME	1		mL

HYDROCARBON SCAN BY GC:FID SW846-8015A(MOD
Analyst: E. BINGHAM Analysis Date: 19-JUL-96 11:50 Instrument: GC/FID Test: O409.1.0
Prep: GOG SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B P233.2.0

Parameter	Result	Det. Limit	Units
DIESEL FUEL	0.033	0.01	mg/L
SURROGATE RECOVERY			
1-CHLORO-2-FLUOROBENZENE	95.2		% Rec

Sample Comments

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CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	16-JUL-96	3265	A380974
	Complete	PO Number	
	31-JUL-96	W23MWP-5264-S005-	
	Printed	Sampled	
	31-JUL-96	09-JUL-96	

Report To	Bill To
RICHARD PUZNIAK CDR, U.S. ARMY ENVIRONMENTAL HYGIENE AGE BLDG E2100 ABERDEEN PROVING GROUNDS, MD 21010-5423	DAAD05-94-D-7026 DEFENSE FINANCE & ACCT SVC-APG BLDG 310, WING 7 ABERDEEN PROVING GROUNDS, MD 21005-5001

Sample Description

CLIENT ID: D9927
FIELD ID: SW-D
PICK UP/DELIVERY NO.: P1D8

GOG SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B

Analyst: B. BELL Analysis Date: 17-JUL-96 09:00 Instrument: PREP Test: P233.2.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	970		mL
FINAL VOLUME	1		mL

HYDROCARBON SCAN BY GC:FID SW846-8015A(MOD

Analyst: E. BINGHAM Analysis Date: 19-JUL-96 01:31 Instrument: GC/FID Test: 0409.1.0
Prep: GOG SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B P233.2.0

Parameter	Result	Det. Limit	Units
DIESEL FUEL	0.049	0.01	mg/L
SURROGATE RECOVERY			
1-CHLORO-2-FLUOROBENZENE	100.0		% Rec

Sample Comments

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Approved : Brenda Lausch

Page 1 (last page)

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, INC. COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	16-JUL-96	3265	A380972
	Complete	PO Number	
	31-JUL-96	W23MWP-5264-S005-	
	Printed	Sampled	
	31-JUL-96	10-JUL-96	

Report To	Bill To
RICHARD PUZNIAK CDR, U.S. ARMY ENVIRONMENTAL HYGIENE AGE BLDG E2100 ABERDEEN PROVING GROUNDS, MD 21010-5423	DAAD05-94-D-7026 DEFENSE FINANCE & ACCT SVC-APG BLDG 310, WING 7 ABERDEEN PROVING GROUNDS, MD 21005-5001

Sample Description

CLIENT ID: D9929
FIELD ID: SL-E
PICK UP/DELIVERY NO.: P1D8

PURGE AND TRAP METHOD FOR ORGANIC ANALYTES SW846-5030A

Analyst: C. BRODERICK Analysis Date: 19-JUL-96 Instrument: PREP Test: P239.1.0

HYDROCARBON SCAN BY GC:FID SW846-8015A(MOD

Analyst: C. BRODERICK Analysis Date: 22-JUL-96 13:12 Instrument: GC/FID Test: 0409.1.0
Prep: PURGE AND TRAP METHOD FOR ORGANIC ANALYTES SW846-5030A P239.1.0

Parameter	Result	Det. Limit	Units
GASOLINE	BDL	0.10	mg/L

Sample Comments

BDL Below Detection Limit

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Approved : Brenda Rouch

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REPORT OF ANALYSIS

Report No. 96-07-316 Report Date: July 29, 1996

Report To: USACHPPM Page: 1 — of 10

Sample I.D. Submitted Soil: D9937, SS-1, Bradley Field AASF, 38-EH-2651 dated 7/10/96

	Test Results	Detection Limits	Method	Analyst	Date Test Completed
Antimony (Sb)	ND	0.3	EPA 7041	PDB	07/22/96
Arsenic (As)	0.9	0.1	EPA 7060A	PDB	07/25/96
Barium (Ba)	14	1	EPA 6010A	MMM	07/20/96
Beryllium (Be)	ND	0.6	EPA 6010A	MMM	07/20/96
Cadmium (Cd)	3.2	0.6	EPA 6010A	MMM	07/20/96
Chromium (Cr)	23	1	EPA 6010A	MMM	07/20/96
Lead (Pb)	130	0.1	EPA 7421	PDB	07/19/96
Mercury (Hg)	ND	0.06	EPA 7471	CJK	07/17/96
Nickel (Ni)	38	3	EPA 6010A	MMM	07/20/96
Selenium (Se)	0.6	0.3	EPA 7740	PDB	07/23/96
Silver (Ag)	ND	0.6	EPA 6010A	MMM	07/20/96
Thallium (Tl)	ND	13	EPA 7841	PDB	07/23/96
% Solids	78.4	0.1	CLP Protocol	PRG	07/18/96
Vanadium (V)	21	3	EPA 6010A	MMM	07/20/96
Zinc (Zn)	60	0.6	EPA 6010A	MMM	07/20/96

Notes

(1) Results expressed as mg/kg (ppm) on a dry weight basis.

Thomas A. McVicker
QA/QC Officer

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REPORT OF ANALYSIS

Report No. 96-07-316-R Report Date: August 22, 1996

Report To: USACHPPM Page: 2 — of 10

Sample I.D. Submitted Soil: D9938, SS-2, Bradley Field AASF, 38-EH-2651 dated 7/10/96

	Test Results	Detection Limits	Method	Analyst	Date Test Completed
Antimony (Sb)	0.7	0.2	EPA 7041	PDB	07/22/96
Arsenic (As)	6.1	0.1	EPA 7060A	PDB	07/25/96
Barium (Ba)	110	1	EPA 6010A	MMM	07/20/96
Beryllium (Be)	0.8	0.6	EPA 6010A	MMM	07/20/96
Cadmium (Cd)	3.8	0.6	EPA 6010A	MMM	07/20/96
Chromium (Cr)	26	1	EPA 6010A	MMM	07/20/96
Lead (Pb)	97	0.1	EPA 7421	PDB	07/22/96
Mercury (Hg)	ND	0.1	EPA 7471	CJK	07/17/96
Nickel (Ni)	19	3	EPA 6010A	MMM	07/20/96
Selenium (Se)	0.6	0.3	EPA 7740	PDB	07/23/96
Silver (Ag)	ND	0.6	EPA 6010A	MMM	07/20/96
Thallium (Tl)	ND	12	EPA 7841	PDB	07/23/96
% Solids	80.3	0.1	CLP Protocol	PRG	07/18/96
Vanadium (V)	48	3	EPA 6010A	MMM	07/20/96
Zinc (Zn)	140	0.6	EPA 6010A	MMM	07/20/96

Notes

(1) Results expressed as mg/kg (ppm) on a dry weight basis.
(2) Report revised to correct Field ID number.

Thomas A. McVicker
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REPORT OF ANALYSIS

Report No. 96-07-316-R Report Date: August 22, 1996

Report To: USACHPPM Page: 3 of 10

Sample I.D. Submitted Soil: D9939, SS-3, Bradley Field AASF, 38-EH-2651 dated 7/10/96

	Test Results	Detection Limits	Method	Analyst	Date Test Completed
Antimony (Sb)	2.9	0.7	EPA 7041	PDB	07/22/96
Arsenic (As)	6.3	0.4	EPA 7060A	PDB	07/25/96
Barium (Ba)	100	4	EPA 6010A	MMM	07/20/96
Beryllium (Be)	ND	1.8	EPA 6010A	MMM	07/20/96
Cadmium (Cd)	460	1.8	EPA 6010A	MMM	07/20/96
Chromium (Cr)	460	4	EPA 6010A	MMM	07/20/96
Lead (Pb)	540	0.2	EPA 7421	PDB	07/19/96
Mercury (Hg)	0.8	0.3	EPA 7471	CJK	07/17/96
Nickel (Ni)	44	9	EPA 6010A	MMM	07/20/96
Selenium (Se)	2.5	0.9	EPA 7740	PDB	07/23/96
Silver (Ag)	ND	1.8	EPA 6010A	MMM	07/20/96
Thallium (Tl)	ND	35	EPA 7841	PDB	07/23/96
% Solids	28.3	0.1	CLP Protocol	PRG	07/18/96
Vanadium (V)	190	9	EPA 6010A	MMM	07/20/96
Zinc (Zn)	540	2	EPA 6010A	MMM	07/20/96

Notes

(1) Results expressed as mg/kg (ppm) on a dry weight basis.
(2) Report revised to correct Field ID number.

Thomas A. McVicker
QA/QC Officer

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Report No. 96-07-316-R Report Date: August 22, 1996

Report To: USACHPPM Page: 4 of 10

Sample I.D. Submitted Soil: D9940, SS-5, Bradley Field AASF, 38-EH-2651 dated 7/09/96

	Test Results	Detection Limits	Method	Analyst	Date Test Completed
Antimony (Sb)	0.3	0.3	EPA 7041	PDB	07/22/96
Arsenic (As)	1.9	0.2	EPA 7060A	PDB	07/25/96
Barium (Ba)	86	2	EPA 6010A	MMM	07/20/96
Beryllium (Be)	ND	0.8	EPA 6010A	MMM	07/20/96
Cadmium (Cd)	6.4	0.8	EPA 6010A	MMM	07/20/96
Chromium (Cr)	17	2	EPA 6010A	MMM	07/20/96
Lead (Pb)	18	0.1	EPA 7421	PDB	07/19/96
Mercury (Hg)	ND	0.08	EPA 7471	CJK	07/17/96
Nickel (Ni)	7.0	3.8	EPA 6010A	MMM	07/20/96
Selenium (Se)	0.6	0.4	EPA 7740	PDB	07/23/96
Silver (Ag)	ND	0.8	EPA 6010A	MMM	07/20/96
Thallium (Tl)	ND	15	EPA 7841	PDB	07/23/96
% Solids	65.9	0.1	CLP Protocol	PRG	07/18/96
Vanadium (V)	19	4	EPA 6010A	MMM	07/20/96
Zinc (Zn)	120	1	EPA 6010A	MMM	07/20/96

Notes

(1) Results expressed as mg/kg (ppm) on a dry weight basis.
(2) Report revised to correct Field ID number.

Thomas A. McVicker
QA/QC Officer

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REPORT OF ANALYSIS

Report No. 96-07-316-R Report Date: August 22, 1996

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Sample I.D. Submitted Soil: D9941, SS-D, Bradley Field AASF, 38-EH-2651 dated 7/9/96

	Test Results	Detection Limits	Method	Analyst	Date Test Completed
Antimony (Sb)	ND	0.3	EPA 7041	PDB	07/22/96
Arsenic (As)	1.1	0.1	EPA 7060A	PDB	07/25/96
Barium (Ba)	43	1	EPA 6010A	MMM	07/20/96
Beryllium (Be)	ND	0.6	EPA 6010A	MMM	07/20/96
Cadmium (Cd)	3.1	0.6	EPA 6010A	MMM	07/20/96
Chromium (Cr)	9	1	EPA 6010A	MMM	07/20/96
Lead (Pb)	9.1	0.1	EPA 7421	PDB	07/22/96
Mercury (Hg)	ND	0.1	EPA 7471	CJK	07/17/96
Nickel (Ni)	5.6	3.2	EPA 6010A	MMM	07/20/96
Selenium (Se)	0.3	0.3	EPA 7740	PDB	07/23/96
Silver (Ag)	ND	0.6	EPA 6010A	MMM	07/20/96
Thallium (Tl)	ND	13	EPA 7841	PDB	07/23/96
% Solids	78.4	0.1	CLP Protocol	PRG	07/18/96
Vanadium (V)	17	3	EPA 6010A	MMM	07/20/96
Zinc (Zn)	66	0.6	EPA 6010A	MMM	07/20/96

Notes

(1) Results expressed as mg/kg (ppm) on a dry weight basis.
(2) Report revised to correct Field ID number.

Thomas A. McVicker
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REPORT OF ANALYSIS

Report No. 96-07-316-R Report Date: August 22, 1996

Report To: USACHPPM Page: 6 — of 10

Sample I.D. Submitted Soil: D9942, SS-6, Bradley Field AASF, 38-EH-2651 dated 7/9/96

	Test Results	Detection Limits	Method	Analyst	Date Test Completed
Antimony (Sb)	ND	0.3	EPA 7041	PDB	07/22/96
Arsenic (As)	3.9	0.2	EPA 7060A	PDB	07/25/96
Barium (Ba)	210	2	EPA 6010A	MMM	07/20/96
Beryllium (Be)	1.4	0.8	EPA 6010A	MMM	07/20/96
Cadmium (Cd)	ND	0.8	EPA 6010A	MMM	07/20/96
Chromium (Cr)	44	2	EPA 6010A	MMM	07/20/96
Lead (Pb)	27	0.1	EPA 7421	PDB	07/22/96
Mercury (Hg)	ND	0.2	EPA 7471	CJK	07/17/96
Nickel (Ni)	32	4	EPA 6010A	MMM	07/20/96
Selenium (Se)	0.5	0.4	EPA 7740	PDB	07/23/96
Silver (Ag)	2.2	0.8	EPA 6010A	MMM	07/20/96
Thallium (Tl)	ND	16	EPA 7841	PDB	07/23/96
% Solids	61.2	0.1	CLP Protocol	PRG	07/18/96
Vanadium (V)	72	4	EPA 6010A	MMM	07/20/96
Zinc (Zn)	120	1	EPA 6010A	MMM	07/20/96

Notes

(1) Results expressed as mg/kg (ppm) on a dry weight basis.
(2) Report revised to correct Field ID number.

Thomas A. McVicker
QA/QC Officer

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REPORT OF ANALYSIS

Report No. 96-07-316-R Report Date: August 22, 1996

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Sample I.D. Submitted Soil: D9943, SS-7, Bradley Field AASF, 38-EH-2651 dated 7/9/96

	Test Results	Detection Limits	Method	Analyst	Date Test Completed
Antimony (Sb)	ND	0.8	EPA 7041	PDB	07/22/96
Arsenic (As)	7.4	0.4	EPA 7060A	PDB	07/25/96
Barium (Ba)	260	4	EPA 6010A	MMM	07/20/96
Beryllium (Be)	ND	2	EPA 6010A	MMM	07/20/96
Cadmium (Cd)	5.5	2.1	EPA 6010A	MMM	07/20/96
Chromium (Cr)	52	4	EPA 6010A	MMM	07/20/96
Lead (Pb)	80	0.2	EPA 7421	PDB	07/22/96
Mercury (Hg)	ND	0.4	EPA 7471	CJK	07/17/96
Nickel (Ni)	34	10	EPA 6010A	MMM	07/20/96
Selenium (Se)	1.3	1.0	EPA 7740	PDB	07/23/96
Silver (Ag)	ND	2	EPA 6010A	MMM	07/20/96
Thallium (Tl)	ND	41	EPA 7841	PDB	07/23/96
% Solids	24.3	0.1	CLP Protocol	PRG	07/18/96
Vanadium (V)	95	10	EPA 6010A	MMM	07/20/96
Zinc (Zn)	740	2	EPA 6010A	MMM	07/20/96

Notes

(1) Results expressed as mg/kg (ppm) on a dry weight basis.
(2) Report revised to correct Field ID number.

Thomas A. McVicker
QA/QC Officer

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REPORT OF ANALYSIS

Report No. 96-07-316-R Report Date: August 22, 1996

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Sample I.D. Submitted Soil: D9944, SS-8, Bradley Field AASF, 38-EH-2651 dated 7/9/96

	Test Results	Detection Limits	Method	Analyst	Date Test Completed
Antimony (Sb)	ND	0.3	EPA 7041	PDB	07/22/96
Arsenic (As)	5.3	0.2	EPA 7060A	PDB	07/25/96
Barium (Ba)	180	2	EPA 6010A	MMM	07/20/96
Beryllium (Be)	ND	0.8	EPA 6010A	MMM	07/20/96
Cadmium (Cd)	3.3	0.8	EPA 6010A	MMM	07/20/96
Chromium (Cr)	35	2	EPA 6010A	MMM	07/20/96
Lead (Pb)	120	0.1	EPA 7421	PDB	07/19/96
Mercury (Hg)	ND	0.2	EPA 7471	CJK	07/17/96
Nickel (Ni)	9.1	4.0	EPA 6010A	MMM	07/20/96
Selenium (Se)	0.8	0.4	EPA 7740	PDB	07/23/96
Silver (Ag)	32	0.8	EPA 6010A	MMM	07/20/96
Thallium (Tl)	ND	16	EPA 7841	PDB	07/23/96
% Solids	62.4	0.1	CLP Protocol	PRG	07/18/96
Vanadium (V)	37	4	EPA 6010A	MMM	07/20/96
Zinc (Zn)	88	1	EPA 6010A	MMM	07/20/96

Notes

(1) Results expressed as mg/kg (ppm) on a dry weight basis.
(2) Report revised to correct Field ID number.

Thomas A. McVicker
QA/QC Officer

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REPORT OF ANALYSIS

Report No. 96-07-316-R Report Date: August 22, 1996

Report To: USACHPPM Page: 9 of 10

Sample I.D. Submitted Soil: D9945, SS-9, Bradley Field AASF, 38-EH-2651 dated 7/9/96

	Test Results	Detection Limits	Method	Analyst	Date Test Completed
Antimony (Sb)	ND	0.9	EPA 7041	PDB	07/22/96
Arsenic (As)	11	0.4	EPA 7060A	PDB	07/25/96
Barium (Ba)	240	4	EPA 6010A	MMM	07/20/96
Beryllium (Be)	ND	2.2	EPA 6010A	MMM	07/20/96
Cadmium (Cd)	99	2	EPA 6010A	MMM	07/20/96
Chromium (Cr)	50	4	EPA 6010A	MMM	07/20/96
Lead (Pb)	140	0.2	EPA 7421	PDB	07/19/96
Mercury (Hg)	0.4	0.4	EPA 7471	CJK	07/17/96
Nickel (Ni)	30	11	EPA 6010A	MMM	07/20/96
Selenium (Se)	2.9	1.1	EPA 7740	PDB	07/23/96
Silver (Ag)	6.0	2.2	EPA 6010A	MMM	07/20/96
Thallium (Tl)	ND	44	EPA 7841	PDB	07/23/96
% Solids	22.6	0.1	CLP Protocol	PRG	07/18/96
Vanadium (V)	94	11	EPA 6010A	MMM	07/20/96
Zinc (Zn)	580	2	EPA 6010A	MMM	07/20/96

Notes

(1) Results expressed as mg/kg (ppm) on a dry weight basis.
(2) Report revised to correct Field ID number.

Thomas A. McVicker
QA/QC Officer

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REPORT OF ANALYSIS

Report No. 96-07-316-R

Report Date: August 22, 1996

Report To: USACHPPM

Page: 10 of 10

Sample I.D. Submitted Soil: D9946, WS-1, Bradley Field AASF, 38-EH-2651 dated 7/10/96

	Test Results	Detection Limits	Method	Analyst	Date Test Completed
Antimony (Sb)	ND	0.4	EPA 7041	PDB	07/22/96
Arsenic (As)	7.6	0.2	EPA 7060A	PDB	07/25/96
Barium (Ba)	340	2	EPA 6010A	MMM	07/20/96
Beryllium (Be)	ND	0.9	EPA 6010A	MMM	07/20/96
Cadmium (Cd)	3.1	0.9	EPA 6010A	MMM	07/20/96
Chromium (Cr)	11	2	EPA 6010A	MMM	07/20/96
Lead (Pb)	27	0.1	EPA 7421	PDB	07/22/96
Mercury (Hg)	ND	0.2	EPA 7471	CJK	07/17/96
Nickel (Ni)	4.8	4.6	EPA 6010A	MMM	07/20/96
Selenium (Se)	0.8	0.5	EPA 7740	PDB	07/23/96
Silver (Ag)	8.0	0.9	EPA 6010A	MMM	07/20/96
Thallium (Tl)	ND	19	EPA 7841	PDB	07/23/96
% Solids	53.9	0.1	CLP Protocol	PRG	07/18/96
Vanadium (V)	23	5	EPA 6010A	MMM	07/20/96
Zinc (Zn)	99	2	EPA 6010A	MMM	07/20/96

Notes

(1) Results expressed as mg/kg (ppm) on a dry weight basis.
(2) Report revised to correct Field ID number.

Thomas A. McVicker
QA/QC Officer

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REPORT OF ANALYSIS

Report No. 96-07-481 Report Date: August 07, 1996

Report To: USACHPPM Page: 1 -- of 9

Sample I.D. Submitted Water: D9926, SW-5, Bradley Field AASF, 38-EH-2651, dated 7/9/96

	Test Results	Detection Limits	Method	Analyst	Date Test Completed
Aluminum (Al)	ND	250	EPA 6020	FAK	07/30/96
Antimony (Sb)	ND	3	EPA 6020	FAK	07/30/96
Arsenic (As)	ND	1	EPA 6020	FAK	08/02/96
Barium (Ba)	37	10	EPA 6020	FAK	07/30/96
Beryllium (Be)	ND	1	EPA 6020	FAK	07/30/96
Cadmium (Cd)	ND	1	EPA 6020	FAK	07/30/96
Calcium (Ca)	19,000	50	EPA 6010A	JA	07/30/96
Chromium (Cr)	ND	20	EPA 6020	FAK	07/30/96
Cobalt (Co)	ND	50	EPA 6020	FAK	07/30/96
Copper (Cu)	ND	10	EPA 6020	FAK	07/30/96
Iron (Fe)	500	50	EPA 6010A	JA	07/30/96
Lead (Pb)	ND	200	EPA 6010A	JA	07/30/96
Magnesium (Mg)	4,500	250	EPA 6010A	JA	07/30/96
Manganese (Mn)	260	10	EPA 6020	FAK	07/30/96
Mercury (Hg)	ND	0.2	EPA 7470A	CJK	07/23/96
Nickel (Ni)	ND	50	EPA 6020	FAK	07/30/96
Potassium (K)	1,400	500	EPA 6010A	JA	07/30/96
Selenium (Se)	ND	1	EPA 6020	FAK	08/02/96
Silver (Ag)	ND	10	EPA 6020	FAK	07/30/96
Sodium (Na)	3,000	100	EPA 6010A	JA	07/30/96
Thallium (Tl)	ND	1	EPA 6020	FAK	07/30/96
Vanadium (V)	ND	50	EPA 6020	FAK	07/30/96
Zinc (Zn)	31	10	EPA 6020	FAK	07/30/96

Notes

(1) Results expressed as ug/l (ppb).

William L. Lock
Laboratory Director

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Gascoyne Laboratories, Inc.

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REPORT OF ANALYSIS

Report No. 96-07-481 Report Date: August 07, 1996

Report To: USACHPPM Page: 2 of 9

Sample I.D. Submitted Water: D9927, SW-D, Bradley Field AASF, dated 7/9/96

	Test Results	Detection Limits	Method	Analyst	Date Test Completed
Aluminum (Al)	ND	250	EPA 6020	FAK	07/30/96
Antimony (Sb)	ND	3	EPA 6020	FAK	07/30/96
Arsenic (As)	ND	1	EPA 6020	FAK	08/02/96
Barium (Ba)	34	10	EPA 6020	FAK	07/30/96
Beryllium (Be)	ND	1	EPA 6020	FAK	07/30/96
Cadmium (Cd)	ND	1	EPA 6020	FAK	07/30/96
Calcium (Ca)	19,000	50	EPA 6010A	JA	07/30/96
Chromium (Cr)	ND	20	EPA 6020	FAK	07/30/96
Cobalt (Co)	ND	50	EPA 6020	FAK	07/30/96
Copper (Cu)	ND	10	EPA 6020	FAK	07/30/96
Iron (Fe)	510	50	EPA 6010A	JA	07/30/96
Lead (Pb)	ND	200	EPA 6010A	JA	07/30/96
Magnesium (Mg)	4,400	250	EPA 6010A	JA	07/30/96
Manganese (Mn)	250	10	EPA 6020	FAK	07/30/96
Mercury (Hg)	ND	0.2	EPA 7470A	CJK	07/23/96
Nickel (Ni)	ND	50	EPA 6020	FAK	07/30/96
Potassium (K)	1,300	500	EPA 6010A	JA	07/30/96
Selenium (Se)	ND	1	EPA 6020	FAK	08/02/96
Silver (Ag)	ND	10	EPA 6020	FAK	07/30/96
Sodium (Na)	2,900	100	EPA 6010A	JA	07/30/96
Thallium (Tl)	ND	1	EPA 6020	FAK	07/30/96
Vanadium (V)	ND	50	EPA 6020	FAK	07/30/96
Zinc (Zn)	52	10	EPA 6020	FAK	07/30/96

Notes

(1) Results expressed as ug/l (ppb).

William L. Lock
Laboratory Director

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REPORT OF ANALYSIS

Report No. 96-07-481 Report Date: August 07, 1996

Report To: USACHPPM Page: 3 — of 9

Sample I.D. Submitted Water: D9928, SW-1, Bradley Field AASF, dated 7/10/96

	Test Results	Detection Limits	Method	Analyst	Date Test Completed
Aluminum (Al)	ND	250	EPA 6020	FAK	07/30/96
Antimony (Sb)	ND	3	EPA 6020	FAK	07/30/96
Arsenic (As)	1	1	EPA 6020	FAK	08/02/96
Barium (Ba)	48	10	EPA 6020	FAK	07/30/96
Beryllium (Be)	ND	1	EPA 6020	FAK	07/30/96
Cadmium (Cd)	ND	1	EPA 6020	FAK	07/30/96
Calcium (Ca)	23,000	50	EPA 6010A	JA	07/30/96
Chromium (Cr)	ND	20	EPA 6020	FAK	07/30/96
Cobalt (Co)	ND	50	EPA 6020	FAK	07/30/96
Copper (Cu)	ND	10	EPA 6020	FAK	07/30/96
Iron (Fe)	3,000	50	EPA 6010A	JA	07/30/96
Lead (Pb)	ND	200	EPA 6010A	JA	07/30/96
Magnesium (Mg)	5,200	250	EPA 6010A	JA	07/30/96
Manganese (Mn)	3,000	10	EPA 6020	FAK	07/30/96
Mercury (Hg)	ND	0.2	EPA 7470A	CJK	07/23/96
Nickel (Ni)	ND	50	EPA 6020	FAK	07/30/96
Potassium (K)	1,600	500	EPA 6010A	JA	07/30/96
Selenium (Se)	ND	1	EPA 6020	FAK	08/02/96
Silver (Ag)	ND	10	EPA 6020	FAK	07/30/96
Sodium (Na)	4,700	100	EPA 6010A	JA	07/30/96
Thallium (Tl)	ND	1	EPA 6020	FAK	07/30/96
Vanadium (V)	ND	50	EPA 6020	FAK	07/30/96
Zinc (Zn)	51	10	EPA 6020	FAK	07/30/96

Notes

(1) Results expressed as ug/l (ppb).

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REPORT OF ANALYSIS

Report No. 96-07-481 Report Date: August 07, 1996

Report To: USACHPPM Page: 4 -- of 9

Sample I.D. Submitted Water: D9930, SW-6, Bradley Field AASF, dated 7/9/96

	Test Results	Detection Limits	Method	Analyst	Date Test Completed
Aluminum (Al)	ND	250	EPA 6020	FAK	07/30/96
Antimony (Sb)	ND	3	EPA 6020	FAK	07/30/96
Arsenic (As)	ND	1	EPA 6020	FAK	08/02/96
Barium (Ba)	55	10	EPA 6020	FAK	07/30/96
Beryllium (Be)	ND	1	EPA 6020	FAK	07/30/96
Cadmium (Cd)	ND	1	EPA 6020	FAK	07/30/96
Calcium (Ca)	33,000	50	EPA 6010A	JA	07/30/96
Chromium (Cr)	ND	20	EPA 6020	FAK	07/30/96
Cobalt (Co)	ND	50	EPA 6020	FAK	07/30/96
Copper (Cu)	ND	10	EPA 6020	FAK	07/30/96
Iron (Fe)	240	50	EPA 6010A	JA	07/30/96
Lead (Pb)	ND	200	EPA 6010A	JA	07/30/96
Magnesium (Mg)	8,300	250	EPA 6010A	JA	07/30/96
Manganese (Mn)	130	10	EPA 6020	FAK	07/30/96
Mercury (Hg)	ND	0.2	EPA 7470A	CJK	07/23/96
Nickel (Ni)	ND	50	EPA 6020	FAK	07/30/96
Potassium (K)	2,000	500	EPA 6010A	JA	07/30/96
Selenium (Se)	ND	1	EPA 6020	FAK	08/02/96
Silver (Ag)	ND	10	EPA 6020	FAK	07/30/96
Sodium (Na)	34,000	100	EPA 6010A	JA	07/30/96
Thallium (Tl)	ND	1	EPA 6020	FAK	07/30/96
Vanadium (V)	ND	50	EPA 6020	FAK	07/30/96
Zinc (Zn)	90	10	EPA 6020	FAK	07/30/96

Notes

(1) Results expressed as ug/l (ppb).

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REPORT OF ANALYSIS

Report No. 96-07-481 Report Date: August 07, 1996

Report To: USACHPPM Page: 5 — of 9

Sample I.D. Submitted Water: D9931, SW-7, Bradley Field AASF, dated 7/9/96

	Test Results	Detection Limits	Method	Analyst	Date Test Completed
Aluminum (Al)	ND	250	EPA 6020	FAK	07/30/96
Antimony (Sb)	ND	3	EPA 6020	FAK	07/30/96
Arsenic (As)	1	1	EPA 6020	FAK	08/02/96
Barium (Ba)	48	10	EPA 6020	FAK	07/30/96
Beryllium (Be)	ND	1	EPA 6020	FAK	07/30/96
Cadmium (Cd)	ND	1	EPA 6020	FAK	07/30/96
Calcium (Ca)	26,000	50	EPA 6010A	JA	07/30/96
Chromium (Cr)	ND	20	EPA 6020	FAK	07/30/96
Cobalt (Co)	ND	50	EPA 6020	FAK	07/30/96
Copper (Cu)	ND	10	EPA 6020	FAK	07/30/96
Iron (Fe)	230	50	EPA 6010A	JA	07/30/96
Lead (Pb)	ND	200	EPA 6010A	JA	07/30/96
Magnesium (Mg)	6,600	250	EPA 6010A	JA	07/30/96
Manganese (Mn)	89	10	EPA 6020	FAK	07/30/96
Mercury (Hg)	ND	0.2	EPA 7470A	CJK	07/23/96
Nickel (Ni)	ND	50	EPA 6020	FAK	07/30/96
Potassium (K)	1,300	500	EPA 6010A	JA	07/30/96
Selenium (Se)	1	1	EPA 6020	FAK	08/02/96
Silver (Ag)	ND	10	EPA 6020	FAK	07/30/96
Sodium (Na)	25,000	100	EPA 6010A	JA	07/30/96
Thallium (Tl)	ND	1	EPA 6020	FAK	07/30/96
Vanadium (V)	ND	50	EPA 6020	FAK	07/30/96
Zinc (Zn)	78	10	EPA 6020	FAK	07/30/96

Notes

(1) Results expressed as ug/l (ppb).

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REPORT OF ANALYSIS

Report No. 96-07-481 Report Date: August 07, 1996

Report To: USACHPPM Page: 6 -- of 9

Sample I.D. Submitted Water: D9932, SW-8, Bradley Field AASF, dated 7/9/96

	Test Results	Detection Limits	Method	Analyst	Date Test Completed
Aluminum (Al)	ND	250	EPA 6020	FAK	07/30/96
Antimony (Sb)	ND	3	EPA 6020	FAK	07/30/96
Arsenic (As)	ND	1	EPA 6020	FAK	08/02/96
Barium (Ba)	49	10	EPA 6020	FAK	07/30/96
Beryllium (Be)	ND	1	EPA 6020	FAK	07/30/96
Cadmium (Cd)	ND	1	EPA 6020	FAK	07/30/96
Calcium (Ca)	29,000	50	EPA 6010A	JA	07/30/96
Chromium (Cr)	ND	20	EPA 6020	FAK	07/30/96
Cobalt (Co)	ND	50	EPA 6020	FAK	07/30/96
Copper (Cu)	ND	10	EPA 6020	FAK	07/30/96
Iron (Fe)	710	50	EPA 6010A	JA	07/30/96
Lead (Pb)	ND	200	EPA 6010A	JA	07/30/96
Magnesium (Mg)	9,900	250	EPA 6010A	JA	07/30/96
Manganese (Mn)	270	10	EPA 6020	FAK	07/30/96
Mercury (Hg)	ND	0.2	EPA 7470A	CJK	07/23/96
Nickel (Ni)	ND	50	EPA 6020	FAK	07/30/96
Potassium (K)	1,700	500	EPA 6010A	JA	07/30/96
Selenium (Se)	ND	1	EPA 6020	FAK	08/02/96
Silver (Ag)	ND	10	EPA 6020	FAK	07/30/96
Sodium (Na)	4,700	100	EPA 6010A	JA	07/30/96
Thallium (Tl)	ND	1	EPA 6020	FAK	07/30/96
Vanadium (V)	ND	50	EPA 6020	FAK	07/30/96
Zinc (Zn)	10	10	EPA 6020	FAK	07/30/96

Notes

(1) Results expressed as ug/l (ppb).

William L. Lock
Laboratory Director

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REPORT OF ANALYSIS

Report No. 96-07-481 Report Date: August 07, 1996

Report To: USACHPPM Page: 7 — of 9

Sample I.D. Submitted Water: D9933, SW-9, Bradley Field AASF, dated 7/9/96

	Test Results	Detection Limits	Method	Analyst	Date Test Completed
Aluminum (Al)	ND	250	EPA 6020	FAK	07/30/96
Antimony (Sb)	ND	3	EPA 6020	FAK	07/30/96
Arsenic (As)	1	1	EPA 6020	FAK	08/02/96
Barium (Ba)	40	10	EPA 6020	FAK	07/30/96
Beryllium (Be)	ND	1	EPA 6020	FAK	07/30/96
Cadmium (Cd)	ND	1	EPA 6020	FAK	07/30/96
Calcium (Ca)	23,000	50	EPA 6010A	JA	07/30/96
Chromium (Cr)	ND	20	EPA 6020	FAK	07/30/96
Cobalt (Co)	ND	50	EPA 6020	FAK	07/30/96
Copper (Cu)	ND	10	EPA 6020	FAK	07/30/96
Iron (Fe)	450	50	EPA 6010A	JA	07/30/96
Lead (Pb)	ND	200	EPA 6010A	JA	07/30/96
Magnesium (Mg)	6,800	250	EPA 6010A	JA	07/30/96
Manganese (Mn)	130	10	EPA 6020	FAK	07/30/96
Mercury (Hg)	ND	0.2	EPA 7470A	CJK	07/23/96
Nickel (Ni)	ND	50	EPA 6020	FAK	07/30/96
Potassium (K)	1,300	500	EPA 6010A	JA	07/30/96
Selenium (Se)	ND	1	EPA 6020	FAK	08/02/96
Silver (Ag)	ND	10	EPA 6020	FAK	07/30/96
Sodium (Na)	10,000	100	EPA 6010A	JA	07/30/96
Thallium (Tl)	ND	1	EPA 6020	FAK	07/30/96
Vanadium (V)	ND	50	EPA 6020	FAK	07/30/96
Zinc (Zn)	39	10	EPA 6020	FAK	07/30/96

Notes

(1) Results expressed as ug/l (ppb).

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REPORT OF ANALYSIS

Report No. 96-07-481 Report Date: August 07, 1996

Report To: USACHPPM. Page: 8 of 9

Sample I.D. Submitted Water: D9934, SW-3, Bradley Field AASF, dated 7/10/96

	Test Results	Detection Limits	Method	Analyst	Date Test Completed
Aluminum (Al)	ND	250	EPA 6020	FAK	07/30/96
Antimony (Sb)	ND	3	EPA 6020	FAK	07/30/96
Arsenic (As)	1	1	EPA 6020	FAK	08/02/96
Barium (Ba)	39	10	EPA 6020	FAK	07/30/96
Beryllium (Be)	ND	1	EPA 6020	FAK	07/30/96
Cadmium (Cd)	ND	1	EPA 6020	FAK	07/30/96
Calcium (Ca)	20,000	50	EPA 6010A	JA	07/30/96
Chromium (Cr)	ND	20	EPA 6020	FAK	07/30/96
Cobalt (Co)	ND	50	EPA 6020	FAK	07/30/96
Copper (Cu)	ND	10	EPA 6020	FAK	07/30/96
Iron (Fe)	1,300	50	EPA 6010A	JA	07/30/96
Lead (Pb)	ND	200	EPA 6010A	JA	07/30/96
Magnesium (Mg)	4,400	250	EPA 6010A	JA	07/30/96
Manganese (Mn)	1,400	10	EPA 6020	FAK	07/30/96
Mercury (Hg)	ND	0.2	EPA 7470A	CJK	07/23/96
Nickel (Ni)	ND	50	EPA 6020	FAK	07/30/96
Potassium (K)	1,400	500	EPA 6010A	JA	07/30/96
Selenium (Se)	ND	1	EPA 6020	FAK	08/02/96
Silver (Ag)	ND	10	EPA 6020	FAK	07/30/96
Sodium (Na)	4,600	100	EPA 6010A	JA	07/30/96
Thallium (Tl)	ND	1	EPA 6020	FAK	07/30/96
Vanadium (V)	ND	50	EPA 6020	FAK	07/30/96
Zinc (Zn)	58	10	EPA 6020	FAK	07/30/96

Notes

(1) Results expressed as ug/l (ppb).

William L. Dock
Laboratory Director

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Gascoyne Laboratories, Inc.

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REPORT OF ANALYSIS

Report No. 96-07-481 Report Date: August 07, 1996

Report To: USACHPPM Page: 9 of 9

Sample I.D. Submitted Water: D9935, SW-4, Bradley Field AASF, dated 7/10/96

	Test Results	Detection Limits	Method	Analyst	Date Test Completed
Aluminum (Al)	ND	250	EPA 6020	FAK	07/30/96
Antimony (Sb)	ND	3	EPA 6020	FAK	07/30/96
Arsenic (As)	ND	1	EPA 6020	FAK	08/02/96
Barium (Ba)	160	10	EPA 6020	FAK	07/30/96
Beryllium (Be)	ND	1	EPA 6020	FAK	07/30/96
Cadmium (Cd)	ND	1	EPA 6020	FAK	07/30/96
Calcium (Ca)	41,000	50	EPA 6010A	JA	07/30/96
Chromium (Cr)	ND	20	EPA 6020	FAK	07/30/96
Cobalt (Co)	ND	50	EPA 6020	FAK	07/30/96
Copper (Cu)	ND	10	EPA 6020	FAK	07/30/96
Iron (Fe)	280	50	EPA 6010A	JA	07/30/96
Lead (Pb)	ND	200	EPA 6010A	JA	07/30/96
Magnesium (Mg)	8,600	250	EPA 6010A	JA	07/30/96
Manganese (Mn)	1,100	10	EPA 6020	FAK	07/30/96
Mercury (Hg)	ND	0.2	EPA 7470A	CJK	07/23/96
Nickel (Ni)	ND	50	EPA 6020	FAK	07/30/96
Potassium (K)	2,400	500	EPA 6010A	JA	07/30/96
Selenium (Se)	ND	1	EPA 6020	FAK	08/02/96
Silver (Ag)	ND	10	EPA 6020	FAK	07/30/96
Sodium (Na)	2,200	100	EPA 6010A	JA	07/30/96
Thallium (Tl)	ND	1	EPA 6020	FAK	07/30/96
Vanadium (V)	ND	50	EPA 6020	FAK	07/30/96
Zinc (Zn)	76	10	EPA 6020	FAK	07/30/96

Notes

(1) Results expressed as ug/l (ppb).

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Laboratory Director

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APPENDIX D

SAMPLE PLAN
SITE INSPECTION NUMBER 38-EH-2651-96
ARMY AVIATION SUPPORT FACILITY
BRADLEY FIELD
WINDSOR LOCKS, CONNECTICUT
8-12 JULY 1996

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DEPARTMENT OF THE ARMY
U.S. ARMY CENTER FOR HEALTH PROMOTION AND PREVENTIVE MEDICINE
ABERDEEN PROVING GROUND, MARYLAND 21010-5422

REPLY TO
ATTENTION OF

MCHB-DC-EGW

03 JUL 1996

SAMPLE PLAN
SITE INSPECTION NO. 38-EH-2651-96
ARMY AVIATION SUPPORT FACILITY
BRADLEY FIELD
WINDSOR LOCKS, CONNECTICUT
8-19 JULY 1996

1. REFERENCES. Appendix A contains a list of references.

2. AUTHORITY.

a. AEHA Form 250-R, NGB, 20 September 1994, Request for USAEHA Field Service, Project No. 38-26-2651-96.

b. Memorandum, USACHPPM, MCHB-DC, 29 June 1995, subject: USACHPPM Schedule of Field Services, FY 95.

3. PURPOSE. Under the authority stated above, and in accordance with U.S. Environmental Protection Agency (EPA) guidance for performing site inspections (SI) under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 and the Superfund Amendments and Reauthorization Act of 1986, the U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM) will conduct a focused SI at the Army Aviation Support Facility (AASF), Bradley Field, Windsor Locks, Hartford County, Connecticut. The focused SI will investigate the possibility of any release of hazardous substances to soil, ground water, or surface water, and, if such a release is found to have occurred, whether it poses a threat to human health or the environment. Metals from battery electrolyte neutralization, spent solvents, and petroleum hydrocarbons are the major concerns raised in the Preliminary Assessment (PA) (reference 1) performed by Engineering Technology Associates. The scope of the investigation will be limited to sampling the sediment in one storm-drain manhole, surface water and sediment upstream and downstream of the AASF, surface water and sediment at four storm-drain outfalls, and soil at six underground storage tank (UST) sites (five UST removals and the fuel farm).

Use of company names does not imply endorsement by the U.S. Army but is intended only to assist in identification of a specific product.

Readiness thru Health

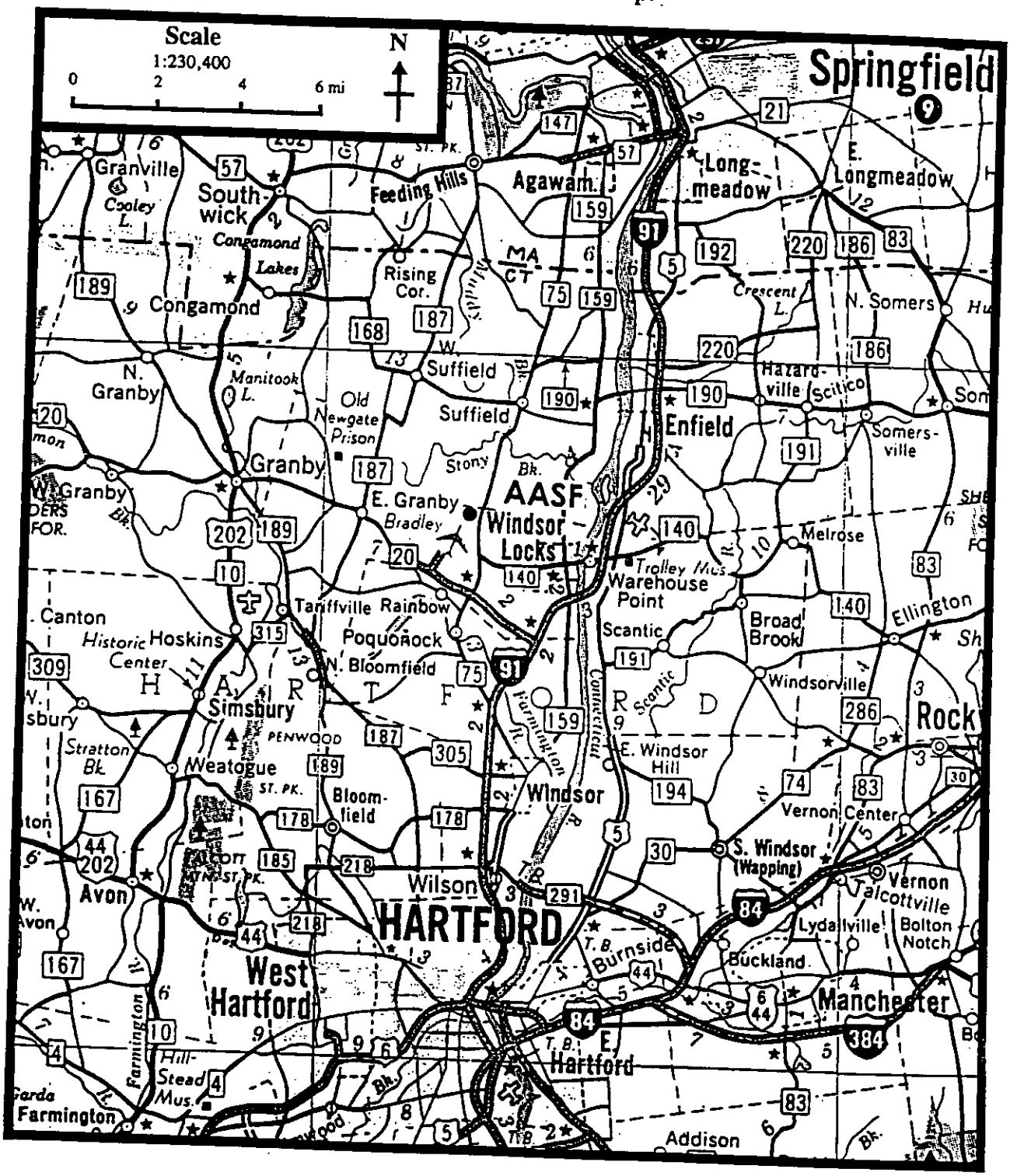
4. SITE DESCRIPTION.

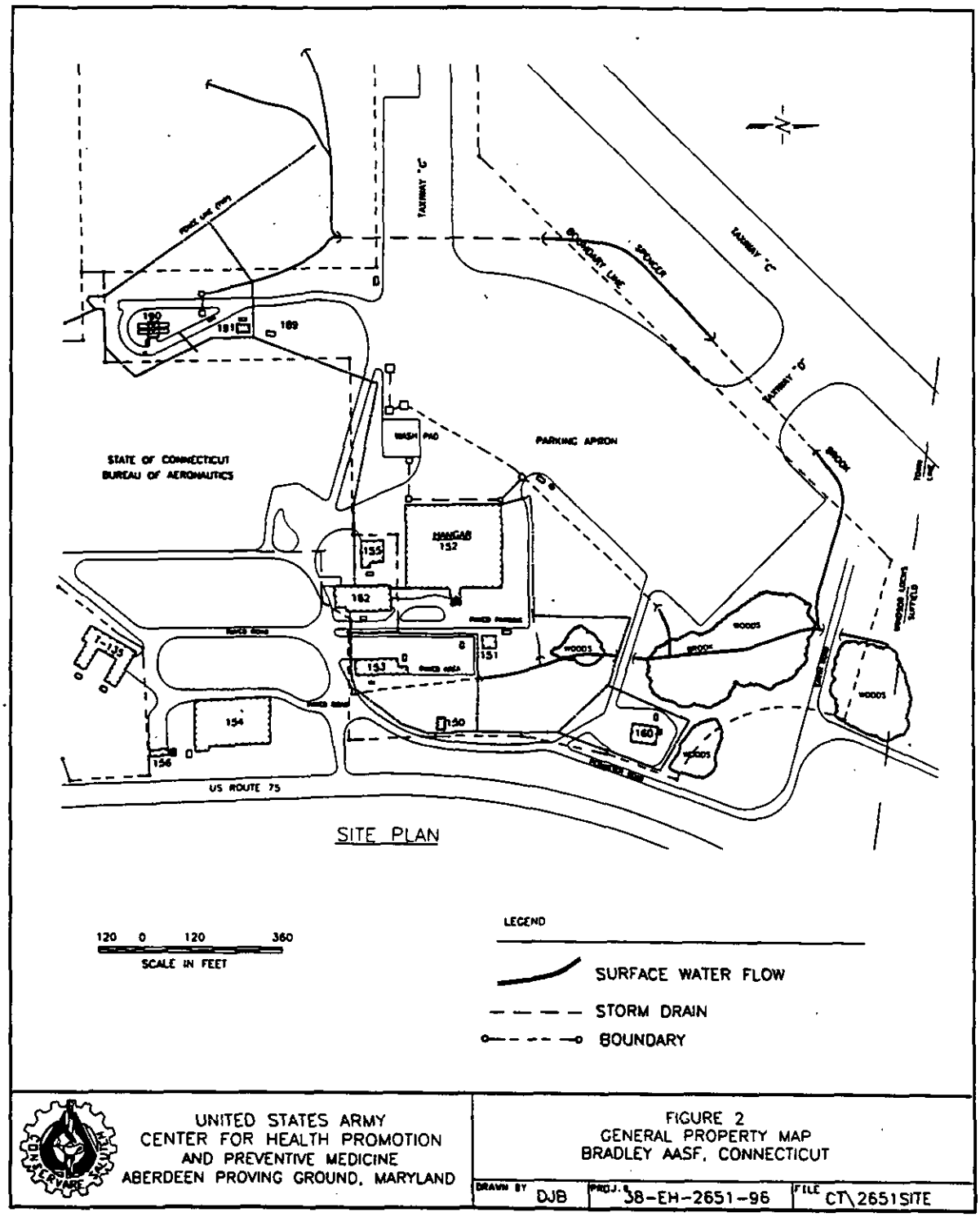
a. Location. The AASF is located at Bradley International Airport (Bradley Field) within the Town of Windsor Locks, Hartford County, Connecticut. The site occupies about 36.1 acres within the boundaries of Bradley Field. It is located on the east side of the airport and on the west side of State Route 75 (Figure 1). Geographically, the site is located at 41° 56' 39.1" N latitude and 72° 40' 24.4" W longitude, and it is on the Windsor Locks 7½' topographic quadrangle. The AASF is situated roughly midway between the cities of Hartford, Connecticut (about 15 road miles to the south) and Springfield, Massachusetts (about 20 road miles to the north).

b. Site History. Bradley Field was acquired by the Federal Government in the 1940's and deeded to the State of Connecticut in 1948. The Connecticut Department of Aeronautics leases the property that includes the AASF site to the Federal Government. The U.S. Army licenses the property to the Connecticut Military Department. The 36.1-acre parcel was used by the Connecticut Air National Guard prior to September 1986, and it has since been used by the Connecticut Army National Guard (CTARNG). The AASF site includes six permanent buildings, several small storage buildings, and surrounding appurtenant lands. The major structure is hangar Building 152, which houses the helicopter maintenance activities and the AASF offices (Figure 2). The site is near the head of Spencer Brook, which flows northward through the AASF facilities. At first most of this stream and its small tributaries remained open channels, but it has become increasingly enclosed in pipes to accommodate road and taxiway crossings and to permit expansion of helicopter and vehicle parking. Most of this enclosure occurred in 1975 and 1980 as can be seen on aerial photos of the site on file at the Connecticut Department of Environmental Protection (CTDEP) maps and publications store in Hartford.

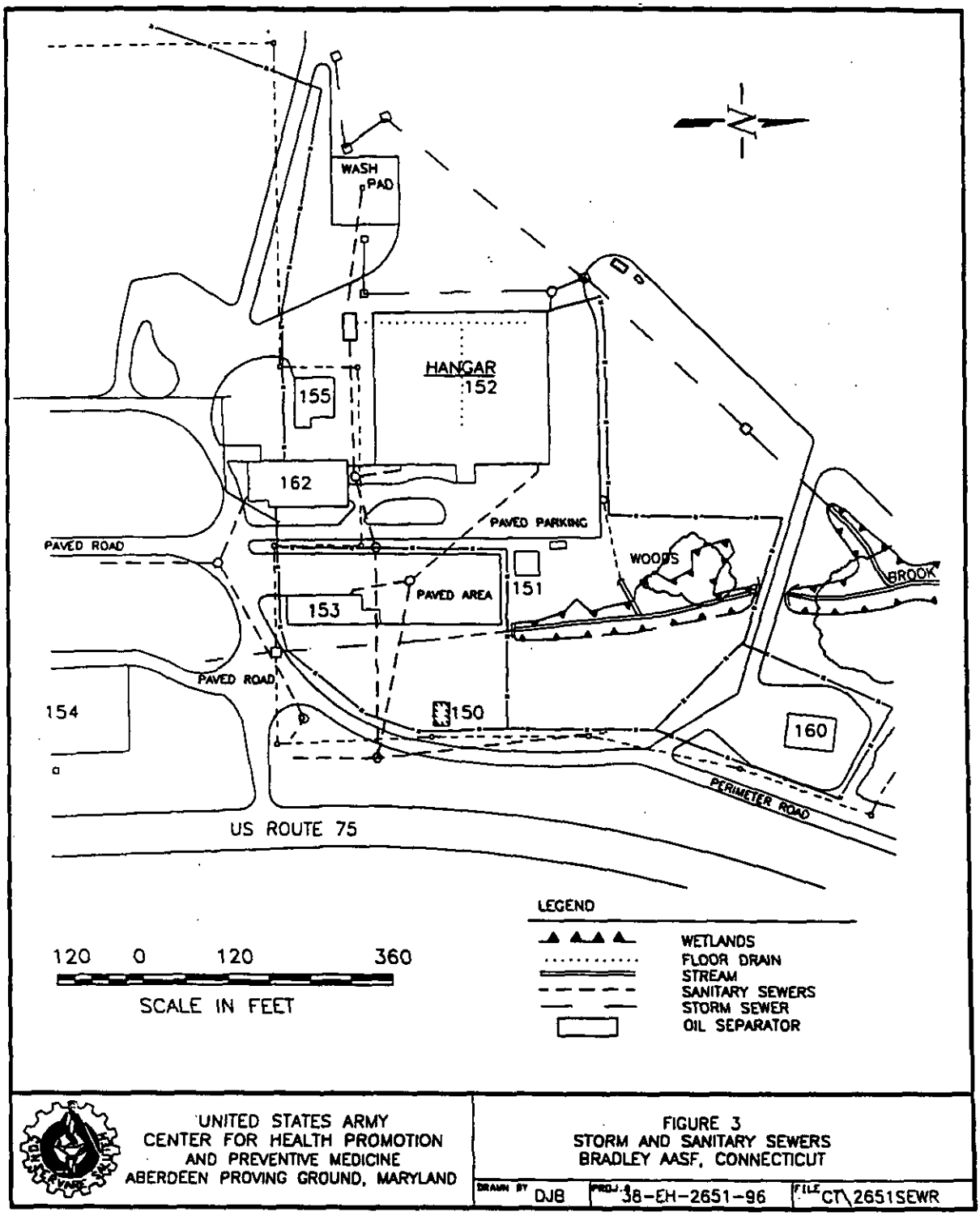
c. Past Operational History and Waste Characteristics. The past practices reported in the PA (reference 1) that have resulted in this focused SI relate to the maintenance activities, especially within Building 152, and the removals and replacements of several USTs. These practices consisted of the pouring of diluted and neutralized battery electrolytes and spent solvents into a floor drain in the battery room. The authors of the PA thought that this floor drain, which is located in the northeast corner of Building 152, was connected to the storm drain system that runs north along the west side of Building 152 to a branch of Spencer Brook (Figure 3). No plans were found in the CTARNG files to confirm this connection, but neither were plans found that showed where the sewer line would have discharged. The wash rack off the southwest corner of Building 152 and on the south edge of the apron was connected to the same storm drain, which received runoff from the major part of the helicopter parking apron.

Figure 1. Location Map.




STATE OF CONNECTICUT
BUREAU OF AERONAUTICS
PARKING APRON
HANGAR
152
US ROUTE 75
SITE PLAN
120 0 120 360
SCALE IN FEET
LEGEND
SURFACE WATER FLOW
STORM DRAIN
BOUNDARY
UNITED STATES ARMY
CENTER FOR HEALTH PROMOTION
AND PREVENTIVE MEDICINE
ABERDEEN PROVING GROUND, MARYLAND
FIGURE 2
GENERAL PROPERTY MAP
BRADLEY AASF, CONNECTICUT
DRAWN BY DJB
PROJ. # 38-EH-2651-96
FILE CT\2651SITE

Sample Plan, Site Inspection No. 38-EH-2651-96, Jul 96



UNITED STATES ARMY
CENTER FOR HEALTH PROMOTION
AND PREVENTIVE MEDICINE
ABERDEEN PROVING GROUND, MARYLAND

FIGURE 3
STORM AND SANITARY SEWERS
BRADLEY AASF, CONNECTICUT

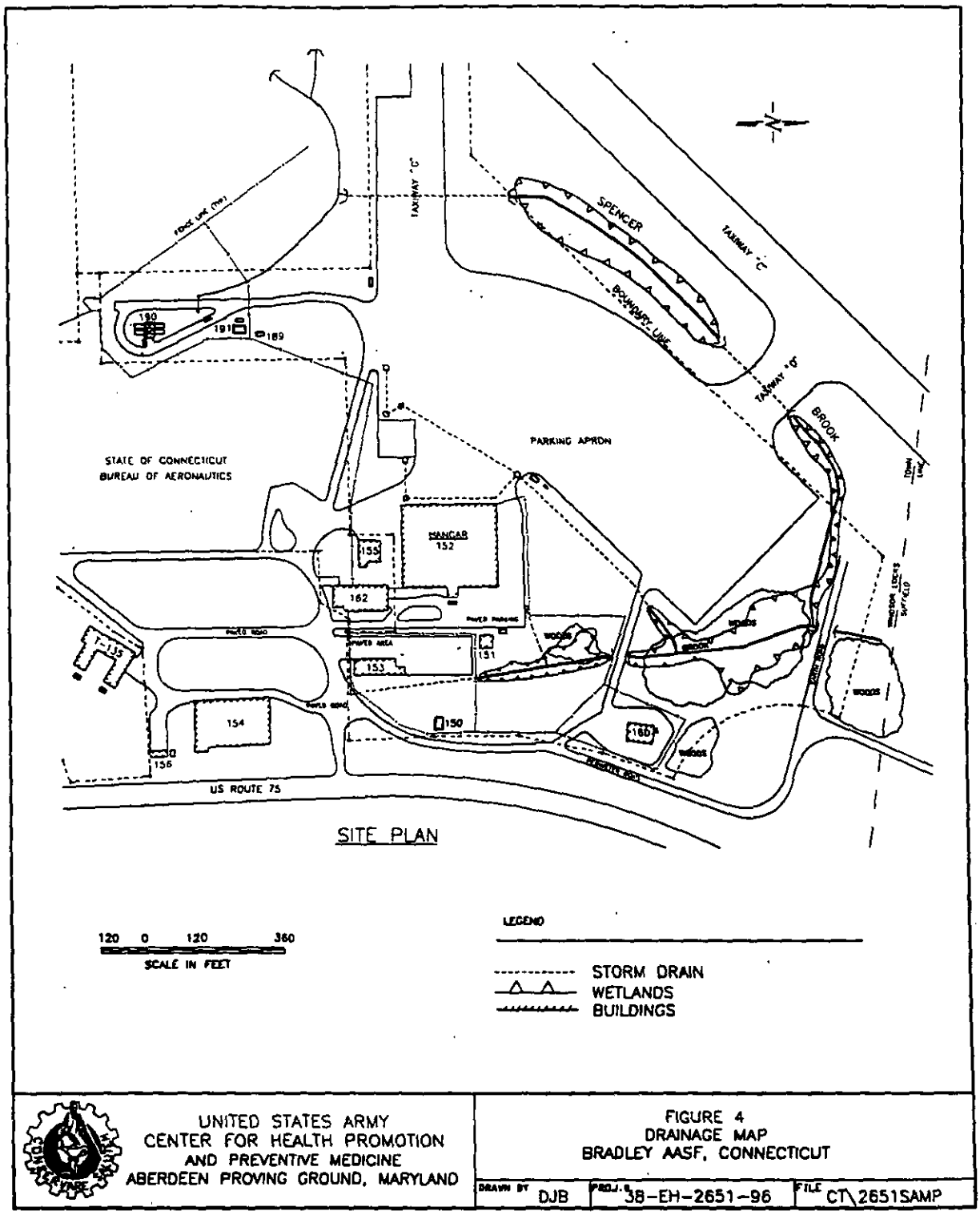
DRAWN BY DJB | PROJ. # 38-EH-2651-96 | FILE CT\2651SEWR

d. Recent Operations and Waste Generation. The floor drain in the battery room is now connected to the sanitary sewer at the northeast corner of Building 152. The floor drains in the hangar bay and the wash rack are now connected to the municipal sanitary sewer via an oil/water separator (Figure 3). The storm drains on the west side of the hangar now receive surface water only from the helicopter parking area. All surface runoff from the facility drains into Spencer Brook and its small tributaries both directly and via the storm drains (Figure 4).

5. POTENTIAL SOURCE SITES.

a. Building 152, Battery Room. Concern was raised in the PA (reference 1) that past practices may have resulted in the discharge into the soil and/or ground water of neutralized battery electrolytes via the floor drain in the battery room in Building 152 and of solvents via the floor drains in the hangar bay. The old discharge route of the battery room floor drain could not be documented, but along with the hangar bay floor drains it may well have discharged to the drainage on the west side of Building 152. The solvent and battery electrolytes, presumably containing lead and other heavy metals, would have been carried to a wetland area along a tributary of Spencer Brook where they may have accumulated in the organic sediment.

b. Old UST Sites. The second concern is the possibility that petroleum hydrocarbons remain in the soil and/or ground water in the areas of removal of USTs at several locations around the site. A 2,000-gallon heating oil UST was removed from the east side of Building 162 in 1990. Soil samples from the excavation were analyzed and reported to have no detections for aromatic or halogenated volatile organic compounds. A 5,000-gallon heating oil UST was removed from the north end of Building 153 in 1991. The PA states that contaminated soil was found during removal, but the tank removal report was not available at this time. A 500-gallon heating oil UST was removed from the northwest corner of Building 160 in 1995. No tank removal report or soil analysis results was available at this time. A 550-gallon waste oil UST was removed from the southeast corner of Building 153 in 1995. No tank removal report or soil analysis results was available at this time. A 5,000-gallon UST was removed in 1993 from the parking area near the south side of Building 151. The tank was found to contain deicing solvents, although it had been expected to contain gasoline. The tank removal report describes some soil contamination, but the soil analysis results showed only total petroleum hydrocarbons (TPH) with the maximum result being 136 milligrams per kilogram in the bottom of the excavation. No aromatic or halogenated volatile organic compounds were detected. However, at the suggestion of the CTDEP, a passive soil venting system was installed in the pit prior to back-filling. In 1991, four 25,000-gallon JP-4 USTs were replaced with four 15,000-gallon JP-8 USTs at the fuel farm at the pump house (Building 190). Three truck filling stands east of the building were also excavated and repaired at this



UNITED STATES ARMY
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AND PREVENTIVE MEDICINE
ABERDEEN PROVING GROUND, MARYLAND

FIGURE 4
DRAINAGE MAP
BRADLEY AASF, CONNECTICUT

DRAWN BY	PROJ. #	FILE
DJB	38-EH-2651-96	CT\2651SAMP

time. In 1994, a 1,000-gallon waste JP-4 tank was removed from the southeast corner of Building 190. Contamination was described in the tank removal reports by Metcalf & Eddy, but soil samples indicate that all but small pockets of contaminated soil were removed during the excavations.

6. ENVIRONMENTAL SETTING.

a. Climate. Bradley Field is located in the temperate zone. Mean monthly temperatures vary from 27° Fahrenheit (F) in January to 74 °F in July. Average annual rainfall is about 40.5 inches with March being the wettest month (average of 3.81 inches) and February the driest (average of 2.57 inches). Precipitation is evenly distributed throughout the year with the driest and wettest months accounting for 6.35% and 9.41%, respectively, of the annual total. The prevailing wind direction is from the southwest (reference 2).

b. Topography. Bradley Field is situated on a rather flat surface in the Connecticut Valley. The land elevation around the AASF site is generally between 150 and 160 feet above sea level. The surface is broadly dissected by the several streams that drain the area. The surface slopes gently eastward to the Connecticut River, which is at an elevation of about 20 feet above sea level and approximately 3 miles east of the AASF.

c. Surface Water. The AASF site is located in the Stony Brook subbasin of the Connecticut River drainage basin. Surface runoff from the facility flows to the north to Stony Brook via a tributary called Spencer Brook (Figure 4). Stony Brook flows easterly to join the south-flowing Connecticut River above Windsor Locks.

d. Hydrogeology. The United States Geological Survey (USGS) has published maps of the geology of the Windsor Locks Quadrangle (references 3, 4, 5, 6, and 7). The bedrock below the site is the Portland Arkose, a thick sequence of reddish-brown siltstone and sandstone beds of Upper Triassic to Lower Jurassic age (reference 3). The bedrock surface is very irregular having been subjected to severe glacial erosion. The bedrock surface lies at depths of between 100 and 150 feet below the site (reference 4), or at elevations of about 0-50 feet above sea level (reference 5). Overlying the bedrock is a series of sedimentary deposits left by the last Pleistocene glaciation (reference 6). These deposits, from the bedrock to the surface, consist of glacial till, lacustrine and deltaic silt and clay, and delta sands. They total 100 to 150 feet in thickness. The rock surface is generally covered by a layer of till mostly 20 or more feet in thickness, but occasionally less than 10 feet or even absent. Till is a mixture of sizes from clay through cobbles or boulders, compact and dense, having been deposited beneath the glacier itself. As the ice retreated northward, sediments were left in a variety of environments of deposition. The Connecticut River Valley was dammed by a pile of sediment at Rocky Hill about 16 miles south of Windsor Locks. This dam caused the entire valley

north to northern Massachusetts to be occupied by a large lake. The result of this situation is that the sediments at Bradley Field are lake deposits dominated by silt and clay. As these fine materials were accumulating on the bottom of the lake, the larger streams, such as the Farmington River, were building deltas out from the valley sides. Bradley Field is located on the northeast edge of the delta built into the lake by the Farmington River. In general, the sediment size becomes coarser from the bottom to the top of the delta. Thus, the sediments at the AASF site and most of Bradley Field are described in reference 7 as consisting of as much as 50 feet of fine to medium sand, with coarse sand to gravel in some places, overlying thick deposits of very fine sand, silt, and clay. Complicating this otherwise fairly simple picture are numerous hills, called drumlins, sticking up through the lake deposits. These drumlins may be rock-cored or entirely till. The tip of one such drumlin is located between the AASF apron and the fuel farm (references 6 and 7). Sands at the fuel farm are thin with the glacial till of the drumlin lying at about 3 to 5 feet below the surface. In other reports the till at the fuel farm has been interpreted as the lake silt and clay, but the till interpretation better fits the data of the published geologic maps.

e. Soils. The soils at the AASF are mostly disturbed and mapped as made land or fill. Otherwise, the soils are mapped as a variety of sandy soils -- Ninegrat, Poquonock, Windsor, and Agawam series (reference 1).

7. COLLECTION OF NON-SAMPLING DATA.

a. Introduction. Additional non-sampling information was collected during a preliminary site visit over the period of 11-14 December 1995. This information resulted in confirmation and clarification of the information in the PA, and is used in the preceding sections. The information has helped to focus the sampling program, but only one item of clarification will be discussed here. No other non-sampling information is planned for this site inspection. However, since the site visits for both the PA and the preliminary SI visit were conducted when the ground was covered by snow and ice, additional site conditions may be revealed that could require modification of this sampling plan.

b. Monitoring Wells. The PA (reference 1, p. 14) stated that two monitoring wells had been installed west of the tank farm in 1990. No knowledge or evidence of such wells was discovered during the preliminary site visit of 11-14 December 1995. The depths of the "wells" given in the PA match the depths of two test borings installed by Metcalf & Eddy during replacement of the old JP-4 USTs, but monitoring wells were not installed in these borings. Both of these test borings were located inside of the paved loop around Building 190, one hole north-northwest of the building and the other south-southeast of the building. There are two 2-inch PVC "wells" located west of Building 190, but while they are within the fenced area they are outside of the CTARNG property. These wells are apparently test holes for

possible hangar construction by United Technologies Corporation, and were installed about 10 years ago, but no information on their construction was obtained. There are also three "wells" located at the fuel farm USTs. These are open-ended 12-inch diameter corrugated pipes placed off the southeast, southwest, and northwest corners of Building 190 just beyond the tanks. All three are full of water (not frozen) at a depth of 3 feet 10 inches below ground surface. Their purpose is unknown.

8. SAMPLING ACTIVITIES.

a. Objectives. There are two objectives of this focused SI. The first is to determine whether or not there has been a release of hazardous substances (solvents or metals) or hydrocarbons to wetland sediments (soil) and/or surface water. The second is to determine whether or not there has been a release of hydrocarbons to the soil and/or ground water. No monitoring wells exist on the site that are suitable for ground-water sampling, and no wells are intended to be installed at this time. These objectives result from a lack of existing data to confirm or deny such contamination from suspected past practices and UST removals. The proposed samples are summarized in Table 1.

b. Sample Locations. The 14 proposed sampling sites are shown on Figure 5.

(1) Source Sampling. Source sampling will be limited to one sediment sample from Site Number 1, the manhole in the storm drain off the northwest corner of Building 152. This appears to be the most likely place for any remnant metals-contaminated solids to be found that could relate to the battery room floor drain prior to the connection to the municipal sanitary sewer. It is not certain that sufficient sediment can be obtained from this manhole. This sample will be analyzed for target analyte list (TAL) metals.

(2) Soil Sampling. Thirty soil samples from seven sites (Figure 4) are planned. Five sites are at former UST locations, and the other two are at the fuel farm. Site Number 2 is at the former waste oil UST off the southeast corner of Building 153. Site Number 3 is at the former heating oil UST off the northwest corner of Building 153. Site Number 4 is at the former heating oil UST on the east side of Building 162. Site Number 5 is at the former heating oil UST by the northwest corner of Building 160. Site Number 6 is the former gasoline UST south of Building 151. Site Number 7 is south and Site Number 8 is north of the JP-8 USTs at Building 190. Four samples are planned for each site, one surface soil (0-1.5 feet deep) and one subsurface soil (10.5-12 feet deep) at each of two locations. The two locations will be at the northerly and southerly ends of the old UST excavations for Sites 2-6, and on the east and west sides of the USTs at Sites 7 and 8.

TABLE 1. PROPOSED SAMPLES

Media	Sample #	Analyses	Location and Objective
Waste Source (sediment)	WS-1	TAL Metals[1]	**Site 1.** Storm sewer manhole off northwest corner Bldg 152. Presence/absence of metals.
Soil A: 0-1.5' B: 10.5-12' or just above water table	S2-N-A S2-N-B	TPH-diesel[2]	**Site 2.** UST (removed) site southeast corner Bldg 153. Presence/absence of heating oil. North and South ends of excavation. A & B samples at each end.
	S2-S-A S2-S-B		
	S3-N-A S3-N-B		**Site 3.** UST (removed) site northwest corner Bldg 153. Presence/absence of heating oil. North and South ends of excavation. A & B samples at each end.
	S3-S-A S3-S-B		
	S4-N-A S4-N-B		**Site 4.** UST (removed) site east side Bldg 162. Presence/absence of heating oil. North and South ends of excavation. A & B samples at each end.
	S4-S-A S4-S-B		
	S5-N-A S5-N-B		**Site 5.** UST (removed) site northwest corner Bldg 160. Presence/absence of heating oil. North and South ends of excavation. A & B samples at each end.
	S5-S-A S5-S-B		
	S6-N-A S6-N-B	TPH-gas[2]	**Site 6.** UST (removed) site south of Bldg 151. Presence/absence of gasoline. North and South ends of excavation. A & B samples at each end.
	S6-S-A S6-S-B		
	S7-E-A S7-E-B		**Site 7.** South end fuel farm USTs (replaced). Presence/absence of JP-4 or JP-8. East and West sides of tank area. A & B samples on each side.
	S7-W-A S7-W-B		

TABLE 1. PROPOSED SAMPLES (Continued)

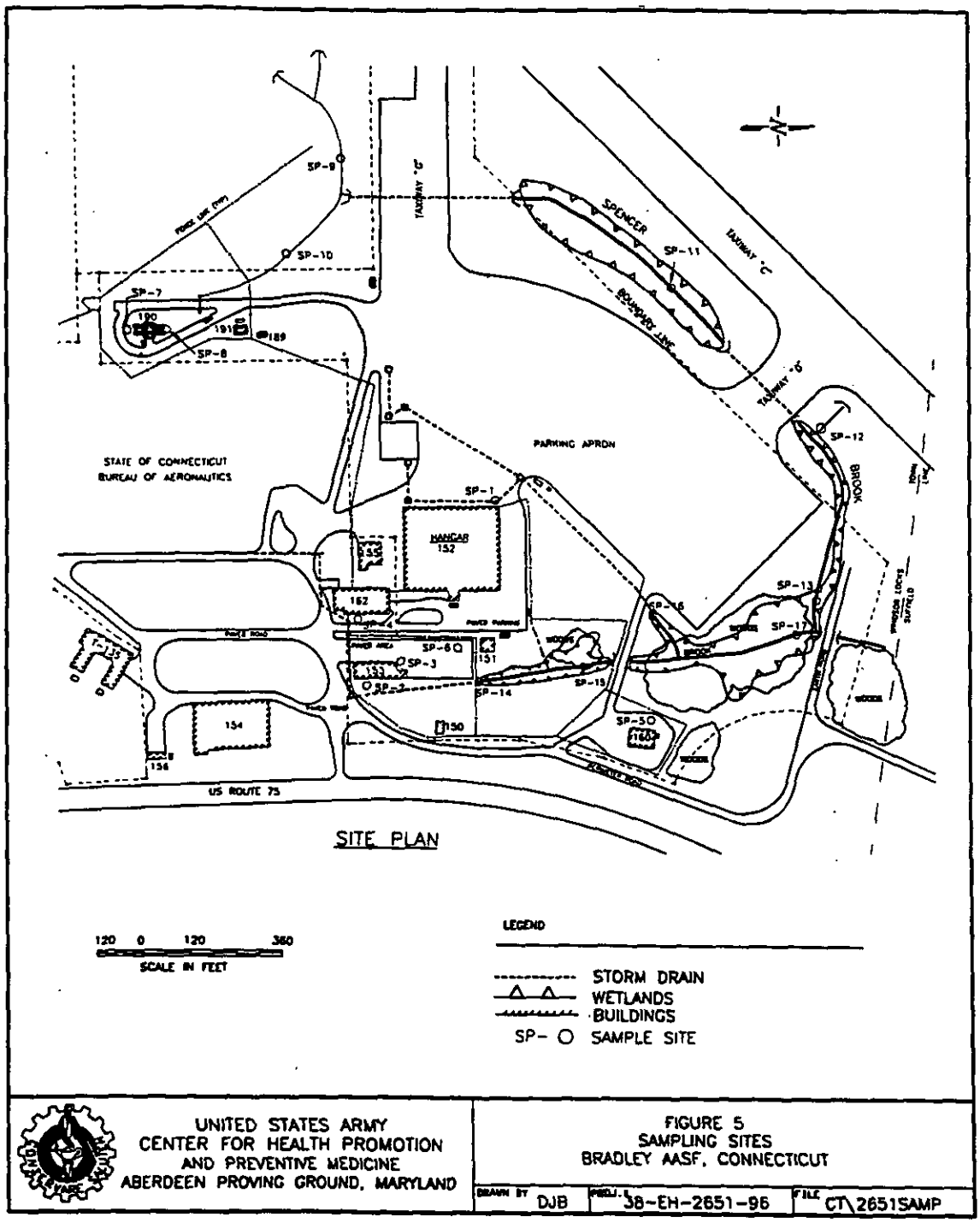
Media	Sample #	Analyses	Location and Objective
Soil (continued)	S8-E-A S8-E-B	TPH-gas[2]	Site 8. North end fuel farm USTs (replaced). Presence/absence of JP-4 or 8. East and West sides of tank area. A & B samples on each side.
	S8-W-A S8-W-B		
QA/QC (soil)	SD-1	TPH-diesel[2]	Duplicate sample of S3-N-B.
	SD-2	TPH-gas[2]	Duplicate sample of S7-W-B.
(water)	SL-E	TPH-diesel TPH-gasoline[4]	Equipment blank to evaluate the decontamination of non-dedicated sampling equipment.
Surface Water and Sediment	SW-1 SS-1	TCL VOC[3] TCL SVOC[3] Pest./PCB[4] TAL Metals[1] TPH-diesel[2]	Site 9. Surface water and sediment. Spencer Brook upstream of AASF activities.
	SW-2 SS-2		Site 10. Surface water and sediment. Spencer Brook tributary below fuel farm.
	SW-3 SS-3		Site 11. Surface water and sediment. Spencer Brook between Taxiways G and D.
	SW-4		Site 12. Surface water only. Storm-water discharge from runways to Spencer Brook downstream of Taxiway D.
	SW-5 SS-5		Site 13. Surface water and sediment. Spencer Brook downstream of all AASF activities; upstream of 48-inch culverts.
	SW-6 SS-6		Site 14. Surface water and sediment. Spencer Brook tributary at storm-drain outfall and head of wetland behind Building 151.
	SW-7 SS-7		Site 15. Surface water and sediment. Spencer Brook tributary downstrem of AASF parking area storm drain.

TABLE 1. PROPOSED SAMPLES (Continued)

Media	Sample #	Analyses	Location and Objective
Surface Water and Sediment (continued)	SW-8 SS-8	TCL VOC[3] TCL SVOC[3] Pest./PCB[4] TAL Metals[1] TPH-diesel[2]	**Site 16.** Surface water and sediment. Spencer Brook tributary at storm-drain outfall from apron area west of hangar Bldg. 152.
	SW-9 SS-9		**Site 17.** Surface water and sediment. Spencer Brook tributary downstream of all AASF activities, and above 48-inch culverts.
QA/QC (water) (sediment)	SW-D	TCL VOC[3] TCL SVOC[3] Pest./PCB[4] TAL Metals[1] TPH-diesel[2]	Spencer Brook water duplicate.
	SS-D		Sediment duplicate.
	SS-T		Trip blank. Distilled water. Take to field with containers; return with samples (VOCs).
	SS-C		Container blank to evaluate possible contamination from distilled water container.
	SS-E		Equipment blank to evaluate the decontamination of non-dedicated sampling equipment.

1. TAL = Target Analyte List, SW-846 methods 6010A, 6020, 7041, 7060, 7421, 7470A, 7471, 7740, 7841.
2. TPH = Total Petroleum Hydrocarbons: diesel, method OECD #132.1; gas = gasoline, SW-846 method 8015.
3. TCL = Target Compound List: VOC = volatile organic compounds, method 8260A; SVOC = semivolatile organic compounds, method 8270.
4. Pest/PCB = Target Compound List, Pesticides and PCBs, method 8080.

Sample Plan, Site Inspection No. 38-EH-2651-96, Jul 96



(3) Surface Water and Sediment Sampling. Ten surface water and nine sediment samples are planned from nine sites on Spencer Brook and its tributaries. Samples SW-1 (surface water) and SS-1 (sediment) will be taken at Site Number 9, which is upstream from the culvert carrying Spencer Brook under Taxiway G, and which is upstream from all AASF activities. Samples SW-2 and SS-2 will be taken at Site Number 10, which is representative of drainage from the fuel farm area. The tributary at Site Number 10 is intermittent, so sample SW-2 will be taken only if there is sufficient flow from the fuel farm area. Samples SW-3 and SS-3 will be taken at Site Number 11, which is in Spencer Brook between Taxiways G and D. Samples SW-4 will be taken at Site Number 12, which is at a storm-drain outfall from the runway area into Spencer Brook just downstream of Taxiway D. There will be no sediment sample, SS-4, at Site Number 12. Samples SW-5 and SS-5 will be taken at Site Number 13, which is located on Spencer Brook just upstrem of the 48-inch culverts and downstream of all AASF activity. Samples SW-6 and SS-6 will be taken at Site Number 14, which is at the storm-drain outfall on the tributaru of Spencer Brook at the head of the wetland behind (east) of Building 151. Samples SW-7 and SS-7 will be taken at Site Number 15, which is on the tributary of Spencer Brook downstream of the storm-drain discharge from the AASF parking area and upstream of the culvert under the road between the apron and Building 160. Samples SW-8 an SS-8 will be taken at Site Number 16, which is at the storm-drain outfall from the apron area west of the hangar, Building 152. Samples SW-9 and SS-9 will be taken at Site Number 17, which is on the tributary of Spencer Brook just upstream of the 48-inch culverts and downstream of all AASF activity.

c. Sampling Methods.

(1) Waste Source Sampling. The sediment sample from the storm drain manhole will be obtained by scooping the soft sediment from the bottom of the manhole structure using a stainless steel or a disposable plastic scoop. The sample container will be filled completely or to the limit that obtainable sediment will allow.

(2) Soil Samples. Soil samples will be obtained by driving a 2-inch diameter macro-core sampler with the Geoprobe® direct push system. The sampler will be extracted from the hole, opened, and the soil removed. The soil for volatile organic compounds (VOCs) analysis will be taken immediately from the bottom end of the sample and placed in the VOC sample container. The remaining soil sample will be mixed in a stainless steel bowl with a stainless steel scoop and transferred to the appropriate sample containers with the scoop. Subsurface samples will be taken from 10.5 to 12 feet below the surface. They will be examined carefully and any suspected fall back will be discarded.

® Geoprobe is a registered trademark of Geoprobe Systems, Salina, Kansas.

(3) Surface Water Samples. Surface water samples will be collected from a well-mixed portion of the stream. Sample bottles will be rinsed three times with water from the sample point prior to filling. After rinsing, the bottle will be immersed with the lip of the bottle pointing upstream and just below the water surface to allow the water to gently fill the bottle with minimal turbulence. A disposable plastic scoop or a peristaltic pump will be used to collect the sample if the water depth is too shallow to immerse the sample container. After collection, the sample will be preserved, if required, capped securely, dried, labeled, and cooled in ice to 4° Centigrade (C).

(4) Stream or Wetland Sediment Samples. Grab sediment samples will be collected from the stream bottom to a depth of 4 inches by using stainless steel or disposable plastic scoops. Water will be decanted from the sediment prior to placing it into the sample container. Sample containers will be filled completely prior to capping. Large stones or debris will be excluded from the sample. After collection, the sample container will be capped, dried, labeled, and cooled in ice to 4 °C.

d. Analyses.

(1) Waste Source Sample. The sediment from the storm drain manhole will be analyzed for target analyte list (TAL) metals on a total basis using various SW-846 methods.

(2) Soil Samples. Soil samples from Sites 2-5 will be analyzed for TPH-diesel using method OECD #132.1. Soil samples from sites 6-8 will be analyzed for TPH-gasoline using SW-846 method 8015.

(3) Surface Water and Sediment Samples. The surface water and sediment samples will be analyzed for Target Compound List (TCL) VOCs using SW-846 method 8060A, TCL semivolatile organic compounds (SVOCs) using SW-846 method 8270, TAL metals using various SW-846 methods, pesticides/polychlorinated biphenyls (PCBs), TPH-diesel using method OECD #132.1, and TPH-gasoline using SW-846 method 8015.

e. Decontamination Procedures. All nondisposable and nondedicated sampling devices (e.g. bailers, stainless steel scoops, stainless steel bowls, core samplers, etc.) will be decontaminated between samples. The decontamination process will be accomplished by the following steps:

- brush off gross soil and other debris
- wash with Alconox® and potable water

® Alconox is a registered trademark of Alconox, Inc., New York, New York.

- rinse with potable water
- rinse with 10% nitric acid solution
- rinse with deionized/distilled water
- rinse with reagent grade isopropanol
- rinse with reagent grade hexane
- rinse with deionized/distilled water
- allow to air dry

f. Quality Assurance and Quality Control (QA/QC). Appendix B is the Quality Assurance Project Plan (QAPjP). It describes the procedures by which QA/QC will be maintained during this project. For the purposes of the field sampling, Table 1 lists the trip blanks, equipment blanks, and duplicate samples that are incorporated into the sampling plan.

9. FIELD ACTIVITIES.

a. Schedule. Field personnel are scheduled to arrive at the site on Monday, 8 July 1996, for orientation and set-up, and to commence field work by Tuesday, 9 July. The CTARNG will coordinate scheduling to ensure accessibility to all sampling sites.

b. Procedure. Soil samples will be obtained by means of a Geoprobe direct push sampling system. Site 4 may not be adequately accessible to this rig, and if so sampling at this site will be by hand auger. The Project Manager will be responsible for placing the samples in the containers, assuring that the samples are properly labeled, preserved, stored, and shipped to the laboratory. He will also be responsible for ensuring the proper chain-of-custody is maintained. The three engineering technicians will be responsible for obtaining the soil samples with the Geoprobe or hand auger, obtaining the surface water and sediment samples, and decontaminating the sampling equipment. The order of sampling will be determined by the Project Manager as required by any access limitations and other site conditions at the time.

c. Sample Handling. Labels will be affixed to each sample container. Information on the labels will include the Project Manager's name, analysis required, sample identification number, date of collection, and method of preservation. The chain-of-custody form will be initiated and packed with the samples for shipment to the laboratory. Samples will be shipped in coolers packed with ice to maintain them at 4 °C. Samples will be shipped to the laboratory by the most convenient shipper. All sample collection, preservation, QA/QC preparation of field blanks and duplicates, and chain-of-custody procedures used during this SI will be in accordance with the USACHPPM Directorate of Laboratory Services standing operating procedures included here within Appendix B.

10. INVESTIGATION-DERIVED WASTES PLAN. The volume of investigation-derived wastes will be kept to the minimum amount possible. The wastes that may be generated during this investigation will include soils solids, water, and trash. The generation of waste soil solids will be insignificant since all samples will be obtained by direct push sampling or by hand excavation. Excess soil material will be returned to the hole or excavation of origin. Soil cuttings that are obviously contaminated will be containerized or covered and stock-piled on the site until sample analysis results show the nature and level of contamination. Some wastewater will be generated by the decontamination of sampling equipment. These wastewaters will be containerized and a sample submitted for analysis (TCL VOCs, TCL SVOCs, TPH, Pesticides/PCBs, and TAL metals). Based on the results of the soil and decontamination water analyses, the CTARNG will be responsible for disposal in accordance with applicable EPA guidance (reference 8) and state regulations. The trash that will be generated during this investigation will consist of such items as packaging materials, string, tape, paper, plastic scoops, and personal protective equipment (e.g., rubber gloves). This trash will be double-bagged and disposed of in the AASF dumpster.

11. PROJECT MANAGEMENT.

a. Health and Safety Plan. Appendix C provides the Health and Safety Plan to be used during this SI field work.

b. Project Personnel. The following personnel will conduct the field work for this SI: Mr. John A. Moser, Geohydrologist, and Mr. Rocky W. Hoover, Engineering Technician, both of USACHPPM, Ground Water and Solid Waste Program; Mr. Kenneth Quirk, Environmental Engineer, and Mr. Richard Gordon, Engineering Technician, both of USACHPPM, Surface Water and Wastewater Program.

c. Field Equipment. The Geoprobe direct push rig will be used for soil sampling during this SI. The surface water samples will be obtained by direct immersion in the stream, or by using either a disposable plastic scoop or a peristaltic pump. The sediment samples will be obtained by hand using stainless steel or disposable plastic scoops. Miscellaneous support equipment will be included in a trailer. A photoionization detector (PID) will be used to monitor the air space of the waste source sampling site, and the samples as they are collected.

d. Project Schedule. The field work is tentatively scheduled to be conducted between 8 and 19 July 1996.

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Geohydrologist
Ground Water and Solid Waste Program

REVIEWED:

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Restoration Team
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APPROVED:

JOHN W. BAUER, P.G.
Program Manager
Ground Water and Solid Waste

APPENDIX A

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8. Management of Investigation-Derived Wastes During Site Inspections, EPA/540/G-91/009, ORD, May 1991.

APPENDIX B

QUALITY ASSURANCE PROJECT PLAN

QUALITY ASSURANCE PROJECT PLAN
SITE INSPECTION NO. 38-EH-2651-96
ARMY AVIATION SUPPORT FACILITY
BRADLEY FIELD
WINDSOR LOCKS, CONNECTICUT

JOHN A. MOSER, P.G.
Project Manager
Ground Water and Solid Waste Program

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QUALITY ASSURANCE PROJECT PLAN
SITE INSPECTION NO. 38-EH-2651-96
ARMY AVIATION SUPPORT FACILITY
BRADLEY FIELD
WINDSOR LOCKS, CONNECTICUT

1. PROJECT DESCRIPTION. This project is a focused site inspection (SI) of potential waste sources and potentially contaminated soil and ground water at and adjacent to the Army Aviation Support Facility (AASF), Bradley Field, Windsor Locks, Connecticut. The purpose is to determine if a release of hazardous substances has occurred, and if so, whether the release poses a threat to human health or the environment. The scope of the SI will include collecting media samples to determine types and concentrations of hazardous substances at the site.

a. Sample Collection Objectives. Table B-1 summarizes the sampling objectives by medium. A biased sampling approach will be used by sampling a potential waste source and the potentially contaminated media. Sediment from one storm sewer manhole will be collected as representative of the battery room waste source to determine if hazardous substances (heavy metals) remain in the drain system to which the battery room floor drain was most likely connected in the past. No releases to ground water have been documented at the site, but some spillage of JP-4 occurred during removal of the old underground storage tanks (USTs) at the fuel farm. Although clean-up of the spillage was accomplished at the time, the tank removal reports suggest that some contamination may remain in the soil. Direct push sampling (Geoprobe®) and hand augering methods will be used to collect surface [0-1.5 feet below surface (fbs)], and subsurface (10.5-12 fbs) soil samples to determine if hydrocarbon contamination is present at five UST removal sites. Surface water and sediment samples will be collected from six sites upstream and downstream of the AASF activities and at storm drain outfalls into wetland areas. Further discussion of the field work is provided in the main body of the Sample Plan.

b. Intended Use of Acquired Data. The data, which will be acquired by the analysis of media collected during the field project, will be used to determine whether hazardous substances were released in the past from potential source sites at the facility. Contamination by naturally occurring parameters, such as metals, will be determined by comparison to background samples. For contaminants that do not occur naturally, such as most volatile

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TABLE B-1. SUMMARY OF SAMPLING OBJECTIVES

SAMPLE MEDIUM	COMPOUND/ANALYTE	NUMBER OF SAMPLES
Waste Source (sediment)	Target Analyte List (TAL) Metals	1
Soil (UST sites)	TPH-diesel TPH-gasoline	16 12
Surface Water	Target Compound List (TCL) Volatile Organic Compounds (VOCs), TCL Semivolatile Organic Compounds (SVOCs), TCL Pesticides/PCBs (Polychlorinated Biphenyls), TAL Metals, and TPH-diesel	9
Sediment (hazardous substances)	TCL VOCs, TCL SVOCs, TCL Pesticides/PCBs, TAL Metals, TPH-diesel	8
QA/QC **(soil duplicates)** **(sediment duplicate)**	 TPH-diesel TPH-gasoline TCL VOCs, TCL SVOCs, TCL Pesticides/PCBs, TAL Metals, TPH-diesel	 1 1 1
QA/QC (water) **(duplicate)** **(trip blank)** **(equipment blank)** **(equipment blank)**	 TCL VOCs, TCL SVOCs, TCL Pesticides/PCBs, TAL Metals, TPH-diesel TPH-diesel, TPH-gasoline	 1 1 1 1

organic compounds (VOCs) and semivolatile organic compounds (SVOCs), any detectable amounts will be considered indicative of contamination. The occurrence of organic compounds or elevated metal levels in media will be compared to applicable or relevant standards such as maximum contaminant levels or soil screening levels. The final SI report will provide tabulated data, where necessary to summarize the results, accompanied by text which discusses the findings. The report will also discuss whether or not a detected release poses a threat to human health and the environment.

c. QAPjP Objectives. The major elements of the overall quality assurance/quality control (QA/QC) program for this SI are:

(1) Use of appropriate methods by technically competent, well-trained personnel with appropriate instrumentation and equipment.

(2) Adherence to United States Army Center for Health Promotion and Preventive Medicine (USACHPPM) Directorate of Laboratory Sciences (DLS) standing operating procedures (SOPs) with emphasis on laboratory and measurement practices.

(3) Analysis and assessment of QC samples including matrix spike samples, duplicate samples, surrogate spikes, blanks, and independent laboratory control standards.

(4) Participation in external QC evaluation programs.

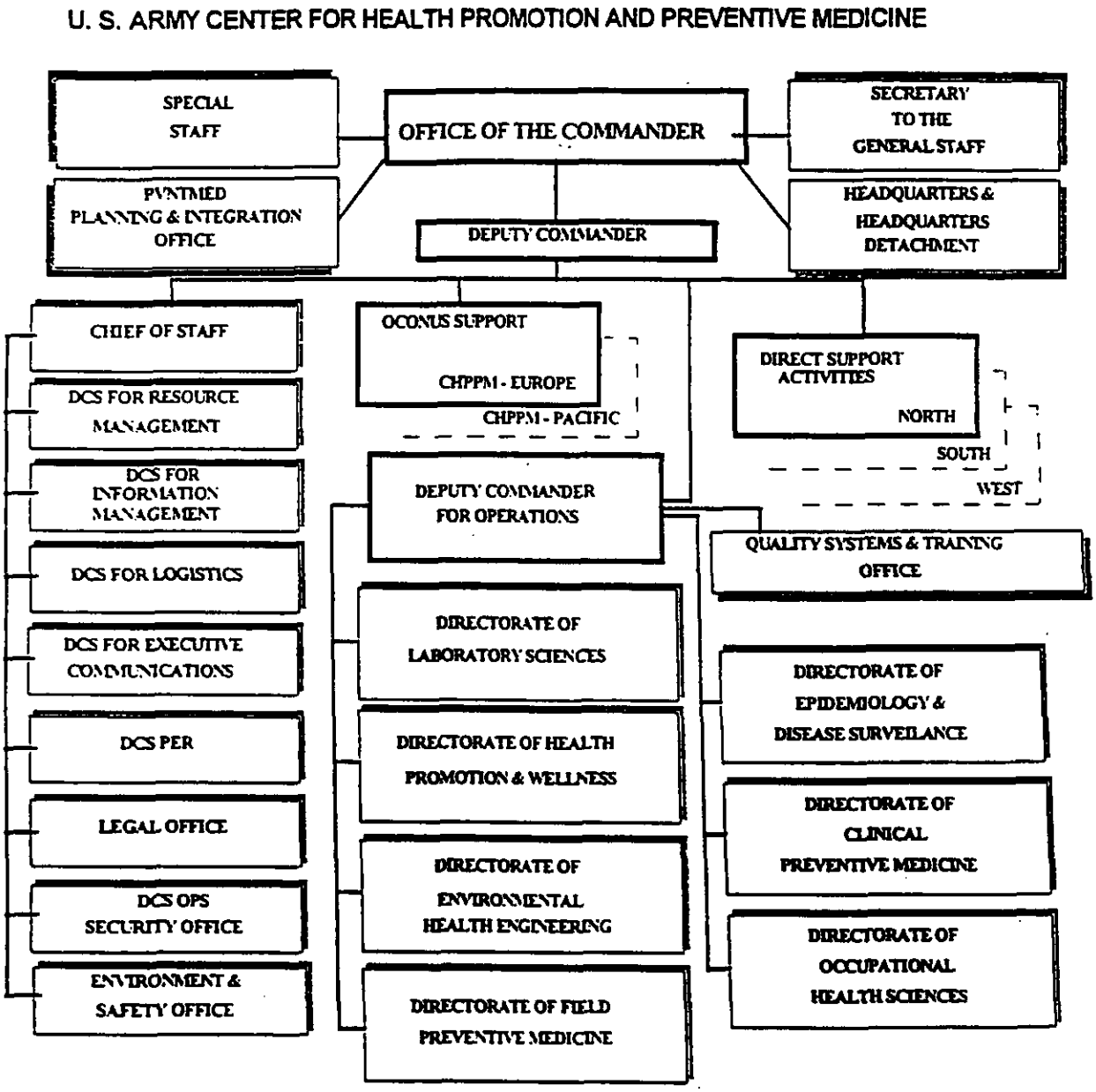
(5) Maintenance of accreditation by State, Federal, and other applicable agencies for work performed.

(6) Monitoring of internal and external compliance to procedures, and assessment of the performance of the analytical methods.

2. PROJECT ORGANIZATION AND RESPONSIBILITY.

a. This SI is being performed by the USACHPPM, which is organized into seven directorates (Figure B-1). The directorates are supported by Chief of Staff and Special Staff functions. The Ground Water and Solid Waste Program (GWSWP), under the Directorate of Environmental Health Engineering (DEHE), is responsible for the actual implementation of this project. The GWSWP Manager is Mr. John W. Bauer, P.G. Mr. Bauer has overall responsibility for ensuring that this project meets its objectives.

Figure B-1. CHPPM Organization.



b. The Project Manager for this SI is Mr. John A. Moser, P.G., who is responsible for designing, planning, and carrying out this project. Mr. Moser is responsible for all field aspects of the implementation of this SI. Those responsibilities include field QA/QC, site health and safety, and the onsite field direction of project activities. Mr. Moser also is responsible for writing the SI report.

c. The Quality Assurance Coordinator (QAC) for laboratory and analytical procedures for this SI is Mr. Dave Rosak. The QAC for field procedures is Mr. Stephen F. Curran, Jr., P.G. The QACs are responsible for ensuring that established QA/QC procedures are implemented and maintained within their areas of specialization.

d. The DLS will be responsible for performing the laboratory analytical work. The DLS consists of eleven programs (Figure B-2). Specific groups within the DLS will be responsible for actual analyses of samples collected during this SI.

3. QUALITY ASSURANCE OBJECTIVES FOR MEASUREMENT DATA.

a. Precision, Accuracy, Representativeness, Completeness, and Comparability.

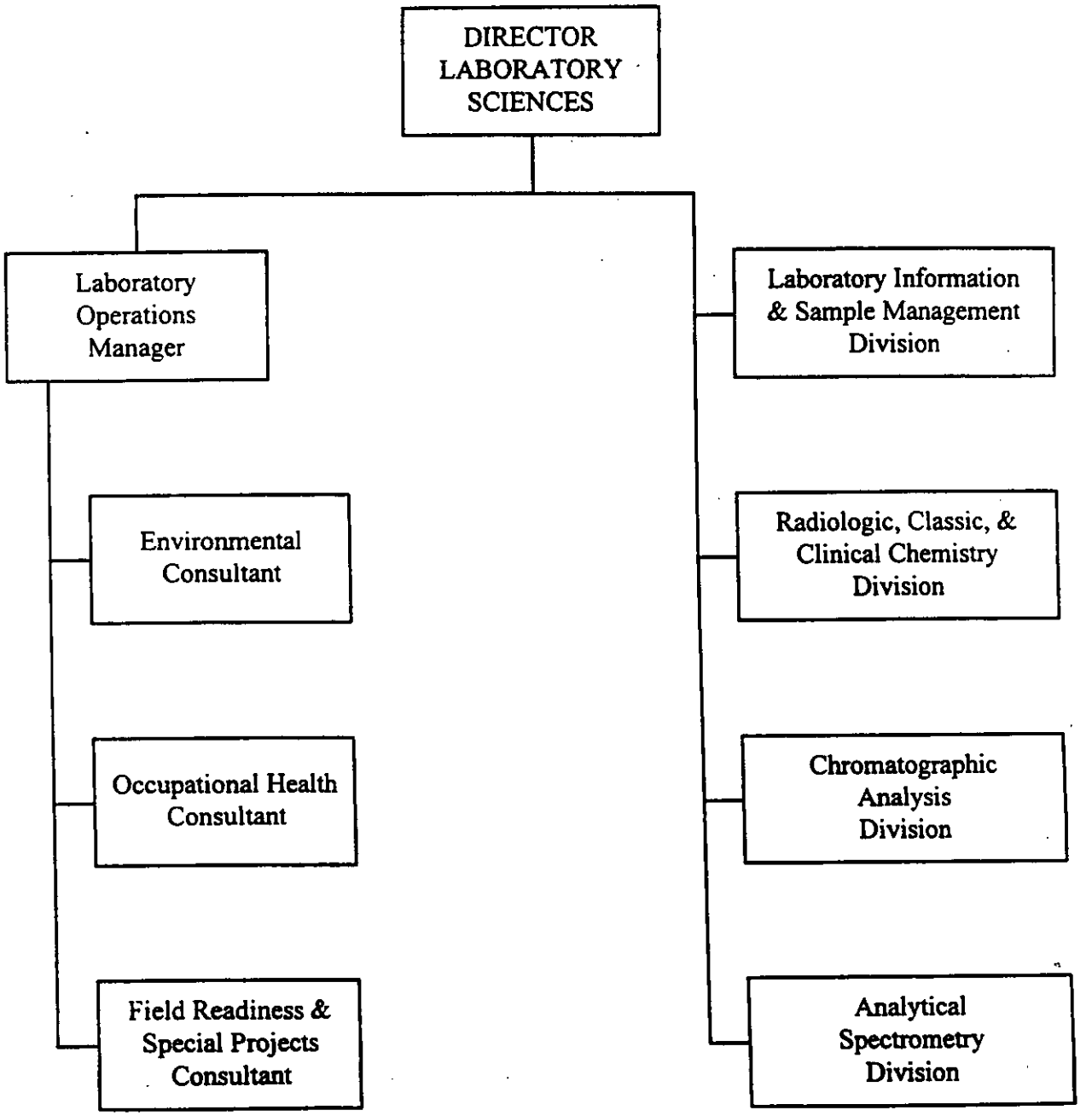
(1) Precision - a measure of mutual agreement among individual measurements of the same property, usually under prescribed similar conditions. Precision is best expressed in terms of the standard deviation. Various measures of precision exist depending upon the "prescribed" similar conditions.

(2) Accuracy - the degree of agreement of a measurement (or an average of measurements of the same thing), X, with an accepted reference to true value, T, usually expressed as the difference between the two values, X - T, or the difference as a percent of the reference, or true, value, 100(X - T)/T, and sometimes expressed as a ratio, X/T. Accuracy is a measure of the bias of the system.

(3) Representativeness - expresses the degree to which data accurately and precisely represents a characteristic of population, parameter variations at a sampling point, a process condition, or an environmental condition.

(4) Completeness - measures the amount of valid data obtained from a measurement system compared to the amount that was expected to be obtained under correct normal conditions.

Figure B-2. Directorate of Laboratory Sciences Organization.



(5) Comparability - expresses the confidence with which data sets can be compared.

b. Measurement Objectives. For the purpose of measurement objectives, data will be evaluated against standard SW-846 criteria. The final SI report will summarize the data that is and is not acceptable for use in determining if a release has occurred at the site. The analytical methods, method detection limits, and QA objectives provided in Tables B-2a through B-2f are considered to be sufficient for assessment of the site. Conclusions about the quality of the data will be based on the degree to which limits of acceptability criteria were exceeded. QCs may include equipment rinseates, field duplicates, laboratory control samples, matrix duplicates and spikes, method blanks, split samples, surrogates, and trip blanks. The QA objectives will be achieved through the implementation of specific procedures for sampling, field data collection, chain-of-custody, calibration, internal QC, preventive maintenance, and corrective actions.

c. Sample Data Quality Indicators.

(1) Accuracy. Field sampling accuracy will be qualitatively assessed through the evaluation of trip and rinse blank data. This information indicates whether contamination has been introduced during the sampling event or during sample transit. The rinse blank data will provide an assessment of decontamination efficiency and the potential for cross-contamination to occur during the field investigation. The criterion for evaluating blank contamination applies to any blank (field and laboratory) associated with the samples and dictates that no contamination should be found in the blank. If contamination is detected, all data associated with the blank will be evaluated to determine if there is an inherent variability in the data for the lot, or if the problem is an associated occurrence not affecting all samples in the lot. In cases where more than one blank is associated with a given sample, evaluation will be based upon a comparison with the associated blank having the highest concentration of the contaminant. Analytical accuracy consists of the evaluation of blanks, surrogates, matrix spikes, and consideration of quantitative limits, recoveries, etc.

(2) Precision. Sampling precision will be assessed through the evaluation of field duplicate samples. Duplicate samples are defined as samples collected simultaneously from the same source under identical conditions. Duplicate samples are used as a check for laboratory and field procedures. The relative percent difference (RPD) will be assessed for detected analytes in all duplicate samples. A goal of 30% for aqueous samples and 50% for solid samples has been set for this QAPjP. It is important to note that information from a single pair of duplicates presents an inaccurate estimate of precision; therefore, evaluation of the overall sampling precision cannot be made based on the assessment of a single duplicate pair RPD.

TABLE B-2a. TAL METALS LIST, METHOD NUMBER AND REPORTING LIMITS

METAL	WATER MATRIX Method #	REPORTING LIMIT (µg/L)
aluminum	6020	250
antimony	6020	3.0
arsenic	6020	1.0
barium	6020	10
beryllium	6020	1.0
cadmium	6020	1.0
calcium	6010A	50
chromium	6020	20
cobalt	6010A	50
copper	6020	10
iron	6010A	50
lead	6020	1.0
magnesium	6010A	250
manganese	6020	10
mercury	7470	0.2
nickel	6020	50
potassium	6010A	500
selenium	7740	1.0
silver	6020	10
sodium	6010A	100
thallium	6020	1.0
vanadium	6020	50
zinc	6020	10

METAL	SOIL MATRIX	REPORTING LIMIT (mg/kg)
antimony	7041	7.5
arsenic	7060	2.5
barium	6010A	1.0
beryllium	6010A	0.5
cadmium	6010A	1.0
chromium	6010A	2.0
lead	7421	0.5
mercury	7471	0.1
nickel	6010A	2.5
selenium	7740	0.5
silver	6010A	1.0
thallium	7041	10
vanadium	6010A	2.5
zinc	6010A	5.0

TABLE B-2b. TCL VOLATILE ORGANICS ANALYSIS DATA SHEET METHOD 8260A REPORTING LIMITS

ANALYTE	CAS #(a)	REPORTING LIMITS(b)
Acetone *	67-64-1	20
Benzene	71-43-2	2
Bromobenzene	108-86-1	2
Bromochloromethane	74-97-5	2
Bromodichloromethane	75-27-4	2
Bromoform	75-25-2	2
Bromomethane	74-83-9	2
2-Butanone *	78-93-3	20
n-Butylbenzene	104-51-8	2
sec-Butylbenzene	135-98-8	2
tert-Butylbenzene	98-06-6	2
Carbon disulfide *	75-15-0	20
Carbon tetracholoride	56-23-5	2
Chlorobenzene	108-90-7	2
Chloroethane	75-00-3	2
Chloroform	67-66-3	2
Chloromethane	74-87-3	2
2-Chlorotoluene	95-49-8	2
4-Chlorotoluene	106-43-4	2
Dibromochloromethane	124-48-1	2
1,2-Dibromo-3-chloropropane	96-12-8	2
1,2-Dibromoethane	106-93-4	2
Dibromomethane	74-95-3	2
1,2-Dichlorobenzene	95-50-1	2
1,3-Dichlorobenzene	541-73-1	2
1,4-Dichlorobenzene	106-46-7	2
Dichlordifluoromethane	75-71-8	2
1,1-Dichloroethane	75-34-3	2
1,2-Dichloroethane	107-06-2	2
1,1-Dichloroethene	75-35-4	2
cis-1,2-Dichloroethene	156-59-4	2
trans-1,2-Dichloroethene	156-60-5	2
1,2-Dichloropropane	78-87-5	2
1,2-Dichloropropane	142-28-9	2
2,2-Dichloropropane	590-20-7	2

TABLE B-2b. (continued)

ANALYTE	CAS #(a)	REPORTING LIMIT(b)
1,1-Dichloropropene	563-58-6	2
cis-1,3-Dichloropropene *	10061-01-5	2
trans-1,3-Dichloropropene *	10061-02-6	2
Ethyl benzene	100-41-4	2
Hexachlorobutadiene	87-68-3	2
2-Hexanone *	591-78-6	20
Isopropylbenzene	98-82-8	2
4-Isopropyl toluene	99-87-6	2
Methylene chloride	75-09-2	2
4-Methyl-2-pentanone *	108-10-1	20
Naphthalene	91-20-3	2
n-Propylbenzene	103-65-1	2
Styrene	100-42-5	2
1,1,1,2-Tetrachloroethane	630-20-6	2
1,1,2,2-Tetrachloroethane	79-34-5	2
Tetrachloroethene	127-18-4	2
Toluene	108-88-3	2
1,2,3-Trichlorobenzene	87-61-6	2
1,2,4-Trichlorobenzene	120-82-1	2
1,1,1-Trichloroethane	71-55-6	2
1,1,2-Trichloroethane	79-00-5	2
Trichloroethene	79-01-6	2
Trichlorofluoromethane	75-69-4	2
1,2,3-Trichloropropane	96-18-4	2
1,2,4-Trimethylbenzene	95-63-6	2
1,3,5-Trimethylbenzene	108-67-8	2
Vinyl chloride	75-01-4	2
m-Xylene	108-38-3	2
o-Xylene	95-47-6	2
p-Xylene	106-42-3	2

(a) Chemical Abstract Services Registry Number.
(b) Reporting Limit (μg/kg - soil; μg/L - water) based on lowest standard analyzed.
* Indicates add-ins for 8260A (Promulgated).

TABLE B-2c. TCL SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET METHOD 8270B REPORTING LIMITS

ANALYTE	WATER (μg/L)	SOIL (μg/kg)
1,2,4-Trichlorobenzene	10	330
1,2-Dichlorobenzene	10	330
1,3-Dichlorobenzene	10	330
1,4-Dichlorobenzene	10	330
2,4,5-Trichlorophenol	10	330
2,4,6-Trichlorophenol	10	330
2,4-Dichlorophenol	10	330
2,4-Dimethylphenol	10	330
2,4-Dinitrophenol	20	660
2,4-Dinitrotoluene	10	330
2,6-Dinitrotoluene	10	330
2-Chloronaphthalene	10	330
2-Chlorophenol	10	330
2-Methylnaphthalene	10	330
2-Methylphenol	10	330
2-Nitroaniline	10	330
2-Nitrophenol	10	330
3-Nitroaniline	10	330
3,3-Dichlorobenzidine	10	330
4-Methylphenol	10	330
4,6-Dinitro-2-methylphenol	10	330
4-Bromophenyl-phenyl ether	10	330
4-Chloro-3-methylphenol	10	330
4-Chloroaniline	10	330
4-Chlorophenyl-phenyl ether	10	330
4-Nitroaniline	10	330
4-Nitrophenol	20	660
Acenaphthene	10	330
Acenaphthylene	10	330
Anthracene	10	330
Benzo(a)anthracene	10	330
Benzo(a)pyrene	10	330
Benzo(b)fluoranthene	10	330
Benzo(g,h,i)perylene	10	330

TABLE B-2d. TCL PESTICIDE/PCB ANALYSIS DATA SHEET METHOD 8080A REPORTING LIMITS

ANALYTE	WATER (μg/L)	SOIL (μg/kg)
Aldrin	10	670
α-BHC	10	670
β-BHC	10	670
d-BHC	10	670
Lindane	10	670
Chlordane	10	670
4,4'-DDD	10	670
4,4'-DDE	10	670
4,4'-DDT	10	670
Dieldrin	10	670
Endosulfan I	10	670
Endosulfan II	10	670
Endosulfan sulfate	10	670
Endrin	10	670
Endrin aldehyde	10	670
Heptachlor	10	670
Heptachlor epoxide	10	670
Methoxychlor	10	670
Toxaphene	10	670
PCB-1016	10	670
PCB-1221	10	670
PCB-1232	10	670
PCB-1242	10	670
PCB-1248	10	670
PCB-1254	10	670
PCB-1260	10	670

TABLE B-2e. TOTAL PETROLEUM HYDROCARBON - METHOD NUMBER AND REPORTING LIMITS

ANALYTE	SOIL MATRIX	REPORTING LIMIT (mg/kg)
TPH-gasoline	SW-846, 8015	10.0
TPH-diesel	OECD #132.1	10.0

TABLE B-2c. (continued)

ANALYTE	WATER (μg/L)	SOIL (μg/kg)
Benzo(k)fluoranthene	10	330
Benzyl alcohol	10	330
bis(2-Chloroethoxy) methane	10	330
bis(2-Chloroethyl) ether	10	330
bis(2-Chloroisopropyl) ether	10	330
bis(2-Ethylhexyl)phthalate	10	330
Butylbenzylphthalate	10	330
Chrysene	10	330
Di-n-butylphthalate	10	330
Di-n-octylphthalate	10	330
Dibenz(a,h)anthracene	10	330
Dibenzofuran	10	330
Diethylphthalate	10	330
Dimethyl phthalate	10	330
Fluoranthene	10	330
Fluorene	10	330
Hexachlorobenzene	10	330
Hexachlorobutadiene	10	330
Hexachlorocyclopentadiene	10	330
Hexachloroethane	10	330
Indeno(1,2,3-cd)pyrene	10	330
Isophorone	10	330
N-Nitroso-di-n-propylamine	10	330
N-Nitrosodimethylamine	10	330
N-Nitrosodiphenylamine	10	330
Naphthalene	10	330
Nitrobenzene	10	330
Pentachlorophenol	10	330
Phenanthrene	10	330
Phenol	10	330
Pyrene	10	330

Table B-2f. Precision, Accuracy, and Completeness Objectives - Water Measurements

	Precision	Accuracy	Completeness
TCL VOCs (8260A)	± 30%	70-130%	80-90%
TCL SVOCs (8270)	± 30%	40-160%	80-90%
TAL Metals (various)	± 20%	80-120%	80-90%

Table B-2g. Precision, Accuracy, and Completeness Objectives - Soil Measurements

	Precision	Accuracy	Completeness
TCL VOCs (8260A)	± 50%	50-150%	80-90%
TCL SVOCs (8270)	± 50%	20-180%	80-90%
Pesticides/PCBs	± 50%	20-180%	80-90%
TAL Metals (various)	± 30%	70-130%	80-90%
TPH	± 30%	70-130%	80-90%

(3) Representativeness. Representativeness is a measure of the degree to which the measured results accurately reflect the medium being sampled. It is a qualitative parameter which is addressed through the proper design of the sampling program in terms of sample location, number of samples, and actual material collected as a "sample" of the whole. The sampling design was biased to sample the locations that would most likely have been impacted if a release occurred at the facility.

(4) Completeness. Completeness is a measure of the amount of information that must be collected during the field investigation to allow for a successful achievement of the objectives. A certain amount and type of data must be collected for conclusions to be valid. Missing data may reduce the precision of estimates or introduce bias, thus lowering the confidence level of the conclusions. While completeness has been historically presented as a percentage of the data that is considered valid, this does not take into account critical sample locations or critical analytical parameters. Sampling completeness will be assessed through the

evaluation of the total number of samples proposed versus the actual number of samples collected and analyzed for the project. This criterion expresses the degree of accuracy and precision to which sample data represent the population. The importance of any lost or suspect data will be evaluated in terms of the sample location, analytical parameter, nature of the problem, decision to be made, and the consequence of an erroneous decision. Critical locations or parameters for which data are determined to be inadequate may be resampled. For this project, the criterion is set at 80-90%. It will be assumed that a high degree of data completeness will be obtained.

d. Field Measurements Accuracy.

(1) Field measurements include pH, specific conductivity, turbidity, and temperature. Air monitoring and field screening will be done using a photoionization detector (PID). Water-level measurements will be made using an electronic water level indicator. The accuracy of the field measurements of pH, temperature, specific conductance, turbidity, and organic vapors will be addressed through pre-measurement calibrations and post-measurement verifications in the field.

(2) The pH will be addressed through performing two measurements on three standard buffer solutions. Each measurement will be within $\pm 0.05\%$ standard unit of buffer. Precision will be addressed through replicate measurements. The standard deviation of four replicate measurements must be less than or equal to 0.1 standard unit. The electrode will be withdrawn, rinsed with deionized water and re-immersed between each replicate. The calibration and verification will done in the field before the first replicate and after the last. The instrument used will be capable of providing measurements of 0.01 standard units.

(3) Temperature will be measured by using a thermometer with a range of -2 to 50° centigrade (C). Accuracy of measurement will be ± 1 °C. The thermometer will be calibrated against an ASTM thermometer. Specific conductance will be measured using a factory-calibrated conductivity meter. The meter will be read to the nearest 10 μmhos/cm. A three-point standard curve will be developed for the conductivity meter. Fresh laboratory-prepared conductivity standards will be used for the calibration. The calibration curve will be used to correct the value measured in the water sample by the meter (if the factory calibration has not deviated then the correction will not be necessary).

(4) Soil screening and air monitoring will be conducted using a PID meter (HNu analyzer). The HNu will be used to measure the concentration of trace organic vapors to the nearest 0.1 ppm on the 0-20 ppm scale, the nearest 1 ppm on the 0-200 ppm scale, for an Hnu

with a range of 0.1 to 2000 ppm. Accuracy shall be ±1% of the meter scale. Water level measurements shall be made with an electronic water level indicator, and will be made to the nearest 0.01 foot. Accuracy will be verified by withdrawing the probe above the water level until the indicator does not indicate water. The probe will be reinserted to verify the previous water level measurement. This will be repeated until the same measurement is obtained three successive times.

4. SITE SELECTION AND SAMPLING PROCEDURES.

a. Sample Locations, Numbers, Rationale, and Procedures. The details of the sampling and sampling rationale are presented in the main body of the Sampling and Analysis Plan. They are not repeated here. Table B-3 lists the container, preservation, and preparation requirements for water and soil or sediment samples.

b. Sample Documentation. Sample locations and numbers will be entered into a field logbook. The field logbook will contain the following information as a minimum: location of sample point; sampling methodology; number of samples collected and type of analysis; date and time of collection; sample identification number; field observations (e.g., stressed vegetation, soil staining); any field measurements made (e.g., pH); identity of all field QA/QC samples; references such as photographs of the sampling site; and signatures of personnel responsible for observations and sampling. Each sample will be labeled. Chain-of-Custody will be filled out. Custody seals will be signed, dated, and placed on coolers.

5. SAMPLE CUSTODY.

a. Chain-of-Custody. Chain-of-Custody may be defined in any of the following ways:

(1) Actual Possession

(2) Visual possession, after actual possession

(3) Physical possession, then secured

b. Field Chain-of Custody. Samples will be placed in coolers and maintained with the sampling crew until transported to a designated secure area. From the designated secure area, samples will either be transported by the sampling crew or shipped by bonded carrier to the USACHPPM laboratories at Aberdeen Proving Ground, Maryland. Samples will be transported in coolers secured with security tape. The coolers will contain freezer packs and

TABLE B-3. SAMPLE COLLECTION REQUIREMENTS

Analysis	Minimum Quantity	Container	Special Preparation	Preservation	Holding Time
Water:					
TCL VOCs TPH-gasoline	40 mL (x2)	Glass; Teflon®-lined Cap	No Head Space	4 °C; 1:1 HCL to pH<2	14 days
TCL SVOCs TPH-diesel	1,000 mL	Glass; Teflon-lined Cap	None	4 °C	7 days
Pesticides/PCB	1,000 mL	Glass; Teflon-lined Cap	None	4 °C	7 days
TAL Metals	1,000 mL	Glass or Polyethylene	None	HNO_3 to pH<2	6 months
Soil/Sediment:					
TCL VOCs and TPH-gasoline	4 oz.	Glass; Wide-mouth Jar; Teflon-lined Cap	No Head Space	4 °C	14 days
TCL SVOCs and TPH-diesel	16 oz.	Glass; Wide-mouth Jar; Teflon-lined Cap	None	4 °C	14 days
Pesticides/PCB	4 oz.	Glass; Teflon-lined Cap	None	4 °C	14 days
TAL Metals	32 oz.	Glass or Polyethylene; Wide-mouth Jar	None	4 °C	6 months

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standardized field sample tracking forms for chain-of-custody documentation. The sample tracking forms will contain a complete list of samples including sample identification numbers, sample dates, sample medium, sample parameters, and the signature of the project officer who supervised sample collection. Duplicate copies of the sample tracking forms will be maintained by the project manager. Upon receipt of the samples, the analytical laboratory will confirm secured transport of the samples by verifying the intact condition of the security tape on the coolers and by matching samples with the listing on the sample tracking form. A sample chain-of-custody form is included in Annex B-1. The temperature of each cooler will be taken upon receipt by the analytical laboratory in accordance with the Sample Management Laboratory SOP No. 4.0 (Annex B-2).

c. Laboratory Chain-of-Custody. The DLS SOP No. 5 (Annex B-1) provides detailed laboratory handling and chain-of-custody procedures for samples.

6. CALIBRATION PROCEDURES AND FREQUENCY.

a. Calibration. DLS calibration procedures involve the use of primary or secondary standard reference materials (SRMs) traceable to National Institute of Standards and Technology (NIST). DLS personnel must document their calibration procedures and status for equipment in the equipment logbook and/or analyst's notebook. Equipment to be calibrated includes:

- Analytical Balances
- Thermometers
- Weights
- Non-Class A volumetric measuring containers used for measurements that affect the accuracy of data.
- Autopipetors

Equipment to be standardized using traceable reference materials includes all:

- UV/Vis Spectrophotometers
- IR Spectrophotometers
- AA and ICP Spectrophotometers
- Gas, Liquid, Ion Chromatography Instruments
- Mass Spectrometers
- Miscellaneous lab equipment, such as conductivity and pH meters.

b. Calibration Frequency. DLS participates in the Army Test, Measurement, and Diagnostic Equipment (TMDE) Program which identifies each piece of equipment that requires calibration. DLS uses the services provided by the U.S. Army District TMDE Support Center - Aberdeen, to calibrate the following equipment at regulated intervals--

- Analytical balances (yearly, when moved, or repaired).
- Thermometers (every six months).
- Drying ovens (every six months or when repaired).
- Voltmeters (yearly or when repaired).
- Microwaves (as required by method).

The U.S. Army TMDE Support Center - Aberdeen documents the calibration procedure and status on a DA Form 2416 and provides a monthly computer listing of each customers TMDE. A DA Label 80, U.S. Army Calibrated Instrument, is affixed to the calibrated instrument for proof of calibration, date calibrated, date due, and identification of performer. All contracts for calibration/repair of TMDE must be approved by Commander, U.S. Army The Surgeon General per AR 750-43, paragraph 6.

7. ANALYTICAL PROCEDURES. Methods used for this SI will be U.S. Environmental Protection Agency (EPA) methods or DLS developed methods based on EPA methods. All DLS analytical methods must be documented in SOPs. The technical SOPs will be strictly followed. Any deviations from SOPs are allowed only with approval from the Program Manager or designee in writing. All approved deviations must be documented in the analytical report and the analyst's notebook or project file. See Annex B-3 for methods to be used and individual parameters.

8. DATA REDUCTION, VALIDATION AND REPORTING.

a. All reduced data will have a two tiered review. The reviewer must inspect the numerical data for accuracy, significance, and reasonableness. The reviewer will be alert to the requester's actual requirements.

b. The analyst reviews all of his or her work for completeness and accuracy. The authorized reviewer reviews all raw data and submits it to another chemist GS-9 or above for an additional review. Analyst's results are submitted to the first level reviewer. The documents must include all raw data.

c. The review process will insure that all Data Quality Objective's are met. Quality control should be within acceptable limits.

d. All raw data will be maintained through charting, graphing, and documentation. A printout of the data will be stored and will contain the analyst's signature and the date of extraction and analysis. This information will be maintained in either the analyst's notebook or project file. The integrity of the analyst's notebook is maintained through specific controls. (DLS SOP 3.)

e. All data obtained from automated and nonautomated systems will be reduced per analytical method SOPs. All deviations from the analytical method (modification to operating conditions or concentration steps) will be documented in the analyst's notebook and/or project file and in the final report to the customer.

f. All numerical results will be reported in terms of concentration in the environmental sample. In reporting results, rounding to the correct number of significant figures will occur only after all calculations and manipulations are completed. As many figures as are warranted by the analytical technique will be used in pre-reporting calculations.

g. Each analytical method will describe the correct procedure for using Method Blank results. All uncorrected values less than the reporting limits, including no response, will be reported as "less than" the reporting limit.

h. All final results will be reported to the customer for each batch of samples submitted. All analytical results will be reported using full analytical deliverables. All nonparameters will be reported in a format similar to the analytical deliverables. All raw data will be archived in the USACHPPM Library.

i. A narrative must be provided describing the analytical methods and exact procedures performed by the laboratory, as well as any deviations from the method. Problems encountered during analysis, problem resolution and any factors which may affect the validity of the data must be addressed. Interim reports will be issued to the customer if requested.

j. All data validation will be the responsibility of the program QACs and the project QA manager.

9. INTERNAL QUALITY CONTROL CHECKS AND FREQUENCY. For samples analyzed under the protocol, internal QC checks are specified in the methods and will not be repeated here. For the protocol, internal QC checks will be as follows.

a. Before analysis, chemical calibration standards of each target analyte will be analyzed to establish that the instrument is functioning properly with the desired sensitivity.

b. Chemical instrument calibration will be accomplished using calibration standards prepared by mixing the species to be analyzed in the solvent that is introduced into the instrument, as dictated by the analytical method.

c. The concentrations of the chemical calibration standards will be chosen to bracket the certified range of the method.

d. Data from the chemical calibration standards will be plotted with the instrument response indicated on the ordinate and the concentration indicated on the abscissa. Methods and formulae for quantification will be specified in the analytical methods.

e. Numbers and concentrations of standards to be analyzed during calibrations performed will be specified in the analytical methods.

f. A check standard will be run every 10 samples where applicable. Instrument responses for each standard must fall within two standard deviations of the mean response.

g. The Branch LQCC or designee prepares internal laboratory control samples which will be analyzed with each sample batch where applicable. These control samples will be analyzed per method SOPs.

h. Matrix spike and matrix spike duplicates will be run with each sample batch. These control samples will be analyzed per method SOPs.

10. PERFORMANCE AND SYSTEM AUDITS AND FREQUENCY. The audits by the QC staff include: verification that standards, procedures, records, charts, magnetic tapes are properly maintained; verification that actual practice agrees with written instructions; verification that QA records are adequately filed and maintained so as to assure protection and retrievability; and assessment of results of QC sample analyses.

11. PREVENTIVE MAINTENANCE PROCEDURES AND SCHEDULES.

a. Field Equipment. The field equipment used for measurements during this project are pH meters, turbidity meters, conductivity meters, water level indicators, and photoionization detectors. Specific field preventive maintenance procedures for this equipment is given by the manufacturer. Field instruments will be checked daily and calibrated according to the manufacturer's recommended frequency. Calibration checks will be documented in the field logbook. Critical spare parts will be kept onsite if feasible to reduce downtime. Backup instruments and equipment will be available onsite or within 1-day shipment to avoid delays in the field schedule.

b. Laboratory Instruments. The DLS laboratory equipment maintenance program includes in-house maintenance and contract services. The DLS equipment maintenance program contains the following elements:

- Preventive maintenance.
- Manufacturer's verification.
- Corrective maintenance.
- Quality control checks.

All analytical equipment used in this project is covered under full service maintenance contracts.

12. SPECIFIC ROUTINE PROCEDURES USED TO ASSESS PARCC FOR MEASUREMENT PARAMETERS INVOLVED. See Annex B-3 for DLS SOP for procedures used to assess data quality (DLS Quality Assurance Manual, April 1995).

13. CORRECTIVE ACTION.

a. Field Sampling Corrective Action. Project personnel will be responsible for reporting all suspected technical nonconformances or QA nonconformances to the Project Manager. The Project Manager will be responsible for assessing the suspected problems and deciding if the situation is a reportable nonconformance that warrants corrective action. The identification, cause, and corrective action for those situations will be documented for those situations. If appropriate, the Project Manager will ensure that no additional work that is dependent on the nonconforming activity is performed until corrective actions are completed. Corrective actions for field measurements may include:

- Repeating the measurements to check the suspected error
- Checking for all proper adjustments for ambient conditions such as temperature
- Checking the batteries
- Checking the calibration
- Replacing the instrument
- Stopping the work

b. Laboratory Corrective Action. Corrective actions are a result of any nonconformities or failures detected through the assessment of the Quality System. All corrective actions must be documented and initiated immediately after the nonconformity or failure has been detected. The following minimum steps must be taken:

- Investigate and, if possible, identify the cause for the nonconformity or failure.
- Determine what action(s) are necessary.
- Assign and/or accept responsibility for implementing the corrective action.
- Complete the formalized written report or annotate the analyst's notebook or equipment logbook.
- Verify that the corrective action was effective.

Two possible types of corrective actions are:

- Formalized written reports.
- Analyst's notebook or equipment logbook annotations.

14. QUALITY ASSURANCE REPORT TO MANAGEMENT. The Quality Assurance Office (QAO) performs assessments of the entire Quality System. These assessments include a yearly assessment of the overall Quality System, a quarterly assessment of at least one SOP in the directorate, and requested assessments on any area of the Quality System. The QAO assures overall quality within the entire agency, and in doing so will also assure that project specific QA/QC objectives will be met for this project. A report of the following will be given to the supervisor of the area audited after completion of the assessment. The contents of the report are as follows:

a. The assessor's name, date, and the identification of area or procedure audited.

b. A detailed listing of nonconformance(s) found and the objective evidence supporting this nonconformance.

c. A list of the corrective action(s) proposed by the responsible supervisor. This list specifies the expected completion date and is signed and dated by the supervisor.

d. Any comments or actions, if necessary, that may clarify the assessment.

e. A follow-up assessment statement confirming that corrective actions have been taken.

f. A summary of these assessments will be included in both the QAO monthly and quarterly reports to management.

ANNEX B-1

DLS CHAIN-OF-CUSTODY SOP

DIRECTORATE OF LABORATORY SCIENCES
STANDING OPERATING PROCEDURE
for
CHAIN-OF-CUSTODY

Preparer	4 Jun 93 Date
DLS Approval	7 June 1993 Date
Leader, QAU Approval	8 June 93 Date

Annual Review

DLS Approval	Date
DLS Approval	Date
DLS Approval	Date
DLS Approval	Date
DLS Approval	Date

Disclaimer: This Standing Operating Procedure has been prepared for the sole use of the US Army Environmental Hygiene Agency and may not be specifically applicable to the activities of other organizations.

HSHB-ML

U. S. Army Environmental Hygiene Agency
Directorate of Laboratory Sciences
Standing Operating Procedure
for
Chain-of-Custody

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1.0 PURPOSE. This document establishes procedures and documentation requirements for protecting sample integrity during the transfer of "custody" of sample(s).

2.0 APPLICABILITY. This document applies to all environmental and occupational sample(s) identified as chain-of-custody (COC) sample(s) and received at the Directorate of Laboratory Sciences (DLS).

3.0 DEFINITIONS.
A sample is in someone's "custody" if:

a. It is in one's actual physical possession;

b. It is in one's view, after being in one's physical possession;

c. It is one's physical possession and then locked up so that no one can tamper with it;

d. It is kept in a secured area, restricted to authorized personnel only.

This sample will include both original sample and prepared aliquot(s).

4.0 DISCUSSION. Written procedures for sample handling should be available and followed whenever sample(s) are collected, transferred, stored, analyzed or disposed. For the purpose of litigation, it is necessary to have an accurate written record which can be used to trace the possession and handling of sample(s) from the moment of collection through disposal. The procedures defined here represent a means to satisfy the requirement.

5.0 RESPONSIBILITY.

5.1 The Analyst must follow the requirements set forth in this SOP for all COC samples.

5.2 The designated branch COC Custodians will receive and account for the COC sample(s) in their respective branch. They are to post and update the list of authorized personnel on the doors leading to their laboratories.

5.3 Quality Assurance Unit (QAU) will maintain a list of designated branch COC Custodians.

5.4 Branch chiefs will assign the designated branch COC Custodians. They will review affidavits to ensure the reconstruction of the broken chain.

6.0 POLICY and PROCEDURE. DLS requires that chain-of-custody practices shall be employed during the sample receipt, sample identification, sample analysis, sample storage and sample disposal processes conducted as part of environmental/ occupational monitoring and assessment. These actions shall establish a reasonable probability that:

(a) this accurate written record is supportable if the necessity arises.

(b) the sample which is collected is the same sample which is analyzed.

(c) the sample is not altered, changed or otherwise compromised.

6.1. Chain-of-Custody Guidelines for Field Sample Collection and Sample Transfer to Laboratory.

6.1.1. The sample collector should be responsible for assuring that proper chain-of-custody requirements are met during collection of environmental and occupational sample(s). The Project Officer will notify the laboratory prior to shipment. The laboratory is working with IH mail-in submitters on this issue, but this new process may take time to institute.

All actions conducted in the field should be documented in field logbooks as well as on chain-of-custody forms; information which is assigned to each field sample should include the following:

(a) source/installation where sample was collected
(b) date and time of collection of field sample.
(c) field sample I.D. number.
(d) analyses desired for sample.
(e) sample collector's name.
(f) USAEHA project number (if applicable).
(g) total number of containers per sample.
(h) date of shipment of sample to laboratory.
(i) method of shipment (e.g. UPS, Federal Express)
(j) tamper resistance tape.
(k) preservative used.

6.1.2. When transferring the "possession" of the container to the next party, i.e. laboratory personnel, the project officer should sign and record the date/time of transfer on the chain-of-custody form included with each group of sample(s) for each transportation container. The original chain-of-custody forms should be placed in a sealed plastic bag to prevent wetting and placed inside the respective sample's shipping container. Transportation containers should then be sealed with tamper proof shipping tape and forwarded to the laboratory for subsequent analyses. An example of the USAEHA Chain-of-Custody Form is attached as Appendix A. Project officers should retain a photocopy of each chain-of-custody form designated for each transportation container.

6.1.3. Transportation containers should be shipped to the laboratory via common carrier (UPS, Federal Express, etc.). Common carriers should abide by Department of Transportation regulations (See References) governing shipment of chain-of-custody sample(s). Upon receipt of containers from a common carrier or from customer, chain-of-custody should be relinquished to the Laboratory Customer Services Division (LCSD) or staff duty personnel at building E2100 during non-duty hours. Any evidence of tampering (e.g. breakage of seal) during shipment by common carrier should be documented upon receipt and inspection of transportation containers by personnel of LCSD during duty hours or staff duty personnel during non-duty hours. Staff duty personnel shall follow guidelines of the non-duty sample receipt policy (See References).

As soon as sample(s) are transferred to DLS branch laboratory personnel, custody should be formally relinquished to them. If, for any reason, the chain is broken between transfer of sample(s) from field to LCSD/staff duty personnel, or from transfer of sample(s) from LCSD/staff duty personnel to laboratory, a contingency plan should be implemented to determine cause of breakage of chain and to perform corrective action to reconstruct chain, if possible. A description of the contingency plan is detailed in paragraph 6.4.

6.1.4 If guidelines as specified in paragraphs 6.1.1. through 6.1.3. are not followed, DLS will not be able to accept field sample(s) as chain-of-custody.

6.2. Chain-of-Custody Guidelines for Environmental Sample Inprocessing, Environmental Sample Analysis and Environmental Sample Disposal.

6.2.1. Personnel of the Directorate of Laboratory Sciences (DLS) shall be responsible for management oversight of procedures which will assure custody of sample(s) from the time of receipt of field sample(s) in LCSD through LCSD to the branch laboratories for subsequent analyses and finally coordination of sample(s) with LCSD sample disposal. These procedures are described as follows:

6.2.1.1. Original field chain-of-custody forms together with the sample(s) are received from the customer in LCSD. The original form(s) are maintained in LCSD.

6.2.1.2. New DLS chain-of-custody form(s) is/are created in LCSD and forwarded with the sample(s) to respective branch laboratories. Branch records generated (analyst's notebooks, project files, and/or worklist) will establish custody throughout that branch.

6.2.1.3. DLS chain-of-custody forms are returned with the data report to LCSD. If the branch laboratory send the results directly to the customer, then copies of the COC Form are forwarded to the customer and LCSD.

The branch laboratory retains a copy of the DLS chain-of-custody form(s) together with the sample(s) until the sample(s) is/are disposed by either the branch laboratory or LCSD coordination. If the branch laboratory disposes of sample(s), the branch laboratory forwards a copy of COC form to LCSD.

6.2.1.4 LCSD maintains project files containing COC form and forwards a copy of field and DLS COC form to the project officer.

6.2.1.5. Designated branch COC custodians receive and account for sample(s) in their respective branch. The branch COC custodians are required to sign chain-of-custody form(s) which accompany sample(s) and to transcribe information contained on chain-of-custody forms to logbooks for permanent recordkeeping. A copy of the list of designated branch COC custodians maintained by the QAU will be furnished to LCSD.

6.2.1.6. Access to the laboratory area containing custody sample(s) is controlled at all times. The analyst insures that the contents of the sample are not tampered with during the time that the analyst is in possession of the sample. A list of authorized personnel who are allowed access to the particular laboratory area is posted on doors leading to the laboratory area. There will be a procedure for handling unauthorized personnel.

6.2.1.7. When entered into the laboratory sample and data management system, the chain-of-custody sample(s) is/are flagged as such.

6.3. Chain-of-Custody Guidelines for Direct Branch Receipt of Sample(s).

6.3.1. The DLS personnel shall be responsible for management oversight of procedures which will assure custody of special hazardous sample(s) such as unique sample(s) from the time of receipt through disposal. These procedures are as follows:

6.3.1.1. Original field chain-of-custody forms together with the sample(s) are received in branch from the customer. Branch records generated (analyst's notebooks, project files, and/or worklist) will establish custody throughout that branch.

Sample analyses are performed and the data report together with the original field chain-of-custody form are returned to the project officer.

6.3.1.2. A copy of field chain-of custody form(s) is maintained in branch with the sample(s) until the sample(s) is/are disposed. The field chain-of-custody copies are filed in the branch after sample disposal. Disposal may include returning the unused portion of the sample(s) to the sender along with a copy of the COC Form(s).

6.3.1.3. Designated branch COC custodians receive and account for unique sample(s) in their respective area. The branch COC custodians sign chain-of-custody form(s) which accompany sample(s) and transcribe information contained on chain-of-custody forms to logbooks for permanent recordkeeping. A copy of the list of designated branch COC custodians maintained by QAU will be furnished to LCSD.

6.3.1.4. Access to the laboratory area containing unique custody sample(s) is controlled at all times. The analyst insures that the contents of the sample are not tampered with during the time that the analyst is in possession of the sample. A list of authorized personnel who are allowed access to the particular laboratory area are posted on doors leading to the laboratory area. There will be a procedure for handling unauthorized personnel.

6.3.1.5. When entered into the laboratory sample and data management system the unique chain-of-custody sample(s) are flagged as such.

6.4 Chain-of-Custody Guidelines - Broken Custody.

6.4.1 A previously developed contingency plan is implemented when the chain is broken [e.g. if sample(s) doesn't/don't arrive with chain-of-custody form(s); if unauthorized personnel open shipping containers; if unauthorized personnel sign chain-of-custody forms upon receipt of sample(s)]. This contingency plan comprises the following steps:

6.4.1.1. If a broken chain is suspected, contact the branch COC custodian and/or branch chief. If the chain is determined to be broken, the customer will be notified. Obtain affidavits from all involved field and laboratory personnel in order to reconstruct the chain. The affidavit is a sworn statement that the person actually handled or observed sample(s) in the transfer process. An example of an affidavit form is attached (Appendix B).

6.4.1.2. Complete the transfer of custody sample(s) and attach affidavits to the chain-of-custody documentation. File information accordingly.

6.4.1.3. Review affidavits to ascertain that reconstruction has or has not occurred. This task is the respective area's branch chief's responsibility.

7. SAFETY. Refer to Branch/Division SOPs on Safety.

8. RECORDKEEPING.

8.1 List of designated branch COC Custodians will be maintained by QAU and updated quarterly.

8.2 The field personnel will initiate the first COC Form(s). The form(s) will accompany the sample(s) to the laboratory.

8.3 If aliquots of the sample(s) are to be distributed to more than one branch laboratory, then LCSD will prepare an in-house COC form for each branch laboratory. A copy will be returned to LCSD after the laboratory signs for the sample(s). This copy will be placed in the project folder.

8.4 Any aliquot created in the branch laboratory will be track using the existing internal paperwork.

8.5 A copy of the COC Form(s) will be returned to LCSD along with the analytical report. A copy of the COC Form(s) will be sent the customer along with the analytical report. A retained copy will replace the previous copy in the project folder.

8.6 The original COC Form(s) will be returned to LCSD after the samples are disposed and a copy will remain in the branch laboratory. This copy will replace the previous obtained copy in the project folder.

8.7 The branch COC Custodian will post a list of the authorized personnel (for that area) on the branch laboratory door. This list must be updated with each change.

9. REFERENCES.

9.1. "Manual for the Certification of Laboratories Analyzing Drinking Water", US Environmental Protection Agency, EPA/570/9-90/008, April, 1990, US Environmental Protection Agency, Washington, D.C. 20460.

9.2. "Industrial Hygiene Laboratory Quality Control # 587, July, 1983, National Institute for Occupational Safety and Health, Cincinnati, Ohio.

9.3. Code of Federal Regulations, Title 49, Parts 171 to 177, Transportation.

9.4. US Environmental Protection Agency, "The User's Guide to the Contract Laboratory Program, Office of Emergency and Remedial Response, Dec 1986.

9.5. LCSD Division Policy for Receiving Samples, 9 Sep 92.

CHAIN-OF-CUSTODY RECORD

The proponent of this form is the Directorate of Laboratory Sciences.

INSTALLATION ____________ PROJECT NUMBER ____________

PROJECT OFFICER ____________

PACKED BY ____________

NOTE: For use of this form, see AEHA TG 155 ; or DLS SOP No. 5.0.

DATE SAMPLED	FIELD IDENTIFICATION NUMBER	LAB NUMBER	SAMPLE TYPE	COMP	GRAB	TOTAL NUMBER OF CONTAINERS	SAMPLE PARAMETER
					TOTAL		

DATE SHIPPED ____________ CARRIER USED ____________ SEAL INTACT ☐ YES ☐ NO

LAB NUMBER	RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME	COMMENTS

REMARKS

AEHA Form 235-R, 1 JUN 93 (HSHB-ML) *Previous editions of this form are obsolete.*

APPENDIX A
CHAIN-OF-CUSTODY FORM

LAB NO.	RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME	COMMENTS

REMARKS

DISPOSAL RECORD

LAB NUMBER	DATE OF DISPOSAL	NUMBER OF CONTAINERS	SIGNATURE	REMARKS

APPENDIX B

UNITED STATES ARMY ENVIRONMENTAL HYGIENE AGENCY
DIRECTORATE OF LABORATORY SCIENCES
CHAIN-OF-CUSTODY AFFIDAVIT

I swear (or affirm) that the following statement is made to the best of my knowledge that the environmental/occupational sample(s) identified on Chain-of-Custody form for:
Project# _____, Sample(s) # _____,
were received on: _____.

The sample(s) identified on the chain-of-custody form were transferred in a secure manner:
from _____ to _____
on _____ for _____.

I also solemnly swear (or affirm) that to the best of my knowledge the sample(s) were not damaged or tampered with during my possession.

_____ _____
Name Date

Subscribed and sworn to (or affirmed) before:

_____ _____
Witness Name Date

ANNEX B-2

DLS SOP FOR TEMPERATURE MONITORING OF COOLERS AND SAMPLE KITS

U.S. ARMY CENTER FOR HEALTH PROMOTION AND PREVENTIVE MEDICINE
Directorate of Laboratory Sciences

STANDING OPERATING PROCEDURE
for
Temperature Monitoring of Coolers and Sample Kits

Paragraph	Page(s)
1.0 Purpose	2
2.0 Applicability	2
3.0 Definitions	2
4.0 Responsibilities	2
5.0 Procedure	3-4
6.0 Safety	4
7.0 References	4

1.0 PURPOSE: This SOP describes the procedure to follow when taking the temperature of coolers and sample kits containing environmental samples received in the Sample Management Laboratory (SML).

2.0 APPLICABILITY: This SOP must be followed by all personnel processing samples in SML. The procedure applies to all sample containers received for environmental analysis.

3.0 DEFINITIONS:

3.1 Chain-of-Custody Record (COC) - Documentation of the sample handling/transfer process where by samples are kept under physical possession or control of some individual to prevent tampering or alteration of the samples' characteristics.

3.2 Temperature Control Bottle - A bottle of water shipped with the samples that is used to monitor the temperature of the cooler or kit.

4.0 RESPONSIBILITIES: Anyone processing samples in SML must review this SOP at least annually and annotate his/her understanding of the SOP content. Direct all questions about this SOP to the Supervisor, Team Leader, NCOIC or the Trainer for clarification before processing the samples.

5.0 PROCEDURE: The temperature of all samples received into SML in any type of cooler, styrofoam kit or insulated box must be monitored for temperature. Situations where samples are brought in "not chilled" or without ice are documented on the SML Sample Receipt Log (Appendices A and B). *Industrial Hygiene samples are not monitored by this procedure.* Temperature control bottles and air temperature methods are used to monitor the temperature of samples upon receipt. The air temperature method is used only when there is no temperature control bottle with the shipment.

5.1 Temperature Control Bottle Method. If a temperature control bottle supplied by SML or the customer, remove it, check that the lid is tight, tighten the loose lid and invert the bottle at least four times. Open the lid and place the thermometer in the bottle. Gently stir the water for several seconds with the thermometer. Read the temperature immediately and observe the thermometer for 30 seconds. Record the lowest temperature reading.

5.2 Air Temperature Method. When no temperature control bottle supplied, the air temperature method applied. Place a thermometer next to a sample container in the cooler or box and tightly close the cooler/box lid. Wait at least five minutes, then remove the thermometer. Read the temperature immediately and observe the thermometer for 30 seconds. Record the lowest temperature reading.

5.3 Documentation of the Temperature. Record all temperature readings in SML Sample Receipt Log. Record the corrected temperature for each cooler or box. Note the correction factor on the temperature ID tag and make the necessary correction when recording the temperature on the Sample Receipt Log. Note the temperature ID number, the temperature method as bottle or air and if wet ice or ice packs were used as the cooling device. *Acceptable temperature range is 2° to 6°C.*

For multiple cooler shipments accurately reference the temperature of each cooler. The temperature section of the Sample Receipt Log (Appendix A) contains six sections in which to record the temperature information for six coolers/boxes from one customer. Appendix B, Sample Receipt Log contains additional sections, 7-12, for temperature documentation.

5.4 Documentation of the Temperature on the Customers COC/Paperwork. Chain of Custody or other paperwork accompanying the customer's samples must be completed by SML upon receipt. The temperature of the cooler/kit must be documented on the customer's paperwork if requested. The documentation must reference and correspond to a specific cooler or kit and the containers contained in the cooler or kit.

5.5 Out of Range Temperature Procedures. The acceptable temperature range is 2° to 6°C. The supervisor of SML or his/her designee must be immediately notified of shipments reading temperatures out of range. Customers must also be notified of the temperature condition of their sample shipments when the cooler/kit is out of range. This notification is provided so that they can make any necessary changes in their future sample shipments. Document all notifications to supervisor or his/her designee and the customer on the sample receipt log.

6.0 Safety. Safety is the first concern when processing or handling samples. SML employees are responsible for conducting themselves in a way that will not compromise their safety or that of their co-worker's. While in the laboratory, everyone must wear safety glasses. When opening coolers or sample kits, the minimum Personal Protective Equipment (PPE) must be worn: Safety Glasses, Gloves and Lab Coat.

7.0 References.

7.1 USACHPPM Chemical Hygiene Plan
7.2 SML SOP 2.0 Sample Processing
7.3 SML SOP 3.0 Handling of Unknown Samples

SML SAMPLE RECEIPT
LOG

PROJECT # : _____ COC SEAL: Present / Not Present on cooler

INSTALLATION: _____ Broken / Intact

TIME OF RECEIPT: _____ PACKAGE: Chilled / Not Chilled

PROCESSOR'S INITIALS: _____

TEMPERATURE OF SAMPLES		
#7	#8	#9
Thermometer ID: _____	Thermometer ID: _____	Thermometer ID: _____
Corrected Temp: _____	Corrected Temp: _____	Corrected Temp: _____
Bottle / Air	Bottle / Air	Bottle / Air
Wet Ice / Ice Packs	Wet Ice / Ice Packs	Wet Ice / Ice Packs
#10	#11	#12
Thermometer ID: _____	Thermometer ID: _____	Thermometer ID: _____
Corrected Temp: _____	Corrected Temp: _____	Corrected Temp: _____
Bottle / Air	Bottle / Air	Bottle / Air
Wet Ice / Ice Packs	Wet Ice / Ice Packs	Wet Ice / Ice Packs

Paperwork Discrepancy / Unpacking Problems: _____

_____

_____

_____

_____

_____

Form Date 02/16/94

SML SAMPLE RECEIPT LOG

PROJECT #: _____ COC SEAL: Present / Not Present on cooler

INSTALLATION: _____ Broken / Intact

TIME OF RECEIPT: _____ PACKAGE: Chilled / Not Chilled

PROCESSOR'S INITIALS: _____

TEMPERATURE OF SAMPLES		
#1	#2	#3
Thermometer ID: _____	Thermometer ID: _____	Thermometer ID: _____
Corrected Temp: _____	Corrected Temp: _____	Corrected Temp: _____
Bottle / Air	Bottle / Air	Bottle / Air
Wet Ice / Ice Packs	Wet Ice / Ice Packs	Wet Ice / Ice Packs
#4	#5	#6
Thermometer ID: _____	Thermometer ID: _____	Thermometer ID: _____
Corrected Temp: _____	Corrected Temp: _____	Corrected Temp: _____
Bottle / Air	Bottle / Air	Bottle / Air
Wet Ice / Ice Packs	Wet Ice / Ice Packs	Wet Ice / Ice Packs

Paperwork Discrepancy / Unpacking Problems: _____

_____

_____

_____

_____

_____

Form Date 02/16/94

ANNEX B-3

DLS SOP FOR PROCEDURES USED TO ASSESS DATA QUALITY

SECTION 18 - PROCEDURES USED TO ASSESS DATA QUALITY

18.1 PURPOSE

The information detailed below describes protocols for personnel of DLS to use in evaluating the quality of data achieved versus what was required in establishing the original project DQOs.

18.2 INTRODUCTION

In order for data to withstand scientific and legal challenges, the quality of the data must be known. The DQOs established by the project officer or contained in a formal Quality Assurance Project Plan (QAPP) shall establish the acceptable quality limits for the data of each project. The intended use of the data will determine the limits established in the DQOs. If the established quality limits are not met, interpretation of the quality of the data obtained must be made based on the corrective actions taken in the field or laboratory.

Data quality indicators are tools that are used to determine whether or not the DQOs and established quality limits have been met.

18.3 CALCULATION OF DATA QUALITY INDICATORS

18.3.1 Precision.

Precision is a measure of the reproducibility of a measurement system. The precision of a particular measurement system may be determined by using the Relative Standard Deviation (RSD) or the standard deviation. The calculations for both of these follow. A more thorough discussion of accuracy and precision is contained in appendix D. If precision is to be determined on the entire sample process, from preparation to analysis, then replicate analyses of multiple extracts are required. If precision is to be determined on the instrument system only, then replicate analyses of a single extract shall be required.

(1) Relative Standard Deviation is calculated as follows:

$$RSD = \left(\frac{\sigma}{\bar{y}}\right) x\ 100$$

(a) σ is the standard deviation.
(b) $\bar{y}$ is the average (mean) of the replicate analyses. (See EPA/600/8-91/003.)

(2) The standard deviation may be calculated over a number of measurements (six or more) as follows:

$$\sigma = \sqrt{\frac{\Sigma (x_i - \bar{x})^2}{N-1}}$$

(a) xi is the value of an individual measurement within the data set.
(b) $\bar{y}$ is the mean of the data set.
(c) N is the number of measurements in the data set.
(See EPA/600/8-91/003.)

(3) The estimated standard deviation may be calculated over a number of measurements (less than six) as follows--

$$S = \sqrt{\frac{\Sigma (x_i - \bar{x})^2}{N}}$$

(4) For some measurements, like pH, the actual variation may be more appropriate than RSD or standard deviation. Then, precision is estimated as the range: D of duplicate measurements. D is calculated as follows--

$$D = | m_1 - m_2 |$$

(a) D is the range.
(b) m1 is the first measurement.
(c) m2 is the second measurement.
(See EPA/600/8-91/003.)

(5) The precision obtained for various types of samples may be used to help determ validity of the data.

18.3.2 Accuracy.

Accuracy is a measure of the bias that exists in a measurement system and is also degree of agreement between a sample's theoretical and observed concentrations.

(1) When the measurement is applied to a particular set of observed values, it will b combination of a--

(a) Random component.

(b) Common systematic error (or bias) component.

(See EPA Manual SW-846.)

(2) The accuracy of a particular measurement system may be estimated by calculatin percent recovery (%R) as follows--

$$\%R = \left(\frac{Obs}{Theor} \right) x\ 100$$

(a) Obs equals the measured (observed) value.

(b) Theor equals the theoretical (true) value.

(3) If the accuracy of a spiked sample is being determined, the--

(a) Observed value equals the value measured after the spike, minus the value mea before the spike.

(b) Theoretical value equals the value of the spike added. (See EPA/600/8-91/003

(4) Each calculated R value is compared to the accuracy criteria developed historically or specified in applicable methodology. If the calculated R value is within the acceptanc for accuracy determined to be 100% plus or minus three times the relative standard devi the population mean for a respective chemical parameter, then data generated from all s processed in respective batch will have to be reanalyzed after appropriate corrective act

identify and resolve the problem(s).

18.3.3 Representativeness.

Representativeness is a measure of the degree to which data accurately and precisely represent--

(1) A characteristic of a population's variations at a sampling point.
(2) A process condition.
(3) An environmental condition. The degree of representativeness achieved is dependent on the thoroughness of the QA project plan and adherence to its prescribed procedures, especially in regard to the statistical soundness of the sampling plan.

18.3.4 Completeness.

Completeness is defined by the EPA as a measure of the amount of valid data obtained from a sampling system and/or laboratory measurement system process compared to the amount of data that was expected to be obtained under correct normal conditions. To determine the amount of valid data requires implementing proper QA/QC practices throughout the entire project from collection of field sample through receipt and in-processing of samples to laboratory, to sample analysis, data reduction, validation and review and data outprocessing. If the data is considered incomplete, the project officer will determine if resampling is necessary and then will inform the laboratory of his/her decision regarding resampling. Completeness is a comparison of the amount of valid data received versus and the amount that is specified in the DQOs. It may be calculated as follows--

$$RPC = \frac{V}{n} \times 100$$

(1) RPC is the relative percent completeness.
(2) V is the number of valid measurements completed (or samples collected).
(3) n is the number of measurements specified in the DQOs that are required to achieve a specified level of confidence.
(See EPA/600/8-91/003.)

18.3.5 Comparability.

Comparability is a measure of the similarity of data collection operations. It is based largely on the use of identical or nearly identical methods and procedures. True comparability is achieved through the use of standardized methods and procedures, incorporated into statistically designed data collection systems.

18.3.6 Timeliness.

Timeliness may be regarded as an absolute comparison between the date that data are needed and the date that data are received. If the results are received after the date they are needed, the data may not be useable. Whether or not the data is valid will be determined through the use of other indicators.

18.3.7 Detection Limits.

The detection limit is the lowest value of an analyte that may be reliably determined. The two most commonly used estimates in DLS for detection limits are the MDL, specified by EPA (40 CFR 136, Definition and Procedure for the Determination of the Method detection Limit, Appendix B, pp. 537, 1990) and the MRL, specified by PMRMA (Rocky Mountain Arsenal Chemical Quality Assurance Plan, Sept 1993). There are similarities and differences between the two procedures which can be summarized as follows:

- The MDL has a 1 percent false positive error for samples with no analyte present. For samples with analytes at the MDL concentration there is a 50 percent false negative error.
- The MRL has a 5 percent false positive error for samples with no analyte present. For samples with analytes at the MRL concentration, there is a 5 percent false negative error.
- The MDL and MRL concentrations are both based on the total analytical method.
- The MDL concentrations are usually reported as found concentrations that are not recovery corrected. The MRL concentrations are usually reported as found concentrations that are recovery corrected.
- The MDL and MRL concentrations can be reported either as found concentrations or as target concentrations. For comparison purposes, the same concentration unit must be used for both procedures.
- The MRL concentrations are always larger than the MDL concentrations.
- For reporting purposes, EPA and PMRMA prefer the use of PQLs. See discussion of reporting limits in Section 19.3.8 below.

DLS SOPs listing analyte detection limits should indicate whether the EPA MDL or the

PMRMA MRL technique was used to determine the analyte detection limit. The MDL or MRL determinations for DLS procedures should be performed annually. Repeat MDL or MRL determinations for a procedure should fall within calculated Upper and Lower 95% Control Limits".

For measurements made within the Radioisotope Analysis Program, the Minimum Detectable Activity (MDA) calculations as specified in the *Manual for Conducting Radiological Surveys in Support of License Termination,* NUREG/CR-5849, shall apply.

18.3.8 Reporting Limits.

The reporting limit (sometimes reported as the Practical Quantitation Limit (PQL)) is the minimum analyte concentration value reported to the customer in the analytical report. The reporting limit value (or PQL) is not experimentally derived per se but is typically some multiple of the experimentally derived MDL or MRL values. The reporting limit value (or PQL) for an analyte takes into account the project DQOs, the regulatory MCLs, any applicable maximum allowable contaminant levels, any applicable tolerances and other considerations. The reporting limit value (or PQL) for an analyte must always be at least equal to or greater than the corresponding analyte MDL or MRL value. A commonly used value for setting the reporting limit (or PQL) for an analyte is 12 times the standard deviation resulting from the MDL determination. The "<" reporting limit values used in most DLS customer analytical reports are typically reported "as is" without any accompanying correction factors or uncertainty limits for inherent errors".

For measurements made within the Radioisotope Analysis Program, the Minimum Detectable Activity (MDA) calculations as specified in the *Manual for Conducting Radiological Surveys in Support of License Termination,* NUREG/CR-5849, shall apply.

18.3.9 Other DQOs.

Any additional project specific data quality indicators, along with the assessment requirements, should be addressed in the QA project plan.

18.4 QC ACCEPTABILITY CRITERIA

Acceptability criteria for QCs will be established by the requirements of the DQOs. QCs are used to measure accuracy, precision, contamination, (reagent, instrument, etc.) and matrix effects. Conclusions about the quality of the data may be based on whether limits of

acceptability criteria were exceeded and the degree to which they were exceeded. QCs may include blanks, equipment rinsates, field duplicates, field control samples, laboratory control samples, matrix duplicates and spikes, method blanks, split samples, surrogates, and trip blanks.

(1) The limits of acceptability criteria for blanks and rinsates are values that are either no greater than--

(a) The quantification or reporting limit.

(b) Five percent of the regulatory limit for that analyte.

(c) Five percent of the concentration measured in the corresponding samples. (See EPA Manual SW-846.)

(2) The appropriate choice is determined by how close the regulatory limit is to the quantification or reporting limit of the method.

(a) When both limits are very close together, then the quantification or reporting limit becomes the acceptable criteria.

(b) When both limits are moderately close together, then the acceptable criteria is five percent of the regulatory limit for that analyte.

(c) When there is a large difference between the two limits, then the acceptable criteria is five percent of the concentration measured in the corresponding samples.

(3) If the acceptability criteria are exceeded by the result obtained for the blank or rinsate, then the sample may be determined to be contaminated, corrective action is required, and the data must be flagged.

APPENDIX C

SITE SAFETY AND HEALTH PLAN

SITE SAFETY AND HEALTH PLAN
SITE INSPECTION NO. 38-EH-2651-96
ARMY AVIATION SUPPORT FACILITY
BRADLEY FIELD
WINDSOR LOCKS, CONNECTICUT
8-19 JULY 1996

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Section 1.0 Safety and Health Organization

1.1 General

All operations and personnel having exposure potential to site hazards are subject to the requirements of this Site Safety and Health Plan (SSHP). Work may not be performed in a manner that conflicts with the intent of or the inherent safety and environmental precautions of this plan. The safety and health requirements in this plan may change as work progresses. However, no changes will be made without the approval of the Site Safety and Health Officer.

1.2 Project Members

Mr. John A. Moser, P.G.
Project Manager/Site Safety and Health Officer
U.S. Army Center For Health Promotion and Preventive Medicine (USACHPPM)
Ground Water and Solid Waste Program (GWSWP)
Has the authority and responsibility to direct this project, and to implement this SSHP.

Mr. Rocky W. Hoover
Engineering Technician, USACHPPM, GWSWP
Responsible for operation and maintenance of field equipment.

Mr. Kenneth Quirk, Environmental Engineer
USACHPPM, Surface Water & Wastewater Program (SW&WP)
Responsible for surface water and sediment sampling aspects of the project.

Mr. Richard W. Gordon
Engineering Technician, USACHPPM, SW&WP
Responsible for operation and maintenance of field equipment.

1.3 Site Point of Contact

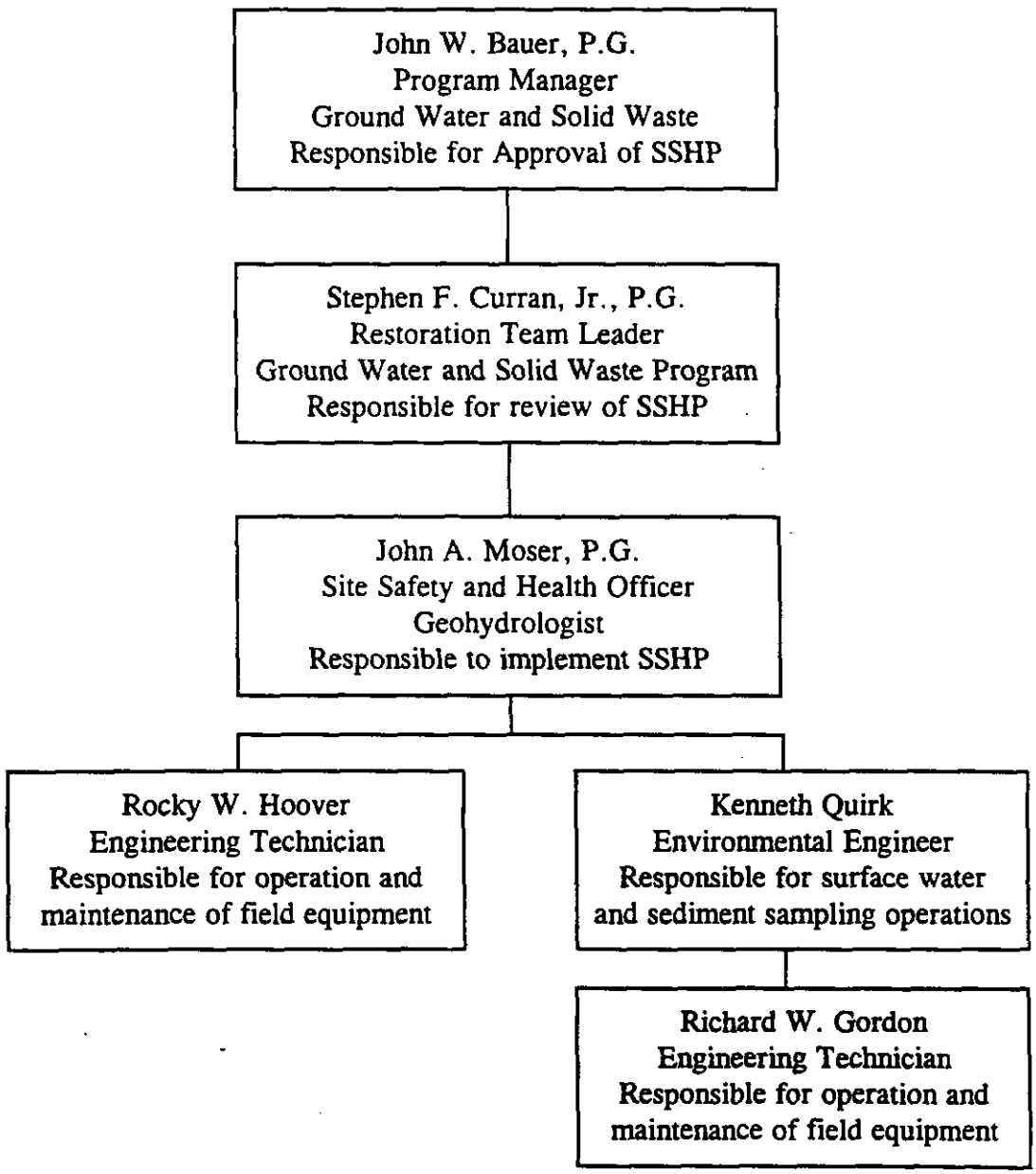
CPT Ralph Hedenberg
Environmental Program Manager
Connecticut Army National Guard
DSN 636-7945, Comm (203) 524-4945

1.4 Organizational Management Chart

Figure 1.4.1 is the organizational management chart for this project.

Figure 1.4.1. ORGANIZATIONAL MANAGEMENT CHART

Site Safety and Health Plan
Site Inspection No. 38-EH-2651-96
Army Aviation Support Facility
Bradley Field
Windsor Locks, Connecticut



2.0 Site History/Task Descriptions/Work Plan

2.1 Site History

The site is located within the town of Windsor in Hartford County, Connecticut. By the main highways it is about 10 miles north of downtown Hartford and about 15 miles south of downtown Springfield, Massachusetts, but its physical position is more equidistant between the two cities. The Army Aviation Support Facility (AASF) occupies about 36.1 acres on the northeast side of the Bradley International Airport property and is entirely within the airport boundaries. The east side of the AASF acreage is within about 200 feet of State Route 75 that runs north-south along the east side of the airport. The site has been used for aircraft maintenance for the past 45 years. The site history is described in more detail in Section 4 of the Sample Plan.

The main changes affecting potential waste sources are the switching of floor drains in buildings 152 and 153 and the wash rack from the storm drains to the sanitary sewer in 1992, and the removal and/or replacement of several underground storage tanks (USTs) during the past 6 years. Thus, the discharge points (outfalls) of the storm drains and the UST sites are the potential locations of soil or water contamination.

2.2 Task Descriptions/Work Plan

The investigation will be conducted by a sampling team consisting of three field personnel. The field work will consist of sampling ground water at two sites, sampling surface and subsurface soil at seven sites, sampling surface water at two sites, and sampling sediment from stream bed or wetlands at seven sites. The Sampling Plan provides further details of the sampling work and procedures.

3.0 Hazard Identification and Risk Assessment

3.1 Chemical Hazards

The chemical hazards addressed in this SSHP are exposure hazards via inhalation, absorption, ingestion, and skin contact with soil, liquid, or air contaminants.

There are no documented releases of hazardous compounds at the Bradley AASF facility. Media samples will be analyzed for the following groups of compounds: target compound list (TCL) volatile organics; TCL semivolatile organics; TCL pesticides/PCBs, target analyte list (TAL) metals, and total petroleum hydrocarbons - diesel (TPH-d) and gasoline (TPH-g).

Sampling and field laboratory personnel will be required to preserve certain water samples. The preservatives are hydrochloric acid and sulfuric acid. The preservatives are corrosive hazards and must be handled with care.

3.2 Physical Hazards

3.2.1 Heat Stress

Heat stress is a major hazard, especially for workers wearing protective clothing. The same protective materials that shield the body from chemical exposure also limit the dissipation of body heat and moisture. Depending on the ambient conditions and the work being performed, heat stress can occur very rapidly - within as few as 15 minutes. It can pose as great a danger to worker health as chemical exposure. The ambient temperature is expected to be warm to hot, possibly with high humidity, during the scheduled field work period.

Avoiding overprotection, acclimatization, proper training, frequent monitoring of personnel who wear protective clothing, appropriate scheduling of work and rest periods, and frequent replacement of fluids can protect against this hazard.

3.2.2 Cold Exposure

Cold injury (frostbite and hypothermia) and impaired ability to work are dangers at low temperatures, wet conditions, and when the wind-chill factor is low. The ambient temperature is expected to be warm to hot during the scheduled work period.

Wearing appropriate clothing, having shelters available, careful scheduling, and monitoring worker's physical conditions will guard against injury.

3.2.3 Noise

Work around large equipment often creates excessive noise. The effects of noise can include:

- Workers being startled, annoyed, or distracted;
- Physical damage to the ear, pain, and temporary and/or permanent hearing loss;
- Communication interference that may increase potential hazards due to the inability to warn of danger.

The main source of noise will be from operating aircraft in the area, some very close by. The soil sampling machinery (Geoprobe®) can be a source of excessive noise also. Ear protection will be used by the sampling team.

3.3 Task Hazard Analysis

The following Task Hazard Checklist presents an analysis of each major task associated with this project:

- Mobilization and Site Set-Up
- Soil Sampling
- Well Sampling
- Surface Water and Sediment Sampling

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USACHPPM
TASK HAZARD CHECK LIST

PROJECT NO: 38-EH-2651-96 **TASK NAME:** Mobilization and Site Set-Up

1. Hazard Identification:

[/] Physical Exertion	[/] Lifting Hazards	[ ] Confined Space
[/] Heat Stress	[/] Slips/Trips/Falls	[ ] Biological Hazards
[ ] Cold Stress	[/] High Noise (>85dBA)	[ ] Chemical Exposure
[/] Heavy Equipment	[ ] Vehicle Traffic	[ ] Electrical
[ ] Fire Hazards	[ ] Drilling	[/] Overhead Utilities
[ ] Flammable Materials	[ ] Soil Excavation	[/] Underground Utilities
[ ] Fuel/Gas Lines	[ ] Low Flying Areas	[ ] Other

2. Control or Protective Measure:

[/] Tailgate Meeting [/] Operator Meeting	[/] PPE [/] Site Control	[/] Safe Work Practices [ ] Decontamination
Engineering Controls (list):		
Standard Operating Procedures (list):		
Other (list):		

3. Personal Protective Equipment (PPE) for Assigned Task: (The Site Health and Safety Officer may alter levels of protection to meet site conditions and monitoring data.)

Level of Protection	[ ] A [ ] B	[ ] C [/] D	[ ] Modified
Respirator (level C or above)	[ ] SCBA [ ] Airline w/escape	[ ] Full Face [ ] Half Face	[ ] Cartridge Type
Protective Clothing	[ ] Full Encapsulation [ ] Saranex	[ ] Tyvex [ ] Standard Tyvex	[ ] PE [/] Other: Coveralls
Head/Eye/Ear	[ ] Safety Glasses [ ] Safety Goggles	[ ] Ear Plugs [ ] Ear Muffs	[/] Hard Hat [ ] Other:
Gloves (specify inner/outer)	[ ] Nitrile [ ] Butyl	[ ] Neoprene [ ] Latex	[ ] PVC [/] Other: work
Footwear	[/] Steel-toed Leather [ ] Steel-toed Rubber	[ ] Leather [ ] Chemical Overboot	[ ] Other:

Modifications:

USACHPPM
TASK HAZARD CHECK LIST

PROJECT NO: 38-EH-2651-96 **TASK NAME:** Soil Sampling

1. Hazard Identification:

[/] Physical Exertion	[/] Lifting Hazards	[ ] Confined Space
[/] Heat Stress	[/] Slips/Trips/Falls	[ ] Biological Hazards
[ ] Cold Stress	[/] High Noise (>85dBA)	[/] Chemical Exposure
[/] Heavy Equipment	[ ] Vehicle Traffic	[ ] Electrical
[ ] Fire Hazards	[/] Drilling	[/] Overhead Utilities
[ ] Flammable Materials	[ ] Soil Excavation	[/] Underground Utilities
[ ] Fuel/Gas Lines	[ ] Low Flying Areas	[ ] Other

2. Control or Protective Measure:

[/] Tailgate Meeting [/] Operator Meeting	[/] PPE [/] Site Control	[/] Safe Work Practices [/] Decontamination
Engineering Controls (list):		
Standard Operating Procedures (list):		
Other (list):		

3. Personal Protective Equipment (PPE) for Assigned Task: (The Site Health and Safety Officer may alter levels of protection to meet site conditions and monitoring data.)

Level of Protection	[ ] A [ ] B	[ ] C [/] D	[ ] Modified
Respirator (level C or above)	[ ] SCBA [ ] Airline w/escape	[ ] Full Face [ ] Half Face	[ ] Cartridge Type
Protective Clothing	[ ] Full Encapsulation [ ] Saranex	[ ] Tyvex [ ] Standard Tyvex	[ ] PE [/] Other: Coveralls
Head/Eye/Ear	[/] Safety Glasses [/] Safety Goggles	[/] Ear Plugs [/] Ear Muffs	[/] Hard Hat [ ] Other:
Gloves (specify inner/outer)	[ ] Nitrile [ ] Butyl	[ ] Neoprene [/] Latex	[ ] PVC [/] Other: Work
Footwear	[/] Steel-toed Leather [ ] Steel-toed Rubber	[ ] Leather [ ] Chemical Overboot	[ ] Other:

Modifications:

USACHPPM
TASK HAZARD CHECK LIST

PROJECT NO: 38-EH-2651-96 **TASK NAME:** Surface Water and Sediment Sampling

1. Hazard Identification:

[/] Physical Exertion	[ ] Lifting Hazards	[/] Confined Space
[/] Heat Stress	[/] Slips/Trips/Falls	[/] Biological Hazards
[ ] Cold Stress	[ ] High Noise (>85dBA)	[/] Chemical Exposure
[ ] Heavy Equipment	[ ] Vehicle Traffic	[ ] Electrical
[ ] Fire Hazards	[ ] Drilling	[ ] Overhead Utilities
[ ] Flammable Materials	[ ] Soil Excavation	[ ] Underground Utilities
[ ] Fuel/Gas Lines	[ ] Low Flying Areas	[ ] Other

2. Control or Protective Measure:

[/] Tailgate Meeting	[/] PPE	[/] Safe Work Practices
[/] Operator Meeting	[/] Site Control	[/] Decontamination

Engineering Controls (list): Ventilate manhole. Test atmosphere in manhole for oxygen, methane, carbon monoxide, and hydrogen sulfide.

Standard Operating Procedures (list):

Other (list):

3. Personal Protective Equipment (PPE) for Assigned Task: (The Site Health and Safety Officer may alter levels of protection to meet site conditions and monitoring data.)

Level of Protection	[ ] A [ ] B	[ ] C [/] D	[ ] Modified
Respirator (level C or above)	[ ] SCBA [ ] Airline w/escape	[ ] Full Face [ ] Half Face	[ ] Cartridge Type
Protective Clothing	[ ] Full Encapsulation [ ] Saranex	[ ] Tyvex [ ] Standard Tyvex	[ ] PE [/] Other: Coveralls
Head/Eye/Ear	[/] Safety Glasses [ ] Safety Goggles	[/] Ear Plugs [ ] Ear Muffs	[/] Hard Hat [ ] Other:
Gloves (specify inner/outer)	[ ] Nitrile [ ] Butyl	[ ] Neoprene [ ] Latex	[ ] PVC [/] Other: Work
Footwear	[/] Steel-toed Leather [ ] Steel-toed Rubber	[ ] Leather [ ] Chemical Overboot	[ ] Other:

Modifications:

4.0 Training

4.1 OSHA Requirements

All survey members have completed a 40-hour course in health and safety for hazardous waste operations and an annual 8-hour refresher course as required, except Mr. Gordon has not had the refresher course. All USACHPPM project personnel have completed a minimum of 3 days actual field experience under the direct supervision of a trained, experienced supervisor. The Site Safety and Health Officer also has completed an 8-hour supervisor's course.

4.2 First Aid/Medical Surveillance

All USACHPPM project personnel involved with field work, except Mr. Gordon, have had first aid training with periodic refresher courses. They are enrolled in a medical surveillance program through the Aberdeen Proving Ground-Edgewood Area Clinic which includes initial and annual medical examinations. These persons have been approved by a physician as being fit to perform work of this type.

4.3 Personal Protective Equipment

All USACHPPM project personnel involved with field work have received training in use, care, and limitations of personal protective equipment.

5.0 Medical/Emergency Response Plan

5.1 Medical Support Scenario

The nature of work at potential hazardous waste sites makes emergencies a continual possibility no matter how infrequently they may actually occur. Emergencies happen quickly and unexpectedly and require immediate response. Any hazard onsite can precipitate an emergency: chemical, biologic agents, radiation, or physical hazards may act alone or in concert to create explosions, fires, spills, toxic atmospheres, or other dangerous and harmful situations.

Table 5.1.1 lists signs and symptoms of chemical exposure and heat stress that indicate potential medical emergencies.

Figures 5.1.1 and 5.1.2 outline the response to a medical emergency.

Table 5.1.1. Signs and Symptoms of Chemical Exposure, Heat Stress, and Cold Exposure that Indicate Potential Medical Emergencies.

TYPE OF HAZARD	SIGNS AND SYMPTOMS
Chemical Hazard	Behavioral changes Breathing difficulties Changes in complexion or skin color Coordination difficulties Coughing Dizziness Drooling Diarrhea Fatigue and/or weakness Headache Irritability Irritation of eyes, nose, respiratory tract, skin, or throat Light-headedness Nausea Sneezing Sweating Tearing Tightness in the chest
Heat Exhaustion	Clammy skin Confusion Dizziness Fainting Fatigue Heat rash Light headedness Nausea Profuse sweating Slurred speech Weak pulse
Heat Stroke	Confusion Convulsions Hot skin, high temperature (yet may feel chilled) Incoherent speech Staggering gait Sweating stops (residual sweat may be present) Unconsciousness
Systemic Hypothermia	5 Stages: (1) Shivering (2) Apathy, listlessness, sleepiness, and rapid body cooling (3) Unconsciousness, glassy stare, slow pulse and respiration (4) Freezing of the extremities (5) Death

Figure 5.1.1. Medical Emergency Procedure

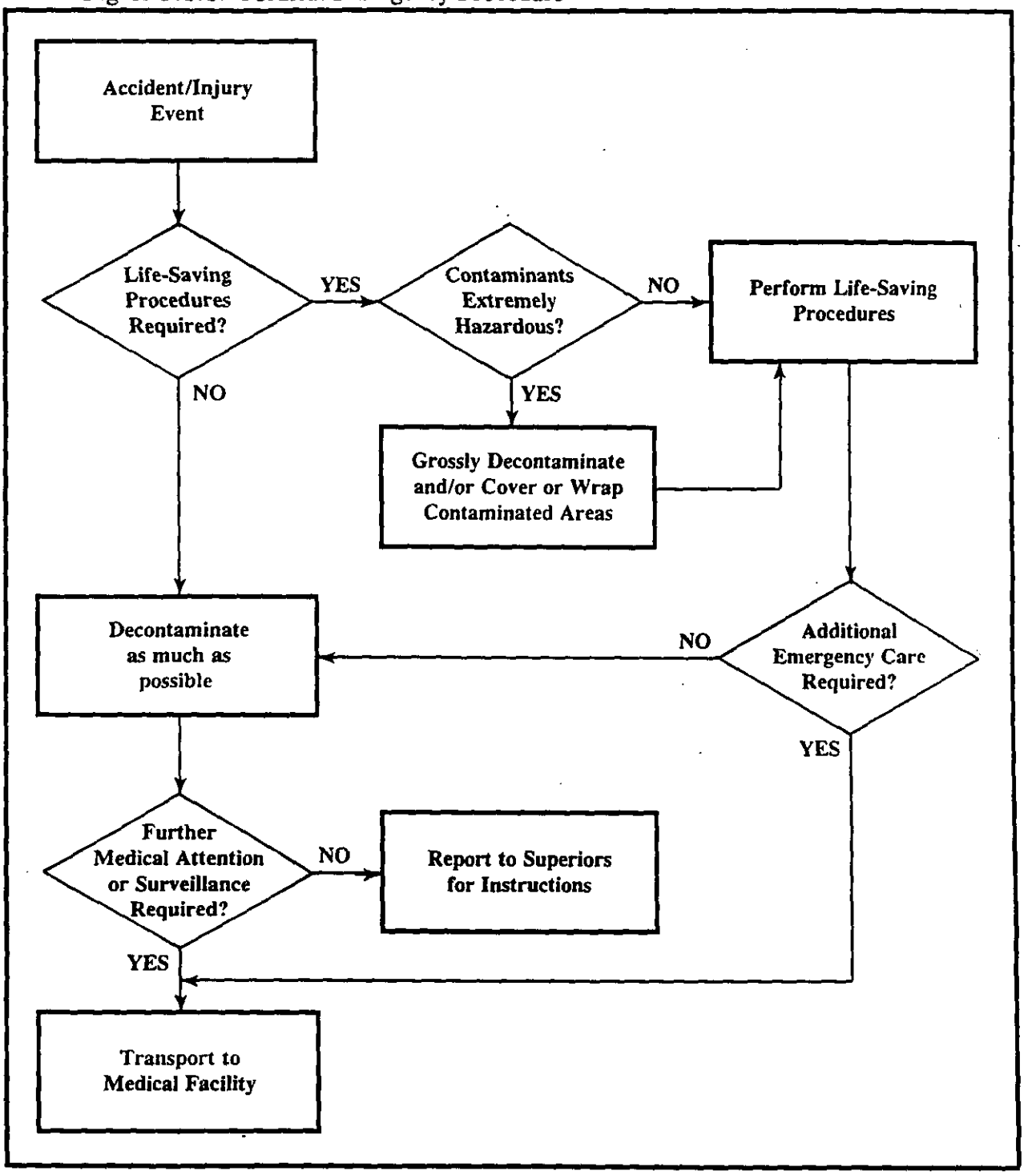
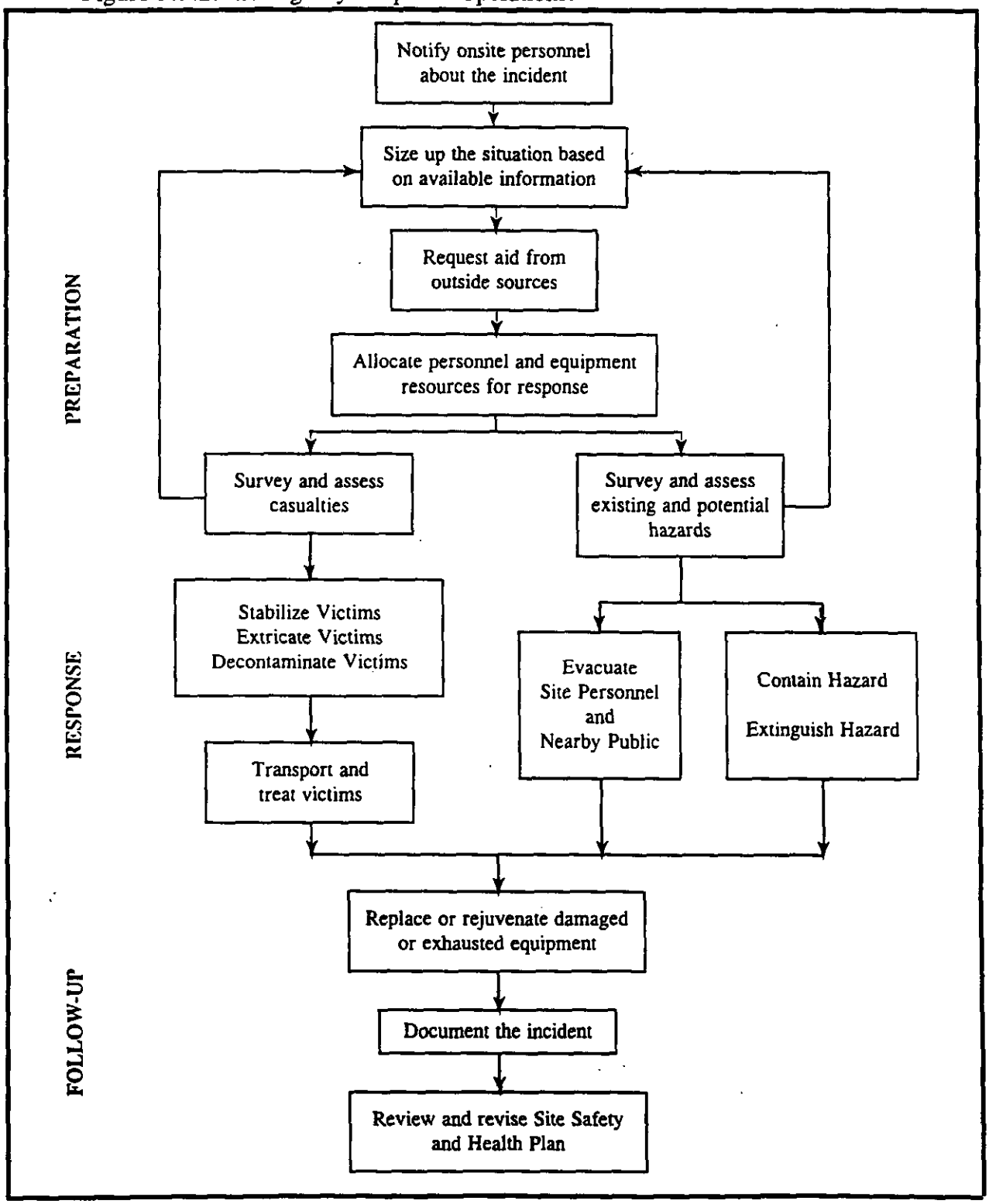


Figure 5.1.2. Emergency Response Operations.



5.2 Emergency Response Plan

Immediate first aid will be administered onsite by uninjured field personnel. Emergency assistance may be obtained by dialing **911**. The nearest medical facility is the Mt. Sinai Hospital at Tower Avenue and Blue Hills Avenue, Hartford, located about 12 miles south of the site. An alternate facility is the St. Francis Hospital at Woodland Avenue and Collins Street, Hartford, located about 1 mile south of Mt. Sinai Hospital. See Figure 5.2.1 for the route to Mt. Sinai Hospital and the location of St. Francis Hospital. The travel time between the facility and Mt. Sinai Hospital is at least 25 minutes.

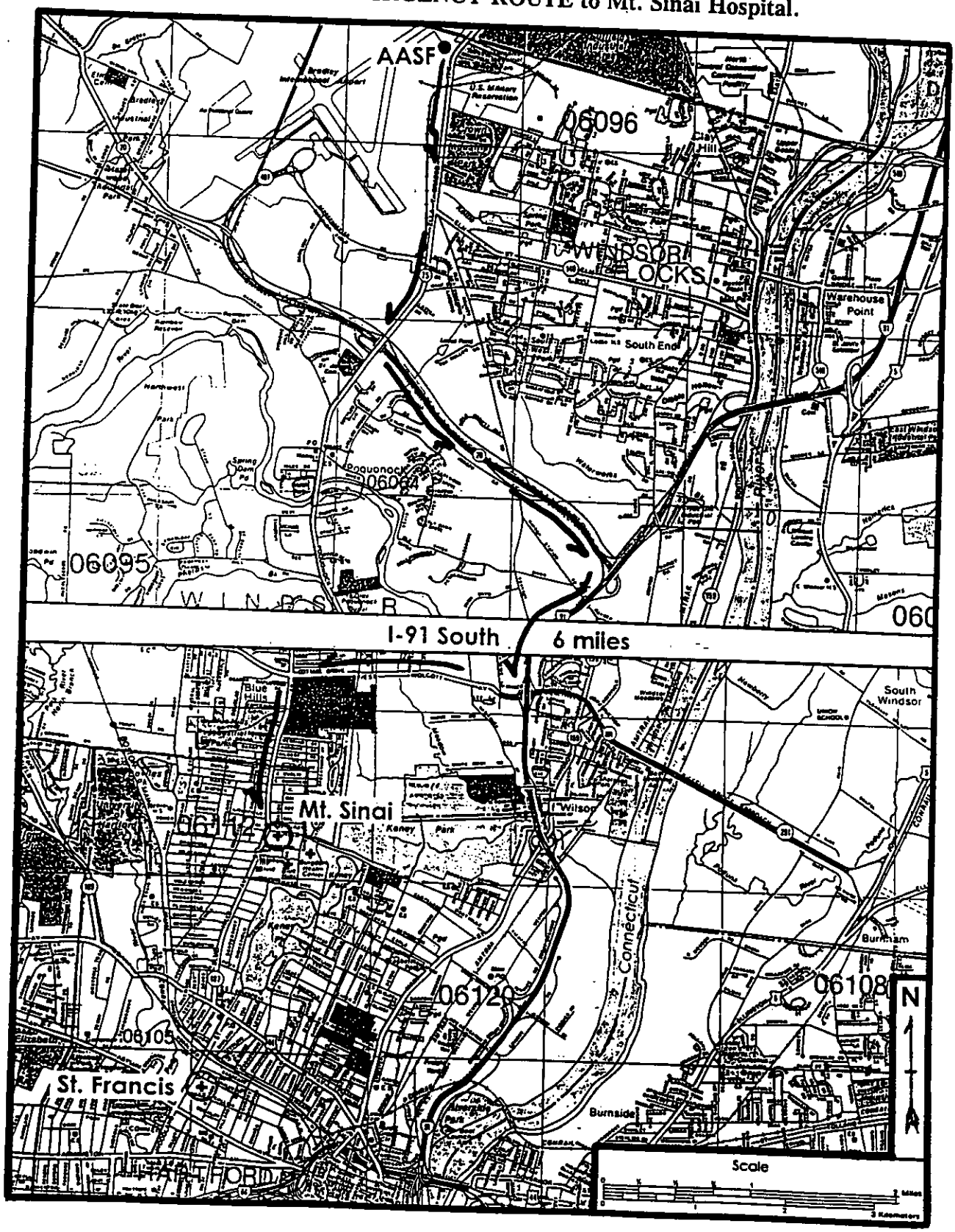
Telephones are located onsite in the AASF office (Building 152) and in the field truck.

TABLE 5.2.1

EMERGENCY TELEPHONE NUMBERS

911

Figure 5.2.1. EMERGENCY ROUTE to Mt. Sinai Hospital.



6.0 Site Control

6.1 Site Map

Figure 6.1.1 is a site plan of the facility showing the location of buildings, roads, and other important features of the facility.

The map should be updated throughout the course of site operations to reflect: accidents, changes in site activities, emergencies, hazards not previously identified, new materials on site, vandalism, and weather conditions.

6.2 Buddy System

The buddy system will be used at all times during the operation. Field work of all types during this project will be accomplished only when there are at least two persons at the work site and in communication with outside support.

The responsibilities of the buddy include:

- Providing his partner with assistance;
- Observing his partner for signs of chemical or heat exposure;
- Periodically checking the integrity of his partner's protective clothing;
- Notifying the Site Safety and Health Officer and others if emergency help is needed.

6.3 Safe Work Practice

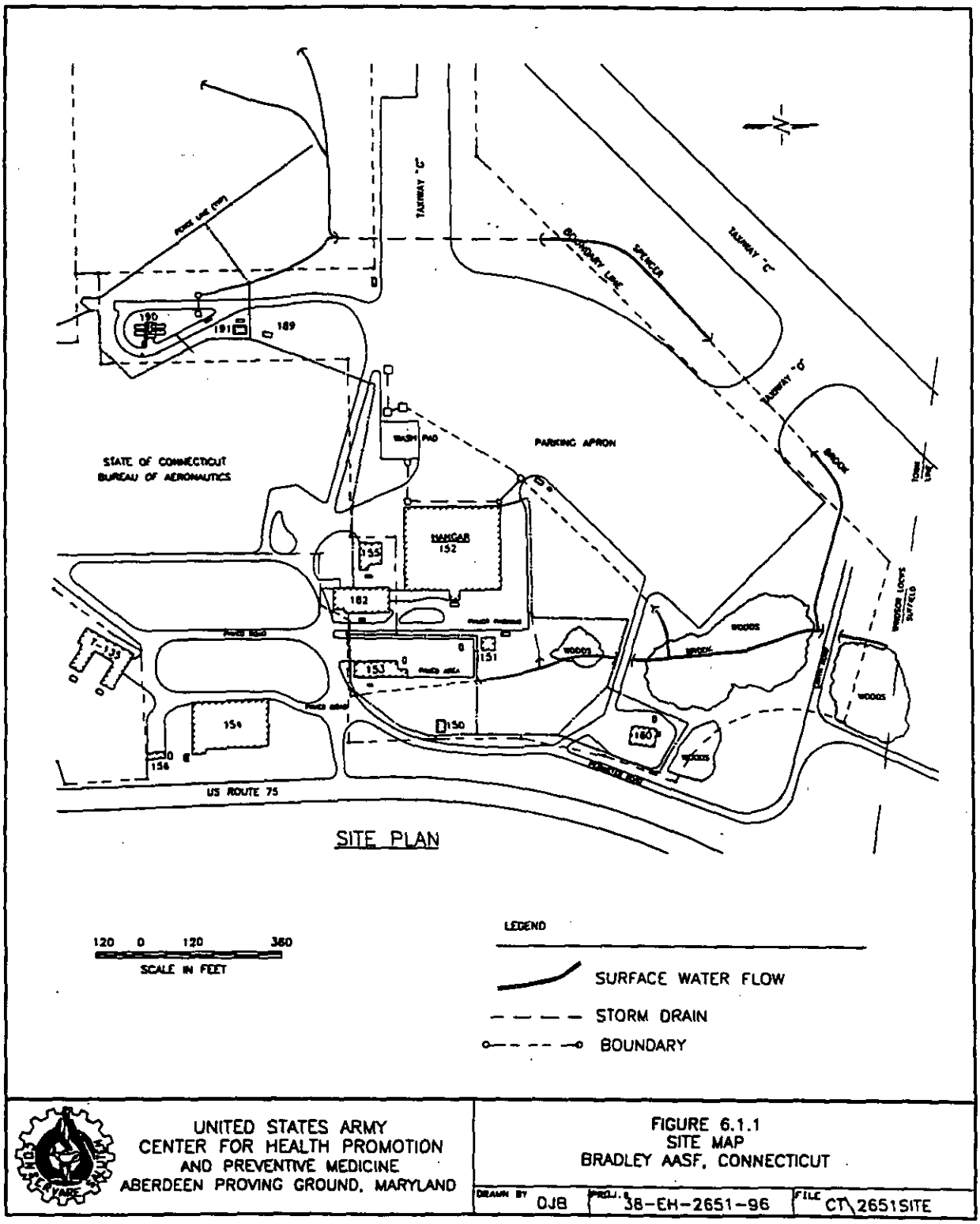
A safety briefing will be held prior to initiating field sampling work each morning and at the completion of the day's activities. Each briefing will include the following topics: personnel roles, lines of authority and communication, emergency recognition and prevention, safe distances, and places of refuge.

No personnel will be admitted to the site without the proper safety equipment outlined in section 3.3 Task Hazard Analysis.

Eating will not be allowed on the investigation sites.

Alcoholic beverage consumption is prohibited during the work day.

A first aid kit will be available during site activities.



UNITED STATES ARMY
CENTER FOR HEALTH PROMOTION
AND PREVENTIVE MEDICINE
ABERDEEN PROVING GROUND, MARYLAND

FIGURE 6.1.1
SITE MAP
BRADLEY AASF, CONNECTICUT

DRAWN BY	PROJ. #	FILE
OJB	38-EH-2651-96	CT\2651SITE

The kill switch on the drill rig will be checked each morning before commencing operations. All emergency kill switch malfunctions will be documented and reported to the Site Safety and Health Officer and the Senior Engineering Technician. All malfunctions will be corrected before sampling operations are permitted.

All personnel must comply with established safety procedures and the Drilling Operations SOP No. 1 (Annex C-2). Any project member who does not comply with the SSHP, as established by the Site Safety and Health Officer, will be immediately dismissed from the site.

7.0 Personal Protective Equipment (PPE) Program

7.1 PPE Selection Based Upon Site Hazards

Due to the fact that there are no documented releases of hazardous compounds and the nature of planned work at the Bradley facility, the initial level of protection during the study will be modified level D. This level will protect the worker against physical hazards and provide minimal skin protection.

The modified level D includes: protective coveralls, steel-toed work boots, latex gloves during sampling activities, work gloves and hard hat during auger drilling operations, and ear plugs or muffs.

If the monitors reveal the presence of organic compounds greater than 100 parts per million, work will not continue at the specific sampling site. Due to the unknown identification and concentrations of the organic vapors, work requiring protection levels of C or above will not be allowed during this phase of the investigation.

7.2 PPE Use and Limitations

The level D limitation of most concern is the absence of worker respiratory protection. For this reason, air monitoring will be continuous during drilling and sampling operations. Any indication of chemical contamination producing respiratory concern will result in the cessation of operations. Operations will not be conducted in an environment where level C and above protection is required.

7.3 PPE Maintenance and Storage

PPE equipment that will be used during the field work has been maintained and stored at the USACHPPM, GWSWP, Soils Laboratory. All steps will be made to ensure the integrity of the equipment is not jeopardized during transit to the site.

7.4 PPE Decontamination and Disposal

All PPE (i.e., sampling gloves, work gloves, Tygon® coveralls, rubber booties) will be double bagged and disposed of in the dumpster located at the facility. The waste contained in the dumpster is disposed of by contract in a local sanitary landfill.

7.5 PPE Training and Proper Fitting

All workers have been trained and properly fitted prior to the start of the project.

7.6 PPE Donning and Doffing Procedures

All workers have been trained on proper donning and doffing procedures prior to the start of the project.

7.7 PPE Inspection Procedures Prior, During, and After Use

All PPE will be inspected before and after the start of each work day.

7.8 Other Considerations

Any malfunction or degradation of PPE should be reported to the Site Safety and Health Officer and replaced immediately.

® Tygon is a registered trademark of Norton Industrial Plastics, Akron, Ohio.

8.0 Monitoring Plan

8.1 Frequency and Types of Air Monitoring

The air will be monitored prior to and during all drilling and sampling operations.

The following list of equipment will be used for air monitoring during this study:

Name	Monitors	Detection limits
Photoionization Detector (PID)	Organic gases and Vapors	Does not detect methane. Does not detect a compound if probe has lower energy level than compound. Readings can only be reported to calibration standard used. Response can be affected by high humidity.

8.2 Frequency and Types of Noise Monitoring

The drill rig presents the only significant source of noise during the sampling activities. Hearing protection will be required most of the time on the site due to operating aircraft.

8.3 Maintenance and Calibration

PID

- Recharge or replace battery.
- Regularly clean lamp window.

9.0 Respiratory Protection Plan

No work above level D protection will be allowed.

9.1 Respirator Selection

Not Applicable

9.2 Respirator Training

Not Applicable

9.3 Respirator Testing

Not Applicable

10.0 Decontamination Plan

10.1 Personal Hygiene and Decontamination

If the PID indicates no exposures to organic vapors, personal decontamination will involve rinsing the dirt and debris from the clothes and skin. The Site Safety and Health Officer will monitor to see that no soil is removed from the site via personal clothing.

10.2 Equipment Decontamination

The equipment used during the project will be cleaned before it is taken offsite.

11.0 General Site Safety Procedures

The following individuals acknowledge that they have been informed, understand, and agree to comply with the contents of this SAFETY AND HEALTH PLAN.

Mr. John A. Moser	John A. Moser
Mr. Rocky W. Hoover	Rocky W. Hoover
Mr. Kenneth Quirk	Kenneth Quirk
Mr. Richard W. Gordon	Richard W. Gordon
_____	_____
_____	_____
_____	_____

Annex C-1

References

1. NIOSH Pocket Guide to Chemical Hazards, U.S. Department of Health and Human Services, June 1990.

2. Quick Selection Guide to Chemical Protective Clothing, Forsberg, Krister and Mansdorf, S.Z., 1989.

3. Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities, NIOSH, U.S. Department of Health and Human Services, 1985.

Annex C-2

Drilling SOP No. 1

DEPARTMENT OF THE ARMY
U.S. ARMY ENVIRONMENTAL HYGIENE AGENCY
ABERDEEN PROVING GROUND, MARYLAND 21010-5422

REPLY TO ATTENTION OF
HSHB-ME-SE

September 1987

STANDING OPERATING PROCEDURE*
NO. 1
DRILLING OPERATIONS

	Paragraph	Page
Purpose	I	1
References	II	1
Objectives	III	1
Applicability	IV	2
Responsibilities	V	3
Approvals	VI	11

I. PURPOSE. To give guidelines to Waste Disposal Engineering Division (WDED) personnel on safety, maintenance, and operational responsibilities for the drilling operations.

II. REFERENCES.

A. Annual Book of ASTM Standards, American Society of Testing and Materials, Vol. 04.08, Soil and Rock; Building Stones, March 1986.

1. D-1452-80, Soil Investigation and Sampling by Auger Boring.

2. D-1586-84, Thin-walled Tube Sampling of Soil.

3. D-1587-83, Penetration Test and Split-Barrel Sampling.

4. D-4220-83, Preserving and Transporting Soil Samples.

B. Driscoll, Fletcher, Groundwater and Wells, Johnson Division, 1986.

C. Acker, Operating and Maintenance Manual and Parts Catalog, Model AD-II Auger Drill 45060378, Acker Drill Co., Inc., P.O. Box 830, Scranton, Pennsylvania.

D. Acker, Operating and Maintenance Manual and Parts Catalog, Model AD-II Auger Drill 45680182, Acker Drill Co., Inc., P.O. Box 830, Scranton, Pennsylvania.

E. Mobile, Owner's and Operators Manual with B53 insert, catalogue 9271 and B24 insert, catalogue 52683, Mobile Drill Company, Indianapolis, IN, 1987.

F. Drilling Safety Guide, National Drilling Federation, Columbia, SC, 1985.

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* This SOP supersedes the December 1982 edition.

III. OBJECTIVES.

A. To allow drilling personnel to work in a safe environment.

B. To ensure that timely maintenance of the drilling equipment is performed.

C. To outline the operational responsibilities of all personnel at the drilling site.

IV. APPLICABILITY. This Standing Operating Procedure (SOP) is applicable to all personnel of the WDED and other personnel working on or with the following drilling rigs:

A. 1978 Acker AD II. This drilling assembly is mounted on an International Harvester 1700 Loadstar truck with a 345-cubic inch, V8, gasoline engine. A Ford, 240-cubic inch, in-line, 6-cylinder, gasoline engine powers the drilling assembly.

B. 1982 Acker AD II. This drilling assembly is mounted on an International Harvester 1900 Loadstar truck with a 404-cubic inch, V8, gasoline engine. A Ford, 240-cubic inch, in-line, 6-cylinder, gasoline engine powers the drilling assembly.

C. Mobil Model B-53. This drilling assembly is mounted on a Dodge D-800 truck with a 440-cubic inch, V8, gasoline engine. A power-takeoff unit drives the drilling assembly. This rig is capable of remote control drilling.

D. Mobil Model B-24. This drilling assembly is mounted on a rubber-tracked vehicle. A 2-cylinder gasoline engine powers both the tracks and the drilling assembly. This rig is capable of remote control drilling.

V. RESPONSIBILITIES.

A. Safety.

1. Drill Site Selection.

a. Terrain.

(1) The project officer will select the area for a particular bore hole, within a 5-foot radius. The driller will choose the exact spot within that area, unless the project officer has a reason that the borehole location needs to be more exact. The driller will consider safety aspects when maneuvering the drilling rig into the chosen site. If the area is wooded, coordinate with the installation to clear all overhanging limbs, branches, or trees which may interfere with the drilling operation. If the site is inaccessable, move the site of the proposed boring to a more suitable area or delete entirely.

(2) The drilling rig will not traverse steep banks, ditches, or steeply rolling landscapes. Traversing these landscapes will unduely torque the truck's frame, require excessive blocking to level the drilling deck, and create a safety problem due to the drill rig's high center of gravity. If no other access to a site is found, coordinate with the installation to grade a trail which the drill rig can safely maneuver across.

(3) Leveling of the rig will follow the guidelines given in paragraph VC2b. Avoid setting up the rig in an area which requires excessive blocking. When blocking is required, place the timbers under the jacks so that they do not slip off the timbers. The rig cannot operate safely with more than 12 inches of timbers under the rear jacks or more than 24 inches of timbers under the front jack. However, more blocking of any one jack may be acceptable for some circumstances.

(4) Avoid sites under or adjacent to overhead powerlines. Locate the guidelines for drilling near powerlines at the installation's Safety Office. A site 100 feet from the base of the powerline support is usually adequate.

b. Soil Condition. The project officer and driller must investigate the drilling sites for accessibility before committing a drill crew to the facility.

c. Surface and Subsurface Hazards.

(1) Locate all utilities in the study area before drilling. Contact the installation facility engineer and safety office for utility maps and guidance for locating drilling sites.

(2) The drill crew will not drill in areas of suspected or known biological, or radiological agents. The remote drilling rig will be used in areas where unexploded ordnance is known to occur and only after the area has been cleared by explosive ordnance disposal (EOD) units.

2. Personal Protection.

a. Drill Crew. All personnel working near the drilling rig will wear leather gloves, hardhats and steel-toed footwear. The drill crew will wear ear protection when noise levels around the rig become excessive. Personnel working around moving machinery will not wear jewelry or loose-fitting clothing. Safety glasses will be worn by crew members when needed. All rigs have emergency kill switches. Usual drilling studies include one or two untrained helpers from the installation who must be familiarized with the drilling operation. The project officer must ensure everyone on the drill crew knows where the nearest emergency facilities are located (i.e., hospital emergency room, fire department, DEH staff duty officer).

b. Visitors. The project officer is responsible for the visitors safety at the drilling site.

B. Maintenance.

1. Truck and chassis.

a. Daily Maintenance Check. The operator will inspect the vehicle daily to ensure proper operation. The following items will be checked before starting the truck:

Item	Type of Check
Tires	Visual for air, cuts in tire, nails
Engine oil	Visual for leaks, adequate oil level
Engine Coolant	Visual for hose condition, leaks, cuts, adequate water level
Fuel	Visual using the dash gauge
Fan belt	Visual for wear and cuts

b. Malfunctions.

(1) Repair all vehicle malfunctions before continuing the operation. If the malfunction occurs at an installation, attempt to obtain assistance from that installation.

(2) If installation assistance is not available, locate the nearest International Harvester dealer, Dodge dealer, or appropriate repair facility. Use the U. S. Government Credit Card for the following: vehicular repairs not exceeding $200, and petroleum, oil, and lubricant (POL). The drilling rig operator/driver will use miscellaneous funds for minor repairs where the repair shop will not accept the U. S. Government Credit Card. If extra funds are needed or the malfunction is severe (repairs exceeding $200), call the Chief, Engineering Services Branch (ESB), or the Chief, WDED, immediately to program funding for repairs. Information required to obtain funds include the following: the vehicle serial number, garage (shop name, shop address and point of contact), and the estimated cost. Report all malfunctions to the maintenance coordinator upon return to the Aberdeen Proving Ground (APG).

2. Drilling Rig.

a. Daily Maintenance Check. The driller will perform daily checks before starting the drilling rig. These checks will ensure proper equipment operation and prolong equipment life.

Item	Type of Check
Oil level	Visual for leaks, adequate oil level
Coolant level	Visual for leaks, adequate fluid
Fuel level	Visual with a measuring stick
Fan belts	Visual for wear, cuts
Radiator hoses	Visual for leaks, cracks, deterioration
Hydralic hoses	Visual for leaks, cuts, deterioration
Winch cables	Visual for broken or frayed wires

b. Other Maintenance Checks. The driller will complete the following checks prior to commencing a drilling study.

Item	Type of Check
Hydraulic Fluid	Visually check the hydraulic fluid level.
Gear Oil	Check fluid level in all gear boxes.
Transmission Fluid	Check oil level in rig transmission.
Grease	All grease fittings on the rig should be greased.

c. Air Brakes. Both the Dodge D-800 and the International Harvester 1900 have dual air systems. Drain the reservoirs on these systems at the end of each day, to reduce the amount of condensation in the line.

d. Malfunctions. Before drilling begins, correct all malfunction that impair the operation of the drilling rig. Upon return to APG, report all malfunctions to the maintenance coordinator.

e. Inventory. Each project officer will ensure that the driller performs a complete inventory of the drilling rig before and after each project. Record drill rig engine hours as part of the inventory. The project officer and driller will jointly conduct an inventory of supplies and equipment stored in the drilling trailer. The project officer will provide a copy of both inventories to the Chief, Laboratory Section, the next project officer using that rig, and the maintenance coordinator. The new project officer will ensure the drilling rig has the required tools and supplies to complete the next project (See Appendix A).

f. Replacement. The driller will record any drilling tools replaced or requiring replacement. The driller will report tool replacements to the maintenance coordinator upon return to APG. The project officer will make the necessary correction to the inventory before turning the drilling rig over to the next project officer.

3. Pickup. The pickup will undergo the same daily checks as the truck and chasis. Any maintenance performed on the pickup by an installation motor pool will be recorded on a DA Form 2407, maintenance request. Maintenance performed by other repair facilities will be recorded on some type of receipt. The driller will maintain a copy of these maintenance records and submit them to APG motor pool when the study is completed.

C. Operation.

1. Driving to the Temporary Duty (TDY) Location. Before driving the drilling rig to the next installation, the driver will perform the daily maintenance check. The check will include all truck lighting (headlights, taillights, brake lights, license-tag light, and clearance

lights). Ensure all equipment is secured for highway travel. The project officer will ensure that the driller is provided adequate time to clean and maintain the drilling rig. The vehicle driver will maintain the trip tickets and maintenance logs. The driller will be responsible for submitting appropriate trip tickets to APG. The credit card holder will collect all receipts charged on the U. S. Government Credit Card and submit two copies of the receipts to the WDED Program Support Specialist upon completion of the trip. The project officer will be responsible for cleanliness of the pickup and trailer.

a. Route to the TDY Location. The project officer will choose the route to the TDY location. The drill rig will remain in the United States.

b. Driver. The driver is responsible for the vehicle's safe operation. He will hold a valid military drivers license for that vehicle and obey all traffic laws for the State in which he is operating. He will stop at all open highway weigh stations. The drilling rig, fully equipped, weighs in excess of 26,000 pounds. A driver will not drive longer than 2 hours without taking a 5- to 10-minute break and will not drive more than 12 hours in 1 day, followed by a rest period of at least 8 hours. The driver will use a guide while backing up and in low clearance areas (drilling rigs require at least 11 feet of clearance).

c. Study Crew. The drilling crew usually consists of three persons: the project officer, the driller, and the installation laborer with a knowledge of machinery and of where to procure needed items. Additional personnel can be assigned to a specific project if it warrants more help.

2. Setup Onsite. The project officer or designee will evaluate each site before the drilling begins. In addition, he/she will precoordinate with the installation for any special equipment (maps, drilling permits, utility locations, bulldozer, etc.).

a. Site Selection. The project officer must consider the safety of the drill crew, the ability of the machinery to perform the boring and the usefulness of the boring to the purpose of the mission in selecting the drilling site. Safety at the site will follow the guidelines in paragraph VA. The drilling rig must be able to: drill through the subsurface formations; access the site; and egress from the site. The drill crew will not attempt borings which: may damage the equipment, would be impossible to access, or from which egress will be blocked by the newly drilled boring.

b. Leveling.

(1) The drill rig must be level for the safe and effective operation of the machine. The driller will position the drilling rig to

minimize the effort required to level the rig. All leveling will be accomplished using the hydraulic jacks and timber spacers (blocks). The remainder of this section does not apply to the Mobil B-24. Do not exceed the recommendation in paragraph VA1a(3).

(2) The procedure for leveling the rig follows. Once the rig is in place, recheck the location for electrical powerlines which may come in contact with the derrick. Also, recheck the rig to ensure that nothing is loose and in danger of falling when the derrick is erected. The rigs used by this Agency have two rear hydraulic jacks and a single front hydraulic jack. Using a handheld level as a guide, begin by leveling the rear of the drilling deck to avoid twisting the frame of the truck. When the deck is level right to left, level the rig front to rear using the handheld level, the front hydraulic jack (if possible) and both of the rear hydraulic jacks. Once the drilling deck is level, recheck both the right to left level and the front to rear level, and adjust the drilling deck as needed.

c. Blocking. Place the drilling rig jacks on blocks (timbers) if the soil will not support the jack or if the leveling operation needs more elevation.

d. Mast Erection. After leveling the drilling rig, erect the drill mast. While the driller hydraulically raises the mast (or derrick), the other members of the crew will visually check the drilling rig for any loose objects or loose lines that could damage the equipment or cause an injury. Once the mast has been placed in the vertical position, put the mast safety locks in place. On the Acker drilling rigs, fasten the security bolt and connect the power transfer collar. On the Mobil drilling rigs, insert the two safety pins. Once these procedures are completed, recheck the level of the drilling deck and the drilling rig is ready.

e. Equipment Layout. Before drilling begins, remove all necessary equipment from the drilling deck and lay it beside the drilling rig. Off-load the following equipment: the auger, tools for the auger, gas and oil cans, and sampling equipment. Place tools and sampling equipment on a clean sheet of plywood so that no items are lost. The drilling assembly on the Acker rigs slides front and back during regular drilling operation. The drilling team must clear all equipment to ensure the platform is free to move.

3. Drilling.

a. Continuous Flight Auger. The spiraling flights on the continuous flight (solid stem) auger allow continuous cleaning of the hole during drilling. This Agency uses 4-inch outside diameter (OD) auger. Under ideal conditions, WDED rigs are capable of drilling to 365 feet using 4-inch OD auger. The cutter head, attached to the leading section of auger, cuts approximately one-half of an inch of clearance for the flights that follow. The flights, in turn, act as a screw conveyer, bringing

cuttings to the surface where they are cleared to one side. Soil samples are recovered by two methods: using bags to sample the auger cuttings at the surface, or removing the auger and sampling with a tube sampler (split spoon or Shelby tube).

b. Hollow-Stem Auger. The hollow-stem auger uses continuous flighting but has a hollow core. The hollow core is used to take samples from the bore hole without removing the auger. Three types of hollow-stem auger are used by this agency: Central Mining Equipment (CME) 6.25-inch inside diameter (ID) x 9.625-inch outside diameter (OD), Mobile 2.25 inch ID X 4.5 inch OD, and Acker 3.25-inch ID x 6.75-inch OD. Under ideal conditions, WDED rigs can drill to a depth of 140 feet using 6.75-inch OD auger. When advancing the hole, insert a center stem (rod) and plug into the hollow center of the auger. Attach the center rod, (Aw rod for the Acker auger and interlocking A rod for the CME auger), to the drive adapter. After drilling to the proper depth for taking a soil sample, remove the center rod and plug, and lower a sampler (Shelby tube or Split spoon) through the hollow stem to sample the soil at the bottom of the hole. The project officer will provide guidance on the depth, frequency, and type of sample. In some situations, it is appropriate to drill without center steel. This is accomplished by mounting a plastic basket between the lead flight of auger and the cutterhead to prevent soil from entering the stem of the auger.

c. Rock Drilling. The Acker AD II is capable of using rock bits and a water swivel to drill in rock. Projects which require drilling through limestone stringers or limited bedrock drilling can use this capability to complete the mission. The procedure for rock drilling follows: use 6-inch hollow stem auger with a center plug of Aw rod to drill to bedrock; dig a trench from the auger hole, downgradient, to carry drilling water away from the hole. Remove the center plug and replace it with a roller cone bit. Attach a swivel head to the other end of the Aw rod and resume drilling using the Aw rod only. Do not reattach the auger to the drill rig. Pump clean water into the Aw rod before applying rotation or down pressure. Use a pumping pressure adequate to bring the cuttings to the surface and cool the bit. Stop the rotation and the down pressure after reaching the desired depth but before stopping the flow of water into the Aw rod.

d. Backfilling. After removing the auger from the bore hole, fill the hole to prevent contamination entering the ground water through the bored hole. Unless superceded by State drilling or monitoring well installation requirements, backfill boreholes using the following procedure. Place a layer of bentonite (approximately 1-foot thick) in the bottom of the hole, and allow it to swell overnight. Fill the remaining borehole volume with well cuttings. Backfill with tremied or rodded concrete grout slurry mixed with 5-percent bentonite, if the potential exists for the cuttings to be contaminated with a hazardous material.

4. Sampling.

a. Split Spoon. The split spoon has a ball-check valve head, hardened steel cutting face, and a sample tube that is split longitudinally. When the head and face are removed, the two halves of the barrel open, exposing the entire sample. New samplers give the option of lining the spoon with a thin, clear plastic tube. This allows the sample to be removed, inspected, and remain undisturbed. To sample, place the sampler on the end of the center rod and lower the spoon into the hole. Upon reaching the bottom of the hole, drive or push the spoon to the proper depth. Keep a record of the number of blows of the sample hammer (A "blow" equals one impact using a standing weight of 140 pounds dropped from a height of 30 inches.) or the hydraulic pressure required to advance the sample each 6 inches. After taking the sample, spin the Aw rod to shear the sample from the formation. Remove the sampler from the hole and mark each sample with date, name of project officer, project number, hole number, and depth. Use soil retainers to keep the sample from falling, when working in loose soil. This procedure is based on American Society for Testing and Materials D 1586-84, Penetration Test and Split-barrel Sampling of Soils.

b. Shelby Tube. This is the simplest of the undisturbed samplers (American Society for Testing and Materials D 1587-83). It consists of a thin-walled metal tube secured to a head containing a check valve. The bottom of the tube provides an inside clearance of approximately 99-percent of the diameter. Since, cohesive soils have a tendency to swell during sampling, the 1-percent restriction retains the sample. Like the split spoon, drive or push this sampler into the formation while recording the amount of effort expended for every 6 inches of penetration. After sampling, remove the shelby tube, seal both ends, and label with the date, project number, hole number, depth, and name of the project officer. Seal the tubes with one of the following: Expandable packers; Wax with disks; End caps; Plastic bags; or Cheesecloth and wax. This method and procedure is based on American Society for Testing and Materials D 4220-83, Thin-walled Tube Sampling of Soils.

c. Bag Samples. Obtain bag samples from the auger turnings, either at the surface as the soil is brought up by the flight or off the flight as the auger is lifted out of the hole. The bag sample can be of different sizes according to the type of analysis required. A bag sample of about 35-40 pounds of soil is enough for a full soil analysis. Obtain a memory bag (5-10 lbs) each time the soil characteristics change unless other samples are programmed for that depth. Mark all bag samples with the date, project number, estimated depth, bore hole number, and elevation. This method and procedure is based on American Society for Testing and Materials D 1452-80, Soil Investigation and Sampling by Auger Boring.

5. Ground-water Monitoring Well Installation.

a. Drilling Operation. This division installs ground-water monitoring wells (MW) with the in-house drilling rigs. Depending on the

subsurface material encountered and the requirements of the MW, the auger which may be used is 4-inch diameter solid-stem auger, 6-inch hollow-stem auger, or 9-inch hollow-stem auger. Use the 4-inch diameter solid stem auger for installing only shallow 2-inch diameter monitoring well in cohesive soil types. Use the 6- and 9-inch diameter hollow-stem auger to handle well installation in a variety of soil. Installation of these follows a procedure similar to obtaining a Shelby tube or a split spoon-sample through the hollow stem. Remove the auger center steel, and insert the well casing and screen after drilling to the desired depth. After which, remove the hollow-stem auger, one section at a time from around the well casing.

b. Backfilling. Backfill the annular space around the well casing. Use a granular material, with a D_{50} greater than the well screen slot size. Backfill to 1 foot above the top of the screen (Ground Water and wells, Johnson 1986). Above the granular material, place approximately 1-foot thick layer of bentonite pellets. Allow the bentonite to swell overnight. Above the bentonite, rod or tremie concrete grout, mixed with 5-percent powdered bentonite, to the surface. Install a steel sleeve with a locked cap, over the well casing and set into the concrete, to prevent unauthorized access to the well casing. In frost heave prone soils (where frost heave historically occurs), and replace the concrete with bentonite.

c. Well Diameter. Use the 4- and 6-inch auger methods to install 2-inch diameter well casing only. Employ the 9-inch auger to install 4-inch diameter well casings.

d. Well Development. Develop the well after it is constructed. This procedure removes the finer material from around the well screen, opening and enlarging void spaces in the material around the well screen so that water can enter the well screen freely. Develop the well by using an acceptable method, such as one of the following: flushing with clean water followed by bailing or pumping; flushing with high pressured water or air; or using a surge block. NOTE: Do not use a surge block in slow recharge aquifers since it may collapse the well screen.

6. Takedown. The rig is ready for takedown, after completing the borehole and removing the auger from the hole. The takedown procedure is a reverse of the setup. On the Acker rigs, unfasten the power transfer collar and the mast security bolt. On the Mobil rig, unfasten the safety pins. These items must be disengaged, otherwise, lowering the mast will damaged the rig. With these items checked, place the drill head, even with the pivot point of the mast, slide the base on the Acker to the rear, and slowly lower the mast. Lower the drill rig to the ground, and raise the jacks to their traveling position; remove the timbers from beneath the jacks, and load them onto the drilling deck. Load and secure all tools and equipment on the drilling deck. The truck is ready to proceed to the next site.

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APPENDIX A

DRILLING EQUIPMENT CHECKLIST

DRILLING EQUIPMENT CHECK LIST

		QTY ON HAND	QTY NEEDED
1.	HOLLOW STEM AUGER, 6"X 5' LENGTHS.		
2.	AUGER, CONTINUOUS FLIGHT, 4"X 5' LENGTHS.		
3.	DRILL ROD, "AW", 5' LENGTHS.		
4.	AUGER HOLDING FORK, 6".		
5.	AUGER HOLDING FORK, 4".		
6.	AUGER RETRIEVER, 6".		
7.	AUGER RETRIEVER, 4".		
8.	CONICAL CUTTERHEAD.		
9.	CONICAL BITS (TEETH).		
10.	LIFTING SWIVEL TO "AW" ROD.		
11.	LIFTING EYE TO 1-5/8" HEX.		
12.	AUGER ADAPTER CAP.		
13.	ROD DRIVE CAP.		
14.	CENTER PLUG.		
15.	DRAG BIT ASSEMBLY.		
16.	DRAG BIT TEETH, CARBIDE.		
17.	3" SHELBYTUBE HEAD.		
18.	3" SHELBYTUBES.		
19.	2" SHELBYTUBE HEAD.		
20.	2" SHELBYTUBES.		
21.	EXTENSION, AUGER.		
22.	CUTTERHEAD, CARBIDE INSERT TYPE (WITH COTTERPIN HOLE).		
23.	CARBIDE INSERT FINGERS.		
24.	3" SPLITSPOON.		
25.	BASKET RETAINERS, 3", METAL ( ) PLASTIC ( ).		
26.	LINERS, PLASTIC (FOR 3" SPLITSPOON).		
27.	2" SPLITSPOON.		
28.	BASKET RETAINERS, 2", METAL ( ) PLASTIC ( ).		
29.	4" CUTTERHEAD, CARBIDE FINGER TYPE.		
30.	CARBIDE INSERT FINGERS (BENT SLIGHTLY).		
31.	DOUBLE WEDGES.		
32.	"D" PINS.		
33.	FISHTAIL BITS.		
34.	1-5/8" HEX TO "AW" COUPLER.		
35.	THREAD TAP, "AW" (CLEAN-OUT).		
36.	ROD HOLDING JAWS, "AW" & COLLAR.		
37.	1-5/8" HEX FEMALE TO 7/8" HEX MALE.		
38.	LIFTING EYE FOR 7/8" HEX.		
39.	140 LB. SLIDE SAFETY HAMMER.		
40.	AUGER HOLDING BOLTS (FOR AUGER ADAPTER CAP).		
41.	COUPLERS-"AW" TO PIPE THREAD.		
42.	SAMPLERS, STAINLESS STEEL (IWAN TYPE).		
43.	HAND OILERS.		
44.	GREASE GUN.		
45.	FIRST AID KIT.		
46.	COOLER, ICE CHEST.		
47.	COOLER, DRINKING WATER, ROUND.		
48.	LEVEL, CARPENTORS.		
49.	BRUSH, WIRE.		
50.	PIPE WRENCH, 24".		
51.	CHAIN, TOWING.		
52.	CHAIN TIGHTENERS.		
53.	JACK, HYDRAULIC.		
54.	FIRE EXTINGUISHER.		

DRILLING EQUIPMENT CHECK LIST

		QTY ON HAND	QTY NEEDED
55.	SHOVEL, LONGHANDLE, ROUND POINT.		
56.	SHOVEL, LONGHANDLE, SQUARE POINT.		
57.	GRASS WHIP.		
58.	TAPE, MASKING.		
59.	PLASTIC BAGS, ROUND BOTTOM.		
60.	PLASTIC BAGS, 13"X 12"X 24" (WASTEBASKET SIZE).		
61.	TAGS, 3"X 5" CARDBOARD W/STRING.		
62.	MAGIC MARKERS, (WATERPROOF).		
63.	HARD HATS.		
64.	HEARING PROTECTORS OR EAR PLUGS.		
65.	GOGGLES OR SAFETY GLASSES.		
66.	GLOVES, LEATHER.		
67.	GLOVES, RUBBER, JERSEY LINED.		
68.	SAFETY ROAD MARKERS OF FLARES.		
69.			
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80.			

APPENDIX E

SOIL SAMPLE LOGS

Site 2:	Depth	Description
North	0-0.5'	Topsoil.
	0.5-1.2'	Sample S2-N-A. Dark yellowish brown, fine to medium sand. Some black organic (vegetative?) matter.
	1.2-1.5'	Sample S2-N-A. Light reddish brown, fine to medium sand. Fill.
	≈ 6'	Approximate water table (from moisture on probe rods).
	10.5-12'	Sample S2-N-B. Dark grayish brown, fine to medium sand. Saturated.
South	0-1.5'	Sample S2-S-A. Brown fine to medium sand. Fill.
	≈ 6'	Approximate water table (from moisture on probe rods).
	10.5-12'	Sample S2-S-B. Dark brown medium sand. Saturated.

Site 3:	Depth	Description
North	0-0.5'	Asphalt pavement and subbase gravel.
	0.5-1.8'	Sample S3-N-A. Brown medium to coarse sand with gravel. Fill.
	1.8-2.0'	Sample S3-N-A. Light brown medium sand. (2 samples required to obtain sufficient sample due to gravel.)
	≈ 5.5'	Approximate water table (from moisture on probe rods).
	10.5-12'	Sample S3-N-B. Brown fine to medium sand. Saturated.
South	0-0.5'	Asphalt pavement and subbase gravel.
	0.5-2'	Sample S3-S-A. Brown fine to medium sand.
	≈ 6'	Approximate water table (from moisture on probe rods).
	10.5-12'	Sample S3-S-B. Brown fine to medium sand. Saturated.

Site 4:	Depth	Description
North	0-0.5'	Topsoil.
	0.5-1'	Sample S4-N-A. Light brown fine to medium sand.
	1-1.5'	Sample S4-N-A. Mixed dark brown and light brown, medium sand.
	≈ 5'	Approximate water table (from moisture on probe rods).
	10.5-12'	Sample S4-N-B. Brown very-fine to medium sand. Saturated.

Site 4:	Depth	Description
South	0-1.5'	Sample S4-S-A. Yellowish brown fine to medium sand. Some pale brown at bottom of run.
	≈ 5'	Approximate water table (from moisture on probe rods).
	10.5-12'	Sample S4-S-B. Pinkish gray, very-fine to medium sand. Saturated.

Site 5:	Depth	Description
North	0-1.5'	Sample S5-N-A. Brown silty fine to medium sand. Fill. Direct push sample augmenetd with hand auger.
	≈ 5-6'	Approximate water table (from moisture on probe rods).
	10.5-12'	Sample S5-N-B. Dark grayish brown clay, silt, and very-fine sand. Weakly valved. Moist. Lake or delta deposits.
	10.5-12'	Sample SD-1. Same as S5-N-B.
South	0-0.6'	Sample S5-S-A. Topsoil. Brown fine to medium sand. Rootless. Sampled with hand auger.
	≈ 5.5'	Approximate water table (from moisture on probe rods).
	10.5-12'	Sample S5-S-B. Dark grayish brown, very-fine sand, clay, and silt. Valved. Moist. Lake or delta deposits.

Site 6:	Depth	Description
North	0-0.5'	Sample S6-N-A. Light brownish gray medium sand. Fill.
	0.5-1.5'	Sample S6-N-A. Dark reddish brown silty fine sand. Moist. Fill.
	≈ 4'	Approximate water table (from moisture on probe rods).
	11.5-13.5'	Sample S6-N-B. Light brownish gray fine to medium sand. Saturated.
South	0-0.5'	Sample S6-S-A. Light brownish gray medium sand. Fill.
	0.5-1.5'	Sample S6-S-A. Dark reddish brown silty fine to medium sand. Fill.
	≈ 4'	Approximate water table (from moisture on probe rods).
	10.5-12'	Sample S6-S-B. Light brownish gray fine sand. Wet.

Site 7:	Depth	Description
East	0-1.5'	Sample S7-E-A. Dark reddish brown silty sand, with pockets of light gray medium to coarse sand. Fill.
	≈ 5'	Approximate water table (from moisture on probe rods).
	10.5-12'	Sample S7-E-B. Same as 0-1.5', but with pebbles. Saturated. Fill.
West	0-1.5'	Sample S7-W-A. Pale brown medium to coarse sand and dark reddish brown silty sand with occasional pebbles. Fill.
	≈ 5'	Approximate water table (from moisture on probe rods).
	10.5-12'	Sample S7-W-B. Same as 0-1.5'. Saturated. Fill. (2 samples required to obtain sufficient material.)

Site 8:	Depth	Description
East	0-1.5'	Sample S8-E-A. Dark reddish brown silty sand with pebbles, and light brownish gray medium sand. Fill.
	≈ 5'	Approximate water table (from moisture on probe rods).
	11.5'	Refusal on stones. Moved 6 inches south.
	10.5-11.5'	Gray gravel. Saturated. Fill.
	11.5-12'	Sample S8-E-B. Dark reddish brown, clayey, sandy silt. Moist. Glacial till.
West	0-1.5'	Sample S8-W-A. Light brownish gray medium sand, and dark red-brown silty sand with pebbles. Fill.
	≈ 5'	Approximate water table (from moisture on probe rods).
	10.5-12'	Sample S8-W-B. Light brownish gray medium to coarse sand. Saturated. Fill.
	10.5-12'	Sample SD-2. Coarse brown-gray sand. Saturated. Fill. (Second hole 6" from sample S8-W-B.)

Corrective Action Plan

Connecticut Army National Guard
Army Aviation Support Facility
Tank Fuel Farm Area

Bradley International Airport, Route 75
Windsor Locks, Connecticut

November 2008

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CORRECTIVE ACTION PLAN
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2 Site Plan and Sampling Locations

APPENDICES **END OF REPORT**

A AOC-Specific Conceptual Models
B Standard Operating Procedure for Low-Flow Groundwater Monitoring

EXECUTIVE SUMMARY

Based on historic information and recent environmental investigations conducted by Fuss and O'Neill, Inc. at the Connecticut Army National Guard (CTARNG), Army Aviation Support Facility (AASF) in Windsor Locks, Connecticut, three areas of environmental concern (AOCs) were identified within the designated investigation area (Figure 2). The potential of releases of oils or hazardous materials were investigated at each of the AOCs and, where necessary, the extent and magnitude of identified releases were determined through additional investigation. This Corrective Action Plan (CAP) evaluates various soil remediation options and presents an implementation plan for each AOC where remediation was determined to be necessary.

Exceedances of clean-up criteria limits in Connecticut's Remediation Standard Regulations (RSRs) were identified in the soil at the following AOCs during the 2008 Focused Phase III Site Investigation:

- AOC-01 –Bulk Fuel Facility used for the storage and dispensing of jet fuel
- AOC-02 – Former underground oil/fuel storage tanks located adjacent to the fuel farm office building.

Results from Fuss & O'Neill's 2008 Focused Phase III investigation indicated that residual VOC and petroleum hydrocarbon concentrations in accessible areas at AOC-01 were below applicable RSR criteria. However, soil in inaccessible areas under the building and between the USTs is presumed to contain VOC and/or petroleum hydrocarbon concentrations above RSR criteria limits.

Evidence of residual petroleum from the former USTs at AOC-02 was detected beneath an approximately 260 square-foot portion of the former tank grave at depths equivalent to approximately the bottom of the tank grave, which is located at an elevation below the water table. Concentrations of ETPH from soil boring SB-10 at the 10- to 12-foot and 14- to 16-foot depth intervals below grade were above the RSR Residential Direct Exposure Criteria (DEC) limit for petroleum hydrocarbons.

Initial groundwater sampling at the fuel facility area of the AASF indicated that groundwater has not been negatively impacted by releases to soil identified at AOC-01 and AOC-02.

We recommend the following actions to address site soil and groundwater as part of this Corrective Action Plan (CAP):

- Collect at least one additional round of groundwater samples to confirm that a release to groundwater has not occurred at the AOCs.

- Address jet fuel -impacted soil in the area of the bulk fuel facility (AOC-01) storage tanks (USTs) through continuing operation of the soil vapor extraction (SVE) system installed by ESI after soil excavation activities in 2007. Flow rates and soil vapor VOC concentrations should be measured periodically during operation of the SVE system to evaluate the system's effectiveness. When VOC concentrations in the extracted air are reduced to "not detected", the SVE system should be shut down and post remediation

soil samples should be collected. The soil samples should be collected as close to the USTs as possible and through the floor of the fuel facility building. Results from the soil samples will be used to determine if the further remediation for VOCs and/or petroleum hydrocarbons could be necessary.

- Following decommissioning of the bulk fuel facility (AOC-01) and shutdown of the SVE system, test soil beneath the floor of Building 190 and the existing USTs and excavate any soil that exceeds RSR criteria. Soil excavation in these areas, if necessary, would require removal of the USTs and Building 190.

- Address petroleum hydrocarbon contamination below the water table at the fuel farm office (AOC-02) through excavation and off-site disposal of petroleum-impacted soil above a depth of 15 feet to eliminate residual Residential DEC exceedances. If excavation cannot be performed as proposed, enhanced biodegradation using Oxygen Releasing Compound (ORC®) has also been identified as a viable secondary remediation option at AOC-02.

1.0 INTRODUCTION

This Corrective Action Plan (CAP) presents proposed soil and groundwater remedial measures for the Tank Fuel Farm area at the Connecticut Army National Guard (CTARNG), Army Aviation Support Facility (AASF) in Windsor Locks, Connecticut. A portion of a USGS quadrangle map showing the AASF facility and surrounding areas is shown on Figure 1. Three areas of environmental concern (AOCs) have been investigated at the Tank Fuel Farm area. The primary objective of the remedial actions discussed in this plan is to address releases of potentially hazardous substances identified and/or characterized during the 2008 Phase III Environmental Site Investigation conducted at the site.

2.0 CONCEPTUAL MODEL

2.1 Site Description and History

The Tank Fuel Farm area includes a bulk fuel facility in the area of Building 190 (AOC-01), an associated office and administration building designated Building 191(AOC-02) and at least two former locations of a former portable hazardous waste accumulation storage building designated as Building 189 (AOC-03). See Figure 2 for a plan of the study area.

The AASF is an operations center used by the CTARNG for the routine maintenance and minor repair of military helicopters and fixed-wing aircraft. Historical information about the former and current USTs in the area of building 190 indicates that the Bulk Fuel Facility has been operating since at least the early 1970s.

2.2 Physical Setting and Site Geology

The topography of the site is generally level, sloping slightly to the northwest. A drainage swale originates along the northwestern edge of the Site and continues northwest off-site to Spencer Brook.

Surficial material at the site is mapped as stratified drift and deltaic deposits overlying till with clay (Colton, 1960). Historical reports documenting excavations in the site area noted a clay layer at depths ranging from 3 to 10 feet below ground surface.

Bedrock beneath the site is mapped as the Portland Arkose, a reddish brown siltstone and sandstone (Schnabel and Eric, 1964). Depth to bedrock is estimated to be 100 to 150 feet below ground surface (Handman, 1972).

2.3 Site Hydrogeology

The quality of groundwater beneath the site is classified by the CTDEP as GA (CTDEP, 1996). Groundwater classified as GA is defined by CTDEP as groundwater within the area of existing private water-supply wells or an area with the potential to provide water to public or private water-supply wells. The CTDEP presumes that groundwater in such an area is, at a minimum, suitable for drinking or other domestic uses without treatment. The designated uses for Class GA groundwater are as existing private and potential public or private supplies of water

suitable for drinking without treatment and as baseflow for hydraulically-connected surface water bodies (CTDEP, 2002).

Depths to water measured on May 6, 2008 at monitoring wells installed in the Tank Fuel Farm area were determined to range from 3 and 11 feet below ground surface.

Hydraulic conductivity (K) values calculated during the Phase III Investigation generally ranged from 0.5 to 33 feet per day. With the exception of well MW-04, the range of hydraulic conductivities from 0.5 to 10 are consistent with groundwater flow through fine grained unconsolidated deposits. Results from the slug test performed on well MW-04 indicate that coarser sands are present in the vicinity of that well.

The nearest surface water body is Spencer Brook, which is located approximately 300 feet northwest of the site at its closest point. Spencer Brook is not classified by the State of Connecticut and is, therefore, assumed to be a Class A surface water body. Class A Water Quality Criteria support the following designated uses: potential drinking water supply; fish and wildlife habitat; recreational use; agricultural, industrial supply and other legitimate uses, including navigation (CTDEP, 2002).

2.4 Potential Receptors

Potential receptors that have been identified at the site include:

- Employees conducting work within each AOC
- Plant and animal life surrounding the site
- Wetland area mapped approximately 200 feet to the northeast of the investigation area
- Spencer Brook - a drainage swale east of the investigation area leads north to Spencer Brook

The CTARNG performed a groundwater receptor survey in 2007 for a one mile radius around the fuel facility. Fourteen private wells were located within the radius. The closest well is 0.27 miles southeast of the site. Additionally, a July 1996 site inspection report by the Army Center for Health Promotion and Preventive Medicine indicated that no private or public water supply wells are reported to be located within approximately one-mile downgradient of the AASF facility.

To determine the presence of potential stressors and ecological communities associated with the site, a Screening-Level Ecological Risk Assessment (SLERA) was conducted in July 2008. Results from the SLERA indicated that the extent of any potential risk of harm to ecological receptors is limited both spatially (e.g., to the drainage swale) and ecologically (e.g., to individuals). Potential risk of harm to ecological populations is considered negligible; therefore, no additional investigations or remediation efforts are necessary for the protection of ecological receptors.

2.5 Summary of AOCs

A description of each AOC is provided below. Locations of the AOCs are shown on Figure 2. Details of historical and 2008 investigations conducted at each AOC are described in the technical memoranda in Appendix A.

AOC-01: Bulk Fuel Facility (Building 190) Area
Building 190 contains pumps and other appurtenances associated with the Bulk Fuel Facility. Building 190 is a 25- by 35-foot brick building constructed in 1958. The Bulk Fuel Facility consists of four 15,000-gallon underground storage tanks (USTs) currently containing JP-8 jet fuel, but which formerly contained JP-4 jet fuel. Two JP-8 USTs are installed along the north side of Building 190 and two are installed along the south side of the building. Additionally, a 1,000-gallon UST is located adjacent to the southeastern corner of Building 190. The 1,000 gallon UST is reportedly used for spill containment and temporary off-spec jet fuel storage. The 15,000 gallon JP-8 USTs are connected to two fuel truck unloading stations and one truck fill station. The building contains a floor drain connected to the 1,000 gallon UST.

AOC-02: Fuel Farm Office (Building 191) Area
The Fuel Farm Office, designated as Building 191, is a 36- by 24-foot brick building constructed in 1951. The building has been used for storage and computer monitoring of the nearby bulk fuel facility. Four 10,000 gallon underground storage tanks (USTs) were historically located adjacent to the east side of the building. These USTs were removed in May 2003.

AOC-03: Former Hazardous Waste Accumulation Building (Building 189) Locations
Building 189 was a portable Hazardous Waste Accumulation Storage Building. The building was a 15 by 10 foot metal frame building with a steel grate floor. A concrete sump for secondary containment was present beneath the steel grate floor. The building is no longer located in the area of this investigation. Historical mapping of the area showed two locations of Building 189 within AOC-03. For the purposes of the 2008 investigations, the two locations have been identified as the Eastern and Western mapped locations.

3.0 REGULATORY FRAMEWORK

The regulatory standard used to guide the site investigation and development of the CAP is the Connecticut Remediation Standard Regulations (RSRs) §222-133k-1 through -3 of the Regulations of the Connecticut State Agencies (RCSA). It should be noted that the RSRs are applicable only to sites where clean-up is dictated by a State regulatory program, such as the UST regulations, the Connecticut Property Transfer Law (the "Transfer Act"), a formal voluntary remediation program, or a CTDEP order. Although the RSRs may not universally apply to conditions at the AASF facility, the RSRs are being used as guidance to develop a remediation plan for the site.

The RSRs specify criteria acceptable to the CTDEP for addressing releases of hazardous wastes and hazardous materials to soil, sediment, groundwater, and soil gas. Applicable RSR criteria are discussed below.

3.1 RSR Soil Criteria

Soil remediation is regulated by substance and release area. Release areas are defined as the area of polluted soil exceeding the analytical detection limit for a particular substance, or site-specific background concentration if the substance is naturally occurring. The RSR Standards for Soil Remediation (RCSA Section 22a-133k-2) require polluted soil at a release area to be remediated to meet the Direct Exposure Criteria (DEC) to protect against the effects of contact or ingestion of contaminants and the pollutant mobility criteria (PMC) which are intended to prevent impacts to groundwater through leaching of contaminants from impacted soil.

The DEC apply to soils within a depth of 15 feet below grade. Contaminant concentrations in soil are either required to meet the Residential DEC (Res DEC) or the Industrial/Commercial DEC (I/C DEC), depending on current and future land use at the site. The default DEC are the residential unless an environmental land use restriction (ELUR) limiting site uses to industrial or commercial purposes is executed.

The applicable PMC for a site are dependant on its groundwater classification. In the case of the AASF site, the groundwater classification is GA. For GA areas, the PMC apply to soil located above the seasonal low water table. As with the DEC, it is possible to use engineered controls to manage impacted soil on-site. Variances also exist for the presence of widespread, polluted fill and constituents associated with fill that contains only asphalt fragments, coal fragments, or coal/wood ash.

The RSRs also define specific alternatives to meeting the baseline DEC and PMC by including self-implementing options, exceptions and variances as well as alternatives that require CTDEP approval. These alternatives include the use of "institutional" or "engineered" controls to environmentally isolate and/or render polluted soils inaccessible.

3.2 RSR Groundwater Criteria

The RSR Groundwater Remediation Standards (RCSA Section 22a-133k-3) require that remediation of a groundwater plume shall result in the attainment of the Surface Water Protection Criteria (SWPC) and Volatilization Criteria (VC). In GA groundwater areas groundwater must also meet background groundwater quality for each substance in the plume. Under certain conditions, groundwater in a GA area may be remediated to the Groundwater Protection Criteria (GWPC) instead of background. These criteria are discussed in more detail below. As with soil, the RSRs specify self-implementing options and exceptions associated with determining compliance with groundwater criteria.

In any groundwater classification area, the goal of groundwater remediation is to:

- Protect the existing use of the groundwater
- Prevent further degradation of groundwater quality
- Prevent degradation of surface water from discharges of impacted groundwater
- Protect human health

Background: The RSRs require that groundwater in a GA area be remediated to background concentrations, which are generally understood to be the concentrations at the nearest location upgradient of and unaffected by the release.

Groundwater Protection Criteria (GWPC): Groundwater in a GA area may be remediated to GWPC instead of background if the background concentration for groundwater is equal to or less than the GWPC prior to initiation of remediation activities, or if the following conditions are present:

- A public water supply distribution system is available within 200 feet of the site;
- The groundwater plume is not located in an aquifer protection area; and
- The groundwater plume is not located within the area of influence of any public water supply well.

Surface Water Protection Criteria (SWPC): The SWPC ensure that surface water quality is not impaired by the discharge of contaminated groundwater into a surface water body at constituent concentrations above the Water Quality Standards. The SWPC apply to a groundwater plume at the point where the plume discharges to a surface water body. Alternatively, the SWPC may be evaluated as an average of concentrations within the plume. Site-specific SWPC may also be calculated.

Volatilization Criteria (VC): The VC protects human health from volatile substances in shallow groundwater that may volatize and migrate in vapor form from groundwater into overlying buildings. Under the current regulations, the VC are considered for areas where groundwater is within 15 feet of the ground surface or the lowest level of a structure intended for human occupancy; however, the CTDEP is proposing that this compliance depth be increased to 30 feet. The VC are specific to a site's land use (i.e., residential versus industrial/commercial). Residential criteria apply unless an ELUR is filed to restrict the site's use to industrial/commercial purposes.

4.0 SUMMARY OF RELEASE AREAS

4.1 AOC-01: Bulk Fuel Facility (Building 190)

Releases of jet fuel occurred from the USTs, piping and/or fill stations associated with the Bulk Fuel Facility during the 1990s and in 2007. Soil samples collected in 1996, 2007 and 2008 indicated that soil excavation activities were successful in removing petroleum impacted soils in accessible areas. Consistent with these results, petroleum hydrocarbon and VOC concentrations detected in soil samples collected as part of the Focused Phase III investigation in 2008 were below applicable RSR criteria. However, it is likely that soil exhibiting RSR exceedances is still present beneath the bulk fuel facility building (Building 190) and between the existing 15,000-gallon USTs. Remediation of areas of inaccessible soil is recommended at this AOC. The recommended remedial approach is discussed in Section 5.0 below.

Groundwater samples collected at wells downgradient of the current and former UST at AOC-01 did not contain petroleum or petroleum-related VOCs.

Tables showing soil and groundwater sample results at AOC-01 are included with the AOC-specific conceptual model for AOC-01 in Appendix A.

4.2 AOC-02: Fuel Farm Office (Building 191) Area

A release of petroleum occurred from the former USTs on the east side of the fuel farm office building (Building 191). Historical post-excavation sidewall soil samples and 2008 surficial samples have demonstrated that petroleum-impacted soil associated with this release was successfully excavated laterally to concentrations below RSR criteria. However, during the 2008 investigation, evidence of residual petroleum at concentrations above RSR criteria was found beneath the former tank grave within an area of approximately 260 square feet.

Groundwater elevation data indicate that residual petroleum impacts in the former tank grave are below the seasonal low water table, which renders the PMC not applicable. The remediation strategy therefore has been designed to address Residential DEC exceedances associated with the area of residual petroleum impacts in the 10 to 15-foot depth interval. The recommended remedial approach is discussed in Section 5.0 below.

Methylene chloride was detected in soil adjacent to a concrete pad of unknown historical function at AOC-02. Subsequently, additional soil sampling was conducted in the area and methylene chloride was not detected. The original results have been attributed to laboratory contamination.

Groundwater samples collected downgradient of the former excavation did not contain ETPH, indicating that residual petroleum impacts noted in the former tank grave area are not adversely impacting groundwater quality in the vicinity.

Tables showing soil and groundwater sample results at AOC-02 are included with the technical memorandum for AOC-02 in Appendix A.

4.3 AOC-03: Former Hazardous Waste Accumulation Building (Building 189) Locations

Soil samples collected from the vicinity of the western former location of Building 189 indicated the presence of a minor petroleum hydrocarbon release to shallow soil. Soil analytical results for samples collected in April and August 2008 in the western Building 189 area indicated that the petroleum hydrocarbons in the soil are limited to the shallow soils above 2 to 4 feet below ground surface. The detections of petroleum hydrocarbons reported at similar concentrations in multiple shallow borings suggest an incidental low-level release of petroleum hydrocarbons related to stormwater runoff of historical aircraft operations, as opposed to a discrete release from the former flammables storage locker. Although lateral characterization has not been completed to the south and east, the configuration of the adjacent tarmac and roadway areas limits the potential extent of the release. No exceedances of applicable RSR criteria limits for ETPH were reported.

Soil samples collected from the eastern former location of Building 189 indicated that a minor release of naphthalene and petroleum hydrocarbons may have occurred in this area in the immediate vicinity of soil boring SB-12, most likely related to historical aircraft operations on the tarmac. No exceedances of applicable RSR criteria limits for ETPH were reported. The

extent of naphthalene and petroleum hydrocarbon detections in the soil in this area of AOC-03 has been characterized.

Tables showing soil and groundwater sample results at AOC-03 are included with the AOC-specific conceptual model for AOC-03 in Appendix A.

5.0 REMEDY SELECTION

As noted in Section 3.0 above, the need for remediation at AOC-01 and AOC-02 is described in terms of exceedances of RSR criteria. Based on consultation with CTARNG personnel, we understand that operational control of the AASF facility may ultimately be conveyed to the Connecticut Department of Transportation (CTDOT), and that implementation of an ELUR is not desirable. The timeframe for this transfer of control, and the potential applicability of the Transfer Act to this potential transaction are uncertain at this time.

If the site were to enter a voluntary remediation program or become subject to the Transfer Act, the focus of site remediation would be to achieve formal compliance with the RSRs. As specified in the regulations, the site investigation would need to be completed within two years, and remediation would need to be initiated within three years following entrance into one of these formal remediation programs.

We considered several common, straightforward remedial technologies for residual petroleum-related releases to soil, and potentially groundwater, at AOC-01 and AOC-02. Although numerous other remediation technologies exist for addressing petroleum contamination, most of these were eliminated from further consideration due to cost, impracticality, and/or limited effectiveness. Petroleum hydrocarbons are the primary constituent class of concern for both AOC-01 and AOC-02, with the addition of VOCs in the vicinity of the jet-fuel USTs at AOC-01. For each of the two AOCs where remediation has been recommended, remediation alternatives have been evaluated in light of the current land use and the ultimate need to comply with the RSRs.

5.1 Remediation Alternative Descriptions – Soil

Two remediation technologies, soil vapor extraction (SVE) and excavation, were considered to address petroleum-contaminated soil above the water table. Summaries of these technologies, including general applicability and limitations, are included in the following sections. AOC-specific evaluations of these remedial technologies are discussed in Section 5.3.

5.1.1 Soil Vapor Extraction System (SVE)

Technology Description

SVE is an in situ unsaturated (vadose) zone soil remediation technology in which a vacuum is applied to the soil to induce the controlled flow of air and remove volatile and some semi-volatile contaminants from the soil. The vapor withdrawn from the soil may be treated to recover or destroy the contaminants, depending on local and state air discharge regulations. Explosion-proof equipment should be used for fuels. Vacuum is applied through extraction wells to create a pressure/concentration gradient that induces gas-phase volatiles to be removed

from soil through the extraction wells. (USEPA FRTR Remediation Technologies Screening Matrix and Reference Guide, Version 4.0)

Applicability

The target contaminant groups for SVE are VOCs and some fuels. Factors, such as the moisture content, organic content, and air permeability of the soil, will affect SVE's effectiveness. SVE will not remove heavy oils, metals, PCBs, or dioxins. Because the process involves the continuous flow of air through the soil, however, it often promotes the in situ biodegradation of low-volatility organic compounds that may be present (USEPA FRTR Remediation Technologies Screening Matrix and Reference Guide, Version 4.0).

Limitations

Factors that may limit the applicability and effectiveness of SVE included the following: (USEPA FRTR Remediation Technologies Screening Matrix and Reference Guide, Version 4.0)

- Soil that has a high percentage of fines and a high degree of saturation will require higher vacuums (increasing costs) and/or hindering the operation of the in-situ SVE system.
- Large screened intervals are required in extraction wells for soil with highly variable permeabilities or stratification, which otherwise may result in uneven delivery of gas flow from the contaminated regions.
- Soil that has high organic content or is extremely dry has a high sorption capacity of VOCs, which results in reduced removal rates.
- Exhaust air from in situ SVE system may require treatment to eliminate possible harm to the public and the environment.
- As a result of off-gas treatment, residual liquids may require treatment/disposal. Spent activated carbon will definitely require regeneration or disposal.
- SVE is not effective in the saturated zone; however, lowering the water table can expose more media to SVE (this may address concerns regarding LNAPLs).

Cost

The cost of SVE design, construction, and start-up is site-specific, depending on the volume of soil to be treated, the nature and amount of contamination, and the hydrogeologic setting (EPA, July 1989). In general, SVE systems are most cost-effective in relatively coarse-grained soils and for contaminants with a high degree of volatility (e.g., gasoline). As soils get increasingly fine-grained and/or contaminants become less volatile, as with oils, relative costs for remediation of a given area using SVE increase and other remediation technologies become more cost effective. Confirmatory soil sampling costs at the end of the SVE effort must also be considered.

5.1.2 Excavation and Off-site Disposal

Technology Description

The second remedial approach considered to address the VOC and/or petroleum hydrocarbon contamination in the soil at AOC-01 and AOC-02 is excavation and off-site disposal of the contaminated soil at a permitted treatment or solid waste disposal facility. This remediation option is generally considered to be an extremely effective way of reducing long-term exposure concerns at a site by physically removing contaminated materials from a site. Excavated soil is generally backfilled with clean soil.

Applicability

Excavation would address contamination for all constituent classes of concern at the site.

Limitations

Factors that may limit the applicability and effectiveness excavation and offsite disposal include (USEPA FRTR Remediation Technologies Screening Matrix and Reference Guide, Version 4.0):

- Generation of fugitive emissions may be a problem during operations.
- The distance from the contaminated site to the nearest disposal facility with the required permit(s) will affect cost. This is not a significant concern relative to the AASF facility, since there are a number of disposal facilities within a relatively short distance of the site.
- Depth and composition of the media requiring excavation must be considered.
- Transportation of the soil through populated areas may affect community acceptability.
- Disposal options for certain waste (e.g., mixed waste or transuranic waste) may be limited. These types of waste are not a concern relative to the AASF facility.

In addition to the above limitations, excavation of soil within a building or beneath or adjacent to building footings or underground utilities can significantly increase the level of effort and cost associated with excavation. Similarly, excavation of soil within the saturated zone may result in the need for dewatering and associated groundwater treatment may impact disposal costs.

Cost

Typical costs for excavation, disposal and transportation of soil containing petroleum hydrocarbons and/or VOCs would be approximately $130 per ton of soil and approximately $3,000 per day of on-site work for engineering fees including reporting and laboratory analytical fees. If necessary, handling of uncontaminated soil overlying the contaminated soil would cost approximately $20 per cubic yard. Post-excavation soil samples would need to be collected after excavation activities.

5.2 Remediation Alternative Descriptions – Saturated Soil/Groundwater

Three remediation alternatives (excavation, enhanced biodegradation, and natural attenuation) were considered to address saturated petroleum-impacted soil, and potentially associated localized areas of petroleum-impacted groundwater. Summaries of these technologies, including general applicability and limitations, are included in the following sections. AOC-specific evaluations of these remedial technologies are discussed in Section 5.3.

5.2.1 Excavation and Off-site Disposal

This remediation technology has been discussed above in Section 5.1.2. The description, applicability, and limitations of excavation discussed in that section apply to excavation of saturated soil. An additional consideration for saturated soil is the need for dewatering of the excavation during remediation.

For small excavations or excavations in fine-grained soils, dewatering efforts may be limited, using methods such as a vacuum truck. Larger excavations, or coarser-grained excavation areas may require larger dewatering systems and provision for storage or discharge of dewatering wastewater, including associated permitting requirements, and the possible need for pre-discharge treatment. Costs for dewatering operations can range from approximately $5,000 for simple operations such as use of a vacuum truck to $10,000 or more per day for larger dewatering operations.

5.2.2 Enhanced Biodegradation Using ORC®

Technology Description

The second remedial option considered for saturated soil and groundwater is enhanced biodegradation using Oxygen Releasing Compound (ORC®). ORC® is a proprietary formulation of calcium oxyhydroxide manufactured by Regenesis (San Juan Capistrano, California) that produces a slow and sustained release of oxygen when in contact with soil moisture or groundwater. Naturally occurring microorganisms that aerobically degrade pollutants thrive in the oxygen-enriched environments. ORC produces the oxygen-rich environment and stimulates the microorganisms to rapidly degrade groundwater pollutants into harmless by-products such as carbon dioxide and water.

The ORC is applied using direct injection through bore holes to the depth of the contamination. The ORC is mixed with water to form a slurry and is pressure injected into the area of contamination. The ORC can produce a release of oxygen in the soil for up to 1 year.

Applicability

Bioremediation techniques have been successfully used to remediate soils, sludges, and ground water contaminated with petroleum hydrocarbons, solvents, pesticides, wood preservatives, and other organic chemicals. Bioremediation is especially effective for remediating low level residual contamination in conjunction with source removal. (USEPA FRTR Remediation Technologies Screening Matrix and Reference Guide, Version 4.0)

Limitations

Factors that may limit the applicability and effectiveness of the process include:

- Cleanup goals may not be attained if the soil matrix prohibits contaminant-microorganism contact.
- The circulation of water-based solutions through the soil may increase contaminant mobility and necessitate treatment of underlying ground water.
- Preferential colonization by microbes may occur, causing clogging of nutrient and water injection wells.
- Preferential flow paths may severely decrease contact between injected fluids and contaminants throughout the contaminated zones. The system should not be used for clay, highly layered, or heterogeneous subsurface environments because of oxygen (or other electron acceptor) transfer limitations.
- High concentrations of heavy metals, highly chlorinated organics, long chain hydrocarbons, or inorganic salts are likely to be toxic to microorganisms.
- Bioremediation slows at low temperatures.
- Concentrations of hydrogen peroxide greater than 100 to 200 ppm in groundwater inhibit the activity of microorganisms.

Many of the above factors can be controlled with proper attention to good engineering practice. The length of time required for treatment can range from 6 months to 5 years and is dependent on many site-specific factors.

Cost

General costs to use ORC remediation include:

- Approximately $5,000 for discharge permitting associated with ORC® injection
- Approximately $10 per pound for ORC material
- Approximately $1,700 per day for injection of the ORC material
- Approximately $1,000 per mobilization for groundwater sampling to monitor the progress of the ORC injection
- Approximately $2,000 per mobilization to collect confirmatory soil samples one year after initial ORC injection, in order to evaluate the effectiveness of soil remediation

5.2.3 Natural Attenuation

Description

The third remedial approach considered to address the VOC and petroleum hydrocarbon contamination in saturated soil or groundwater is natural attenuation. As indicated in the previous section, microorganisms which degrade organic contaminants are present naturally in soil. Over time, this biodegradation, as well as mechanical processes such as dilution and dispersion in the presence of water, will typically result in a decrease in contaminant

concentrations over time. Future additional soil sampling would be performed to determine if concentrations had decreased.

Applicability

Natural attenuation may be used to address VOC and/or petroleum hydrocarbon contamination, which are the primary classes of concern at both of the proposed remediation areas at the site.

Limitations

The speed of natural attenuation processes can vary widely, due to variability in soil composition, hydrologic conditions, the volume of contaminants present, and the make-up of soil microorganism populations. Typically, natural attenuation processes take longer to decrease contaminant concentrations than active remediation technologies, which may be a concern if remediation within a set timeframe is desired. Also, follow-up soil and/or groundwater sampling is typically necessary to confirm that contaminant concentrations are decreasing or have decreased to below regulatory levels.

Cost

Costs associated with using natural attenuation as the remediation option at the AOCs include one or more rounds of confirmatory soil sampling after a year or longer to determine if contaminant concentrations in the soil are decreasing. The estimated cost for confirmatory sampling would be approximately $2,000 per event. In situations where groundwater impacts are a concern, periodic groundwater monitoring is typically required to monitor the progress of natural attenuation processes in reducing contaminant concentrations.

5.3 Remedial Technology Selection

5.3.1 AOC-01: Bulk Fuel Facility

As discussed in Section 4.1, previous excavation activities are inferred to have removed contaminants in accessible soil to concentrations below applicable RSR criteria. However, residual petroleum and VOC impacts are inferred to be present in soil between the four existing 15,000-gallon jet-fuel USTs and beneath Building 190. This soil will be difficult or impossible to remove without first removing the tanks and/or demolishing the building. Based on the surficial nature of the releases in the tank area, residual petroleum hydrocarbons in the soil in this area are inferred to be located primarily above the water table.

The short-term objective of remediation activities at AOC-01 is to address potential volatilization issues associated with jet-fuel releases at the bulk fuel facility. If associated ETPH exceedances remain in inaccessible soil areas, the long term remediation objective is to address these exceedances by implementation of administrative controls or by active remediation at the time of bulk fuel facility decommissioning. The CTARNG has indicated their intention to remove the four jet-fuel USTs prior to any future property transfer.

The following findings have been made regarding the remediation alternatives for soil presented in Sections 5.1 with respect to AOC-01:

- SVE – Given the presence of the jet-fuel USTs and the building, as well as historical soil excavation activities, much of the soil in the vicinity of the building likely consists of sand or other structural fill material down to or below the water table, making the area amenable to SVE remediation. SVE is suitable for remediation of the VOC component of impacted soil above the water table, but will likely be less effective at reducing overall total petroleum hydrocarbon concentrations. Information provided by the CTARNG and observations made during the recent investigation indicate that an SVE system has already been installed at the site by ESI and reportedly began operating circa May 2008. Because the design and installation of the ESI SVE system has reportedly been completed, costs associated with SVE remediation going forward would be limited to operation, soil vapor sampling and confirmatory sampling after the system is shut down in the future.

- Excavation – Although residual petroleum contamination would be amenable to excavation, continuing use of the bulk fuel facility, specifically the presence of Building 190 and the associated USTs, makes additional excavation in this area impractical as an initial remediation option. Design and installation of engineered structural support would have to be performed if soil was to be removed from under the building while the building is still in place. These occurrences would make excavation cost prohibitive. With regard to soil impacts in the UST area, we understand that the CTARNG intends to remove the existing USTs prior to a future property transfer. At such time as the existing structures are removed, excavation of remaining soil exhibiting residual petroleum impacts above regulatory criteria would become a viable option.

Initial Remedial Approach

A combination of remediation technologies is recommended to address the petroleum hydrocarbon release at AOC-01. As indicated above, ESI already has an SVE system operating in the area of Building 190. We presume that operation of the existing SVE system, as the initial remediation technology will result in elimination of potential vapor intrusion hazards associated with the petroleum product release, leaving only the total petroleum hydrocarbon component to address. Using general costs provided in Section 5.1.1, operations and maintenance of the existing SVE system would be anticipated to cost $20,000 or less for the year ending May 2009.

After SVE operations have been successfully concluded, we recommend allowing natural processes to further reduce residual petroleum concentrations in soil for as long as the bulk fuel facility is being used, particularly due to the apparent lack of groundwater impacts. If the site becomes subject to the Transfer Act or enters a formal voluntary remediation program during this time, execution of an ELUR may be necessary to achieve RSR compliance for soil beneath the building. Execution of an ELUR for soil beneath the building and/or USTs could cost approximately $10,000 to $20,000, depending on the amount of surveying and/or subordination tasks that are required.

Post-Decommissioning Remedial Approach

When the bulk fuel facility is decommissioned and Building 190 and/or the jet-fuel USTs are removed, soil in these areas should be sampled for evidence of RSR exceedances. If exceedances are detected, soil exhibiting residual petroleum impacts above RSR criteria limits should be addressed. Assuming that all soil beneath Building 190 (approximately 875 square feet) and beneath the four existing jet-fuel USTs (approximately 800 square feet) is impacted to a depth of 12 feet below grade, we estimate that approximately 600 tons of soil beneath the building and 200 tons of soil beneath the existing USTs may need to be addressed. If all of the potentially-contaminated soil within AOC-01 (approximately 800 tons) were to be excavated and disposed, excavation of this material could cost approximately $122,000 based on the unit costs from Section 5.1.2 and an assumption of six days of field effort, not including building demolition or UST removal costs. If portions of the soil areas beneath the existing USTs or Building 190 are determined to be uncontaminated, this cost could be significantly less. Due to the shallow water table, dewatering will likely be necessary, at an estimated cost of $12,000.

UST Area

CTARNG has indicated that removal of the USTs is proposed prior to the potential transfer of the Tank Fuel Farm to the CTDOT, which would facilitate excavation of impacted soil beneath the USTs, if necessary, making excavation and off-site disposal the ultimate remediation option for this soil. The conceptual cost for excavating the estimated 200 tons of petroleum-impacted soil beneath the existing USTs, based on the unit costs in Section 5.1.2 would be approximately $32,000.

Building 190

Since potential VOC impacts will presumably have been addressed beneath Building 190 with the SVE system that is currently operating, the most desirable secondary remediation option for petroleum-impacted soil beneath the building, if remediation is found to be necessary, would be execution of an ELUR to prohibit demolition of the building, which could be completed for approximately $20,000. However, it is our understanding that execution of an ELUR is not a viable remedial option for the CTARNG. Therefore, if contamination is found beneath the building at concentrations above RSR criteria limits, the only other option currently available to achieve RSR compliance is demolition of Building 190 and excavation of soil impacted at concentrations above applicable RSR criteria. The cost to remediate the estimated 600 tons of potentially-impacted soil beneath the building would be approximately $90,000, not including the cost of building demolition or removal of the remaining portions of the previous 20,000-gallon jet fuel USTs.

5.3.2 AOC-02: Fuel Farm Office Area (Building 191)

The residual petroleum hydrocarbon contamination at AOC-02 is located within an approximately 260-square foot area, beginning at a depth of approximately 10 feet below grade. The depth at which residual contamination begins is roughly coincident with the water table, meaning that contaminated soils to be remediated are primarily saturated. The objective of remediation activities in this area is to address Residential DEC exceedances in soil to a depth of at least 15 feet below grade.

The following findings have been made regarding the four remediation alternatives presented in Section 5.2 with respect to saturated soil at AOC-02:

- Excavation – Although residual petroleum contamination at AOC-02 would be amenable to excavation, the saturated nature of the residual soil impacts indicates that use of excavation as a remediation option would necessitate dewatering of the excavation. Based on the estimated amount of contaminated soil to be excavated (approximately 115 tons) and the unit costs from Section 5.1.2, excavation and disposal of this would cost approximately $21,000, plus approximately $6,000 for dewatering equipment and water disposal.

- ORC® Injection – Soil analytical data from the recent Phase III investigation at AOC-02 indicates that most or all of the residual petroleum hydrocarbon contamination in the vicinity of the SB-10 soil boring is likely below the water table, indicating that the reported residual petroleum contamination would be amenable to accelerated biodegradation using ORC®. The geologic log from the SB-10 soil boring indicates that soil in this area is sandy, which would facilitate ORC injection and dispersion. Using the unit cost data presented in Section 5.1.3 and assuming application of approximately 300 pounds of ORC® material, use of accelerated biodegradation as the remediation technology at AOC-02 would cost approximately $15,000 to $25,000.

- Natural Attenuation – Residual petroleum impacts are amenable to remediation by natural degradation processes. However, given the potential for transfer of facility operations to the CTDOT and/or the need to achieve full RSR compliance, the uncertain timeframe for this process to eliminate RSR exceedances may be problematic.

Based on the above findings, either excavation or accelerated biodegradation using ORC® would be viable remediation technologies to address residual petroleum at AOC-02. Both technologies have been demonstrated as effective methods of mitigating petroleum impacts in groundwater and saturated soil. However, for the purposes of this Corrective Action Plan, we have recommended excavation and off-site disposal of contaminated soil as the preferred remediation technology. Excavation and post-excavation confirmatory sampling will result in the most rapid and definitive removal of residual petroleum-impacted soil, although the initial cost and level of site disruption are somewhat greater than accelerated biodegradation.

Accelerated biodegradation may be more cost effective and less disruptive than excavation and will likely result in a more timely remediation than natural attenuation. However, use of accelerated technology requires additional permitting, and up to a year of monitoring/sampling may be required before results can be evaluated. Re-application of ORC® may also be necessary before the desired outcome is achieved. An additional consideration is that in some cases ORC may be ineffective. This remediation technology would become the preferred remediation option if construction activities in the Tank Fuel Farm Area associated with excavation would significantly disrupt site operations or would present significant security or administrative concerns.

6.0 IMPLEMENTATION PLAN

6.1 Public Notice

Public notice will be required for soil remediation at the site if CTARNG elects to conduct this remediation under a formal CTDEP voluntary program or if the site becomes subject to the Transfer Act. If such notice is required, the following tasks will be required:

1. Publish a notice in a newspaper of substantial circulation concurrently with the submission of this CAP to CTDEP. An affidavit of publication must be provided to CTDEP when available.

2. Send a letter to the local director of public health.

3. Mail a letter to each of the abutting property owners or place and maintain a sign (minimum size four feet by six feet) at the site for at least 30 days prior to remediation. The sign must be clearly visible from the local roadway.

6.2 AOC-01: Bulk Fuel Facility (Building 190)

An SVE system was installed at AOC-01 by ESI in 2007 and was activated circa May 2008. The specific design and operations and maintenance plan for this SVE system has not been reviewed by Fuss & O'Neill. We presume that the system will be operated per the existing plan until VOCs have been adequately addressed. The plan for operation of the SVE system should include the following elements:

- Flow rates and soil vapor VOC concentrations should be measured periodically during operation of the SVE system to evaluate the system's effectiveness.

- When VOC concentrations in the extracted air are reduced to below detectable concentrations, the system should be shut down and post remediation soil samples should be collected from the remediated area to confirm the effectiveness of the remediation effort. The soil samples should be collected as close to the USTs as possible and through the floor of the fuel facility building. Results from the soil samples will be used to determine if the further remediation for VOCs could be necessary.

When the post-remediation soil samples are collected after the SVE system is shut down, the samples should also be analyzed for extractable petroleum hydrocarbons (ETPH) to determine the extent of residual petroleum hydrocarbons in the soil. If the samples indicate that petroleum hydrocarbon concentrations in the soil exceed RSR criteria the soil contamination should be addressed by natural attenuation and/or excavation of impacted soil. Excavation of soil would first require that the existing USTs and appurtenances, Building 190, and remnant portions of the former 20,000-gallon USTs under the building be removed and properly disposed. Once these tasks are completed, excavation of soil would proceed under the following plan:

- Remaining soil within the proposed excavation area will be excavated to a depth of at least 12 feet, unless post-SVE sampling indicates that excavation to an alternate depth is appropriate. Contaminated soil will be excavated and direct-loaded into dump trucks for disposal at a licensed facility. Based on our current understanding, we estimate that excavation could generate approximately 200 tons of contaminated material from beneath the existing USTs and approximately 600 tons of contaminated soil from beneath Building 190.

- If direct loading of all excavated material is not possible, due to transportation or disposal facility capacity limitations, contaminated soil will be stockpiled at a suitable location on-site pending disposal. The stockpile will be deposited on plastic sheeting and covered when soil handling is not in progress.

- Dewatering of the excavation is anticipated to be necessary, due to excavation below the water table. Due to the existence of fine-grained soil around the former tank grave, we anticipate that dewatering can be accomplished by removing excess water in the excavation using a vacuum truck, provided that excavation is sequenced to minimize the area of open excavation below the water table at any one time. If the volume of dewatering is greater than anticipated, additional dewatering provisions may be required.

- The sidewalls of the excavation will be screened in the field for petroleum hydrocarbons using a PetroFlag™ test kit (USEPA Method 9074) to indicate the likelihood that sufficient contaminated material has been removed.

- Based upon acceptable PetroFlag™ screening results, post-excavation soil samples will be collected from approximately 10 to 11 feet below grade along the sidewalls of the excavation. Samples will be collected at the rate of one sample per 20 linear feet, with at least one sample per sidewall. Samples will be analyzed for ETPH. Following sample collection, the excavation will be backfilled to the water table to prevent sloughing or significant groundwater accumulation in the excavation pending analytical testing of post-excavation soil samples.

- Once all laboratory analytical results show ETPH concentrations below 500 milligrams per kilogram, the remaining portion of the excavation above the water table will be backfilled to match surrounding grades with imported fill as necessary. Additional lateral excavation will be conducted as necessary along sidewall areas exhibiting ETPH concentrations above this action level.

- Following backfilling operations, the excavated area will be seeded.

6.3 AOC-02: Fuel Farm Office Area (Building 191)

As discussed in section 5.3.2, either excavation or accelerated biodegradation by injection of ORC® are viable remediation options for the AOC-02 area. Although excavation has been selected as the recommended option, implementation plans have been presented below for both options to allow the CTARNG with flexibility regarding implementing remediation in this area, based on facility needs.

6.3.1 Excavation and Off-Site Disposal

The recommended remediation option for mitigating residual Residential DEC exceedances for petroleum hydrocarbons at AOC-02 is excavation and off-site disposal of contaminated soil. The following plan is proposed for implementation of the recommended remediation option:

- Soil within the proposed excavation area will be excavated to a depth of approximately 8 feet below grade (approximately 90 cubic yards of soil). Soil within this depth interval is presumed to be uncontaminated; therefore, the soil should be stockpiled for subsequent re-use. One three-point composite sample of the stockpiled soil should be collected for approximately every 40 cubic yards of soil and the samples should be analyzed for ETPH to confirm the material's suitability for re-use.

- Remaining soil below a depth of eight feet within the proposed excavation area will be excavated to a depth of at least 15 feet. Contaminated soil will be excavated and direct-loaded into dump trucks for disposal at a licensed facility. Based on the proposed excavation limits, approximately 15 by 20 feet (300 square feet), we estimate that excavation could generate approximately 120 tons of contaminated material.

- If direct loading of all excavated material is not possible, due to transportation or disposal facility capacity limitations, contaminated soil will be stockpiled at a suitable location on-site pending disposal. The stockpile will be deposited on plastic sheeting and covered when soil handling is not in progress.

- Dewatering of the excavation is anticipated to be necessary, due to excavation below the water table. Due to the relatively small size of the excavation and the existence of fine-grained soil around the former tank grave, we anticipate that dewatering can be accomplished by removing excess water in the excavation using a vacuum truck. If the volume of dewatering is greater than anticipated, additional dewatering provisions may be required.

- The sidewalls of the excavation will be screened in the field for petroleum hydrocarbons using a PetroFlag™ test kit (USEPA Method 9074) to indicate the likelihood that sufficient contaminated material has been removed.

- Based upon acceptable PetroFlag™ screening results, post-excavation soil samples will be collected from approximately 12 to 13 feet below grade along the sidewalls of the excavation. Samples will be collected at the rate of one sample per 20 linear feet, with at least one sample per sidewall. Samples will be analyzed for ETPH. Following sample collection, the excavation will be backfilled to the water table with uncontaminated soil that was removed from the excavation and stockpiled, to prevent sloughing or significant groundwater accumulation in the excavation pending analytical testing of post-excavation soil samples.

- The remaining portion of the excavation above the water table will be backfilled to match surrounding grades with remaining soil from the uncontaminated stockpile and

imported fill as necessary, once all laboratory analytical results show ETPH concentrations below 500 milligrams per kilogram. Additional lateral excavation will be conducted as necessary along sidewall areas exhibiting ETPH concentrations above this action level.

- Following backfilling operations, the excavated area will be seeded.

6.3.2 Accelerated Biodegradation Using ORC®

If CTARNG needs or obligations prevent implementation of the recommended remediation option, we propose the following plan for implementation of the accelerated biodegradation remediation option:

- Obtain a temporary discharge authorization from the Connecticut Department of Environmental Protection (CTDEP). This process involves preparation of an application and fee payment.

- Mix the ORC® product with clean water, per the manufacturer's recommendation, to form a slurry and inject the slurry into the target area using direct-push techniques. The ORC would be applied within the 8 to 16-foot depth interval at approximately six locations on an approximate five-foot grid spacing.

- Collect a groundwater sample from downgradient monitoring wells MW-4 and MW-5 prior to injecting the ORC. Measure dissolved oxygen, pH and oxidation reduction potential (ORP) to show baseline values prior to the injection. Collect groundwater samples from these wells one month after ORC® injection and then quarterly for a year after the initial ORC injection. During the period when the ORC® is generating oxygen and stimulating microbial action, the pH and ORP should increase. Dissolved oxygen may increase or decrease, depending on the level of microbial activity. After the ORC® has been expended, the concentrations of these indicator parameters should return to near baseline levels.

- Collect follow-up soil samples within the target area after one year, or when indicator parameters indicate that the ORC® has been expended, to determine the effectiveness of accelerated biodegradation in reducing the petroleum hydrocarbon concentrations in the SB-10 area to below regulatory levels. Soil samples should be analyzed for ETPH. Dependent upon analytical results for the follow-up sampling, a second application of ORC® may be necessary to complete the enhanced biodegradation process.

7.0 POST-REMEDIATION MONITORING

Initial sampling at the fuel facility area of the AASF indicated that groundwater was not negatively affected by the soil contamination still present at the site. Confirmation of no release to groundwater typically requires at least two rounds of samples; therefore, at least one additional round of samples should be collected to confirm that a release of contaminants to groundwater above background concentrations has not occurred at the AOCs.

If the CTARNG wishes to satisfy RSR groundwater requirements at the two areas where remediation is proposed, the RSRs require four consecutive quarters of groundwater results to be below applicable criteria to demonstrate compliance (if a release is detected), followed by a minimum of one additional year of results consistent with background concentrations or three years of results below the RSR Ground Water Protection Criteria (GWPC) to demonstrate the effectiveness of soil remediation.

Post remediation groundwater monitoring must be conducted at the site following any remediation activities, including natural attenuation or execution of an ELUR.

The groundwater monitoring program at the site would be implemented in accordance with RCSA Section 22a-133k-3(g). The goals of the monitoring program would be:

- Determine the effectiveness of soil remediation excavation and environmental isolation in maintaining groundwater quality at the site.
- Determine the effectiveness of the remedial measures in eliminating or minimizing health or safety risks.
- Assess compliance with the applicable RSR criteria.

Low flow groundwater samples will be collected from the six on-site monitoring wells using industry-standard sampling techniques. A copy of Fuss & O'Neill's Standard Operating Procedure for low-flow groundwater sampling is provided in Appendix B.

Monitoring wells associated with AOC-01 include downgradient wells MW-02, MW-03 and MW-06 upgradient well MW-01 and four ESI wells (EMW-01, EMW-02, TPW-05 and TPW-06) located adjacent to the four jet-fuel USTs. We anticipate that the ESI wells will likely be destroyed during remediation activities, due to their proximity to the proposed excavation area. Therefore, these wells have not been included as part of the monitoring program. Monitoring wells associated with AOC-02 include downgradient wells MW-04 and MW-05 and upgradient well MW-01. Groundwater samples from all sampling locations will be analyzed for VOCs and ETPH.

Following implementation of the CAP, a groundwater monitoring report will need to be submitted to CTDEP on an annual basis. This report will include an assessment of trends in groundwater quality, particularly trends that appear to be related to the remedial activities at the site. In the unlikely event that the results of the groundwater monitoring program indicate that RSR criteria are unachievable, then more aggressive groundwater remedial techniques would be evaluated.

8.0 REMEDIATION AND MONITORING BUDGET SUMMARY

For budgeting purposes, Fuss & O'Neill prepared Table 1 on the following page to present costs that CTARNG should budget if it plans to move forward with the remediation of the site. Note that Fuss & O'Neill has no control over the cost of labor, materials, equipment or services furnished by others; contractor(s)' methods of determining prices; or competitive bidding or

market conditions. Fuss & O'Neill's opinion of probable costs are made on the basis of Fuss & O'Neill's experience and qualifications and represent Fuss & O'Neill's best judgment as an experienced and qualified professional engineer, familiar with the construction industry. However, Fuss & O'Neill cannot and does not guarantee that proposals, bids or actual Project Costs will not vary from the budget provided below.

For budgeting purposes, we have included costs to enter the site into the Transfer Act and conduct public notification of the remediation and prepare milestone submittals in accordance with the requirements of the statute. If CTARNG elects to conduct the remediation outside of a CTDEP-administered clean-up program, these administrative tasks would not be required.

Table 1
Summary of Anticipated Remediation and Monitoring Estimated Costs

ITEM	UNIT COST	UNITS	EXTENDED COST (Rounded)
Administrative			
1. Transfer Act Form III Filing Fee	$3,000	L.S.	$3,000
2. ECAF Preparation	Varies	Hourly	$3,000
3. CTDEP Submittals / Public Notification	Varies	---	$5,000
4. LEP Verification	Varies	---	$7,000
Investigation			
5. Supplemental Investigation/Sampling	Varies	---	$10,000
Remediation – AOC-01			
6. Soil Vapor Extraction System – 2009 Operations and Maintenance (ESI)	Varies	---	$20,000
7. Soil Excavation/Transport/Disposal – Building 190 (if necessary) **(Building demolition /UST removal costs NOT included)**	$130/ton	600	$78,000
8. Soil Excavation/Transport/Disposal – UST Area (if necessary) **(UST removal costs NOT included)**	$130/ton	200	$26,000
9. Soil Remediation Engineering – Soil Sampling and Inspection	$3,000/day	6	$18,000
10. Dewatering Costs	Varies	---	$12,000
Remediation – AOC-02			
11. Uncontaminated Soil Handling	$20/cubic yd.	90	$2,000
12. Soil Excavation/Transport/Disposal – Former UST Area	$130/ton	120	$16,000
13. Soil Remediation Engineering – Soil Sampling and Inspection	$3,000/day	2	$6,000
14. Dewatering Costs	Varies	---	$6,000
Reporting			
15. Remedial Action Report	Varies	---	$5,000
Groundwater Monitoring			
16. Site-wide Round (10 wells)	$4,000/round	1	$4,000
17. Compliance Monitoring (6 wells)	$2,500/round	4 *	$10,000
18. Reporting	$1,000/round	5	$5,000
		Subtotal	**$ 236,000**
		10-Percent Contingency	**$ 24,000**
		TOTAL (rounded)	**$ 260,000**

Notes:
* Monitoring estimate assumes closure under revised RSRs anticipated to be promulgated in Spring 2009 and no regulatory exceedances in groundwater.

9.0 REFERENCES

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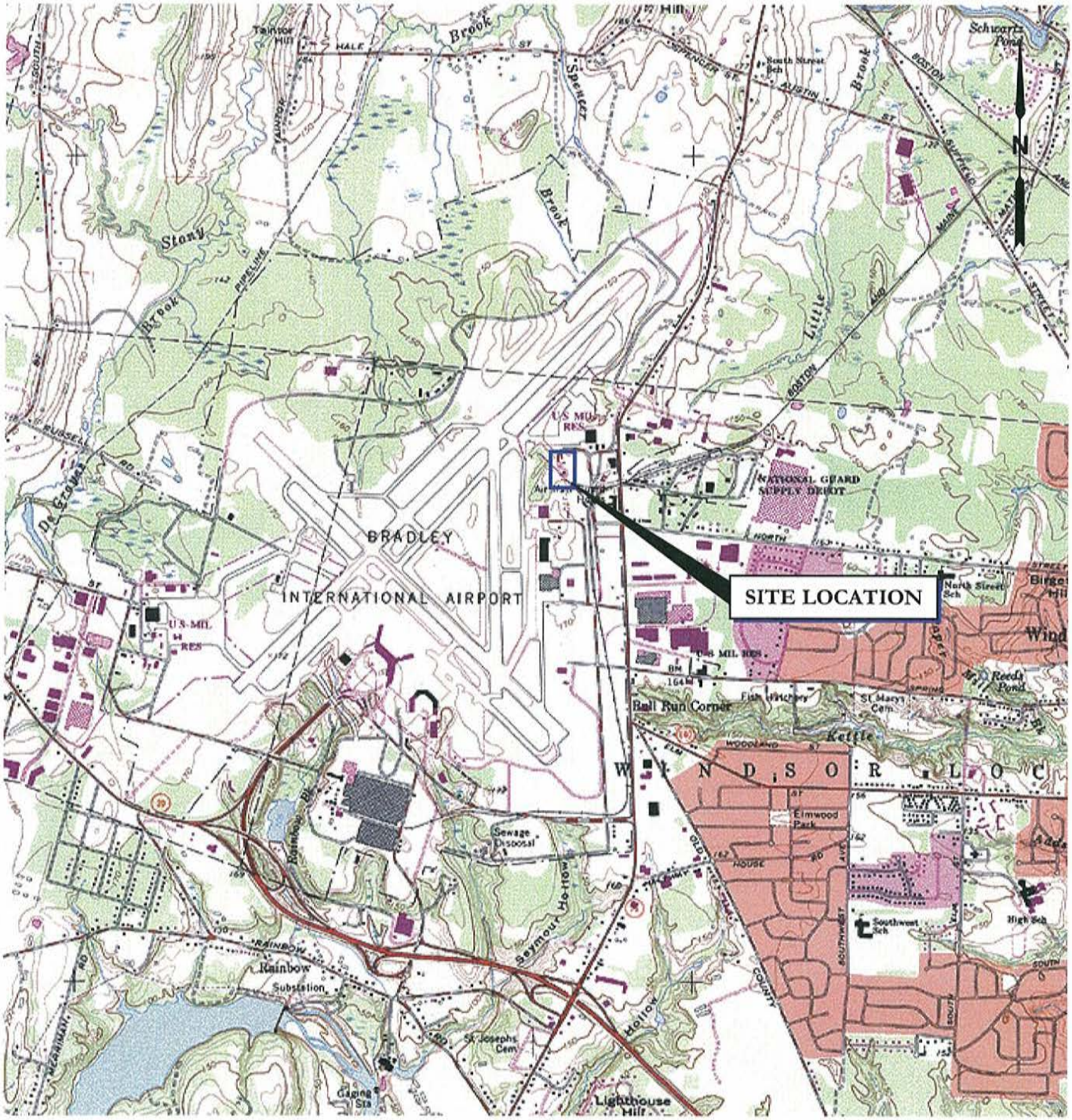
FIGURES



MAP REFERENCE:
THIS MAP WAS PREPARED FROM THE FOLLOWING
7.5 MINUTE SERIES TOPOGRAPHIC MAP:
WINDSOR LOCKS, CONN. 1964 REVISED 1984

Quadrangle Location

0 1000 2000
GRAPHIC SCALE
SCALE: 1"=2000'

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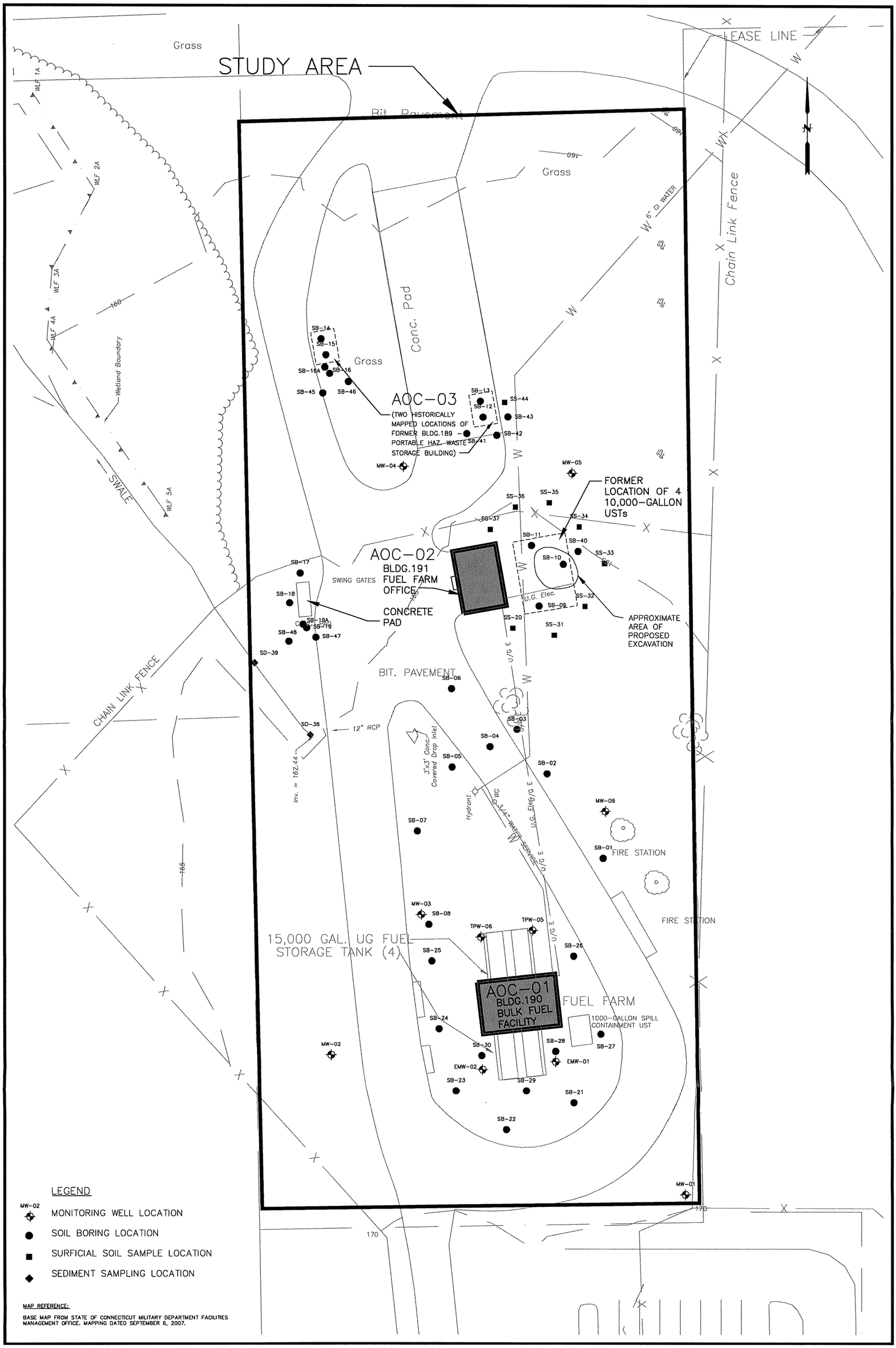
CONNECTICUT ARMY NATIONAL GUARD
SITE LOCATION MAP
ARMY AVIATION SUPPORT FACILITY (AASF)
WINDSOR LOCKS CONNECTICUT

PROJ. No: 20072156A10
DATE: SEPT. 2008

FIGURE 1

F:\P2007\2156\A10\SITE LOC MAP.PPT



SCALE:	
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CONNECTICUT ARMY NATIONAL GUARD

SITE PLAN AND SAMPLING LOCATIONS

ARMY AVIATION SUPPORT FACILITY

WINDSOR LOCKS CONNECTICUT

PROJ. No.: 20072156.A10
DATE: DECEMBER 2008

FIGURE 2

File Path: J:\DWG\P20072156\A10\PLAN\20072156A10SAM002.dwg, Layout: 11x17-P_CL13_HP8000 Wed, Dec 10, 2008 - 1:54 PM User: sarahr

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APPENDIX A

AOC-SPECIFIC CONCEPTUAL MODEL
AOC 01 - BUILDING 190 – BULK FUEL FACILITY
Army Aviation Support Facility (AASF)
Windsor Locks, Connecticut

I. BACKGROUND INFORMATION

Physical Description

The Bulk Fuel Facility is comprised of a 25 by 35 foot brick building constructed in 1958, four 15,000 gallon underground storage tanks (USTs) and a 1,000-gallon UST used to store spilled and off-specification jet fuel. The 15,000-gallon USTs formerly contained JP-4 aviation fuel, but now contain JP-8 aviation fuel. Two of the JP-8 USTs are installed along the north side of the building and two are installed along the south side of the building. The 1,000 gallon spill containment UST is installed adjacent to the southeast corner of the building.

The current 15,000 gallon USTs are connected to two fuel truck unloading stations and one truck fill island/station. The building contains a floor drain connected to the 1,000 gallon spill containment UST.

Historical Information/Processes

Former 25,000-gallon USTs
The four existing 15,000-gallon USTs were installed in 1991 to replace four former 25,000-gallon USTs that contained JP-4 aviation fuel. A "Tank Excavation Inspection Report" written by Metcalf & Eddy, Inc. in October 1991 indicated that two of the 25,000 gallon tanks and three of the former dispenser islands had been removed prior to March 1991 but a date of removal was not noted. The remaining two tanks and one dispenser were still in operation at that time. Metcalf & Eddy reported that these remaining two tanks and dispenser were removed in May 1991 after the first two tanks and dispenser islands had been replaced, in order not to interrupt fuel service. Although Metcalf & Eddy reported that more than one truck dispenser island was replaced during the excavations, the current configuration of the fuel-facility indicates that three former dispenser islands were removed and replaced by one station.

The Metcalf & Eddy report also notes that the historical 25,000 gallon USTs had been installed partially under the facility building and were cut off at the building foundation edge in order to maintain fueling operations at the building during excavation, and that the remaining portions of the former tanks were left in place under the building. Additionally, Metcalf & Eddy observed that former USTs had been installed in depressions excavated in the clay layer underlying the surficial sand and gravel deposits at the site. No depth to the bottom of the tanks was noted, but a depth of 10 feet below ground surface to the clay layer was reported in a nearby excavation. Tank removal activities and soil and water remediation are discussed in more detail in Section II below.

Historical information about the former 25,000 gallon USTs was also included in a "Preliminary Assessment of the Federally-owned National Guard Facilities at Bradley Field, Windsor Locks, Connecticut" report prepared by Engineering Technologies Associates, Inc. of Maryland in 1994. The date of the four 25,000 gallon UST removals noted in this report is June 1989. This date conflicts with the 1991 date of removal of the tanks in the Metcalf & Eddy report, but may be referring to the removal of the first two tanks prior to Metcalf & Eddy's inspection in March 1991. The Engineering Technologies report noted that during the 1989 tank removals oil was found in the soil around the fill pipe. This description of "oil" contamination was most likely jet fuel contamination. The report also notes that a storm drain was broken in the tank removal operation and water entered the excavation and mixed with oily soil. Approximately 4,000 gallons of water was reportedly pumped out of the excavation and disposed, and absorbent pads were placed in the bottom of the excavation. Subsequently, additional unspecified volumes of impacted soil and water were removed from the excavation and two monitoring wells were installed west of the tank area in 1990.

1,000-gallon UST

The Metcalf & Eddy Tank Excavation Report noted that in addition to containing spills, the 1,000 gallon UST also was used to hold a fuel/water mixture from the fuel filters located in the building and was pumped out approximately once per year (Metcalf & Eddy, Inc., 1991). Also noted in the Metcalf & Eddy report was a statement made by a site representative that the 1,000 gallon tank had overflowed at least once prior to 1991 (Note that the capacity of this tank is incorrectly identified as 2,000 gallons on the Metcalf & Eddy sampling sketch).

The 1,000 gallon spill containment UST was removed in April 1994. Tank removal activities were documented in a "Tank Removal Report", Army Aviation Support Facility, Bradley Field, Windsor Locks, Connecticut" prepared by Metcalf & Eddy, Inc., in June 1994 and are summarized in Section II below. Correspondence between the State of Connecticut Military Department and the Connecticut Department of Environmental Protection (CTDEP) indicated that the 1,000 gallon UST was replaced with another 1,000-gallon tank in the same location sometime prior to August 1994.

Site personnel interviewed in February 2008 stated that the 1,000 gallon tank was used as both a spill containment tank and to hold fuel determined to be "off-specification" that could not be used at the facility.

Site personnel also reported that the 1,000 gallon UST overflowed in 2007. Information on remediation activities conducted after the spill is included in Section II below.

Constituents of Concern

Volatile Organic Compounds (VOCs)
Petroleum Hydrocarbons, including polynuclear aromatic hydrocarbons (PAHs)
Metals, particularly lead

Potential Release Mechanisms

Potential release mechanisms at the bulk fuel facility include leaks from the USTs and associated piping and spills from filling and dispensing fuel.

Releases Reported to Regulatory Agencies

The Environmental FirstSearch™ Report included reports to the CTDEP associated with the removal of the four 25,000-gallon USTs and contaminated soil in 1991 and a report noting the presence of the four 15,000-gallon USTs in May 1991.

Applicable Regulatory Criteria

The site has been evaluated with respect to Connecticut's Remediation Standard Regulations (RSRs). The site is located in a GA groundwater classification area. An environmental land use restriction limiting the site to industrial/commercial land use is not planned. Based on this information, we have considered the following RSR criteria at this AOC:

Soil Criteria

- Residential direct exposure criteria (Res DEC)
- GA pollutant mobility criteria (GA PMC)

Groundwater Criteria

- Groundwater protection criteria (GWPC)
- Surface water protection criteria (SWPC)
- Residential volatilization criteria (Res VC)

II. INVESTIGATION AND REMEDIATION

Investigations and remediation contributing to the development of the conceptual model for this AOC are presented below.

Tank Excavation Inspections – Metcalf & Eddy, Inc. – March 13 through June 4, 1991

In addition to historical information about the former 25,000 gallon USTs at the AOC included in Section I above, the "Tank Inspection Report" prepared by Metcalf & Eddy describes tank removal and excavation activities at AOC-01 in May and June, 1991. The report notes that tank removals were performed by All State Burner Services, Inc. (ASBS) and that seven excavations were completed at this AOC. Excavations were associated with the former 25,000-gallon USTs (Excavation #1 and #6), the 1,000-gallon UST area (Excavation #2), the three truck filling stations and associated product piping (Excavation #3, #4, and #5), and bulk fuel facility UST fill piping (Excavation #7). Metcalf & Eddy's map of the excavation locations and table of soil and groundwater sample results are attached. Metcalf & Eddy's report noted that confirmatory soil samples collected from the seven excavations were analyzed for VOCs, total petroleum hydrocarbons (TPH) and leachable metals extracted using the toxicity characteristic leaching procedure (TCLP). The attached table from the report does not include VOC data for the soil samples. The following is a summary of observations made by Metcalf & Eddy during the inspections.

Excavation #1

- Located along the south side of Building 190.

- The two 25,000-gallon USTs located in this area had been removed prior to Metcalf & Eddy's inspection
- No odor or staining was observed in the excavation
- A small amount of water in the excavation was being pumped out to a drainage ditch leading to a stream
- Sorbent booms were placed in the drainage ditch
- A water sample was collected from the discharge in the drainage ditch – BTEX compounds (benzene, toluene, ethylbenzene and xylenes) and TPH were not detected in the sample.
- No soil samples were collected from excavation #1

Excavation #2

- Located along the east side of fuel facility building
- Metcalf & Eddy observed fuel dripping from a pipe leading from the building to the 1,000 gallon fuel/water UST – sorbent pads were placed under the pipe
- Staining was observed on the side of the 1,000 gallon UST
- A strong petroleum odor was noted during additional excavation near the 1,000 gallon UST.
- A clay layer was encountered at 10 feet below ground surface. The contractor removed approximately 1 foot of clay from the excavation.
- A soil sample was collected from northwest corner of excavation (near the building) – the sample results may be labeled incorrectly in the report or table but results are most likely from sample #1 3/13 – TPH at 16.5 milligrams per kilogram (mg/kg), TCLP chromium and barium were detected in the sample at 0.03 milligrams per liter (mg/L) and 3.2 (mg/L) respectively.

Excavations #3 and #4

- Consisted of excavations along the eastern side of the access road associated with truck fill stations 1 and 2, as identified by Metcalf & Eddy.
- Petroleum contamination was found extending beneath the fill stands and concrete aprons where trucks parked for re-fueling
- Excavations extended to the north and south of the truck fill stations (see figure)
- The clay layer was encountered at 3 feet below grade at truck fill station 1. Contaminated soil was observed to a depth of 6 feet below grade.
- The excavation beneath truck fill station 2 reached a depth of 12 feet below grade
- Test pits were excavated to the north of the excavation. PID screening readings from samples from test pits and the northern edge of the excavation were 0 to 5 ppm.
- Twelve soil samples were collected from the excavations. Results showed that the TPH concentration in sample #4 3/20 was 635 mg/kg. This concentration is above RSR criteria.

Excavation #5

- Located east of Building 190 at truck fill station 3.
- Six soil samples were collected from the excavation. Detected TPH concentrations following excavation ranged from 19 mg/kg to 240 mg/kg.

Excavation #6

- Located on the north side of the fuel facility building, associated with removal of the two 25,000 gallon USTs.
- Observations made by Metcalf & Eddy during the tank removals indicated that contaminated soil was present between the two tanks.
- Following removal of the tanks and soil that exhibited PID readings greater that 3 mg/kg, three soil samples were collected from the sides of the excavation. TPH concentrations detected in the samples were 2 mg/kg or less. A sample was not collected from the bottom of the excavation.

Excavation #7

- Located west of the fuel facility building, where fill piping for the former USTs was removed.
- A strong petroleum odor, visibly stained soil and PID readings of 1,500 ppm were noted by Metcalf & Eddy during excavation.
- The excavation was stopped when PID readings from the four walls and bottom were 0 ppm. One composite soil sample was submitted to the laboratory for analysis. The TPH concentration in the sample was 90 mg/kg.

1,000-gallon UST Removal – April 1993

The 1,000-gallon waste fuel/water UST (also identified as a spill containment UST) at the AOC was removed and replaced in spring-summer 1993. UST excavation information was included in the "Tank Removal Report", prepared by Metcalf & Eddy, Inc. in June 1994. The following is a summary of Metcalf & Eddy's observations made during the tank removal and subsequent correspondence from the State of Connecticut Military Department regarding the UST replacement:

- Metcalf & Eddy observed surficial corrosion on the exterior of the tank and "petroleum related" soil contamination on the side walls and bottom of the tank grave.
- Contaminated soil excavation was limited by the proximity of adjacent USTs, the fuel facility foundation, and the driveway. Metcalf & Eddy reported that TPH concentrations from three side wall samples and the benzene concentration in the sample from the north wall were above soil clean-up criteria (see attached analytical summary and figure). TPH concentrations in samples from the north and east wall were 980 and 3,500 mg/kg, respectively. The benzene concentration in the north wall sample was 28 micrograms per kilogram (ug/kg).
- Metcalf & Eddy recommended drilling soil borings and installing monitoring wells in the area of the fuel facility.
- Subsequent correspondence from the State of Connecticut Military Department to the CTDEP indicated that the 1,000 gallon UST was replaced sometime prior to August 1993, presumably with the existing 1,000 gallon spill contaminant UST.

Site Inspection –AASF - Army Center for Health Promotion and Preventive Medicine – July 1996

The U.S. Army Center for Health Promotion and Preventative Medicine (USACHPPM) conducted a site inspection and soil and surface water sampling at the AASF site in July 1996.

As part of the sampling program, eight soil samples from four locations were collected in the vicinity of the bulk fuel facility and USTs, and two sediment samples and one surface water sample were collected in the tributary and stream to the east. A portion of the map of sample locations included in the USACHPPM report is attached. The samples were identified as the following

Sample ID	Type / Location
S7-E-A	Surface Soil - East side of JP-8 USTs off south end of building 190
S7-E-B	Subsurface Soil – East side of JP-8 USTs off south end of building 190
S7-W-A	Surface Soil – West side of JP-8 USTs off south end of building 190
S7-W-B	Subsurface Soil – West side of JP-8 USTs off south end of building 190
S8-E-A	Surface Soil - East side of JP-8 USTs off north end of building 190
S8-E-B	Subsurface Soil – East side of JP-8 USTs off north end of building 190
S8-W-A	Surface Soil – West side of JP-8 USTs off north end of building 190
S8-W-B	Subsurface Soil – West side of JP-8 USTs of north end of building 190
SS-1	Sediment – Spencer Brook
SS-2	Sediment – dry tributary downstream of fuel facility
SW-1	Surface Water – upstream of AASF activities

The report indicated that the surface soil samples were collected at depths of 0 to 1.5 feet below ground surface and the subsurface soil samples were collected at 10.5 to 12 feet below ground surface. The soil samples were analyzed for TPH-gasoline range compounds and TPH diesel range compounds. TPH-gasoline/TPH-diesel were not detected in the samples. The two sediment samples were analyzed for metals, VOCs, Semi-Volatile Organic Compounds (SVOCs), pesticides, PCBs and TPH. A table of the results from the USACHPPM report is attached. Low levels of VOCs, pesticides and PCBs were detected in one or both of the sediment samples. SVOCs also were detected in both sediment samples. The concentration of the SVOC benzo(b)fluoranthene (1,300 ug/kg) was above the Res DEC in the sediment sample collected from the tributary downstream of the AASF tank fuel farms area. The surface water sample was also analyzed for metals, VOCs, SVOCs, pesticides, PCBs and TPH. TPH and low levels of the VOCs 1,1-dichloroethane and 1,1,1-trichloroethane were detected in the surface water sample.

2007 Fuel Spill

In 2007, a water pipe in the fuel farm area burst, causing the 1,000 gallon spill containment UST in the tank fuel farm to overflow. Approximately 600 to 700 gallons of jet fuel was released when the tank filled with water and overflowed, and the jet fuel migrated downslope to off-site swales on Bradley International Airport's property. Environmental Services, Inc. (ESI), responded to the fuel spill and contaminated soil was excavated from the area. In addition, ESI installed a soil vapor extraction (SVE) system to remediate inaccessible soil located underneath the fuel pump house and existing USTs and installed and operated five groundwater extraction wells to remove an oil sheen observed on the groundwater table. Soil vapor and groundwater remediation activities are reportedly still in progress. Based on field observations made during the Focused Phase III investigation, the SVE system the SVE system appears to have been activated in late May or early June of 2008.

2007 Groundwater Well Receptor Survey – Connecticut Army National Guard

The Connecticut Army National Guard performed a groundwater receptor survey for a one mile radius around the fuel facility in 2007. Fourteen private wells were located within the radius. The closest well is 0.27 miles southeast of the site. The July 1996 site inspection report described above indicated that the groundwater flow direction at the AASF site is to the northeast. No private or public water supply wells are reported to be located within approximately one-mile downgradient of the AASF facility.

2008 –Focused Phase III Investigation - Fuss & O'Neill

Fuss & O'Neill performed Phase III sampling at AOC-01 between April and June 2008. The objective of the investigation at this AOC was to document that previous remediation efforts in the area of the bulk fuel facility had successfully removed accessible petroleum-impacted soil to the extent necessary to meet applicable RSR soil criteria, and to evaluate groundwater quality at AOC-01.

Soil Samples

Eighteen soil borings and four monitoring wells (MW-01, MW-02, MW-03 and MW-06) were installed in the vicinity of AOC-01 by Fuss & O'Neill in April 2008. Soil borings were advanced using Fuss & O'Neill's direct push drilling rig to depths ranging from 4 feet to 12 feet below grade. Boring depths were determined from historical information on previous excavations, previous investigation information and inferred UST depths in the area. Monitoring wells were drilled with a hollow stem auger drilling rig. Monitoring well construction information is included in Appendix C to the Focused Phase III investigation report. AOC-02 soil boring and well locations are shown on Figure A01-1. Soil samples were collected during the investigations were submitted to Phoenix Environmental Laboratories and analyzed for VOCs and ETPH. Samples from boring SB-25 and SB-29 at 1 foot below ground surface (located directly south and west of the existing 25,000-gallon USTs) were also analyzed for total lead, leachable lead extracted using the Synthetic Precipitation Leaching Procedure (SPLP), and for PAHs. Analytical results are summarized in Table A01-1.

ETPH was detected in seven soil samples collected at AOC-01, at concentrations ranging from 22 mg/kg to 160 mg/kg. The highest ETPH detection was reported at boring SB-02 at a depth of 6 feet below grade. SB-02 is located along the eastern edge of former Metcalf & Eddy Excavation #3. ETPH was not detected in the 1 foot and 11 foot sample from the same boring. With the exception of the ETPH concentration detected at SB-02, detected ETPH concentrations were below 60 mg/kg.

Low concentrations of the VOCs 1,2,4-trimethylbenzene (10 ug/kg) , m/p-xlyenes (22 ug/kg) and o-xylene (12 ug/kg) were detected in one soil sample collected at boring SB-27 at a depth of 5 feet below ground surface. These compounds are aromatic VOCs typically associated with petroleum products.

PAHs were not detected in the soil sample from SB-29. The PAHs benzo(b)fluoranthene, fluoranthene and pyrene were detected in the soil sample from SB-25 at concentrations of 420 ug/kg, 450 ug/kg and 440 ug/kg, respectively. Lead was detected in samples from SB-25 and

SB-29 at concentrations of 12.3 mg/kg and 5.44 mg/kg, respectively. These concentrations are consistent with typical natural soil concentrations. SPLP lead was not detected in these samples.

Groundwater Samples

Fuss & O'Neill installed three monitoring wells (MW-02, MW-03 and MW-06) downgradient of AOC-01 and one upgradient well (MW-01) in April 2008. Four additional wells (EMW-01, EMW-02, TPW-05 and TPW-06) installed adjacent to the four USTs by ESI following 2007 excavation activities, were sampled during Fuss & O'Neill's investigation.

Fuss & O'Neill personnel collected groundwater samples from the six of the seven monitoring wells listed above on May 6, 2008. Monitoring well MW-06 was dry on May 6. This well was subsequently developed on May 16, 2008. A groundwater sample was collected from MW-06 immediately following development and again on June 19, 2008. Monitoring well TPW-05 was also re-sampled for zinc on June 19, 2008.

Groundwater samples were analyzed for ETPH and VOCs, as well as the total metals aluminum, arsenic, barium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, and zinc. Samples from monitoring wells MW-01, MW-02 and MW-06 were additionally analyzed for dissolved metals because turbidity levels measured during purging were above 10 NTU. Analytical results are summarized in Table A02-2.

ETPH was not detected in the samples. The VOCs bromodichloromethane and chloroform were detected at low levels (2.2 and 11 micrograms per liter (ug/L), respectively) in the groundwater sample collected from well MW-06 immediately following development. The VOCs detected are generally associated with chlorinated public water supplies. It is likely that the detections are associated with water introduced during well development. No other VOCs were detected in the wells. As noted above, MW-06 was sampled again on June 19, 2008. Bromodichloromethane was not detected in the June sample, and chloroform was detected at a trace level of 1.1 ug/L.

With the exception of the zinc concentration detected at well TPW-05, detected metals concentrations at the wells downgradient and adjacent to the four USTs were similar to background levels. Zinc was detected at TPW-05 at a concentration of 0.355 mg/kg in the May 2008 groundwater sample. TPW-05 was re-sampled for zinc on June 19, 2008. Total zinc was detected at a concentration of 0.098 mg/L and dissolved zinc was detected at 0.092 mg/L.

Sediment Samples

Fuss & O'Neill personnel collected two sediment samples (SD-38 and SD-39) in the drainage swale northeast of AOC-01. Samples were analyzed for ETPH, VOCs, metals, PAHs and PCBs. Analytical results are summarized in Table AOC-1-3.

VOCs, PAHs and PCBs were not detected in the sediment samples. ETPH was detected in the sample from SD-39. Detected metals at both sample locations included barium, chromium and lead. An ecological risk assessment (ERA) was conducted for the drainage swale area as part of the Focused Phase III investigation. The results of the ERA are discussed in Section 5.3 of the Focused Phase III investigation report, and the full ERA is provided as Appendix E to that report.

AOC Investigation Summary

Releases of jet fuel have occurred at this AOC. Several excavations of impacted soil and removal of contaminated groundwater have occurred at the AOC since the early 1990s. The early 1990s excavations were associated with replacement of the four jet fuel USTs, fill and fueling stations and the 1,000-gallon UST. Evidence of releases from the USTs and/or piping and fill stations were noted by consultants at the site during the excavations. Confirmatory samples following excavation and removal activities indicated that fuel contaminated soil was still present in the northern portion of the excavation and in the vicinity of the 1,000-gallon UST.

The next investigation at AOC-01 took place in 1996, U.S. Army personnel took soil samples in the vicinity of the four previously replaced USTs. Analytical results from the samples indicated that contaminated soil was most likely successfully removed in the vicinity of those sampling locations. During the same investigation, army personnel collected sediment samples from the drainage swale located Low levels of VOCs, pesticides and PCBs were detected in one or both of the sediment samples. SVOCs also were detected in both sediment samples.

The 1,000-gallon spill containment UST overflowed in 2007. Contaminated soil was excavated and a SVE system was installed to help address inaccessible contamination in the vicinity of the UST.

Soil borings drilled during the 2008 Phase III Investigation at AOC-01 were located to test soil around previous excavation limits to evaluate if petroleum impacted soil was adequately removed during 1990s and in 2007. Low concentrations of ETPH, up to 160 mg/kg, were detected in soil samples collected from AOC-01. No exceedances of applicable RSR criteria were reported. However, residual petroleum-impacted soil is likely still present beneath the bulk fuel facility building and between the existing 15,000-gallon USTs.

Groundwater sampling results indicated that there is no evidence of a release to groundwater from releases of petroleum to soil in the vicinity of Building 190.

III. REGULATORY COMPLIANCE ANALYSIS

There were no exceedances of baseline RSR criteria in soil samples collected during the 2008 Focused Phase III investigation. Regarding groundwater, the concentrations of bromodichloromethane and chloroform in the sample from well MW-06 collected in May 2008 were above the GWPC; however, this sample was collected immediately following well development, which included introduction of potable water into the well. The detected VOCs are byproducts typically associated with chlorination of potable water supplies and are not inferred to be associated with a release due to site activities. In support of this assumption, bromodichloromethane was not detected in the groundwater sample subsequently collected from MW-06 on June 19, 2008, and chloroform was detected at a trace level below RSR criteria.

The zinc concentration detected in the May 2008 sample from well TPW-05 was above the SWPC. However, the zinc concentration in the sample collected from TPW-05 in June was below the SWPC. The presence of zinc in the TPW-05 groundwater sample is believed to be an anomalous or highly localized occurrence and is not believed to be representative of groundwater quality at AOC-01.

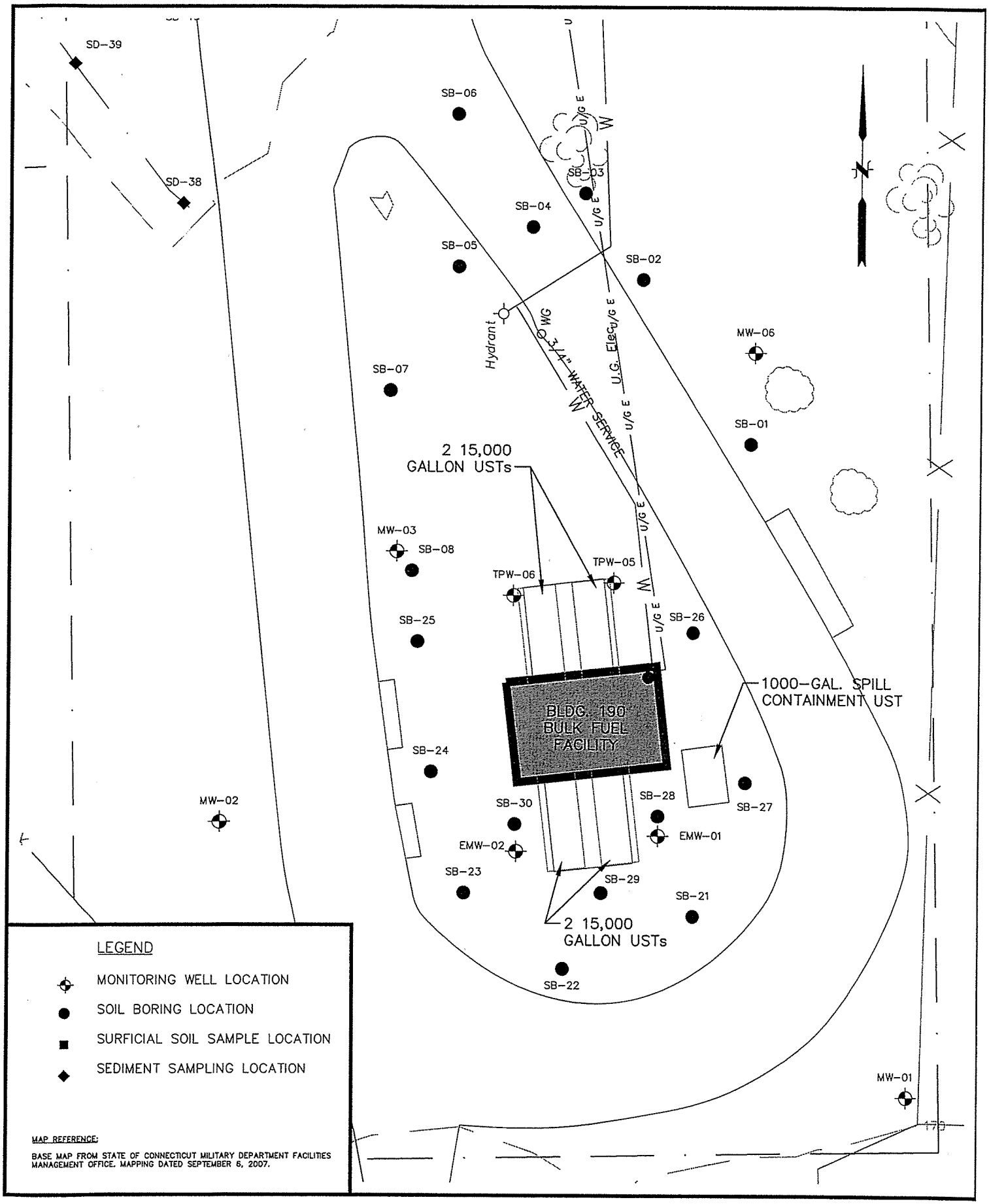
IV. CONCLUSIONS AND RECOMMENDATIONS

AOC-01 has been investigated/characterized using the following lines of evidence:

- Review of historical reports
- Physical inspection of the UST area and concrete pad to the west
- Observations made during collected of soil and groundwater samples
- Soil analytical results
- Groundwater analytical results

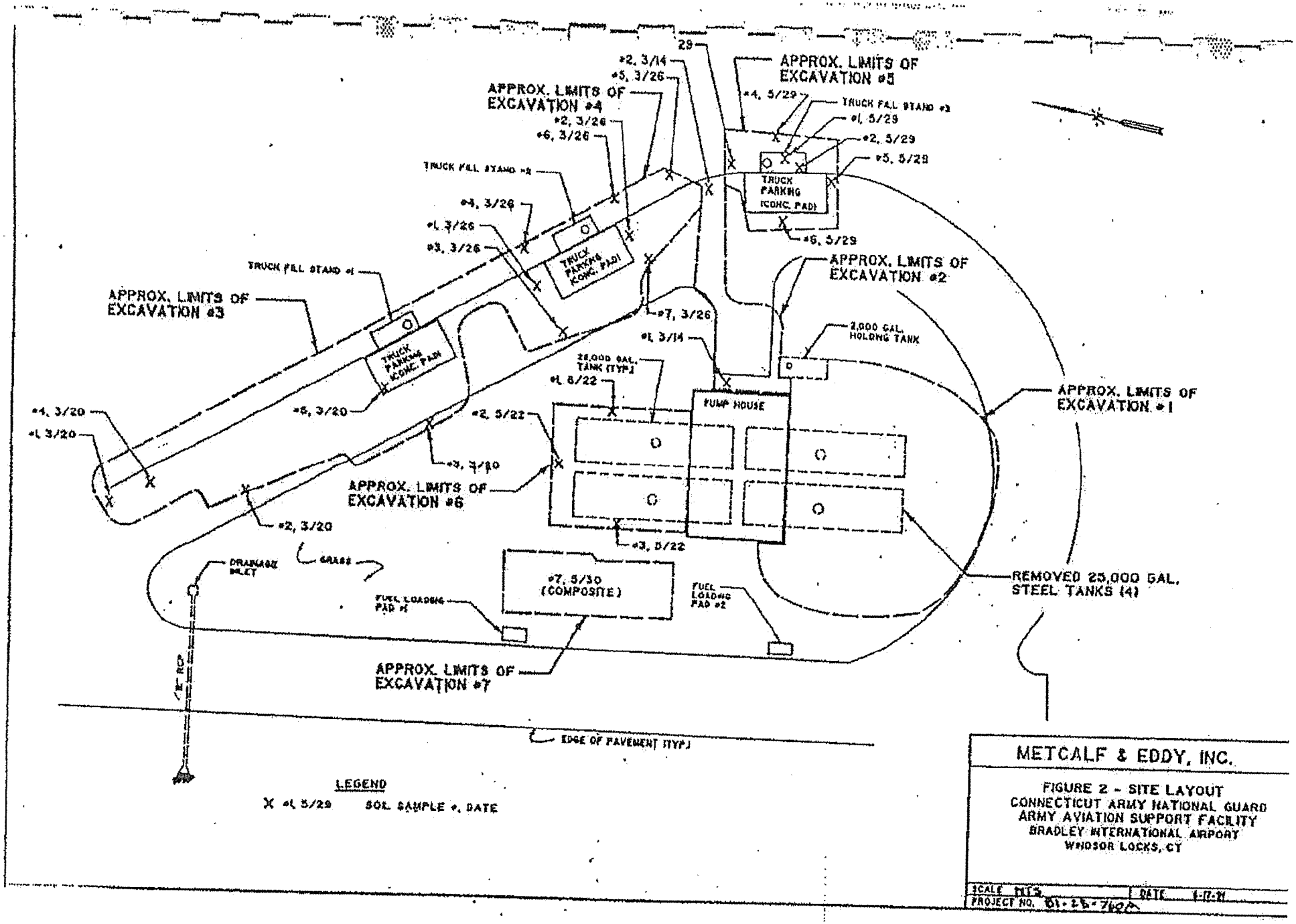
Releases of jet fuel occurred at the AOC from the USTs, piping and/or fill stations during the 1990s and in 2007. Soil samples collected in 1996 and 2007 indicated that soil excavation activities were successful in removing petroleum impacted soils in accessible areas. In support of this statement, petroleum hydrocarbon and VOC concentrations detected in soil samples collected as part of the Focused Phase III investigation in 2008 were below applicable RSR criteria. However, it is likely that soil exhibiting RSR exceedances are still present beneath the bulk fuel facility building (Building 190) and between the existing 15,000-gallon USTs.

We recommend that operation of the SVE system installed by ESI in the vicinity of Building 190 to address residual petroleum contaminated soil associated with the 2007 petroleum product release be continued until operation of the bulk fuel facility is discontinued or until VOCs are below detectable levels in soil vapor monitoring samples. Following decommissioning of the bulk fuel facility, soil sampling is recommended beneath Building 190 and the existing USTs to determine the need for additional soil remedial action to achieve RSR compliance.



SCALE: HORZ.: 1" = 30' VERT.: DATUM: HORZ.: VERT.: 0 15 30 GRAPHIC SCALE	WWW.FandO.COM FUSS & O'NEILL *Disciplines to Deliver* 146 HARTFORD RD MANCHESTER, CT 06040 860.646.2469	CONNECTICUT ARMY NATIONAL GUARD AOC-01: BULK FUEL FACILITY ARMY AVIATION SUPPORT FACILITY WINDSOR LOCKS CONNECTICUT	PROJ. No.: 20072156.A10 DATE: SEPTEMBER 2008 FIG. A01-1

File Path: J:\DWG\P2007\2156\A10\PLAN\20072156A10-Figure A01-1.dwg, Layout: 08.5x11-P_CL13_HP8000 Thu, Sep 25, 2008 - 8:30 AM User: Sarahr
CTB:F&O STANDARD (HALF) LMAN: MS VIEW:AOC-01 UCS:



METCALF & EDDY, INC.

FIGURE 2 - SITE LAYOUT
CONNECTICUT ARMY NATIONAL GUARD
ARMY AVIATION SUPPORT FACILITY
BRADLEY INTERNATIONAL AIRPORT
WINDSOR LOCKS, CT

SCALE NTS DATE 1-17-91
PROJECT NO. 81-28-760A

TABLE NO. 1

PARAMETERS DETECTED IN ANALYTICAL RESULTS AT THE ARMY AVIATIONAL SUPPORT FACILITY, WINDSOR LOCKS, CT.

SAMPLE #	1	2	1	2	3	4	5	1	2	3
LOCATION	Pump House Excavation	Road Trench	North Face Trench	West Wall	West Wall	Bottom North	Bottom Slab	Hole Bottom Slab	Hole Bottom South of Island	West Wall Island 2
DATE	3-13	3-13	3-20	3-20	3-20	3-20	3-20	3-26	3-26	3-26
TPH (mg/kg)	16.5	72	6	315	10.5	635	15	<2	4.4	5.9
Cr (mg/l)	0.03	0.02	ND	ND	0.01	0.03	0.02	0.01	ND	ND
Ba (mg/l)	3.2	2.2	0.7	0.64	0.76	1.8	1.1	1.8	1.3	0.47
Pb (mg/l)	ND	ND	ND	0.01	ND	0.03	ND	ND	ND	ND
Ag (mg/l)	ND	ND	0.01	0.01	0.02	0.02	0.02	0.02	0.02	ND
As (mg/l)	ND	ND	ND	ND	ND	0.01	ND	ND	ND	ND
Cd (mg/l)	ND	ND	ND	ND	ND	0.01	0.01	ND	ND	ND

SAMPLE #	4	5	6	7	1	2	3	1	2	3
LOCATION	East Wall East of Slab	Tank Excavation South Wall	Tank Excavation East Wall	Tank Excavation West Wall	Tank Excavation East Wall	Tank Excavation North Wall	Tank Excavation West Wall	Fill Stand 3 Bottom	Slab 3 Bottom	Fill Stand 3 North Wall
DATE	3-26	3-26	3-26	3-26	5-22	5-22	5-22	5-29	5-29	5-29
TPH (mg/kg)	5.9	7.4	5.9	5.9	<2	2.0	<2	240	50	49
Cr (mg/l)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ba (mg/l)	0.66	0.28	0.25	0.53	0.94	0.53	1.0	0.93	0.79	0.53
Pb (mg/l)	ND	ND	ND	ND	0.11	0.14	0.16	0.12	0.14	0.12
Ag (mg/l)	ND	ND	0.01	0.04	ND	0.01	0.03	ND	0.01	0.01
As (mg/l)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cd (mg/l)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

SAMPLE #	4	5	6	7
LOCATION	Fill Stand 3 East Wall	Fill Stand 3 South Wall	Fill Stand 3 West Wall	Tank Fill # 1
DATE	5-29	5-29	5-29	5-30
TPH (mg/kg)	19	38	22	90
Cr (mg/l)	ND	ND	ND	ND
Ba (mg/l)	0.89	0.49	0.51	0.58
Pb (mg/l)	0.22	0.18	0.21	0.30
Ag (mg/l)	0.02	0.01	0.02	0.01
As (mg/l)	ND	ND	ND	ND
Cd (mg/l)	ND	ND	ND	ND

Note: other parameters analyzed but none detected above detection limits

TABLE NO. 2

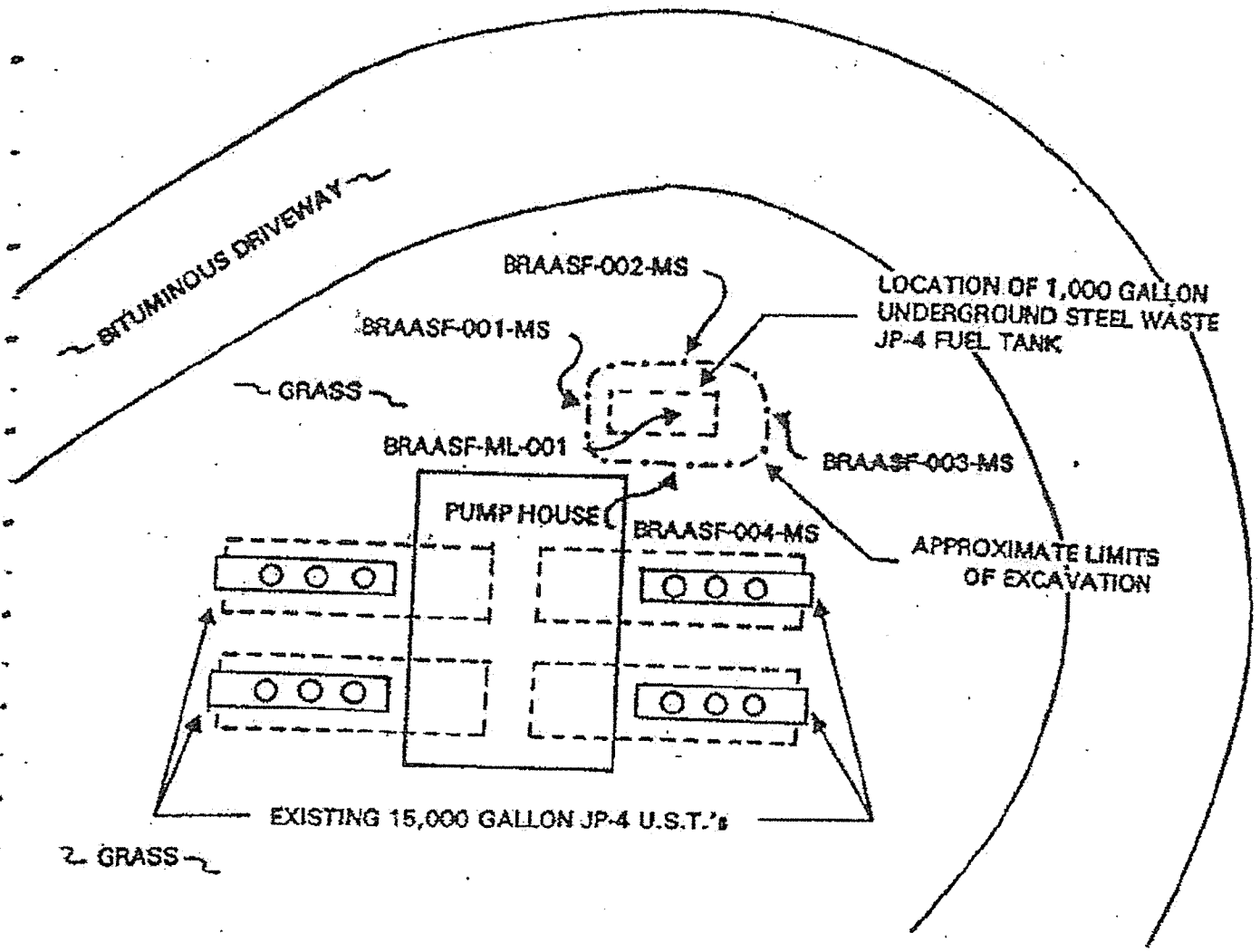
PARAMETERS DETECTED IN ANALYTICAL RESULTS AT THE ARMY AVIATIONAL SUPPORT FACILITY, WINDSOR LOCKS, CT.

WATER ANALYSES

LOCATION	Dewatering Discharge Tanks 1 and 2	Dewatering Discharge Tanks 1 and 2	Dewatering Discharge Tanks 3 and 4
DATE	3-15	3-26	6-4
TPH (mg/kg)	<2.0	2.6	10.4
Ba (mg/l)	0.6	0.19	NA
Cr (mg/l)	0.03	<0.01	NA
Benzene (ug/l)	ND	ND	ND
Ethyl Benzene (ug/l)	ND	ND	ND
O-Xylene (ug/l)	ND	ND	ND
P&M-Xylene (ug/l)	ND	ND	ND

DISPOSAL PILES

SAMPLE # LOCATION	1 Disposal Pile	2 Disposal Pile	1 Disposal Pile
DATE	3-15	3-15	4-4
TPH (mg/kg)	120	360	100
Ba (mg/l)	1.6	1.0	NA
Cr (mg/l)	0.01	ND	NA
Benzene (ug/l)	ND	ND	4.6
Toluene (ug/l)	ND	60	ND
O-Xylene (ug/l)	ND	715	38
P&M-Xylene (ug/l)	ND	ND	20
Benzo (a) anthracene (ug/l)	NA	NA	270
Chrysene (ug/l)	NA	NA	270
Fluoranthene (ug/l)	NA	NA	472
Phenacetin (ug/l)	NA	NA	214
Pyrene (ug/l)	NA	NA	508



LEGEND

BRAASF-001-MS SAMPLE I.D. #

APPROXIMATE SCALE: 1" = 20'

20 10 0 10 20

STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC WORKS

DRAWINGS PREPARED BY METCALF & EDDY, INC. MERIDEN CONNECTICUT

date 4-12-94

scale 1" = 20'

drawn by MRN

approved by

project UNDERGROUND TANK REMOVAL/REPLACEMENT

ARMY AVIATIONAL SUPPORT FACILITY BRADLEY FIELD WINDSOR LOCKS, CONNECTICUT

project no. 96-28-160-AN

drawing no. AASF-2

TABLE 1. SUMMARY OF ANALYTICAL RESULTS
Sample I.D. # Prefix: BRAASF-

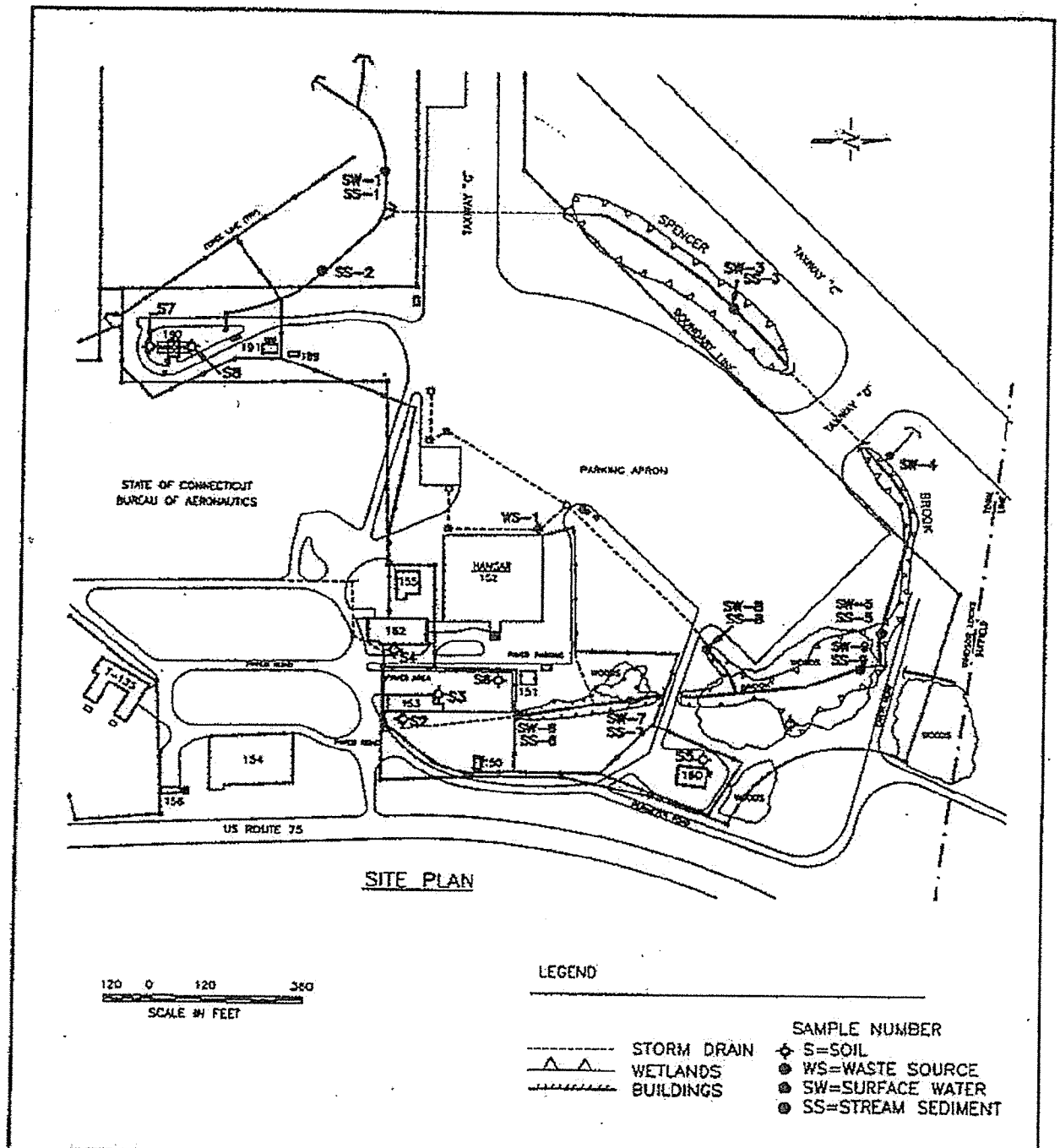
Sample I.D.#		001MS	002MS	003MS	004MS	005MS
Sample Location		N.WALL	E.WALL	S.WALL	W.WALL	SOIL PILE
Sample Date		5-28-93	5-28-93	5-28-93	5-28-93	5-28-93
Tank Grave		1000 WO	1000 WO	1000 WO	1000 WO	1000 WO
Parameters	Units	Concentrations				
U.S. EPA Method 8010(1)	ug/kg	ND(2)	ND	ND	ND	ND
U.S. EPA Method 8020(1)						
Benzene	ug/kg	28	ND	ND	ND	ND
Toluene	ug/kg	60	< 40	ND	ND	ND
Xylenes	ug/kg	1464	2360	ND	ND	<.120
TCLP Metals(1)						
Barium	mg/l	0.44	0.63	0.63	0.63	0.83
Selenium	mg/l	0.0028	0.0028	0.0038	0.0038	ND
TPH by I.R.	mg/kg	980	3500	33	340	850
U.S. EPA Method 8080 PCBs	mg/kg	NA(3)	NA	NA	NA	ND
Ignitability	deg F	NA	NA	NA	NA	> 212

1. Parameters not listed were not detected
2. ND = Not Detected, Below Stated Detection Limits
3. NA = Not Analyzed

TABLE 1. SUMMARY OF ANALYTICAL RESULTS (cont.)
Sample I.D.# Prefix: BRAASF

Sample I.D.#		ML001
Sample Location		GWATER
Sample Date		4-19-93
Tank Grave		1000 WO
Parameters	Units	Concentration
U.S.EPA Method 8010(1)	ug/l	ND(2)
U.S.EPA Method 8020(1)		
Xylenes	ug/l	< 3
MTBE	ug/l	92
Oil and Grease	mg/l	< 10

1. Parameters not listed were not detected
2. ND = Not Detected, Below Stated Detection Limits



UNITED STATES ARMY
CENTER FOR HEALTH PROMOTION
AND PREVENTIVE MEDICINE
ABERDEEN PROVING GROUND, MARYLAND

FIGURE 5
SAMPLING LOCATIONS
BRADLEY AASF, CONNECTICUT

DRAWN BY	PROJ. #	FILE
DJB	38-EH-2651-96	CT\2651LOCS

TABLE 2. ANALYTICAL RESULTS FOR SEDIMENT SAMPLES--TAL METALS

DEC Soil (mg/kg) RS I/C	Detections	WS-1 D9946 mg/kg	SS-1 D9937 mg/kg	SS-2 D9938 mg/kg	SS-3 D9939 mg/kg	SS-5 D9940 mg/kg	SS-6 D9942 mg/kg	SS-7 D9943 mg/kg	SS-8 D9944 mg/kg	SS-9 D9945 mg/kg	SS-D[1] D9941 mg/kg
7 82.00	Antimony (Sb)	ND	ND	0.7	2.9	0.3	ND	ND	ND	ND	ND
0 10	Arsenic (As)	7.6	0.9	6.1	6.3	1.9	3.9	7.4	5.3	11	1.1
10 140,000	Barium (Ba)	340	14	110	100	86	210	260	180	240	43
2 2	Beryllium (Be)	ND	ND	0.8	ND	ND	1.4	ND	ND	ND	ND
34 1000	Cadmium (Cd)	3.1	3.2	3.8	460	6.4	ND	5.5	3.3	99	3.1
00 100	Chromium (Cr)	11	23	26	460	17	44	52	35	50	9
500 12 1000	Lead (Pb)	27	130	97	540	18	27	80	120	140	9.1
.0 610	Mercury (Hg)	ND	ND	ND	0.8	ND	ND	ND	ND	0.4	ND
10 75000	Nickel (Ni)	4.8	38	19	44	7.0	32	34	9.1	30	5.6
40 10,000	Selenium (Se)	0.8	0.6	0.6	2.5	0.6	0.5	1.3	0.8	2.9	0.3
40 19000	Silver (Ag)	8.0	ND	ND	ND	ND	2.2	ND	32	6.0	ND
5.4 160	Thallium (Tl)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
40 14000	Vanadium (V)	23	21	48	190	19	72	95	37	94	17
000 610,000	Zinc (Zn)	99	60	140	540	120	120	740	88	580	66

ND = not detected. [1] = Duplicate of SS-5.

TABLE 3. ANALYTICAL RESULTS FOR SEDIMENT SAMPLES--ORGANIC (CONT.)

Detections	SS-1 D9937 µg/kg	SS-2 D9938 µg/kg	SS-3 D9939 µg/kg	SS-5 D9940 µg/kg	SS-6 D9942 µg/kg	SS-7 D9943 µg/kg	SS-8 D9944 µg/kg	SS-9 D9945 µg/kg	SS-D[2] D9941 µg/kg
SVOCs (continued)									
Benzo[a]anthracene	360*	510	1,100	ND	2,600	7,600	1,100	3,400	500
Chrysene	570	740	1,500	230*	2,700	8,000	1,600	4,900	560
bis(2-Ethylhexyl)phthalate[1]	230*	ND	4,700	ND	480*	ND	1,000,000[3]	1,600	450
Benzo[b]fluoranthene	760	1,300	3,100	370*	4,300	21,000	2,700	8,400	750
Benzo[k]fluoranthene	250*	360*	1,100	ND	1,500	5,000	880	2,400	260*
Benzo[a]pyrene	340*	600	1,500	240*	2,400	7,100	1,400	3,600	450
Indeno[1,2,3-cd]pyrene	400*	540	1,100	ND	1,800	7,100	970	ND	310*
Dibenz[a,h]anthracene	ND	ND	ND	ND	500	1,600	ND	660*	ND
Benzo[g,h,i]perylene	370*	510	950	ND	1,800	7,500	910	2,700	260*
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PESTICIDES/PCBs									
DDD,p,p'	ND	ND	0.040	ND	ND	0.031	ND	0.023	ND
DDE,p,p'	ND	ND	ND	ND	ND	0.015	ND	0.012	ND
DDT,p,p'	ND	0.12	ND	ND	ND	0.34	ND	0.23	ND
PCB (1260)	0.14	ND	1.39	ND	ND	ND	ND	ND	ND
TPH-DIESEL	29	ND	ND	ND	33	54	57	30	26

ND = not detected. * = Estimated value, below reporting limit. [1] = Probable lab contamination. [2] = Duplicate of SS-5. [3] = Diluted.

TABLE 3. ANALYTICAL RESULTS FOR SEDIMENT SAMPLES–ORGANIC

Detections	SS-1 D9937 µg/kg	SS-2 D9938 µg/kg	SS-3 D9939 µg/kg	SS-5 D9940 µg/kg	SS-6 D9942 µg/kg	SS-7 D9943 µg/kg	SS-8 D9944 µg/kg	SS-9 D9945 µg/kg	SS-D[2] D9941 µg/kg
VOCs									
acetone	25*	ND	29	15*	14*	63	ND	84	13*
2-butanone	ND	ND	ND	ND	ND	ND	ND	18*	ND
1,1-dichloroethane	2.4*	ND	ND	ND	ND	ND	ND	ND	ND
methylene chloride[1]	3.7	1.1*	4.8	2.5	3	3.6	2*	3.2	2.9
1,1,1-trichloroethane	2.7	2.9	ND	ND	ND	ND	ND	ND	ND
trichlorofluromethane	ND	ND	ND	ND	ND	ND	1.5*	ND	ND
SVOCs									
Phenol	ND	ND	ND	ND	ND	ND	ND	640*	ND
Benzyl alcohol	ND	250*	430*	ND	ND	610*	ND	830*	ND
4-Methylphenol	ND	ND	ND	ND	ND	ND	ND	9,100	ND
Acenaphthylene	ND	ND	ND	ND	ND	990*	ND	ND	ND
Acenaphthene	ND	ND	ND	ND	330*	ND	ND	ND	ND
Phenanthrene	620	400*	860	ND	3,600	6,500	1,700	3,700	410*
Anthracene	ND	ND	ND	ND	670	1,300	ND	ND	ND
Di-n-butylphthalate	ND	ND	ND	ND	ND	1,300	ND	ND	ND
Fluoranthene	1,100	970	2,200	380*	10,000[3]	2,100	3,800	10,000	1100
Pyrene	840	910	2,100	320*	4,500	15,000	2,200	6,400	790
Butylbenzylphthalate	ND	ND	1,700	ND	ND	ND	ND	ND	ND

TABLE 4. ANALYTICAL RESULTS FOR AQUEOUS SAMPLES–TAL METALS

Detections	SW-1 D9928 µg/L	SW-3 D9934 µg/L	SW-4 D9935 µg/L	SW-5 D9926 µg/L	SW-6 D9930 µg/L	SW-7 D9931 µg/L	SW-8 D9932 µg/L	SW-9 D9926 µg/L	SW-D[1] D9930 µg/L
Aluminum (Al)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Antimony (Sb)	ND	ND	ND	ND	ND	DN	ND	ND	ND
Arsenic (As)	1	1	ND	ND	ND	1	ND	1	ND
Barium (Ba)	48	39	160	37	55	48	49	40	34
Beryllium (Be)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium (Cd)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Calcium (Ca)	23,000	20,000	41,000	19,000	33,000	26,000	29,000	23,000	19,000
Chromium (Cr)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt (Co)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Copper (Cu)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iron (Fe)	3,000	1,300	280	500	240	230	710	450	510
Lead (Pb)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Magnesium (Mg)	5,200	4,400	8,600	4,500	8,300	6,600	9,900	6,800	4,400

TABLE 4. ANALYTICAL RESULTS FOR AQUEOUS SAMPLES--TAL METALS (CONT.)

Detections	SW-1 D9928 µg/L	SW-3 D9934 µg/L	SW-4 D9935 µg/L	SW-5 D9926 µg/L	SW-6 D9930 µg/L	SW-7 D9931 µg/L	SW-8 D9932 µg/L	SW-9 D9926 µg/L	SW-D[1] D9930 µg/L
Manganese (Mn)	3,000	1,400	1,100	260	130	89	270	130	250
Mercury (Hg)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel (Ni)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Potassium (K)	1,600	1,400	2,400	1,400	2,000	1,300	1,700	1,300	1,300
Selenium (Se)	ND	ND	ND	ND	ND	1	ND	ND	ND
Silver (Ag)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium (Na)	4,700	4,600	2,200	1,400	2,000	25,000	4,700	10,000	2,900
Thallium (Tl)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium (V)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc (Zn)	51	58	76	31	90	78	10	39	52

ND = not detected. [1] = Duplicate of SW-5.

TABLE 5. ANALYTICAL RESULTS FOR AQUEOUS SAMPLES--ORGANIC

Detections	SW-1 D9928 µg/L	SW-3 D9934 µg/L	SW-4 D9935 µg/L	SW-5 D9926 µg/L	SW-6 D9930 µg/L	SW-7 D9931 µg/L	SW-8 D9932 µg/L	SW-9 D9933 µg/L	SW-D[1] D9927 µg/L
VOCs									
1,1-dichloroethane	1.2*	1.6*	ND	ND	ND	ND	ND	ND	ND
1,2,4-trichlorobenzene	ND	ND	ND	1.1*	ND	ND	ND	ND	ND
1,1,1-trichloroethane	8.3	7.8	ND	1.6*	ND	ND	ND	ND	1.6*
SVOCs	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pesticides/PCBs	ND	ND	ND	ND	ND	ND	ND	ND	ND
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
TPH-diesel	0.022	0.014	0.024	0.082	0.024	0.010	0.012	0.033	0.049

ND = not detected. * = Estimated value, below reporting limit. [1] = Duplicate of SW-5.

TABLE A01-1

SUMMARY OF DETECTED PARAMETERS - SOIL SAMPLES
CTARNG AASF - BUIDLING 190 BULK FUEL FACILTIY
WINDSOR LOCKS, CONNECTICUT

					SITE ID	MW-06	SB-01	SB-01	SB-01	SB-02	SB-02	SB-02	SB-02	SB-03	SB-03	SB-03	SB-04	SB-04	SB-04	SB-05	SB-05	SB-05	SB-06	SB-06	SB-06	SB-07	SB-07
					SAMPLE #	856080425-85	856080421-03	856080421-04	856080421-05	856080421-06	856080421-07	856080421-08	856080421-09	856080421-10	856080421-11	856080421-12	856080421-13	856080421-14	856080421-15	856080421-16	856080421-17	856080421-18	856080421-19	856080421-20	856080421-21	856080421-22	856080421-23
					DATE	4/25/2008	4/21/2008	4/21/2008	4/21/2008	4/21/2008	4/21/2008	4/21/2008	4/21/2008	4/21/2008	4/21/2008	4/21/2008	4/21/2008	4/21/2008	4/21/2008	4/21/2008	4/21/2008	4/21/2008	4/21/2008	4/21/2008	4/21/2008	4/21/2008	4/21/2008
					DEPTH (FT)	5	1	6	11	1	6	11	11	1	5	11	1.25	5	11	1	5	11	1.25	5	11	1	3.75
CONSTITUENT		UNITS	GA-PMC	I/C DEC	Res DEC																						
VOCs																											
1,2,4-Trimethylbenzene	Total	(ug/kg)	7000	1000000	500000	<6.5	<4.4	<5.1	<4.1	<4.4	<3.7	<4.6	<4.4	<4.6	<4.3	<4.4	<5.7	<4.1	<4.6	<4.2	<4.2	<5.5	<3.8	<4.2	<4	<4.5	<4.4
M/P-xylenes	Total	(ug/kg)	19500	1000000	500000	<6.5	<4.4	<5.1	<4.1	<4.4	<3.7	<4.6	<4.4	<4.6	<4.3	<4.4	<5.7	<4.1	<4.6	<4.2	<4.2	<5.5	<3.8	<4.2	<4	<4.5	<4.4
o-Xylene	Total	(ug/kg)	19500	1000000	500000	<6.5	<4.4	<5.1	<4.1	<4.4	<3.7	<4.6	<4.4	<4.6	<4.3	<4.4	<5.7	<4.1	<4.6	<4.2	<4.2	<5.5	<3.8	<4.2	<4	<4.5	<4.4
Xylene (total)	Total	(ug/kg)	19500	1000000	500000	<6.5	<4.4	<5.1	<4.1	<4.4	<3.7	<4.6	<4.4	<4.6	<4.3	<4.4	<5.7	<4.1	<4.6	<4.2	<4.2	<5.5	<3.8	<4.2	<4	<4.5	<4.4
ETPH																											
Extractable Petroleum Hydrocarbons	Total	(mg/kg)	500	2500	500	<11	<13	25	<11	<10	160	<11	<11	<11	<11	<11	<11	<11	<11	22	<11	<11	<10	<11	<11	30	<11

					SITE ID	SB-08	SB-08	SB-21	SB-21	SB-22	SB-22	SB-23	SB-23	SB-24	SB-24	SB-25	SB-25	SB-26	SB-26	SB-27	SB-27	SB-28	SB-28	SB-29	SB-29	SB-30	SB-30
					SAMPLE #	856080421-24	856080421-25	856080423-53	856080423-54	856080423-55	856080423-56	856080423-57	856080423-58	856080423-59	856080423-60	856080423-61	856080423-62	856080423-63	856080423-64	856080423-65	856080423-66	856080423-67	856080423-68	856080423-69	856080423-70	856080423-71	856080423-72
					DATE	4/21/2008	4/21/2008	4/23/2008	4/23/2008	4/23/2008	4/23/2008	4/23/2008	4/23/2008	4/23/2008	4/23/2008	4/23/2008	4/23/2008	4/23/2008	4/23/2008	4/23/2008	4/23/2008	4/23/2008	4/23/2008	4/23/2008	4/23/2008	4/23/2008	4/23/2008
					DEPTH (FT)	1	3.75	1	5	1	5	1	6	1	5	1	5	1	5	1	5	1	5	1	5	1	6
CONSTITUENT	P/F	UNITS	GA-PMC	I/C DEC	Res DEC																						
METALS																											
Lead	Total	(mg/kg)	----	1000	400	----	----	----	----	----	----	----	----	----	----	12.3	----	----	----	----	----	----	----	5.44	----	----	----
VOCs																											
1,2,4-Trimethylbenzene	Total	(ug/kg)	7000	1000000	500000	<4.6	<4.1	<4.6	<3.7	<3.8	<4.3	<4.2	<3.8	<4.4	<3.8	<4.8	<3.7	<5	<3.6	<4.2	10	<5	<4.8	<4.9	<3.9	<6	<3.9
M/P-xylenes	Total	(ug/kg)	19500	1000000	500000	<4.6	<4.1	<4.6	<3.7	<3.8	<4.3	<4.2	<3.8	<4.4	<3.8	<4.8	<3.7	<5	<3.6	<4.2	22	<5	<4.8	<4.9	<3.9	<6	<3.9
o-Xylene	Total	(ug/kg)	19500	1000000	500000	<4.6	<4.1	<4.6	<3.7	<3.8	<4.3	<4.2	<3.8	<4.4	<3.8	<4.8	<3.7	<5	<3.6	<4.2	12	<5	<4.8	<4.9	<3.9	<6	<3.9
Xylene (total)	Total	(ug/kg)	19500	1000000	500000	<4.6	<4.1	<4.6	<3.7	<3.8	<4.3	<4.2	<3.8	<4.4	<3.8	<4.8	<3.7	<5	<3.6	<4.2	34	<5	<4.8	<4.9	<3.9	<6	<3.9
ETPH																											
Extractable Petroleum Hydrocarbons	Total	(mg/kg)	500	2500	500	53	<11	<10	<11	<10	<11	<11	<11	<11	<12	56	<11	<11	<11	<11	<11	<11	<11	28	<11	<11	<11
PAHs																											
Benzo(b)fluoranthene	Total	(ug/kg)	1000	7800	1000	----	----	----	----	----	----	----	----	----	----	420	----	----	----	----	----	----	----	<340	----	----	----
Fluoranthene	Total	(ug/kg)	5600	2500000	1000000	----	----	----	----	----	----	----	----	----	----	450	----	----	----	----	----	----	----	<340	----	----	----
Pyrene	Total	(ug/kg)	4000	2500000	1000000	----	----	----	----	----	----	----	----	----	----	440	----	----	----	----	----	----	----	<340	----	----	----

Notes:
ug/kg = micrograms per kilogram
mg/kg - millgrams per kilogram
mg/L - milligrams per liter
ND = not detected
<= not detected at reporting limit
--- = not analyzed

GB PMC = Pollutant Mobility Criteria for GB groundwater areas
I/C DEC = Industrial Commercial Direct Exposure Criteria
Res DEC = Residential Direct Exposure Criteria

TABLE A01-2

SUMMARY OF DETECTED PARAMETERS - WATER SAMPLES
CTARNG AASF - BUIDLING 190 BULK FUEL FACILTIY
WINDSOR LOCKS, CONNECTICUT

					SITE ID	EMW-01	EMW-02	MW-02	MW-03	MW-03	MW-06	MW-06	TPW-05	TPW-05	TPW-06
					SAMPLE #	738080506-08	738080506-09	738080506-02	738080506-03	738080506-04	856080514-03	856080619-03	738080506-11	856080619-02	738080506-10
					DATE	5/6/2008	5/6/2008	5/6/2008	5/6/2008	5/6/2008	5/14/2008	6/19/2008	5/6/2008	6/19/2008	5/6/2008
					DEPTH (FT)	8	8	12	12	12	20	18	10	11	10
CONSTITUENT		UNITS	SWPC	GWPC	Res VC										
METALS															
Silver	Total	(mg/l)	0.012	0.036	NA	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	----	<0.001
Aluminum	Total	(mg/l)	----	----	NA	0.909	0.16	1.37	0.317	0.361	----	0.17	0.224	----	0.068
Barium	Total	(mg/l)	----	1	NA	0.017	0.02	0.195	0.254	0.254	0.094	0.178	0.094	----	0.055
Chromium	Total	(mg/l)	0.11	0.05	NA	0.001	<0.001	0.002	<0.001	<0.001	0.005	<0.001	<0.001	----	<0.001
Copper	Total	(mg/l)	0.048	1.3	NA	0.004	0.001	0.002	0.002	0.003	----	0.002	0.002	----	<0.001
Nickel	Total	(mg/l)	0.88	0.1	NA	<0.001	<0.001	0.003	<0.001	<0.001	----	<0.001	0.002	----	<0.001
Lead	Total	(mg/l)	0.013	0.015	NA	0.007	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	----	0.005
Zinc	Total	(mg/l)	0.123	5	NA	0.056	0.011	0.007	0.003	0.004	----	0.002	**0.355**	0.098	0.005
Silver	Dissolved	(mg/l)	0.012	0.036	NA	----	----	0.002	----	----	<0.001	----	----	----	----
Aluminum	Dissolved	(mg/l)	NA	NA	NA	----	----	0.46	----	----	----	----	----	----	----
Barium	Dissolved	(mg/l)	NA	1	NA	----	----	0.178	----	----	0.067	----	----	----	----
Chromium	Dissolved	(mg/l)	0.11	0.05	NA	----	----	0.001	----	----	<0.001	----	----	----	----
Copper	Dissolved	(mg/l)	0.048	1.3	NA	----	----	0.005	----	----	----	----	----	----	----
Nickel	Dissolved	(mg/l)	0.88	0.1	NA	----	----	0.003	----	----	----	----	----	----	----
Lead	Dissolved	(mg/l)	0.013	0.015	NA	----	----	0.002	----	----	<0.002	----	----	----	----
Zinc	Dissolved	(mg/l)	0.123	5	NA	----	----	0.009	----	----	----	----	----	0.092	----
VOCS															
Bromodichloromethane	Total	(ug/l)	NA	0.56	2.3	<0.5	<0.5	<0.5	<0.5	<0.5	**2.2**	<0.5	<0.5	----	<0.5
Chloroform	Total	(ug/l)	14100	6	26	<1	<1	<1	<1	<1	**11**	1.1	<1	----	<1
ETPH															
Extractable Petroleum Hydrocarbons	Total	(mg/l)	NA	0.1	NA	<0.10	<0.10	<0.10	<0.10	<0.10	<0.074	<0.070	<0.10	----	<0.10

Notes:

ug/L = micrograms per liter
mg/L - milligrams per liter
NA = not applicable
ND = not detected
<= not detected at reporting limit
--- = not applicable or not analyzed

SWPC = Surface Water Protecton Criteria
GWPC = Groundwater Protection Criteria
Res VC = Residential Volatilization Criteria
11 = Concentrations shown in bold exceed one or more criteria

TABLE A01-3

SUMMARY OF DETECTED PARAMETERS - SEDIMENT SAMPLES
CTARNG AASF - BUIDLING 190 BULK FUEL FACILTIY
WINDSOR LOCKS, CONNECTICUT

		SITE ID	SD-38	SD-39
		SAMPLE #	856080423-81	856080423-82
		DATE	4/23/2008	4/23/2008
		DEPTH (FT)	0.25	0.25
CONSTITUENT		UNITS	Primary	Primary
METALS				
Barium	Total	(mg/kg)	50.3	37.4
Chromium	Total	(mg/kg)	13.6	11.2
Lead	Total	(mg/kg)	13.8	6.19
ETPH				
Extractable Petroleum Hydrocarbons	Total	(mg/kg)	<12	32
PAHS				
PAHs	Total	(ug/kg)	ND	ND
PCBS				
PCBs	Total	(ug/kg)	ND	ND

Notes:
ug/kg = micrograms per kilogram
mg/kg - millgrams per kilogram
mg/L - milligrams per liter
ND = not detected
<= not detected at reporting limit
--- = not analyzed

AOC-SPECIFIC CONCEPTUAL MODEL
AOC 02 - BUILDING 191 – FUEL FARM OFFICE AREA
Army Aviation Support Facility (AASF)
Windsor Locks, Connecticut

I. BACKGROUND INFORMATION

Physical Description

The Fuel Farm Office, designated as Building 191, is a 36- by 24-foot brick building constructed in 1951. Four 10,000-gallon underground storage tanks (USTs) containing petroleum products were formerly present adjacent to the east side of the building. These USTs were removed in May 2003.

A 5-foot by 15-foot concrete pad of uncertain function is located approximately 70 feet west of the Fuel Farm Office building. Site personnel present during the 2008 site walkover did not have any information about historical activities associated with this concrete pad.

Historical Information/Processes

Site personnel indicate that Building 191 has been used for storage and computer monitoring of the nearby fuel facility. An "Underground Tank Closure Report" prepared by Zuvic Associates after the USTs were removed in 1993 contained conflicting information on the contents of the tanks. The text of the report noted observing "fuel contaminated soil" but the attached sketch figure of the tanks and excavation labeled the USTs as containing "motor oil". The UST removal and soil excavation activities documented in the Zuvic report are summarized in Section II below.

Constituents of Concern

Constituents of concern include petroleum hydrocarbons, volatile organic compounds (VOCs), and PAHs, which are associated with virgin fuels or motor oil. Metals and polychlorinated biphenyls (PCBs) were also included as constituents of concern at the time of the tank removals. These parameters may be present if the USTs contained waste oil at any time during their historical use.

Potential Release Mechanisms

Potential release mechanisms at the AOC include leaks from the former USTs and associated piping. Historical uses of the concrete pad are not known. Potential releases in the area of the concrete pad would be inferred to be surficial in nature.

Releases Reported to Regulatory Agencies

The Environmental FirstSearch™ Report contained several spill reports for the AASF site but none matched the May 2003 date of the UST removals

Applicable Regulatory Criteria

The site has been evaluated with respect to Connecticut's Remediation Standard Regulations (RSRs). The site is located in a GA groundwater classification area. An environmental land use restriction limiting the site to industrial/commercial land use is not planned. Based on this information, we have considered the following RSR criteria at this AOC:

Soil Criteria

- Residential direct exposure criteria (Res DEC)
- GA pollutant mobility criteria (GA PMC)

Groundwater Criteria

- Groundwater protection criteria (GWPC)
- Surface water protection criteria (SWPC)
- Residential volatilization criteria (Res VC)

II. INVESTIGATION AND REMEDIATION

Investigations and remediation contributing to the development of the conceptual model for this AOC are presented below.

Underground Storage Tank Removals – May 2003

Zuvic Associates of Middletown, Connecticut documented the removal of the four 10,000 gallon USTs from May 29 through May 30, 2003 in the report "Underground Tank Closure Report", AASF, Bradley International Airport, June 2003. The following is a summary of Zuvics' observations and sampling results:

- The USTs were removed by Kessler Installation of Hartford, Connecticut.
- Contaminated soil was observed in soil adjacent to the USTs. Leaks in the piping and tank fittings were believed to be the source of the contamination. Zuvic reported that there were no "holes or failures" observed on the tanks.
- Contaminated soil was removed from the common tank grave
- During the removal of tanks identified as #3 and #4 (see attached Zuvic sketch), a water line was damaged and the excavation filled with water and overflowed on adjacent grassy areas. Zuvic reported that all soil that came in contact with the water was excavated and the water was pumped out of the excavation and disposed of by United Oil Recovery of Meriden, Connecticut. Stockpiled soil was sampled for disposal and was shipped to Phoenix Soil of Waterbury, Connecticut.

- One groundwater sample and seventeen soil samples were collected from the excavation on June 2 and June 4, 2003. Samples were analyzed for extractable total petroleum hydrocarbons (ETPH). Three soil samples (-8, -13 and -17 shown on attached sketch) and the groundwater sample were also analyzed for aromatic volatile organic compounds (VOCs), polychlorinated biphenyls (PCBs) and metals. Zuvic reported that groundwater and soil sample results were below applicable RSR criteria. Detected ETPH concentrations in soil samples ranged from 44 to 210 milligrams per kilogram (mg/kg). PCBs and aromatic VOCs were not detected in the three samples. VOCs, ETPH and PCBs were not detected in the groundwater sample.

2008 –Focused Phase III Investigation - Fuss & O'Neill

Fuss & O'Neill reviewed existing information from the Zuvic investigation and developed a scope of work to address identified data gaps. In the former UST area, Fuss & O'Neill identified a lack of soil analytical data from the bottom of the former UST grave to document Res DEC compliance, and a lack of soil analytical data surrounding the former UST excavation to document compliance of soil areas impacted by the 2003 overflow incident as data gaps. The area around a concrete pad of unknown historical use west of Building 191 was also investigated to make a release determination.

Former UST Area

On April 22 and 23, 2008, soil samples were collected in the former UST area from three soil boring locations (SB-09, SB-10 and SB-11) and eight surficial sampling locations (SS-20 and SS-31 through SS-37). In addition, two monitoring wells (MW-04 and MW-05) were installed to the northwest and north of the former UST area, respectively. Soil borings were drilled to a depth of 16 feet below ground surface, using direct-push methodology. Soil borings SB-09, SB-10, and SB-11 were located within the footprint of the former UST excavation. Boring depths were determined based on historical information on removal of the former USTs and the sizes of the former USTs in order to collect samples from depths that would have been at the bottom of the 2003 excavation. Surficial soil samples were collected outside the limits of the 2003 excavation to help determine if historical soil excavation by Zuvic Associates was successful in removing soil surrounding the UST area possibly contaminated by the water overflow from the excavation that occurred during UST removals.

Soil samples collected from this area were analyzed for VOCs, ETPH, and polynuclear aromatic hydrocarbons (PAHs). The 10- to 12-foot depth interval samples from the tank grave borings, as well as selected additional samples, were additionally analyzed for lead and/or barium. Analytical results are summarized in Table A02-1.

VOCs and PAHs were not detected in any of the soil samples collected from borings or surficial soil locations in the former tank grave area during the 2008 investigation. ETPH was detected in six of the eight surficial soil samples at concentrations ranging from 22 to 190 mg/kg. In addition, ETPH was detected in soil samples collected from the 10- to 12-foot and 14- to 16-foot depth intervals of the SB-10 boring at concentrations of 1,200 and 940 mg/kg, respectively. Field personnel noted stained soil and petroleum odor at SB-10 and a slight petroleum odor at SB-11. Low concentrations of lead and/or barium were detected in six soil samples collected

from the soil borings and surficial sampling locations. The detected metals concentrations are consistent with those typically observed in natural soil.

In order to complete lateral delineation of the residual petroleum impact noted at the SB-10 location, soil boring SB-40 was drilled in August 2008 approximately 10 feet northeast of the previous SB-10 location. Soil samples were collected from the 8- to 10-foot, 10- to 12-foot, and 14- to 16-foot depth intervals of the SB-40 boring. Soil samples were analyzed for ETPH. Petroleum hydrocarbons were not detected in either of the samples (see Table A02-1).

Monitoring wells MW-05 and MW-04 were installed to the north and northwest of the former UST area, using hollow stem auger drilling methods. Monitoring well construction information is included in Appendix C of the Focused Phase III investigation report. Soil boring and well locations are shown on Figure A02-1. Groundwater samples were subsequently collected from MW-04 and MW-05 on May 6, 2008. The groundwater samples were analyzed for ETPH and VOCs, as well as the metals arsenic, aluminum, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, and zinc. Analytical results from the MW-04 and MW-05 groundwater samples are summarized in Table A02-2.

ETPH and VOCs were not detected in the samples. Low levels of the metals silver, aluminum, barium, chromium, copper, lead and/or zinc were detected in the samples. Detected metals concentrations were similar or lower than background results from monitoring well MW-01, located at the southeast corner of the Study Area

Concrete Pad Area

Three soil borings (SB-17, SB-18, and SB-19) were advanced on April 22, 2008 along the northern, western, and southern sides of the concrete pad located west of Building 191. Soil borings were drilled to depths of 6 feet below ground surface using direct-push methodology. Soil samples were collected from the 0- to 2-foot and the 4- to 6-foot depth intervals in each boring. Samples were submitted to Phoenix Environmental Laboratories and analyzed for VOCs and ETPH. Analytical results are summarized in Table A02-1.

ETPH was not detected in any of the samples. Low levels of the VOC methylene chloride, 13 and 16 micrograms per kilogram (ug/kg), were reported in the samples collected from SB-19, the southern boring. Methylene chloride is a common cleaning agent for laboratory equipment, and low concentrations of this compound in a sample are often associated with laboratory contamination. The reported methylene chloride concentrations in the SB-19 soil samples were consistent with this scenario. In addition, a review of laboratory method blank results by Phoenix indicated that methylene chloride was present in the method blanks run prior to the SB-19 soil samples.

Three additional soil borings (SB-19A, SB-47 and SB-48) were drilled in the vicinity of the SB-19 location on August 18, 2008 to confirm that the methylene chloride detections reported during the April mobilization were due to laboratory contamination, as opposed to a release from historical operations at the concrete pad. Soil boring SB-19A was drilled directly adjacent to the previous SB-19 sampling location, and SB-47 and SB-48 were drilled further to the southwest and southeast as contingent sample locations. Soil boring locations are shown on Figure A02-2.

Soil samples were collected from 0- to 2-foot, 4- to 6-foot and 6- to 8-foot depth intervals at SB-19A and from the 0- to 2-foot and 4to 6-foot depth intervals at SB-47 and SB-48. The shallower two depth interval samples from the SB-19A location were analyzed for chlorinated VOCs. Soil samples from borings SB-47 and SB-48 were held at the laboratory pending results from SB-19A. Methylene chloride was not detected in the soil samples collected at SB-19A. Analytical results are summarized in Table A02-1. Because methylene chloride was not detected in the samples from SB-19A, soil samples from SB-47 and SB-48 were not analyzed.

AOC Investigation Summary

Historical information about the UST removals adjacent to the fuel farm office building and 2008 soil boring results indicated that a release of petroleum occurred in the UST area. Post-excavation sidewall soil samples collected by Zuvic Associates showed that laterally, petroleum impacted soil in the tank grave had been removed to concentrations below applicable RSR criteria. However, soil samples were not collected from the bottom of the excavation by Zuvic. As noted above, soil borings drilled as part Fuss & O'Neill's 2008 investigation of AOC-02 were advanced to take samples from a depth similar to the depth of the bottom of the excavation. The 2008 samples indicated that residual petroleum contaminated soil is present at a depth which would have been below the former USTs. Petroleum hydrocarbon concentrations detected in samples from 10- to 12-feet and 14- to 16-feet depth intervals at soil boring SB-10 were above RSR criteria. Based on groundwater elevation data from nearby monitoring wells, these depth intervals are below the seasonal low water table, which occurs at a depth of approximately 10 feet below grade. Surficial soil samples collected surrounding the former tank grave contained low levels of petroleum hydrocarbons, but reported concentrations were below applicable RSR criteria. This finding supports Zuvic's assertion that soil impacted above RSR criteria as a result of the excavation overflow had been remediated.

Soil boring SB-40 was drilled in August 2008 approximately 10 feet northeast of the previous SB-10 location to further define the extent of regulatory exceedances for petroleum hydrocarbons. Results from April 2008 soil borings SB-09 and SB-11 and from SB-40 indicated that the extent of petroleum hydrocarbons below the water table is limited laterally to an area of approximately 260 square feet including the location of SB-10.

Soil samples collected in the vicinity of the concrete pad in April and August 2008 did not show any evidence of a release to the soil surrounding the concrete pad. Trace concentrations of methylene chloride detected at SB-19 in April 2008 were inferred to be a result of laboratory contamination. This assertion was confirmed by supplemental sampling conducted at SB-19A in August 2008.

Results from the groundwater samples collected in May 2008 indicated that groundwater quality downgradient of AOC-02 is not being impacted by petroleum hydrocarbons, VOCs, or target metals.

III. REGULATORY COMPLIANCE ANALYSIS

As noted in Section I above, RSR criteria applicable to the site include the Residential DEC and GA PMC for soil and the GWPC, SWPC and Residential VC for groundwater.

Investigations in the former UST area at AOC-02 have identified concentrations of ETPH above the Residential DEC and GA PMC in subsurface soils below the water table. Since the impacted soil is below the seasonal low water table, the GA PMC do not apply. However, the DEC apply to a depth of 15 feet, so impacted soil above this depth in the vicinity of SB-10 would need to be addressed to comply with the RSRs.

Groundwater samples collected from monitoring wells MW-04 and MW-05 installed downgradient from AOC-02 in May 2008 showed no evidence of a release to groundwater.

IV. CONCLUSIONS AND RECOMMENDATIONS

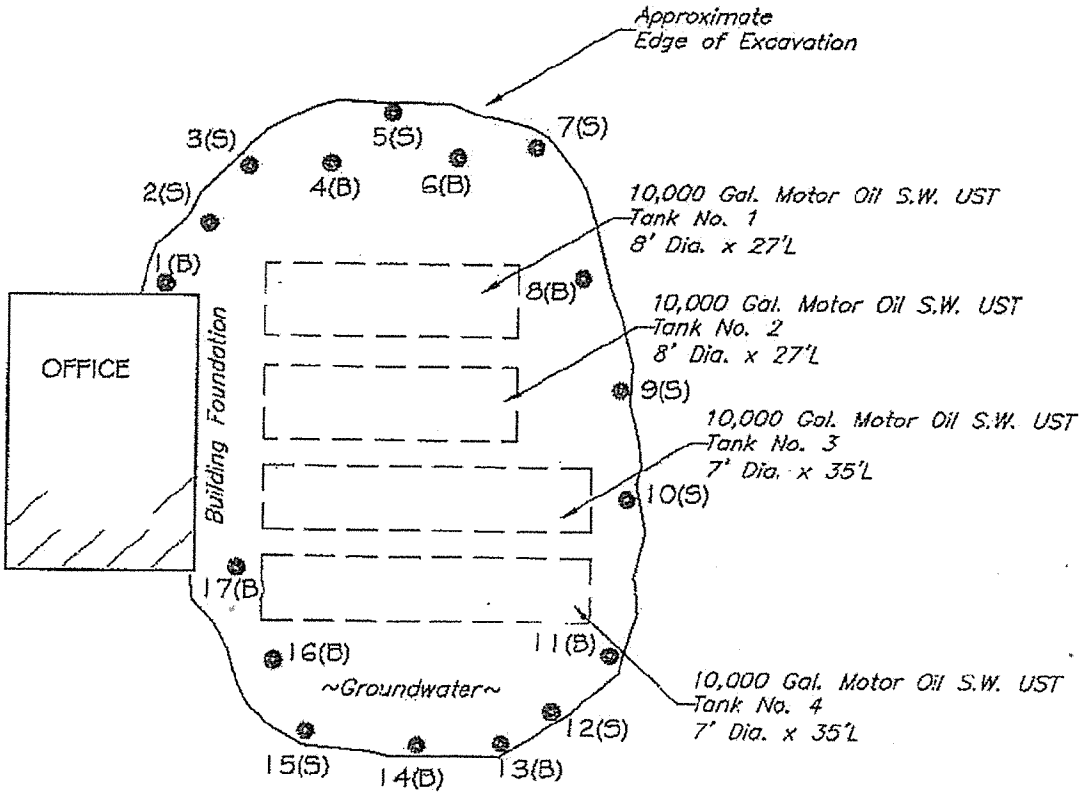
AOC-02 has been investigated using the following lines of evidence:

- Review of historical reports
- Physical inspection of the UST area and concrete pad to the west
- Observations made during collection of soil and groundwater samples
- Soil analytical results
- Groundwater analytical results

A release of petroleum occurred from the former USTs on the east side of the fuel farm office building. Analytical results from post-excavation sidewall soil samples collected during 2003 and surficial samples collected during April 2008 have demonstrated that petroleum-impacted soil associated with this release was successfully excavated laterally to concentrations below RSR criteria. However, during the 2008 investigation, evidence of residual petroleum from the USTs was found below the water table within a portion of the former tank grave. The impacted depth interval is approximately equivalent to the bottom of the former tank grave.

Groundwater samples collected downgradient of the former excavation did not contain ETPH.

We recommend developing a remediation strategy to address residual petroleum-impacted soil below the water table to a depth of 15 feet below grade within the former UST area.



ADDITIONAL OBSERVATIONS:

SAMPLE COLLECTION POINTS @ ±12' APART
SAMPLE COLLECTED ABOVE GROUNDWATER
DEPTH TO GROUNDWATER 8 FT BELOW GRADE
TEMP. MID 50s, Cloudy
(B) BOTTOM SAMPLE
(S) SIDE WALL SAMPLE

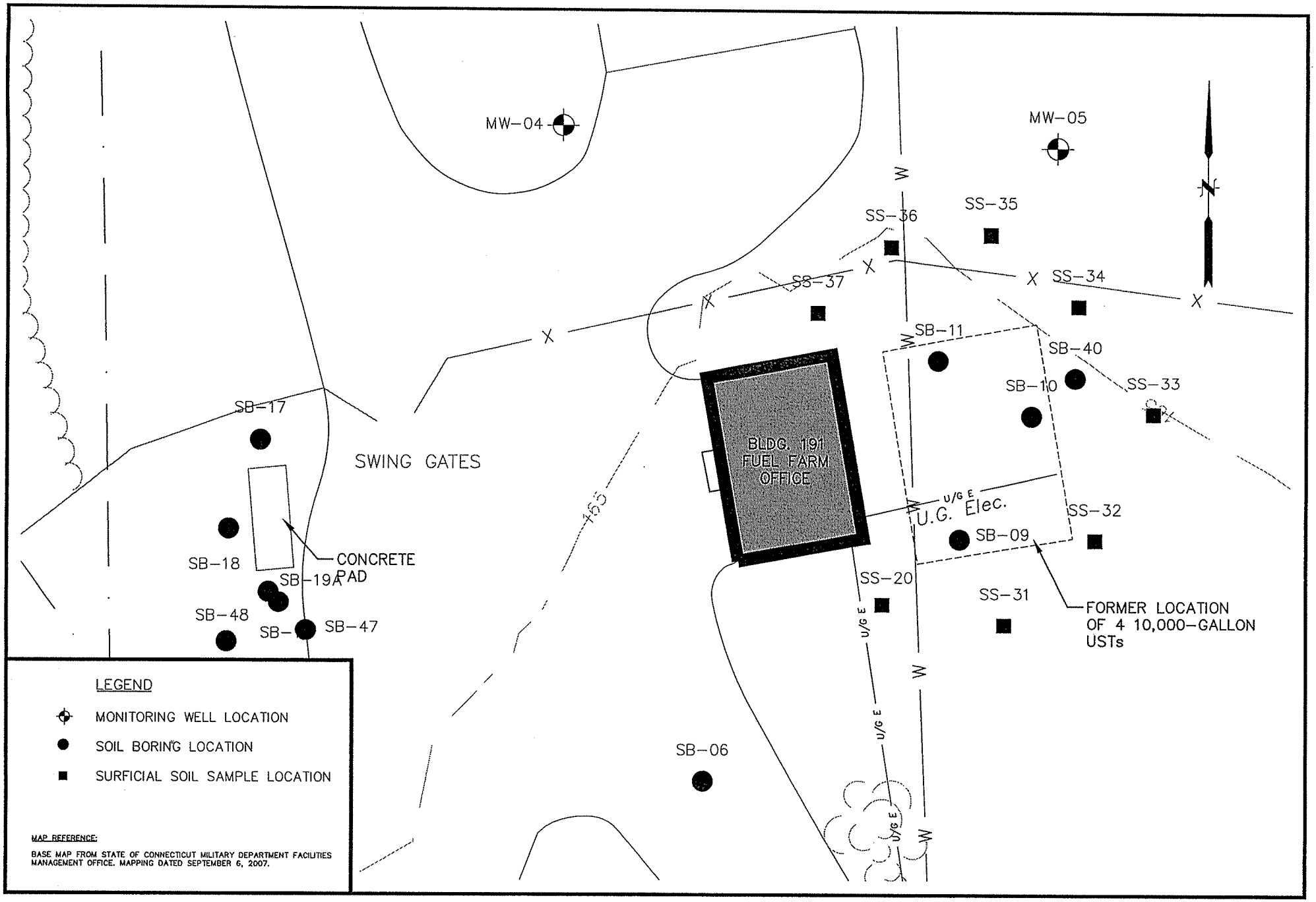
DWG No. 1

JUNE 20, 2003 SCALE: N.T.S.

SAMPLING LOCATION
AASF
WINDSOR LOCKS, CT

SITE SKETCH

ZUVIC ASSOCIATES INC.
1722 BARTHOLOMEW RD.
MIDDLETOWN, CT 06457



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CONNECTICUT ARMY NATIONAL GUARD

AOC-02: FUEL FARM OFFICE AREA

ARMY AVIATION SUPPORT FACILITY

PROJ. No.: 20072156.A10
DATE: SEPTEMBER 2008

FIG. A02-1

Date: Thu, Sep 25, 2008 - 8:48 AM User: Sarahr

TABLE A02-1

SUMMARY OF DETECTED PARAMETERS - SOIL SAMPLES
CTARNG AASF - BUIDLING 191 FUEL FARM OFFICE AND FORMER USTs AND CONCRETE PAD
WINDSOR LOCKS, CONNECTICUT

					FORMER UST AREA										
				SITE ID	MW-05	MW-05	SB-09	SB-10	SB-10	SB-10	SB-11	SB-40	SB-40	SB-40	SB-40
				SAMPLE #	856080425-83	856080425-84	856080422-28	856080422-30	856080422-31	856080422-32	856080422-33	856080821-03	856080821-04	856080821-05	856080821-06
				DATE	4/25/2008	4/25/2008	4/22/2008	4/22/2008	4/22/2008	4/22/2008	4/22/2008	8/21/2008	8/21/2008	8/21/2008	8/21/2008
				DEPTH (FT)	1	11	11	11	11	15.5	11	9	9	11	14.12
ONSTITUENT		UNITS	GA-PMC	I/C DEC	Res DEC	Primary	Primary	Primary	Primary	Duplicate 1	Primary	Primary	Primary	Duplicate 1	Primary	Primary
ETALS																
arium	Total	(mg/kg)	----	140000	4700	----	----	22.2	34.5	63.1	----	18.8	----	----	----	----
ead	Total	(mg/kg)	----	1000	400	----	----	3.92	2.53	10	----	5.02	----	----	----	----
ead	SPLP	(mg/l)	0.015	----	----	----	----	----	----	----	----	----	----	----	----	----
OCs																
OCs	Total	(ug/kg)	Varies	Varies	Varies	ND	ND	ND	ND	ND	ND	ND	----	----	----	----
HPH																
xtractable Petroleum Hydrocarbons	Total	(mg/kg)	500	2500	500	<11	<13	<12	[1200]	450	[940]	<11	<11	<11	<11	<11
AHs																
AHs	Total	(ug/kg)	Varies	Varies	Varies	----	----	ND	ND	ND	ND	ND	----	----	----	----

					FORMER UST AREA								
				SITE ID	SS-20	SS-31	SS-32	SS-32	SS-33	SS-34	SS-35	SS-36	SS-37
				SAMPLE #	856080422-50	856080423-73	856080423-74	856080423-75	856080423-76	856080423-77	856080423-78	856080423-79	856080423-80
				DATE	4/22/2008	4/23/2008	4/23/2008	4/23/2008	4/23/2008	4/23/2008	4/23/2008	4/23/2008	4/23/2008
				DEPTH (FT)	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
ONSTITUENT		UNITS	GA-PMC	I/C DEC	Res DEC	Primary	Primary	Primary	Duplicate 1	Primary	Primary	Primary	Primary	Primary
ETALS														
arium	Total	(mg/kg)	----	140000	4700	----	----	----	----	----	----	----	----	----
ead	Total	(mg/kg)	----	1000	400	----	----	9.71	9.77	----	----	----	----	----
ead	SPLP	(mg/l)	0.015	----	----	----	----	<0.015	<0.015	----	----	----	----	----
OCs														
OCs	Total	(ug/kg)	Varies	Varies	Varies	ND	ND	ND	ND	ND	ND	ND	ND	ND
HPH														
xtractable Petroleum Hydrocarbons	Total	(mg/kg)	500	2500	500	<10	59	26	190	22	69	<10	<9.9	30
AHs														
AHs	Total	(ug/kg)	Varies	Varies	Varies	----	----	----	----	----	----	----	----	----

						CONCRETE PAD AREA							
					SITE ID	SB-17	SB-17	SB-18	SB-18	SB-19	SB-19	SB-19A	SB-19A
					SAMPLE #	856080422-44	856080422-45	856080422-46	856080422-47	856080422-48	856080422-49	856080821-20	856080821-21
					DATE	4/22/2008	4/22/2008	4/22/2008	4/22/2008	4/22/2008	4/22/2008	8/21/2008	8/21/2008
					DEPTH (FT)	1	5	1	5	1	5	1	5
ONSTITUENT	P/F	UNITS	GA-PMC	I/C DEC	Res DEC	Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary
OCs													
ethylene chloride	Total	(ug/kg)	100	760000	82000	<4.9	<5.6	<5.4	<20	13	16	<10	<10
HPH													
xtractable Petroleum Hydrocarbons	Total	(mg/kg)	500	2500	500	<10	<10	<10	<10	<10	<10	----	----

otes:
g/kg = micrograms per kilogram
g/kg - millgrams per kilogram
g/L - milligrams per liter
D = not detected
= not detected at reporting limit
- = not analyzed

GB PMC = Pollutant Mobility Criteria for GB groundwater areas
I/C DEC = Industrial Commercial Direct Exposure Criteria
Res DEC = Residential Direct Exposure Criteria
[ ] = Concentrations shown in brackets only exceed one or more criteria

TABLE A02-2

SUMMARY OF DETECTED PARAMETERS - WATER SAMPLES
CTARNG AASF - BUIDLING 191 FUEL FARM OFFICE AREA
WINDSOR LOCKS, CONNECTICUT

					SITE ID	MW-04	MW-05
					SAMPLE #	738080506-05	738080506-06
					DATE	5/6/2008	5/6/2008
					DEPTH (FT)	12	15
CONSTITUENT		UNITS	SWPC	GWPC	Res VC		
METALS							
Silver	Total	(mg/l)	0.012	0.036	NA	0.002	<0.001
Aluminum	Total	(mg/l)	----	----	NA	0.071	0.092
Barium	Total	(mg/l)	----	1	NA	0.053	0.481
Chromium	Total	(mg/l)	0.11	0.05	NA	0.001	<0.001
Copper	Total	(mg/l)	0.048	1.3	NA	0.003	0.003
Lead	Total	(mg/l)	0.013	0.015	NA	0.003	<0.002
Zinc	Total	(mg/l)	0.123	5	NA	0.006	0.004
ETPH							
Extractable Petroleum Hydrocarbons	Total	(mg/l)	NA	0.1	NA	<0.10	<0.10
VOCS							
VOCs	Total	(ug/L)	Varies	Varies	Varies	ND	ND

Notes:
ug/L = micrograms per liter
mg/L - milligrams per liter
NA = not applicable
ND = not detected
<= not detected at reporting limit
--- = not applicable or not analyzed

AOC-SPECIFIC CONCEPTUAL MODEL
AOC 03 – FORMER HAZARDOUS WASTE ACCUMULATION STORAGE BUILDING
Army Aviation Support Facility (AASF)
Windsor Locks, Connecticut

I. BACKGROUND INFORMATION

Physical Description

The Hazardous Waste Accumulation Storage Building, formerly designated as Building 189, was a 15 by 10 foot metal frame building with a steel grate floor. The building included an integrated secondary containment system beneath the steel grate floor. According to site personnel, the building was a portable unit and is no longer located in the area of this investigation.

Historical Information/Processes

During an inspection by Engineering Technologies Associates, Inc. in 1994, approximately 60 gallons of hazardous materials were observed in the building including paints, solvents, sealing compounds and degreasers. The report prepared by Engineering Technologies Associates also noted that a flammable materials storage locker was located five feet south of the building. The site plan in the Engineering Technologies report showed Building 189 located northwest of building 191 in a grassy area along the access road. A site plan of the area was also included in a "Narrative Report – Site Inspection" prepared by The U.S. Army Center for Health Promotion and Preventative Medicine (USACHPPM) in 1996. The plan in that report showed building 189 to be located further to the southeast, closer to building 191. During a February 2008 site visit, Fuss & O'Neill confirmed that the building had been removed from the Study Area.

Constituents of Concern

Volatile Organic Compounds (VOCs)
Petroleum Hydrocarbons
Polychlorinated biphenyls (PCBs)

Potential Release Mechanisms

Potential release mechanisms at the AOC include possible spills from transferring hazardous substances to the building and spills in the building not contained by the secondary containment system below the floor.

Releases Reported to Regulatory Agencies

No spill reports to regulatory agencies for this AOC were found in the Environmental FirstSearch™ Report

Applicable Regulatory Criteria

The site has been evaluated with respect to Connecticut's Remediation Standard Regulations (RSRs). The site is located in a GA groundwater classification area. An environmental land use restriction limiting the site to industrial/commercial land use is not planned. Based on this information, we have considered the following RSR criteria at this AOC:

Soil Criteria

- Residential direct exposure criteria (Res DEC)
- GA pollutant mobility criteria (GA PMC)

Groundwater Criteria

- Groundwater protection criteria (GWPC)
- Surface water protection criteria (SWPC)
- Residential volatilization criteria (Res VC)

II. INVESTIGATION AND REMEDIATION

2008 –Focused Phase III Investigation - Fuss & O'Neill

Fuss & O'Neill completed five soil borings at AOC-03 on April 22, 2008 to make a release determination at the two locations where the hazardous waste accumulation shed was formerly shown to be located within the AASF Tank Fuel Farm area. Three soil borings (SB-14, SB-15 and SB-16) were advanced within the footprint of the westernmost mapped location of Building 189, which included an adjacent flammable materials locker. Two additional borings (SB-12 and SB-13) were advanced near the southeastern corner of a large tarmac area, within the approximate footprint of the more southeasterly Building 189 location mapped by USACHPPM.

The AOC-03 soil borings were advanced using Fuss & O'Neill's direct-push drilling rig. Soil boring locations are shown on Figure A03-1. Soil samples collected from the AOC-03 borings were submitted to Phoenix Environmental Laboratories. Analytical results are summarized in Table A03-1.

Western Area

Samples were collected from the SB-14 and SB-15 soil borings at depth intervals of 0 to 2 feet and 2 to 4 feet below grade. At the SB-16 location, within the approximate footprint of the of the former flammables storage cabinet, one sample was collected from the top two feet of soil. Soil samples were analyzed for VOCs, extractable total petroleum hydrocarbons (ETPH), and PCBs.

The only ETPH detection was a concentration of 44 milligrams per kilogram (mg/kg) in the shallow soil sample collected from SB-16, the former flammables storage cabinet location. VOCs and PCBs were not detected in any of the western boring locations.

Three additional soil borings (SB-16A, SB-45 and SB-46) were drilled in the vicinity of SB-16 on August 21, 2008 to delineate the extent of the identified ETPH detection. Soil boring SB-16A was drilled directly adjacent to the previous SB-16 location and SB-45 and SB-46 were drilled approximately 5 to 10 feet to the south and southeast of SB-16. At SB-16A, ETPH was detected in the soil sample from 2 to 4 feet at a concentration of 270 mg/kg, but not in the deeper sample from 6 to 8 feet below ground surface. ETPH was also detected in the shallow samples from SB-45 and SB-46 at concentrations of 420 mg/kg and 370 mg/kg, respectively. Petroleum hydrocarbons were not detected in the 2 to 4 foot depth interval samples from SB-45 or SB-46.

Eastern Area

Samples were collected from the SB-12 and SB-13 soil borings at depth intervals of 0 to 2 feet and 2 to 4 feet below grade. Soil samples were analyzed for VOCs, extractable total petroleum hydrocarbons (ETPH), and PCBs. A low concentration of ETPH (22 mg/kg) was reported in the shallow soil sample from the SB-12 boring. Naphthalene was also reported in both the 0- to 2-foot and 2- to 4-foot soil samples from SB-12 at concentrations of 64 and 34 micrograms per kilogram (ug/kg), respectively. No PCBs were detected in any of the soil samples from the easterly sampling area.

On August 21, 2008, soil samples were collected from three additional soil borings (SB-41 through SB-43) and one surficial sampling location (SS-44) in the area of the SB-12 boring to delineate the extent of the identified naphthalene and ETPH detections. SS-44 and SB-43 were located along the eastern edge of the tarmac area on which SB-12 was completed. SB-41 and SB-42 were located approximately 10 feet to the southwest and south of SB-12, respectively. Soil samples were analyzed for VOCs and ETPH. As shown in Table A03-1, naphthalene and ETPH were not detected in the samples.

AOC Investigation Summary

Soil samples collected from the vicinity of westernmost mapped AOC-03 location indicated the presence of a minor petroleum hydrocarbon release to shallow soil. The distribution and shallow nature of the petroleum hydrocarbon detections suggest that the detected petroleum release is likely associated with stormwater run-off from the adjacent roadway or historical aircraft operations in the area and not associated with the former flammables storage locker. No exceedances of applicable RSR criteria limits for ETPH were reported.

Soil samples collected from the easternmost former location of Building 189 indicated that a minor release of naphthalene and petroleum hydrocarbons may have occurred in this area, likely related to historical aircraft operations on the tarmac. No exceedances of applicable RSR criteria limits for ETPH were reported.

III. REGULATORY COMPLIANCE ANALYSIS

All detected target analyte concentrations reported during the Focused Phase III investigation sampling in April and August 2008 were below applicable RSR criteria.

Western Area - Soil analytical results for samples collected in April and August 2008 in the western Building 189 area indicated that the petroleum hydrocarbons in the soil are limited to the shallow soils above 2 to 4 feet below ground surface. The detections of petroleum hydrocarbons reported at similar concentrations in multiple shallow borings suggests an incidental low-level release of petroleum hydrocarbons related to stormwater runoff of historical aircraft operations, as opposed to a discrete release from the former flammables storage locker. Although lateral characterization has not been completed to the south and east, the configuration of the adjacent tarmac and roadway areas limits the potential extent of the release. Also, the conceptual release mechanism suggests a relatively uniform concentration pattern throughout the release area.

Eastern Area – Additional soil sampling this area indicated that the low level detections of petroleum hydrocarbons and naphthalene were limited to the immediate area of soil boring SB-12. The extent of naphthalene and petroleum hydrocarbon detections in the soil in this area of AOC-03 has been characterized.

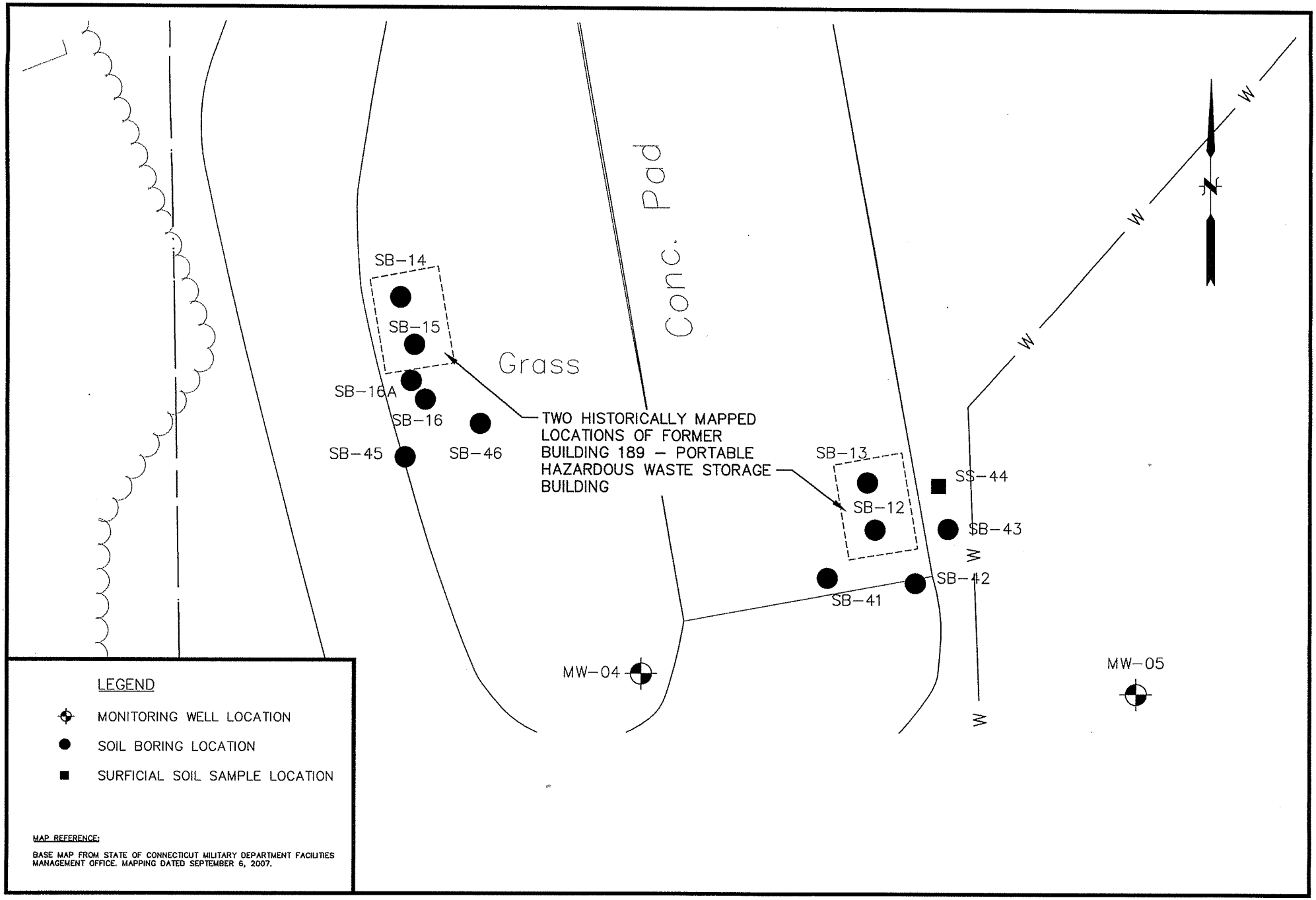
IV. CONCLUSIONS AND RECOMMENDATIONS

AOC-03 has been investigated using the following lines of evidence:

- Review of historical reports
- Physical inspection areas
- Observations made during collected of soil samples
- Soil analytical results

In the area of the westernmost former Building 189 location, petroleum hydrocarbons were detected in shallow soil samples at multiple locations south of the former building. All reported detected concentrations were below RSR criteria. Although, additional sampling would be necessary in this area to make a definitive compliance determination for the petroleum hydrocarbon release, the distribution of detected petroleum hydrocarbons and the lack of discrete release indicators such as staining or odor indicate that this low-level release may be related to stormwater runoff of historical aircraft operations. These conceptual release mechanisms would typically result in a relatively uniform range of concentrations. Based on this rationale and the lack of reported ETPH exceedances, no further action is recommended in this area.

In the easternmost mapped location of former Building 189, on the southeastern portion of a tarmac area, low concentrations of naphthalene and/or petroleum hydrocarbons were detected in soil samples from boring SB-12 in April 2008. Additional soil sampling conducted in August 2008 this area indicated that the low level detections of petroleum hydrocarbons and naphthalene were limited to the immediate area of soil boring SB-12. Detected petroleum hydrocarbon and naphthalene concentrations in April and August 2008 were below RSR criteria. No further action is recommended in this area.



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CONNECTICUT ARMY NATIONAL GUARD

AOC-03: FORMER HAZARDOUS WASTE ACCUMULATION BUILDING

ARMY AVIATION SUPPORT FACILITY

WINDSOR LOCKS CONNECTICUT

PROJ. No.: 20072156.A10
DATE: SEPTEMBER 2008

FIG. A03-1

TABLE A03-1

SUMMARY OF DETECTED PARAMETERS - SOIL SAMPLES
CTARNG AASF - BUILDING 189 HAZARDOUS WASTE ACCUMULATION BUILDING
WINDSOR LOCKS, CONNECTICUT

					Western Mapped Area of AOC-03										
				SITE ID	SB-14	SB-14	SB-15	SB-15	SB-16	SB-16A	SB-16A	SB-45	SB-45	SB-46	SB-46
				SAMPLE #	856080422-39	856080422-40	856080422-41	856080422-42	856080422-43	856080821-14	856080821-15	856080821-16	856080821-17	856080821-18	856080821-19
				DATE	4/22/2008	4/22/2008	4/22/2008	4/22/2008	4/22/2008	8/21/2008	8/21/2008	8/21/2008	8/21/2008	8/21/2008	8/21/2008
				DEPTH (FT)	1	3	1	3	1	3	7	1	3	1	3
CONSTITUENT	UNITS	GA-PMC	I/C DEC	Res DEC											
VOCs															
VOCs	Total (ug/kg)	5600	2500000	1000000	<4.8	<4.9	<4.4	<5	<4.6	----	----	----	----	----	----
ETPH															
Extractable Petroleum Hydrocarbons	Total (mg/kg)	500	2500	500	<11	<11	<11	<11	44	270	<10	420	<11	370	<11
PCBs															
PCBs	Total (ug/kg)		10000	1000	ND	ND	ND	ND	---	----	----	----	----	----	----

					Eastern Mapped Area of AOC-03										
				SITE ID	SB-12	SB-12	SB-13	SB-13	SB-41	SB-41	SB-42*	SB-42	SB-43	SB-43	SS-44
				SAMPLE #	856080422-35	856080422-36	856080422-37	856080422-38	856080821-07	856080821-08	856080821-09	856080821-10	856080821-11	856080821-12	856080821-13
				DATE	4/22/2008	4/22/2008	4/22/2008	4/22/2008	8/21/2008	8/21/2008	8/21/2008	8/21/2008	8/21/2008	8/21/2008	8/21/2008
				DEPTH (FT)	1	3	1	3	1.25	3	1	3	1	3	0.25
CONSTITUENT	UNITS	GA-PMC	I/C DEC	Res DEC											
VOCs															
Naphthalene	Total (ug/kg)	5600	2500000	1000000	64	34	<4.7	<5.2	<5.3	<4.4	<5	<5.2	<4.2	<5.6	<4.2
Trichloroethene	Total (ug/kg)	100	520000	56000	<4.8	<5.2	<4.7	<5.2	<5.3	<4.4	<6.5	<5.2	<4.2	<5.6	<4.2
ETPH															
Extractable Petroleum Hydrocarbons	Total (mg/kg)	500	2500	500	22	<10	<10	<11	<11	<10	---	<10	<11	<10	<11
PCBs															
PCBs	Total (ug/kg)		10000	1000	ND	ND	ND	ND	---	---	---	---	---	---	---

Notes:
ug/kg = micrograms per kilogram
mg/kg - millgrams per kilogram
mg/L - milligrams per liter
ND = not detected
<= not detected at reporting limit
--- = not analyzed

GB PMC = Pollutant Mobility Criteria for GB groundwater areas
I/C DEC = Industrial Commercial Direct Exposure Criteria
Res DEC = Residential Direct Exposure Criteria

* Trichloroethene (TCE) was originally reported at a concentration of 200 ug/kg in the shallow sample from SB-42. However, when the laboratory re-analyzed the sample, the result could not be duplicated. TCE was not detected in the re-analysis. We believe that the TCE detection is anomalous because TCE was not detected in any other nearby soil samples, TCE was not specifically listed as historically being present in the hazardous waste locker and the laboratory could not duplicate the result when the sample was re-analyzed.

APPENDIX B

INTRODUCTION

The purpose of low-flow sampling is to obtain a representative sample of the groundwater quality that includes both the dissolved and colloidal fractions that are migrating. Low-flow sample collection is a technique that allows samples to be collected without the bias of suspended solids and includes colloids.

The technique is based on the fact that laminar flow occurs through a well screen when the well is undisturbed. Samples are collected from the screen interval at flow rates that will not disturb the laminar flow or the fine grained material within the well or filter pack. Pumping stresses are minimized through controlled sampling operations. Objective criteria are used to determine when sampling should begin, thus variability between sampling events is minimized.

PERISTALTIC PUMPS

A peristaltic pump will be used for low-flow purging and sampling of wells at sampling well locations where the well diameter is too small for bladder pumps and can be used when the depth to groundwater is less than 20 feet.

The low-flow sampling system for peristaltic pumps is comprised of dedicated polyethylene tubing which is suspended in each of the sampling wells. The top of the tubing is connected to a stainless steel fitting secured to a milled PVC plastic cap which loosely fits the top of the PVC well casing and prevents the cap from sliding off the PVC. A small slot is cut into the side of the cap to allow for a water level measuring instrument to be lowered into the well without removal of the cap. This allows measurement of water levels without any disturbance of the sampling apparatus. A stainless steel fitting at the top of the cap allows connection of the sampling apparatus to peristaltic pump tubing.

The bottom of the tubing is centered at the midpoint of the screen and at a minimum of two feet above the well bottom to minimize disturbance of any fine-grained sediments that may have settled to the bottom of the well. The tubing is connected to a stainless steel fitting secured to a piece of PVC of a slightly smaller diameter than the well casing (a centralizer). The PVC centralizer and an additional piece of the PVC, which slides on the tubing, provide weight to keep the bottom of the tubing centered at the appropriate depth.

Groundwater is removed from the well through the tubing by suction provided by a peristaltic pump. The silicone tubing within the peristaltic pump is dedicated, of the same inside diameter as the well tubing, and is removed from the peristaltic pump after each use. The two types of tubing are joined with a tubing connector.

WATER LEVEL MEASUREMENTS

A water level measurement will be taken immediately after the well is opened. For shallow wells screened across the water table the water level will be used to determine the required depth to the pump intake (mid-point of the saturated screen length). A second water level measurement will be obtained after the pump has been installed and the water level has equilibrated.

WELL STABILIZATION

Prior to low flow purging, the tubing must first be purged of standing water. The determination of this purge volume is as follows:

Tubing radius	r	0.0104 feet
Tubing volume (ft^3)	$V(ft^3)$	πr^2 x length of tubing
Tubing volume (L)	V(L)	$V(ft^3)$ x 28.316

Tubing Volume = Total Purge Volume

Begin purging the well at the minimum pumping rate. Slowly increase the pumping rate to a level that does not cause the well to drawdown more than 0.3 foot. Continue purging until the total purge volume has been met.

Continue to note and record any changes to the drawdown and pumping rate. Water levels in the well casing will be obtained with a water level indicator while pumping with the peristaltic pump is in progress. The variable speed of the peristaltic pump allows the pump to obtain flow rates as low as 0.1 liter per minute.

Begin monitoring designated indicator field parameters at 3 to 5 minute intervals with a flow-through cell. Stabilization parameters are pH, dissolved oxygen (DO), specific conductance, temperature, and turbidity. Oxidation/reduction potential (ORP) will be recorded during the stabilization process, but will not be used as a stabilization parameter. Research by Runnells and Lindberg (1990) and Whitfield (1974) has shown that there are limitations on monitoring ORP in the field.

The well is ready to sample when the designated field parameters have stabilized. Indicator field parameters have stabilized when three consecutive readings, taken at 3 to 5 minute intervals, satisfy the following criteria:

Temperature	± 3%
pH	± 0.1 unit
Specific Conductance	± 3%
DO	± 10%
Turbidity	± 10% for values greater than 5 NTU

Oxidation/reduction potential (ORP) will be recorded during the stabilization process, but will not be used as a stabilization parameter. Research by Runnells and Lindberg (1990) and Whitfield (1974) has shown that there are limitations on monitoring ORP in the field.

The target turbidity is three consecutive readings less than or equal to 5 NTUs. Every effort should be made to attain these levels, including decreasing the pumping rate and extending the purge time. In some instances, due to geologic conditions, the sample turbidity may not decrease to the desired level. In these cases, and with the approval of the Project Manager or Site Manager, completion of well purging will be based upon stabilization of the indicator parameters without attainment of the targeted turbidity.

Due to the configuration of the turbidity meter, it cannot be connected with the multi-parameter meter. Turbidity screening; therefore, must be conducted separately. To collect samples for measuring turbidity, the two-way valve located at the bottom of the flow-through cell is turned so that water will flow out through the sampling line. The water is collected and the turbidity is measured.

If, after 1 hour of purging, the indicator field parameters have not stabilized, then discontinue purging and proceed to sample the water. On a project specific basis, if target turbidities are not reached, a 10 micron glass wool in-line filter will be used to collect an additional dissolved metals sample. This is done to determine if metals are actually present in the dissolved state in groundwater, or has adhered to solid particles during sample collection. All efforts used to stabilize the parameters will be fully documented.

SAMPLING

The following procedure will be followed for the collection of groundwater samples.

After stabilization of indicator parameters or 1 hour of purging, record comments pertinent to the color and any obvious odors associated with the water.

Arrange and label necessary sample bottles and ensure that preservatives are added, as required. Labeling must include a unique sample number, time and date of sampling, the initials of the sampling personnel, and the identity of the sample fraction. Additionally, provide any information pertinent to the preservation materials or chemicals used in the sample. The pH of preserved samples should be checked to ensure that the proper sample pH has been attained. For VOC samples, collect a test sample to determine the adequacy of the amount of preservative in the pre-preserve sample bottles. Where needed, adjust the amount of preservative added to a sample bottle.

Make sure that the sampling tubing remains completely filled during sampling and that the water does not descend back into the well. Minimize turbulence when filling sample containers, especially VOCs, by allowing the liquid to run gently down the inside of the bottle. Fill the labeled sample bottles, and immediately seal each sample and place it on ice in a cooler to maintain sample integrity.

Once all sampling is completed, recover all sampling equipment and decontaminate or set aside for subsequent decontamination in accordance with the prescribed procedures. Close and secure the well site. Review all sampling records. Ensure that all necessary data is completed. Add additional information as needed.

DECONTAMINATION PROCEDURES

Equipment used for well purging and sampling shall be decontaminated in-house prior to its initial use and in the field after each subsequent use if necessary due to project-specific restraints. Pumps will not be removed from wells between purging and sampling operations. Detergent and organic solvents will be used sparingly in the decontamination process. If field decontamination is required, Standard Operating Procedure 040000 will be followed.

SPILL PREVENTION CONTROL AND COUNTERMEASURES PLAN (SPCCP) CONNECTICUT ARMY NATIONAL GUARD ARMY AVIATION SUPPORT FACILITY BRADLEY INTERNATIONAL AIRPORT WINDSOR LOCKS, CONNECTICUT

Prepared For:

Connecticut Army National Guard

November 2015

Prepared By:

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SPCC PROFESSIONAL ENGINEER CERTIFICATION

The regulations require that a registered Professional Engineer sign the following certification.

I attest that I have reviewed the Spill Prevention, Control and Countermeasures Plan (SPCCP) for the property identified as the Connecticut Army National Guard, Army Aviation Support Facility (AASF), located on Route 75 next to Bradley International Airport, in Windsor Locks, Connecticut (Facility) and having personally or through my agent visited and examined the Facility and being familiar with the provisions and requirements of the regulations requiring such preparation, find that the SPCCP has been prepared in accordance with good engineering practices, including consideration of applicable industry standards, and with the applicable requirements of 40 CFR §112. I attest that the procedures for required inspections and testing have been established and that the SPCCP is adequate for the Facility.

Mark M. Goldberg
(Printed name of Registered Professional Engineer)

Mark M. Goldberg
(Signature of Registered Professional Engineer)

STATE OF CONNECTICUT
MARK M. GOLDBERG
No. 22961
LICENSED
PROFESSIONAL ENGINEER

22961
(Registration No.)

Connecticut
(State)

(Seal)

11/23/15
(Date)

MANAGEMENT APPROVAL & REVIEW – [112.5 & 112.7(d)(2)]

MANAGEMENT APPROVAL

The Connecticut Army National Guard (CTARNG) – AASF personnel are committed to the prevention of discharges of oil to navigable waters or the environment, and maintain the highest standards for spill prevention control and countermeasures through periodic review, updating, and implementation of this Spill Prevention Control and Countermeasure Plan (SPCCP). CTARNG – AASF will provide the manpower, equipment and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful.

Name of Authorized Facility Representative: Robert Dollak

Title: Environmental Program Manager (EPM)

Signature: _____

MANAGEMENT REVIEW

A review and evaluation of this SPCCP is conducted at least once every five years. As a result of this review and evaluation, CTARNG AASF will amend the SPCCP within six months of the review to include more effective prevention and control technology if: (1) such technology will significantly reduce the likelihood of a spill event from the facility; and (2) if such technology has been field-proven at the time of review.

This SPCCP will also be amended within six months after a change in the facility design, construction, operation, or maintenance occurs that materially affects the facility's potential for the discharge of oil into or upon the navigable waters of the United States or adjoining shorelines.

Any technical amendment to the SPCCP shall be certified by a Professional Engineer.

Review Date	(Authorized Facility Representative)		Plan Amendment Required? (Y?N)
	Print Name	Signature	

CROSS REFERENCE TABLE

SPCCP Table of Contents			Citation in CFR 40, Part 112
i.	PE Certification		§112.3(d)
ii.	Management Approval and Review		§112.5 and §112.7(d)(2)
1.0	Introduction		§112.7(a)(3)
	1.1	Purpose and Applicability	§112.1(a),(b),(d) and §112.3
	1.2	Using the Plan	§112.5
	1.3	Conformance with Regulatory Requirements	§112.6, and §112.7(a)(2)
2.0	Facility Description		
	2.1	Facility Location, Use and Storage Capacity	§112.7(a)(3)
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3.0	Potential Spill Predictions		§112.7(b)
4.0	Spill Prevention, Control & Countermeasures		
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	4.2	Facility Procedures, Equipment or Operations to be Modified	§112.7
5.0	Disposal Methods		§112.7(a)(3)(v)
6.0	Contact List, Emergency Procedures		§112.7(a)(3)(vi), (a)(4),(5),(d)
7.0	Inspections, Tests and Records		
	7.1	Visual Inspections	§112.7(e)
	7.2	Fuel Transfers, Inv. Monitoring, Equip. Maint.	§112.7(e)
	7.3	Integrity, Leak and Equipment Testing	§112.7(e), 112.8(c)(6)
8.0	Training		§112.7(f)
9.0	Security		§112.7(g)
10.0	Truck Loading and Unloading Racks		§112.7(h)
11.0	Field-Constructed Container		§112.7(i)
12.0	Compliance with Other Laws		§112.7(j)
13.0	Oil-Filled Operational Equipment		§112.7(k)
14.0	Facility Drainage		§112.8(b)
15.0	Bulk-Storage Tanks		§112.8(c)(1) thru (c)(5)
	15.1	Miscellaneous	§112.8(c)(6) thru (c)(10)
	15.2	Mobile and Portable Containers	§112.8(c)(11)
16.0	Facility Transfer Operations		§112.8(d)

SPILL PREVENTION CONTROL AND COUNTERMEASURES PLAN (SPCCP) ARMY AVIATION SUPPORT FACILITY BRADLEY INTERNATIONAL AIRPORT WINDSOR LOCKS, CONNECTICUT

1.0 INTRODUCTION

Connecticut Army National Guard (CTARNG) is the owner and operator of the facility known as the army aviation support facility (AASF). The AASF primarily operates as a helicopter operations center and fuel station where minor helicopter repairs and servicing are performed. Petroleum and chemical products are stored and used at the facility to support the fueling and servicing operations.

1.1 Purpose and Applicability (112.1(b) and 112.3)

The purpose of this Spill Prevention Control and Countermeasure Plan (SPCCP) is to prevent oil spills from occurring and to set out procedures for the implementation of safe, efficient and timely response in the event of a spill or leak (both hereinafter referred to as "spills"). In accordance with United States Environmental Protection Agency (EPA) oil pollution prevention regulations (40 CFR 112), CTARNG must prepare and implement a SPCCP for this Facility because it could reasonably be expected to discharge oil into or upon navigable waters or adjoining shorelines in the event of a spill and meets one of the following conditions (in AASF's case, Condition 1 is applicable):

1. Aboveground oil storage capacity exceeds 1,320 gallons in containers of 55 gallons or greater; or
2. Underground oil storage capacity exceeds 42,000 gallons, unless the underground tanks are subject to all of the technical requirements of 40 CFR 280 or a state program approved under 40 CFR 281.

As defined by 40 CFR Part 112, oil includes but is not limited to all grades of motor oil, hydraulic oil, lube oil, fuel oil, gasoline and diesel, automatic transmission fluid (ATF), waste oil, and transformer oil. The definition of oil also includes non-petroleum oils such as animal or vegetable oils and synthetic oils.

Additional requirements are placed on facilities that have the potential to cause substantial harm to human health or the environment in the event of a release. An assessment of

the potential for substantive harm has been completed for this Facility, as indicated on the Certification of Applicability checklist provided in Appendix H. Based on this assessment of substantial harm, the Facility is not subject to the Facility Response Plan (FRP) requirements (40 CFR Part 120 and 121).

1.2 Using the Plan (§112.5)

In addition to satisfying a regulatory requirement, this SPCCP will be a working document at the Facility. The SPCCP will be used in the following ways:

- as a reference for oil storage and containment system information;
- as a tool for informing new employees/enlisted personnel and reminding existing employees/enlisted personnel about practices for preventing and responding to spills;
- as a guide to periodic training programs for employees/enlisted personnel;
- as a guide to facility inspections; and
- as a resource during an emergency response.

The format of the SPCCP follows the sequence outlined in 40 CFR §112.7, with any exceptions as noted in the cross-reference table and any necessary additions as required by Army Regulation 200-1, state and/or local regulations.

A complete copy of the SPCCP shall be maintained at the AASF facility located on Route 75 in Windsor Locks, Connecticut and will be available to the Environmental Protection Agency (EPA) Regional Administrator (RA) for onsite review during normal operating hours.

CTARNG must revise this SPCCP for any change in the Facility design, construction, operation, or maintenance that affects the Facility's potential for discharging oil. Revisions must occur as soon as possible, but no later than six months after the change occurs. The Environmental Program Manager (EPM) or designated alternate is responsible for initiating and coordinating such revisions. Pursuant to Army Regulation 200-1, Chapter 11-4(b)(6), the EPM or designated alternate will use the Environmental Quality Control Committee (EQCC) to coordinate the SPCCP with affected installation elements.

This SPCCP must be reviewed at least once every five years. Revisions to the SPCCP, if any, must be made within six months of the review. The five-year review of the SPCCP must be documented on Page ii of the plan. Any technical amendments that are required to be completed for the SPCCP shall be certified by the Professional Engineer (PE) within six months.

Facility information related to the SPCCP must be submitted to the EPA Regional Administrator whenever the facility discharges more than 1,000 gallons in a single event, or discharges more than 42 gallons of oil in each of two spill events within a 12-month period.

1.3 Conformance with Regulatory Requirements (§112.6, §112.7(a)(2))

Owners and operators may choose to prepare and self-certify the SPCCP if the Facility can be defined as a "Qualified Facility" and the requirements of §112.6 are satisfied. A "Qualified Facility" is a facility with an aggregate storage capacity of less than or equal to 10,000 gallons and no single discharge exceeds 1,000 gallons or no two discharges exceeded 42 gallons within any 12-month period in the three years prior to the SPCCP self-certification. The CTARNG Facility stores more than 10,000 gallons of oil; therefore, CTARNG does not have the option to self-certify the SPCCP at this time.

Except as provided in §112.6, the SPCCP may deviate from the requirements in §112.7(g), §112.7(h)(2), §112.7(h)(3) and §112.7(i) and the requirements in §112.8, except the secondary containment requirements in §112.7(c), §112.7(h)(1), §112.8(c)(2) and §112.8(c)(11), if equivalent environmental protection is provided as determined by a professional engineer. Equivalent environmental protection will be discussed in the appropriate sections of this plan. For each deviation from the SPCC regulations using equivalent environmental protection, the Plan shall discuss the following:

- a description of the alternative approach;
- how the approach complies or deviates from industry standards; and
- how it will be implemented in the field.

Additional requirements that are relevant to the AASF pursuant to Army Regulation 200-1 (Environmental Protection and Enhancement), include:

- Leak detection or inventory control procedures for underground storage tanks (USTs);
- Leak detection, overfill protection and cathodic protection for above-ground storage tanks (ASTs), as required;
- Use of double-wall construction with interstitial monitoring on all new regulated USTs; and
- Ensure that all USTs are cathodically protected or are constructed of non-metallic material to meet corrosion requirements.

2.0 FACILITY DESCRIPTION

CTARNG operates a 37.9-acre aviation maintenance and vehicle maintenance facility that consists primarily of two maintenance hangars with attached office space, the Windsor Locks Readiness Center (WLRC) building, two storage buildings, a maintenance shop and a fenced-in motor pool that includes bermed parking areas for Heavy Expanded Mobility Tactical Trucks (HEMTT) (i.e., mobile vehicles used to refuel helicopters). The Site also contains a hazardous waste storage area, above-ground storage tanks (ASTs), a pump house, water tower, emergency diesel generators and a civilian parking lot. In addition, the scope of this plan covers the following areas outside of the property boundary that are operated by CTARNG and are considered part of the Facility: Buildings 154, 155, 162 and 400.

2.1 Location, Use and Oil Storage Capacity (§ 112.7(a)(3))

The facility is located on Route 75 adjacent to Bradley International Airport in Windsor Locks, Connecticut and its use was previously discussed in section 1.0. The total oil storage capacity for the Facility is 29,234 gallons. Table 1 provides a list of the tanks and containers located at the Facility along with the following information: the tank identification number (if applicable), tank description, tank construction, type of oil stored and the maximum oil storage capacity. The Facility Diagram is presented as figure 2 and provides the physical layout of the property, surface water features, and the location and contents of each container. Secondary containment provisions for these tanks and containers are discussed in Sections 4 and 15 of this plan.

The Facility has three below-grade oil-water (O/W) separators and one below-grade grit chamber that are used for wastewater treatment, general secondary containment requirements and/or facility drainage; and, because these O/W separators/grit chamber are used for these functions, they do not need to be counted towards the total oil storage capacity for the Site. The O/W separators are discussed in more detail in Sections 4.1 and 14 of this SPCCP.

2.2 Spill History (§ 112.7(a)(4),(5))

A spill event, as defined by the EPA, is a discharge of oil into or upon the navigable waters of the United States or adjoining shorelines in harmful quantities. State and local agencies have different definitions of spill events. Appendix A of this SPCCP contains an

incident report form to be used to log spill events, regardless of definition, which may occur in the future. The incident report form should include a written description of each spill event that includes:

- date and time of spill;
- the type of oil discharged;
- estimates of the total quantity discharged;
- the source of the discharge;
- a description of all affected media (soil, groundwater, surface water, air);
- the cause of the discharge;
- any damages or injuries caused by the discharge;
- corrective action taken;
- plans for preventing recurrence;
- if evacuation was required; and
- if any spill response contractors or other organizations (i.e., fire department, CTDEEP, EPA, NRC) were notified.

According to information provided by the CTARNG representative, there have been five documented spills of material at the Site, which are summarized in table 2.

3.0 POTENTIAL SPILL PREDICTIONS (§112.7(b))

To meet the requirements of §112.7(b), the potential for failure of equipment is described, including such items as fueling military aviation or motor vehicles, unloading equipment, tank overflow, rupture, leakage, or any other equipment known to be a potential source of an oil discharge. With each type of potential spill, an estimated quantity, an estimated flow rate (if applicable) and a predicted direction of flow is provided. If the spill is predicted to be a small quantity and/or in a location that is not expected to escape beyond a passive secondary containment area and/or the spill is not expected to move beyond the immediate spill area, then this factor will be stated.

A summary of potential spill predictions for the Facility is attached as table 3. Flow rates, response times and spill quantities listed in this table are for planning purposes only. Table 3 also includes a volume of spilled oil associated with a most probable discharge scenario, which is used for general secondary containment sizing for each potential spill location. Secondary containment is discussed further in Sections 4 and 15 of this SPCCP.

4.0 SPILL PREVENTION CONTROL AND COUNTERMEASURES

Section 4.1 discusses discharge prevention, spill control and countermeasures, which include procedures and equipment used to prevent a spill or effectively respond to a spill. If applicable, Section 4.2 discusses Facility procedures equipment and/or operations that are not yet fully functional or are not working as intended. If applicable, Section 4.2 further discusses short-term control measures to be used to prevent a discharge until such Facility procedures, equipment and/or operations are fully functional and working as intended.

4.1 Discharge Prevention, Spill Control and Countermeasures (§112.7(a)(3)(ii),(iii),(iv),(c))

To reduce the chance for spills during fuel transfers, fuel deliveries are scheduled during daylight hours. The fuel delivery procedure contained in Appendix B shall be followed to reduce the chance of a spill. For the purposes of this plan, loading fuel refers to transferring fuel from a bulk storage tank to a tanker truck and unloading fuel refers to transferring fuel from a tanker truck to a bulk storage tank. An operator trained on the requirements of this SPCCP shall monitor fuel transfer activities until such actions are completed. Any spills of oil from the Facility shall be addressed using the Emergency Spill Response Procedures and Emergency Procedures Flowchart in Appendix C. Discharge prevention, spill control and countermeasures for the Facility are summarized below.

The discharge prevention and spill control and countermeasures that are currently in place for the Facility are listed for the tanks and associated piping.

<u>AST-1 – 300-Gallon Off-Spec Fuel Tank:</u>

- double-wall tank
- interstitial leak monitoring
- vents
- tank level gage
- tank elevated off the ground
- tank legs are resting on concrete
- tank surrounded by security fence
- a berm surround the majority of the fenced area except the entrance

AST-2 – 264-Gallon Used Oil Tank:

- double-wall tank
- vents
- tank level gage
- overfill containment structure
- pressure gage
- tank elevated off the ground
- tank legs are resting on concrete
- tank surrounded by security fence
- a berm surround the majority of the fenced area except the entrance

AST-3 through 4 – 350-Gallon Diesel Tank (for pump house):

- single-wall tank
- tank level gage
- tanks are elevated off the floor
- tanks are indoors (Pump House – used for secondary containment)

AST-5 – 120-Gallon Diesel Tank for Emergency Generator (Bldg 162):

- double-wall tank
- interstitial leak monitoring
- vents
- tank is slightly elevated off the ground and resting on concrete
- tank surrounded by a fence
- tank level gage
- fill port spill bucket

AST-6 – 973-Gallon Diesel (Belly) Tank for Emergency Generator (WLRC Bldg):

- double-wall tank
- interstitial leak monitoring
- fill port spill bucket
- vents
- tank is resting on concrete
- tank level gage
- piping inside generator enclosure

General secondary containment for AST-1, AST-2, AST-5 and AST-6 is accomplished by the double-walled construction of the tanks and this complies with §112.7(c) of the SPCC regulation. General secondary containment for AST-3 and AST-4 is accomplished by using the

walls and floor of the Pump House and absorbent spill supplies to respond to a most probable discharge of 20 gallons and this complies with §112.7(c) of the SPCC regulation.

General secondary containment for the aviation vehicles, fuel transfer areas, transformers and fuel pipes outside of a tank's secondary containment are accomplished by having trained CTARNG staff responding with absorbent materials (i.e., active measures) to a "most probable discharge", which is either 5 or 20 gallons (refer to table 2), and this complies with §112.7(c) of the SPCC regulations. Spill supplies rated to absorb at least 20 gallons of oil are located: 1) in the hazardous waste storage area; 2) in the drum storage satellite accumulation area for the north hangar (Bldg. 200); and, 3) in the drum storage satellite accumulation area for the south hangar (Bldg. 152). Refer to the Facility Diagram for the location of spill supplies. The spill supplies can be used to control and recover "incidental (minor) spills" as defined in Appendix C.

General secondary containment provisions for the HEMTT vehicles are accomplished by parking these vehicles within one of three bermed areas located in the motor pool (see figure 2). The low point of a bermed area is equipped with a catch basin that is connected to a 2,500 gallon oil-water (O/W) separator, a hydrodynamic separator and a below-grade stormwater detention system. The discharge outlet of the stormwater detention system discharges to wetlands that eventually flow to Spencer Brook. The below-grade storm pipes connecting the catch basins to the O/W separator are equipped with manual valves located upstream of the O/W separator that are normally left in the closed position (figure 2). When precipitation accumulates in the bermed area, the liquid is inspected for oil and other non-stormwater liquids. If there are no visible signs of contamination in the stormwater, then the valves are opened and the collected water is allowed to drain through the stormwater treatment system described above. When oil is detected in the stormwater, trained CTARNG staff or their contractor pumps, vacuums or otherwise removes the oily water at the surface and disposes of the contents in accordance with Section 5.0 of the plan. The remaining oily water in the catch basin and below-grade storm pipe is allowed to discharge through the stormwater treatment system. In addition, absorbent spill supplies may be used to wipe up any remaining surface oil in the bermed area. The design of this stormwater treatment system and the use of absorbent spill supplies is adequate to contain a "most probable discharge" of 20 gallons, which complies with the general secondary containment requirement in§112.7(c) of the SPCC regulation. Facility drainage details are discussed further in Section 14 of this plan.

General secondary containment for the remaining military vehicles in the motor pool area is accomplished by using drip pans and responding with absorbent materials to a "most probable discharge" of 1 gallon, which complies with the general secondary containment requirement in §112.7(c) of the SPCC regulation.

4.2 Facility Procedures, Equipment or Operations to be Modified (§112.7)

Absorbent spill supplies shall be added to the WLRC building to make these resources readily available for the WLRC emergency generator and hydraulic oil tank for the elevator in the event of a minor release, as defined in Appendix C. All other facility procedures, operations and equipment are fully functional and operating as intended.

5.0 DISPOSAL METHODS (§112.7 (a)(3)(v))

If a discharge of oil were to occur, spill control and countermeasures would be implemented as discussed in Section 4.0. Recovered materials, waste booms, waste absorbent material, impacted soil, and other waste impacted with oil shall be managed as either hazardous waste or regulated non-hazardous waste, depending on the material that is spilled. Hazardous and regulated waste shall be manifested and transported offsite by a licensed waste transporter to a certified disposal facility according to applicable State and Federal regulations.

6.0 CONTACT LIST, EMERGENCY PROCEDURES AND SUPPORTING DOCUMENTATION (§112.7 (a)(3)(vi),(a)(4),(a)(5),(d))

The Facility has an Emergency Contact List which has the names and telephone numbers of persons to be contacted in an emergency. The Emergency Contact List is contained in Appendix G. A copy of the Emergency Contact List shall be maintained with the CTARNG environmental coordinator (EC) or a designated alternate. The Emergency Contact List shall be photocopied and made readily available at the Facility for trained personnel that are responsible for oil management activities. However, if any CTARNG personnel or truck operator notices that a spill has occurred, then, at a minimum, that person shall notify the EC or designated alternate, as identified on the Emergency Contact List, about the condition. If the first person on the list can't be reached then the next CTARNG person on the list will be contacted.

In the event of a spill, the Emergency Spill Response Procedures and the Emergency Procedures Flow Chart that are included in Appendix C shall be followed. According to §112.7(a)(5), if a FRP pursuant to §112.20 has not been prepared, then emergency procedures shall be readily usable during an emergency situation. The Emergency Spill Response Procedures and the Emergency Procedures Flow Chart shall be copied and posted at the AASF hangars, WLRC building and inside the POL storage container located in the hazardous waste storage area. The Emergency Contact List shall be maintained in the same location as the Emergency Spill Response Procedures and Emergency Procedures Flow Chart.

CTARNG is responsible for immediately implementing and expediently completing all actions necessary to remedy the effects of any petroleum release.

According to §112.7(a)(4), when a FRP pursuant to §112.20 is not prepared for the Facility, then the information described in the Incident Report in Appendix A shall be collected and documented in the event of a spill.

The National Response Center (NRC) shall be contacted (800-424-8802) in the event a discharge of oil escapes secondary containment, enters a stormwater catch basin that is not connected to the O/W separator or reaches surface water. The standard approach is to assume that if a discharge escapes secondary containment or enters a stormwater catch basin not connected to an O/W separator, then it has the potential to reach surface water. For the purposes of this discussion, it is assumed that the size of the oil spill does not exceed the oil storage design capacity of the O/W separator and the O/W separator is functioning properly. The following information shall be provided to the NRC in such cases:

- name, organization and telephone number;
- name and address of the party responsible for the incident;
- date and time of the incident;
- location of the incident;
- source and cause of the discharge;
- type(s) of material(s) discharged;
- quantity of material(s) discharged;
- danger or threat posed by the discharge;
- number and types of injuries (if any);
- weather conditions at the incident location; and
- other information to help emergency personnel respond to the incident.

If more than 1,000 gallons of oil are released in a single spill event, or two spill events occur within any consecutive 12-month period during which more than 42 gallons of oil are released in each event, then in addition to the requirements cited above, a report shall be filed with the Regional Administrator of the United States Environmental Protection Agency (USEPA) within 60 days. The report shall include:

- name of the Facility;
- owner's name;
- location of the Facility;
- maximum storage or handling capacity of the Facility and normal daily throughput;
- corrective action and countermeasures that have been taken including a description of equipment repairs and replacements;
- a description of the Facility including maps, flow diagrams and topographical maps;
- the cause of the discharge including a failure analysis of the system or sub-system in which the failure occurred; and
- additional preventive measures that have been taken or contemplated to minimize the possibility of recurrence.

According to §112.7(d), if it is determined that the installation of the structures or items of equipment listed in §112.7(c), (h)(1), §112.8(c)(2), (c)(11) §112.9 (c)(2), §112.10(c), §112.12(c)(2) and §112.12(c)(11) to prevent a discharge is not practicable, then an explanation of why such measures are not practicable must be provided. The Facility is not applying for an impracticability determination for secondary containment because secondary containment is provided.

7.0 INSPECTION, TESTS AND RECORDS (§112.7(e), 112.8(c)(6))

The inspection program shall serve as one of the main mechanisms for detecting spills from tanks, pipes, fuel transfers, fuel delivery trucks, HEMTT vehicles, aviation vehicles and secondary containment areas at the Facility. Each type of inspection, monitoring or test required for the Facility is described below.

7.1 Visual Inspections

Pursuant to §112.7(e), monthly and annual inspections for the oil storage tanks, diesel generator tanks, piping, HEMTT Parking Area (Motor Pool), O/W separator, hydrodynamic

separator, spill supplies, passive secondary containment systems and transformers will be conducted by trained CTARNG personnel and this inspection information will be recorded in the inspection logs in Appendix E. Any obvious spills of oil, oily water, or oil sheens observed during the monthly inspection should be documented on the inspection form in Appendix E in the comments section and subsequently reported to the EC or designated alternate.

Inspections of ASTs will include direct observation of the tanks, overfill containers, tank supports, fuel dispensers/hoses, pipes, pipe supports, valves and other appurtenances for spills, leaks, damage, corrosion or failure as applicable. The ground surface in the vicinity of the tanks, pipes and fuel dispensers shall be inspected for spills of oil and oil stains.

In addition, the interstitial space of double-walled tanks shall be checked for any signs of liquid (petroleum or water). Any quantity of spilled oil that has escaped passive secondary containment systems shall be promptly cleaned up according to the procedures described in the Emergency Procedures Flow Chart in Appendix C.

Each item on the inspection logs should be noted as “OK” or “Not OK” or “Yes” or “No” depending on the question. A brief description of the items that are “Not OK” or “Yes” shall be included in the “Comments” area of the inspection log. After the inspection is completed, the log shall be submitted to the EC or designated alternate and retained on-sitefor a minimum of three years. Any item needing work shall be addressed by the EC and/or EPM in a timely manner.

7.2 Fuel Transfers, Inventory Monitoring and Equipment Maintenance

The EC or designated alternate shall be notified of fuel transfers and be provided the delivery slip or waste manifest, as applicable. The EC or designated alternate shall maintain the fuel transfer records in a dedicated folder at AASF for at least three years.

If after an inspection of an O/W separator at the Facility reveals that maintenance is required or the O/W separator is due for its routine maintenance, then the O/W separator log in Appendix E shall be used to document the maintenance event. The O/W separator shall be maintained in accordance with the owner’s manual; however, at a minimum, the O/W separator shall be cleaned at least annually. The hydrodynamic separator shall be inspected and if necessary cleaned out at the same time as the O/W separator. In general, hydrodynamic separators shall be cleaned when the sediment level comes within one foot of the unit’s top.

Refer to the owner's manual of the hydrodynamic separator for specific maintenance instructions and procedures.

Hazardous materials are stored in dedicated buildings within the hazardous waste storage area (figure 2). The hazardous materials storage inventory form provided in Appendix E shall be used to list the quantity, location and other pertinent data for hazardous materials stored onsite.

7.3 Integrity, Leak and Equipment Testing

Standard industry practice and professional engineering judgment shall be used to develop an integrity, leak and equipment testing schedule for the tanks at the Facility. The integrity and leak testing schedule is based on the 5th Edition of the "Standard for the Inspection of Aboveground Tanks" (SP001 - September 2011) issued by the Steel Tank Institute (STI). The tanks at the site are considered "shop-built tanks" as defined in the SP001 standard. The following tests and testing frequency shall be used:

- AST-1 – 300-gallon off-spec. aviation fuel tank:
  - Fuel gages and interstitial leak monitoring equipment shall be tested annually by a qualified technician to ensure that these devices are working properly.

- AST-2 – 264-gallon used oil tank:
  - Fuel gage and pressure gage shall be tested annually by a qualified technician to ensure that these devices are working properly.

- AST-3 and AST-4 – 350-gallon diesel tanks in the Pump Room:
  - Fuel gage shall be tested annually by a qualified technician to ensure that this device is working properly.

- AST-5 – 120-gallon diesel tank for Emergency Generator near Bldg 162:
  - Fuel gage and interstitial leak monitoring equipment shall be tested annually by a qualified technician to ensure that these devices are working properly.

- AST-6 – 973-gallon diesel (belly) tank for Emergency Generator at WLRC:
  - Fuel gage and interstitial leak monitoring equipment shall be tested annually by a qualified technician to ensure that these devices are working properly.

If formal external inspections for tanks and their associated piping and appurtenances is required, then these inspections shall be completed by a qualified Steel Tank Institute (STI) or American Petroleum Institute (API) technician.

If any repairs are made to tanks, pipes or appurtenances, then those repaired items shall be integrity tested by a certified STI or API inspector or leak tested by a qualified vendor prior to placing the repaired item back into service.

Documentation for all tests, the credentials of the tank integrity and leak testers, and the test procedures shall be maintained onsite in a dedicated folder or log book with the SPCCP for a minimum of 20 years. This document retention period will also allow for comparison of tests over time pursuant to §112.8(c)(6).

If a leak is detected or a tank/hose/dispenser/pipe/appurtenance fails an integrity or leak test, then that piece of equipment shall be taken out of service immediately until the problem is corrected and the replaced or the repaired piece of equipment is re-tested and passes the test.

8.0 TRAINING (§112.7(f))

The EPM or designated alternate is responsible for ensuring proper instruction is provided about emergency spill response procedures, Facility operations including operation and maintenance of equipment to prevent the discharges of oil, and applicable pollution control laws, rules, and regulations, as well as the contents of this SPCCP. CTARNG personnel, whose responsibilities include responding to spills, managing fuel transfers or conducting inspections will receive training within one week of hire and at least yearly thereafter. If training cannot be provided within one week of hire, then properly trained personnel will shadow the new hires or enlisted personnel until training can be provided. The annual training for the stormwater pollution prevention plan (SWPPP) and this SPCCP can be combined provided the relevant topics for each plan are covered.

Certification of personnel training shall be kept at the CTARNG AASF for a minimum of three years. SPCCP training sign-in sheets are included in Appendix F. Annual training shall be provided in the following areas:

- safe and efficient operating procedures for all oil-handling equipment used at the Facility;
- review of emergency procedures;
- proper procedures to unload, receive and store oil and fuel handled at the Facility;

- hazards for oil and fuel;
- spill response and control procedures in the event of a spill;
- snow removal management; and
- proper internal and external reporting procedures.

9.0 SECURITY (§112.7(g))

A security fence surrounds the facility except along the western and northwestern boundary that abuts Bradley International Airport. The Facility can be accessed through the main entrance, which has a guard on-duty 24 hours a day to control access into and out of the Facility. Security cameras are located throughout the Facility and are monitored by the guard on duty 24 hours a day. Each tank area is lighted adequately to detect spills and deter vandalism. Pump controls associated with ASTs 3 and 4 are in the Pump Room, which is kept locked when not in use and only authorized personnel have keys. Based on the above information, the security provisions at the Facility are adequate to comply with §112.7(g) of the SPCC regulation.

10.0 TRUCK LOADING AND UNLOADING RACKS (§112.7(h))

The Facility does not have a truck loading rack, therefore, the provisions in §112.7(h)(1) of the SPCC regulation do not apply. Wheel chocks or a suitable equivalent shall be used to prevent the movement of the tanker truck during fuel transfer operations to comply with §112.7(h)(2) of the SPCC regulation. CTARNG shall either provide wheel chocks or instruct the fuel provider to supply wheel chocks (or suitable equivalent) for fuel delivery to the Facility. Prior to the fuel transfer and before departing, CTARNG personnel shall instruct the tank truck driver to inspect the truck's drains and fuel discharge points for leaks or spills. If necessary, the tank truck operator shall tighten, repair or replace caps or other appurtenances on the tanker truck to prevent fuel from discharging during transit to comply with §112.7(h)(3) of the SPCC regulation.

11.0 FIELD-CONSTRUCTED CONTAINER REPAIR/ALTERATION (§112.7(i))

The Facility does not have any "field-constructed" aboveground containers as defined in the Steel Tank Institute (STI) SP001 standards for aboveground tanks. Therefore, §112.7(i) of the SPCC regulations does not apply.

12.0 COMPLIANCE WITH OTHER LAWS (§112.7(j))

The State of Connecticut does not have specific regulations covering aboveground storage tanks and defers to the SPCC regulations on this matter. All tanks at the Facility shall conform to the National Fire Protection Association (NFPA) Title 30, Section 6.3 Code. Maintenance of each bulk storage container shall conform to NFPA 30 Chapter 22, 2008 Edition or most recent edition. All pipes used to transfer product shall conform to NFPA 30, Chapter 27, 2008 Edition or most recent edition. All appurtenances shall conform to relevant industry codes. Above-ground storage tanks shall comply with Section 11 of Army Regulation 200-1 as previously mentioned in section 1.3 of the SPCCP.

The Facility is subject to the CTDEEP General Permit for the Discharge of Stormwater Associated with Industrial Activity (Permit). As part of the requirements of the Permit, a stormwater pollution prevention plan (SWPPP) has been prepared and will be used in conjunction with this SPCCP to protect surface water quality at the Facility.

CTARNG is registered for the CTDEEP "General Permit for the Discharge of Vehicle Maintenance Wastewater" (Permit No. GVM000100) and CTARNG complies with the provisions of this permit, which includes inspection and maintenance of two below-grade O/W separators (1,000 gallons and 2,500 gallons) located south of the southern hangar (Bldg 152).

13.0 OIL-FILLED OPERATING EQUIPMENT (§112.7(k))

Oil-filled operating equipment is defined in the SPCC regulations as "equipment that includes an oil storage container (or multiple containers) in which the oil is present solely to support the function of the apparatus or the device…". The Facility has two outdoor 300-gallon pad-mounted transformers and one indoor 167-gallon hydraulic oil tank to support the operation of an elevator in the WLRC. The pad-mounted transformers and the hydraulic oil tank are considered oil-filled operating equipment.

If there have been no oil discharges from the oil-filled operating equipment in excess of 1,000 gallons or two spills exceeding 42 gallons each within a 12-month span, then the transformers and hydraulic oil tank are considered "Qualified Oil-Filled Operating Equipment". While there have been documented spills at the Facility, none of these spills (or group of spills) meets the criteria stated above. Therefore these transformers and hydraulic elevator tank are considered "Qualified Oil-Filled Operating Equipment". As previously discussed in Section 4.1,

the "Qualified Oil-Filled Operating Equipment" at the Facility has active secondary containment (i.e., absorbent spill supplies) and an inspection program described in Section 7.1 that is sufficient to comply with §112.7(c). Therefore, the alternative requirements to secondary containment for "Qualified Oil-Filled Operating Equipment" discussed in §112.7(k)(2) are not applicable.

14.0 FACILITY DRAINAGE (§112.8(b))

The Facility does not use dikes as a form of secondary containment for bulk storage containers, therefore, §112.8(b)(1) and §112.8(b)(2) of the SPCC regulation does not apply.

Facility drainage for the HEMTT parking areas within the motor pool area is accomplished by using a series of catch basins that are connected to a 2,500 gallon O/W separator as previously described in section 4.1 of this SPCCP. The O/W separator, hydrodynamic separator and stormwater detention system shall be maintained according to the manufacturer's instructions and shall be inspected and cleaned out at least once a year. The inspection shall include checks for clogging, sediment accumulation and oily water exiting the discharge outlet of the O/W separator, hydrodynamic separator or stormwater detention system. Specific maintenance procedures for the O/W separator, hydrodynamic separator and stormwater detention system are retained at AASF. The O/W separator, hydrodynamic separator and stormwater detention system are adequately sized and designed to handle the stormwater flow capacity for the catch basins that service this stormwater treatment system based on the information provided. The stormwater treatment system consisting of the O/W separator, hydrodynamic separator and stormwater detention system serves as an environmentally equivalent measure to a holding pond, lagoon or catchment basin to comply with §112.8(b)(3) of the SPCC regulation.

As previously discussed in Section 12.0, Facility drainage for the hangars is accomplished by gravity flow of fluids to a series of trench drains located at low points on the floor. The trench drains are connected to two O/W separators that discharge to the sanitary sewer. Facility drainage for the vehicle maintenance training bay within the WLRC is accomplished by gravity flow of fluids to a floor drain located at a low point on the floor. The floor drain at WLRC is connected to a small below-grade grit chamber that discharges to the sanitary sewer. The two O/W separators and grit chamber shall be subjected to the same

inspection and maintenance procedures as described in Sections 7.1 and 7.2 for the O/W separator used for the motor pool area. The two O/W separators and grit chamber described above serve as environmentally equivalent measures to a holding pond, lagoon or catchment basin to comply with §112.8(b)(3) of the SPCC regulation.

The remaining portions of the Facility do not use facility drainage for secondary containment; therefore, §112.8(b)(3) and (b)(4) of the SPCC regulation do not apply for the remaining portions of the Facility that have the potential for a discharge of oil. Drainage water is not treated as described in §112.8(b)(5); therefore this section of the SPCC regulation does not apply.

15.0 BULK-STORAGE CONTAINERS (§112.8(c)(1) through (c)(5))

Bulk-storage containers are defined as any container used to store oil. Requirements for bulk-storage containers are set forth in §112.8(c). All tanks and pipes listed in table 1 are constructed of materials that are compatible for the storage of oil and are designed to store oil under their prescribed environmental settings (i.e., temperature and pressure) to comply with §112.8(c)(1).

AST-1, AST-2, AST-3, AST-4, AST-5 and AST-6 are considered bulk-storage containers as defined in the SPCC regulations. ASTs 1, 2, 5 and 6 are double-walled tanks and the secondary containment structures for each tank are protected from exposure to precipitation. The secondary containment for each tank is sufficiently impervious and adequately sized to contain the tank's oil in the event of a leak or rupture. Therefore, the secondary containment for ASTs-1, 2, 5 and 6 comply with §112.8(c)(2). The bulk storage secondary containment requirement for ASTs 3 and 4 are accomplished by using the Pump Room for secondary containment, which is equipped with a berm that has dimensions of 24 feet long by 20 feet high by two (2) inches high. The secondary containment calculations for ASTs 3 and 4 are included in Appendix I. The berm walls and floor of the pump room are adequately sized and sufficiently impervious to comply with §112.8(c)(2) of the SPCC regulation.

The control measures for the HEMTT vehicle drainage previously described in Sections 4.1 and 14 in conjunction with the inspection program described in Section 7 of this Plan comply with §112.8(c)(3) of the SPCC regulation. The remaining areas of the Facility do

not have the potential for contaminated rainwater to discharge out of a diked area; therefore, §112.8(c)(3) does not apply.

Liquid (i.e., petroleum or water) that is detected in the interstitial space of double-walled tanks will be removed and disposed of according Section 5.0 of this plan. A Secondary Containment Drainage Log is included in Appendix E and it shall be used for documentation purposes when liquid is removed from the interstitial space of double-walled tanks.

If oil escapes a tank's secondary containment, then the Emergency Spill Response Procedures and Emergency Procedures Flow Chart shall be followed. The recovered materials shall be disposed of as described in Section 5.0.

Underground storage tanks (USTs) and bunkered/partially buried tanks are not present at the Facility; therefore, §112.8(c)(4) and (c)(5) of the SPCC regulation do not apply.

15.1 Miscellaneous (§112.8(c)(6) through (c)(10))

Tank testing requirements for the Facility are described in Section 7 of this SPCCP and comply with §112.8(c)(6). The Facility does not have any steam lines, therefore, §112.8 (c)(7) does not apply. Oil level gages are installed on ASTs 1, 2, 3, 4, 5 and 6, and shall be tested annually to ensure they are working properly as part of the requirements to comply with §112.8 (c)(8). The inspection program shall include checking the discharge from the O/W separator and the associated stormwater outfall for any signs of oil or other non-stormwater discharges to comply with §112.8(c)(9). Pursuant to §112.8(c)(10), any spills or leaks of oil from tanks, piping, gaskets, pumps or valves shall be promptly addressed by following the Emergency Spill Response Procedures in Appendix C.

15.2 Mobile and Portable Containers (§112.8(c)(11))

At the time of the inspection, the Facility stored two 55-gallon drums of used oil in the north and south hangers in the areas shown on figure 2. The 55-gallon drums are equipped with either roll-top spill containment units or spill skid platforms that are adequately sized and sufficiently impervious to comply with §112.8(c)(11) of the SPCC regulation.

16.0 FACILITY TRANSFER OPERATIONS (§112.8(d))

Above-ground storage tanks at the site are not equipped with below-grade fuel piping; therefore, §112.8(d)(1) does not apply. If a section of buried pipe is exposed for any reason, the pipe shall be inspected for deterioration. If corrosion or damage is detected, the EPM or designated alternate shall undertake additional examination and corrective action based on the magnitude of the damage to comply with §112.8(d)(1) of the SPCC regulations.

Fill ports associated with fuel transfer operations are capped when not in use to comply with §112.8(d)(2) of the SPCC regulations. Pipe supports at the Facility are properly designed to minimize abrasion and corrosion and allow for expansion and contraction to comply with §112.8(d)(3).

Pursuant to §112.8(d)(4), all aboveground piping, valves and appurtenances shall be inspected as part of the inspection procedures described in Section 7.1 of this SPCCP. If any leaks from piping or hoses are detected, then the Emergency Spill Response Procedures and Emergency Procedures Flow Chart shall be followed. During fuel transfers, a safety cones or suitable equivalent shall be placed around the truck in view of vehicle operators to warn said vehicle operator of fueling activities to comply with §112.8(d)(5) of the SPCC regulation. Aboveground piping is not accessible to vehicle operators, therefore, that portion of §112.8(d)(5) does not apply.

17.0 SPCC TEAM

The Facility SPCC team has one administrator and four members. EC has overall responsibility for the Facility and may delegate some of the SPCC tasks to trained CTARNG personnel as necessary. The EC shall keep the EPM informed of all environmental matters regarding implementation of this SPCCP. The CTARNG personnel that are assigned to the team and the activities for which they are responsible are listed in table 4.

cmm
November 4, 2015
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TABLES

TABLE 1

CONNECTICUT ARMY NATIONAL GUARD
ARMY AVIATION SUPPORT FACILITY
BRADLEY INTERNATIONAL AIRPORT
WINDSOR LOCKS, CONNECTICUT

Oil Storage Capacity for Tanks

TANK ID	Location	TANK DESCRIPTION	MATERIAL OF CONSTRUCTION FOR TANK OR CONTAINER AND DESIGN	TYPE OF OIL STORED	MAXIMUM OIL STORAGE CAPACITY (gal.)
AST-1	Outdoors within the hazardous waste storage area	Outdoor Aboveground Storage Tank	Double-Walled Tank	Off-Spec. Aviation Fuel	300
AST-2	Outodoors within the hazardous waste storage area	Outdoor Aboveground Storage Tank	Double-Walled Tank: Steel	Used Oil	264
AST-3	Pump house	Indoor Aboveground Storage Tank (associated with fire supression system)	Single-Walled Steel Tank	Diesel Fuel	350
AST-4	Pump house	Indoor Aboveground Storage Tank (associated with fire supression system)	Single-Walled Steel Tank	Diesel Fuel	350
AST-5	Outdoors, east of the maintenance shop (Bldg 162)	Outdoor Aboveground Storage Tank (for emergency generator)	Double-Walled Tank	Diesel Fuel	120
AST-6	Oudoors, Northeast of the WLRC Bldg.	Outdoor Aboveground Storage Tank (for WLRC emergency generator)	Double-Walled Tank	Diesel Fuel	973
N/A	HEMTT parking area	Outdoor Aboveground Storage 8 Mobile 2,500 Gallon Tanker Trucks	Steel Tank	Aviation Fuel	20,000
N/A	Outdoors on aviation parking apron	(5) UH-60 Helicopters with 600-Gallon Fuel Tanks	Steel Tank	Aviation Fuel	3,000
N/A	Outdoors on aviation parking apron	(3) CH-47 Helicopters with 1,000-Gallon Fuel Tanks	Steel Tank	Aviation Fuel	3,000
N/A	Indoor satellite accumulation area for Bldg. 152	55-Gallon Drum	Steel Drum	Used Oil	55
N/A	Indoor satellite accumulation area for Bldg. 200	55-Gallon Drum	Steel Drum	Used Oil	55
N/A	Indoors, WLRC Building	Hydraulic Oil Tank for Elevator	Single-Walled Steel Tank	Hydraulic Oil	167
T-1 [1/]	Outdoors east of the maintenance shop (Bldg. 162)	Transformer	Metal Enclosure	Dielectric Oil	300
T-2 [1/]	Outdoors northeast of WLRC (Bldg. 300)	Transformer	Metal Enclosure	Dielectric Oil	300
TOTAL ACTIVE OIL STORAGE CAPACITY:					**29,234**

Notes:
1. The transformer oil storage capacity is estimated.

TABLE 2

CONNECTICUT ARMY NATIONAL GUARD
ARMY AVIATION SUPPORT FACILITY
BRADLEY INTERNATIONAL AIRPORT
WINDSOR LOCKS, CONNECTICUT

Documented Release Summary Table

Spill ID	Reported Release Date	Agency Notified	Location	Quantity and Product Spilled
A	2/5/2000	CTDEEP	Ramp	2 gallons of oil
B	1/27/2002	CTDEEP	Ramp	1 gallon of hydraulic oil
C	8/25/2005	CTDEEP	New Hangar	2 gallons of JP-8 fuel
D	2/1/2007	CTDEEP	Pump House	600 to 700 gallons of Water and JP-8 fuel
E	11/8/2007	CTDEEP	Black Hawk Ramp	5 to 10 gallons of JP-8 fuel

Note: An active file for spill reports and spill logs are maintained at the facility.

TABLE 3

CONNECTICUT ARMY NATIONAL GUARD
ARMY AVIATION SUPPORT FACILITY
ROUTE 77
WINDSOR LOCKS, CONNECTICUT

Potential Spill Predictions

Potential Spill Location	Scenario [2/]	Prediction of Flow Direction	Rate of Flow (gpm)	Response Time	Estimated Amount of Oil Discharged (gallon)
AST-1: 300-gallon off-spec JP-8 fuel	Inner Tank Shell Rupture	discharge would be contained inside the secondary containment (outer shell of tank).	---	---	300
	Inner and Outer Tank Shell Rupture	Discharge would partially be contained within the bermed area and flow north and northeasterly to a CB	---	---	300
	Inner and outer shell tank leakage	Discharge would stay in the bermed area of the hazardous waste storage area and slowly flow north and northeasterly to a CB.	<0.05	1 day	5
	Overfill of vehicle tank from Dispenser	Discharge would stay in the bermed area of the hazardous waste storage area and slowly flow north and northeasterly to a CB.	5	12 sec	1
	Overflow/Overfill of tank (manual or small transfer pump)	Discharge would stay in the bermed area of the hazardous waste storage area and slowly flow north and northeasterly to a CB.	--	2 sec	1
	Hose Rupture during removal of tank's contents	Discharge would either stay in the bermed area or flow north and northeasterly to a CB.	40	30 sec	20 [1/]
	Faulty Ancillary Equipment	Discharge would either stay in the bermed area or flow north and northeasterly to a CB.	<0.05	1 day	5
AST- 2 : 264-gallon used oil tank	Inner Tank Shell Rupture	discharge would be contained inside the secondary containment (outer shell of tank).	---	---	264
	Inner and Outer Tank Shell Rupture	Discharge would partially be contained within the bermed area and flow north and northeasterly to a CB.	---	---	264
	Inner and outer shell tank leakage	Discharge would partially be contained within the bermed area and flow north and northeasterly to a CB.	<0.05	1 day	5
	Overflow/Overfill of tank (manual or small transfer pump)	Discharge would stay in the bermed area of the hazardous waste storage area and slowly flow north and northeasterly to a CB.	--	2 sec	1
	Hose Rupture during removal of tank's contents	Discharge would either stay in the bermed area or flow north and northeasterly to a CB.	40	30 sec	20 [1/]
	Faulty Ancillary Equipment	Discharge would either stay in the bermed area or flow north and northeasterly to a CB.	<0.05	1 day	5
AST-3 and 4: 350-gallon diesel tanks for water pumps in Pump House	Tank Ruptures	discharge would flow out of the pump house north and northeasterly to a CB.	---	---	350
	Tank Leakage	Discharge would stay in the pump house.	<0.05	1 day	5
	Hose Rupture during fueling of the tank	Discharge would flow north and northeast to a CB	40	30 sec	20 [1/]
	Overflow/Overfill of tank	Discharge would stay in the pump house.	40	5	3
	Faulty Ancillary Equipment	Discharge would stay in the pump house.	<0.05	1 day	5
AST-5: 120-gallon diesel tank to support emergency generator next to Bldg. 162	Inner Tank Shell Rupture	discharge would be contained inside the secondary containment (outer shell of tank).	---	---	120
	Inner and Outer Tank Shell Rupture	Discharge would flow easterly to a CB	---	---	120
	Inner and outer shell tank leakage	Discharge would stay in the area and slowly flow easterly to a CB	<0.05	1 day	5
	Overflow/Overfill of tank	Discharge would stay in the overfill spill basin.	40	5 sec	3
	Hose Rupture during removal of tank's contents	Discharge would either stay in the bermed area or flow north and northeasterly to a CB.	40	30 sec	20 [1/]
	Faulty Ancillary Equipment	Discharge would either stay in the bermed area or flow north and northeasterly to a CB.	<0.05	1 day	5

TABLE 3

CONNECTICUT ARMY NATIONAL GUARD
ARMY AVIATION SUPPORT FACILITY
ROUTE 77
WINDSOR LOCKS, CONNECTICUT

Potential Spill Predictions

Potential Spill Location	Scenario [2/]	Prediction of Flow Direction	Rate of Flow (gpm)	Response Time	Estimated Amount of Oil Discharged (gallon)
AST- 6 : 973-gallon diesel (belly) tank for emergency diesel generator for WLRC Building	Inner Tank Shell Rupture	discharge would be contained inside the secondary containment (outer shell of tank).	---	---	973
	Inner and Outer Tank Shell Rupture	Discharge would flow northeasterly to wetlands and Spencer Brook.	---	---	973
	Inner and outer shell tank leakage	Discharge would stay in the area and slowly flow northeasterly to wetlands and Spencer Brook.	<0.05	1 day	5
	Overflow/Overfill of tank	Discharge would flow northeasterly to wetlands and Spencer Brook.	40	5 sec	3
	Hose Rupture during filling of tank	Discharge would sheetflow to the south and west.	40	30 sec	20 [1/]
	Faulty Ancillary Equipment	Discharge would stay in the area and slowly flow northeasterly to wetlands and Spencer Brook.	<0.05	1 day	72
HEMTT Trucks (8): 2,500-gallon tanks of JP-8 fuel [4/]	Tank Rupture when not in use	Some of the fuel would stay in the bermed area and the remaining fuel would flow to a CB inside the motor pool area and then discharge to a stream that discharges to Spencer Brook.	---	---	2,500 [3/]
	Tank Leakage when not in use	Fuel would stay within the bermed area	<0.05	1 day	20 [1/]
	Hose Rupture during fueling of aviation vehicles on the parking apron.	Fuel would stay in the area and/or flow to CBs that discharge to Spencer Brook	40	30 sec	20
	Leaks during repairs in hangars	Fuel would stay in the hangar area	<0.05	1 day	5
Military Vehicles in Motor pool	Tank/pipe leaks	Fuel would stay in the area and enter a nearby catch basin, which ultimately discharge to Spencer Brook	<0.05	1 day	1 [1/]
UH-60 Helicopters with 600 gallon JP-8 fuel tanks	Tank Rupture on the parking apron.	Fuel would flow to CBs that discharge to Spencer Brook	---	---	600
	Tank leakage on the parking apron	Fuel would stay in the area and/or flow to CBs that discharge to Spencer Brook	<0.05	1 day	20
	Hose Rupture during fueling of aviation vehicles on the parking apron.	Fuel would flow to CBs that discharge to Spencer Brook	40	30 sec	20 [1/]
	Leaks during repairs in hangars	Fuel would stay in the hangar area	<0.05	1 day	5
CH-47 Helicopters with 1,000 gallon JP-8 fuel tanks	Tank Rupture on the parking apron.	Fuel would flow to CBs that discharge to Spencer Brook	---	---	1,000
	Tank leakage on the parking apron	Fuel would stay in the area and/or flow to CBs that discharge to Spencer Brook	<0.05	1 day	20
	Hose Rupture during fueling of aviation vehicles on the parking apron.	Fuel would flow to CBs that discharge to Spencer Brook	40	30 sec	20 [1/]
	Leaks during repairs in hangars	Fuel would stay in the hangar area	<0.05	1 day	5
55-gallon drums of used oil in hangars	Drum rupture	used oil would stay within the secondary containment area for the drum.	---	---	55
	Drum leak	used oil would stay within the secondary containment area for the drum.	<0.05	1 day	5 [1/]
167-gallon hydraulic oil tank for elevator	Tank Rupture	Discharge would stay within the WLRC Building	---	---	167
	Tank Leakage	Discharge would stay within the elevator room in the building.	<0.05	1 day	5 [1/]
Transformer T-1 : 300-gallon dielectric oil tank	Tank Rupture	discharge would flow to the north and northeast to civilian parking lot and eventually to a CB that discharges to Spencer Brook	---	---	300
	Tank Leakage	discharge would stay in the area.	<0.05	1 day	5 [1/]

Notes:
1. Indicates this scenario is considered a most probable discharge volume for secondary containment sizing purposes to comply with §112.7(c) of the SPCC regulations.
2. Loading refers to transferring oil from a tank to a truck and unloading refers to transferring oil from a truck to a tank.
3. This volume represents the worst-case discharge scenario for the Facility.
4. HEMTT Vehicles are filled with JP-8 fuel off-site, therefore, this scenario is not included in the spill predictions.

TABLE 4

CONNECTICUT ARMY NATIONAL GUARD
ARMY AVIATION SUPPORT FACILITY
BRADLEY INTERNATIONAL AIRPORT
WINDSOR LOCKS, CONNECTICUT

SPCCP Team

Position	Company	Name	Responsibilities
Administrator	LBG	Sr. Env. Engineer (203) 929-8555	Developing the SPCCP
			Amending the SPCCP when necessary
Owner/Operator	Connecticut Army National Guard - Army Aviation Support Facility	Environmental Coordinator (EC) [1/] (860) 292-4580	Overall management responsibility for the Facility
			Determining the internal division of labor for managing the SPCCP
			Reviewing the SPCCP periodically for currency
			Scheduling the five year review.
			Scheduling, conducting and managing periodic training for employees
			Maintaining inspection, testing and maintenance records
			Maintaining training and spill records
			Responsible for maintaining contract with spill response contractor
			Managing and disposing of solid or liquid waste from the Site
			Responsible for implementing emergency response and spill response procedures
			Responsible for inspections, testing and maintenance of tank systems
			Responsible for monitoring fuel delivery procedures to insure they are being followed
			Updating Emergency Contact List as needed

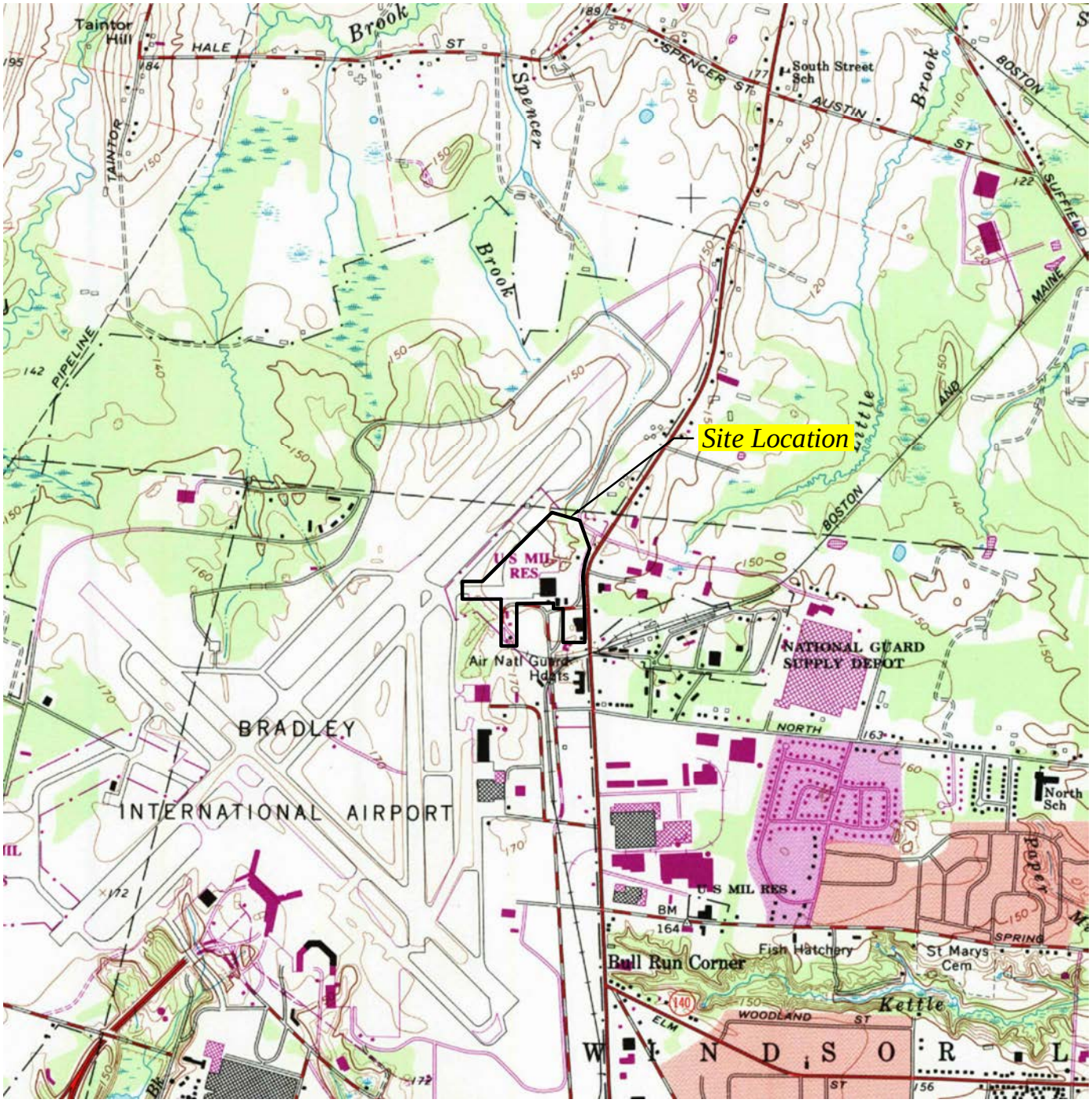
NOTES:

1. The EC shall notify Robert Dollak, the Environmental Manager, of any outstanding environmental issues pertaining to the SPCCP. The EC may delegate some of the responsibilites to designated alternates or team members that are trained to complete theassigned tasks. The following people are SPCCP Support Team Members that may be used to complete one or more of the EC responsibilities:

Off-Site Personnel	Environmental Program Manager	860-524-4945 (W) 860-883-5977 (C)
Response team	State Maintenance Staff	860-209-9371

2. Pursuant to Army Regulation 200-1, Chapter 11-4(b)(10), the Connecticut Adjutants General will designate in writing the EC at the AASF Facility.

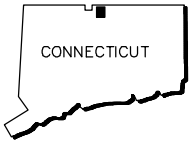
FIGURES



SOURCE: USGS TOPOGRAPHIC QUADRANGLE WINDSOR LOCKS, CONNECTICUT (PHOTOREVISED 1984).

LEGEND

PROPERTY BOUNDARY



QUADRANGLE LOCATION

0 2000

SCALE IN FEET

CONNECTICUT ARMY NATIONAL GUARD (CTARNG)
WINDSOR LOCKS ARMY AVIATION SUPPORT FACILITY (AASF)
BRADLEY INTERNATIONAL AIRPORT
WINDSOR LOCKS, CONNECTICUT

SITE LOCATION MAP

DATE	REVISED	PREPARED BY: LEGGETTE, BRASHEARS & GRAHAM, INC. Professional Groundwater and Environmental Engineering Services 4 Research Drive Suite 301 Shelton, Connecticut 06484 (203) 929-8555			
DRAWN: MRV		CHECKED: MG	DATE: 06/07/12	FIGURE: 1	

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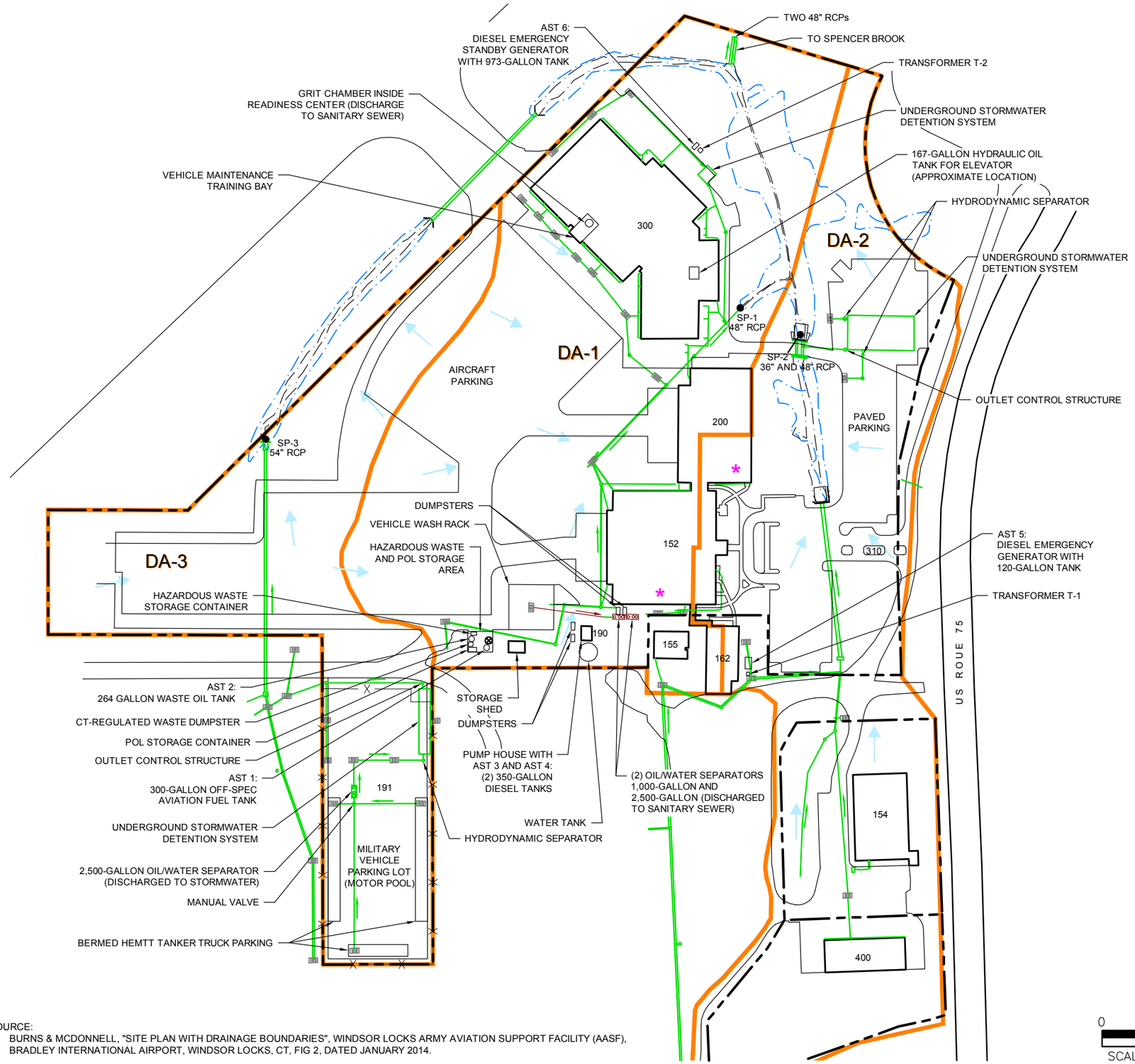

BUILDING SCHEDULE	
152	SOUTH HANGER
154	WAREHOUSE
155	GROUND SUPPORT
162	MAINTENANCE SHOP
190	PUMP HOUSE
200	NORTH HANGER
300	WINDSOR LOCKS READINESS CENTER
310	ENTRY CONTROL FACILITY (GUARD HOUSE)
400	UNHEATED STORAGE

LEGEND

- PROPERTY BOUNDARY
- FEDERAL WETLAND LIMIT
- FENCE
- CATCH BASIN
- STORM SEWER PIPE
- BELOW-GRADE STORMWATER PIPE FLOW
- DRAINAGE AREA BOUNDARY
- BELOW-GRADE SANITARY SEWER PIPE
- SURFACE WATER FLOW
- SP-1 STORMWATER SAMPLE LOCATION POINT
- SPILL KITS AND DRUM STORAGE AREA
- SPILL KIT

NOTE:
SURFACE FEATURES SUCH AS TANKS, OIL-WATER SEPARATORS, DUMPSTERS, WASH RACK, HAZARDOUS WASTE STORAGE AREA, TRANSFORMER AND DIESEL GENERATOR ARE IN APPROXIMATE LOCATIONS.

SOURCE:
1. BURNS & MCDONNELL, "SITE PLAN WITH DRAINAGE BOUNDARIES", WINDSOR LOCKS ARMY AVIATION SUPPORT FACILITY (AASF), BRADLEY INTERNATIONAL AIRPORT, WINDSOR LOCKS, CT, FIG 2, DATED JANUARY 2014.

CONNECTICUT ARMY NATIONAL GUARD (CTARNG)
WINDSOR LOCKS ARMY AVIATION SUPPORT FACILITY (AASF)
BRADLEY INTERNATIONAL AIRPORT
WINDSOR LOCKS, CONNECTICUT

FACILITY DIAGRAM WITH DRAINAGE BOUNDARIES

DATE	REVISED

PREPARED BY: LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Groundwater and Environmental Engineering Services
4 Research Drive
Suite 204
Shelton, Connecticut 06484
(203) 929-8555

DRAWN: RAC | CHECKED: MG | DATE: 10/23/15 | FIGURE: 2

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APPENDIX A

Incident Report Form and List of Spills

INCIDENT REPORT

NOTIFICATION OF OIL, HAZARDOUS SUBSTANCE AND HAZARDOUS WASTE RELEASE

1. Date/Time Report Received: _____

2. Date/Time Incident Discovered: _____

3. Installation: _____

4. Installation Commander: _____ Telephone No.: _____

5. Individual Reporting Incident: _____ Telephone No: _____

6. Individual Receiving Notification: _____ Telephone No:_____

7. Type of Substance Released: _____

8. Amount of Substance (i.e., gallons, pounds, etc.): _____

9. Cause or Source of Incident (description): _____

   _____

10. Location of Release and Specific Areas Affected: _____

    _____

11. Duration of the Spill (minutes, hours, etc.): _____

12. Source of Release Terminated: ___Yes ___ No

13. Release Substance Retained: ___ Yes ___ No

14. Release Reached Navigable Waters: ___ Yes ___ No

15. Name of Receiving Stream: _____

16. Release Extends Beyond Installation Boundary: ___ Yes ___ No

17. Distance Traveled and Other Property Affected: _____

18. Samples Taken: ___ Yes ___ No

19. Evacuation Required: ___ Yes ___ No

20. Injuries or Damage/Impact to Environment: _____

    _____

21. Current Action Taken: _____

22. Corrective Action Planned: _____

_____

23. Dollar Value of Substance Released: _____

24. Cost of Cleanup: Materials: _____

Labor: _____

Disposal: _____

TOTAL: _____

25. Integrated Contingency Plan (ICP) Available: ___ Yes ___ No Date Submitted: _____

26. Written Report to EPA Required: ___ Yes ___ No Date Submitted: _____

27. Amendment to ICP Required: ___ Yes ___ No Date Submitted: _____

28. Notification: (As Required by Federal/State Regulations):

A. State Environmental Office
CTDEEP-ENV
National Guard Armory
360 Broad Street
Hartford, CT 06105-3795
(860) 524-4945

B. Dept. of Energy & Env. Protection
Oil and Chemical Spills Division
79 Elm Street
Hartford, CT 06106
(860) 424-3338

DEEP Case # _____

Badge # _____

C. National Response Center 1-800-424-8802 (date & time): _____

D. ARNG Environmental Resources Branch (date & time): _____

29. General Comments: _____

REFERENCES:

1. Reportable Quantity: 40 CFR 302 Determination of Reportable Quantities.
2. SPCCP/ISCP: Required by AR 200-1 Chapter 8 (SPCCP, para. 8-6; ISCP, para 8-9).
3. Written report to EPA; Required by AR 200-1, Chapter 8, para. 8-11.b.
4. Amendment of SPCCP; Required by AR 200-1, Chapter 8, para. 8-6.4.

APPENDIX B

Fuel Delivery Procedures

CONNECTICUT ARMY NATIONAL GUARD
ARMY AVIATION SUPPORT FACILITY
BRADLEY INTERNATIONAL AIRPORT
WINDSOR LOCKS, CONNECTICUT

FUEL DELIVERY PROCEDURES

No alcohol or illegal drugs are permitted at the Facility at any time.

AST-3, AST-4, AST-5, AST-6

Unloading Diesel Fuel from tanker trucks to tanks:

1. Extinguish all smoking materials.

2. Tank truck operators making deliveries to the Facility shall obtain authorization to conduct fuel transfer operations from the EC or a designated alternate.

3. Park the truck with filling connections adjacent to or close to the fill port.

4. If necessary, leave the engine on to operate the pump so fuel may be unloaded into the tank; otherwise shut off the engine.

5. Set the parking brake, place wheel chocks on the wheels and place safety cones around the truck.

6. Verify that the vent is unobstructed on the tank being filled.

7. The tanker truck operator or trained CTARNG personnel shall observe the oil level using the oil level gage and record his or her name, date, time, measurement on the inventory log sheet that corresponds to the tank being used. The operator shall calculate the amount of oil required to fill the tank to 90% of its storage capacity.

8. Remove caps of truck connections and connect the fill line of tank truck to the fuel port.

9. Inspect the fill line, valves or hose (as applicable) for damage.

10. Start filling the tank.

11. If a leak is detected from any point along the hose, cease filling operations, and correct the leak if it is safe to do so. Report any spills or leaks to the EC or designated alternate. The EC or designated alternate shall follow the Emergency Procedures Flow Chart.

12. The tanker truck operator shall attend the fuel transfer operation at all times to closely monitor fuel transfer operations and product level in the tank being filled.

13. Once the tank is filled to the proper level, cease filling operations by turning off the pump and closing valves that are on the truck.

14. Disconnect the fill line being careful not to spill residual fuel that may be in the hose and place the fill cap on the fill port.

15. Following fuel transfers, delivery slips shall be submitted to the EC or designated alternate at AASF.

16. Remove wheel chocks before departing with the vehicle. Remove sign.

17. Obtain proper signatures for the fuel transfer.

Dispenser Fueling Procedure (for AST-1 off-spec aviation fuel):

1. Extinguish all smoking materials.

2. All personnel using the fuel dispenser at the Facility shall obtain authorization to load fuel from the EPM or a designated alternate.

3. Park the truck with the fill port adjacent to the fuel dispenser.

4. Turn the truck engine off and set the parking brake.

5. Place wheel chocks on the wheels.

6. Remove the nozzle from the fuel dispenser.

7. Verify that the vent is unobstructed on AST-1.

8. Remove cap off the truck fuel port and position fill line in the fuel port.

9. Inspect the dispenser fill line for leaks or damage.

10. Depress the handle on the fuel dispenser to start the flow of fuel.

11. If a leak is detected from any point along the fill line, cease fuel transfer operations and correct the leak if it is safe to do so. Report any spills or leaks to the EC or designated alternate. The EC or designated alternate shall follow the Emergency Procedures Flow Chart.

12. The truck operator shall closely monitor fuel transfer operations.

13. Once the tank is filled, cease fuel transfer operations by releasing the handle on the fuel dispenser and placing the handle back on the dispenser.

14. Place cap on the truck fill port.

15. Fuel transfers shall be documented with the EC or designated alternate at AASF.

16. Obtain proper signatures for the fuel transfer.

AST-2 (264-gallon used oil tank) and AST-3 (Off-spec fuel

Manual transfer of oil or fuel to tank (from small containers – less than 5 gallons):

1. Extinguish all smoking materials.

2. Check the oil level gage to make sure there is space in the tank for the oil to be added.

3. Carefully pour the contents of the used oil into the tank using a funnel and avoiding drips.

4. Monitor the fuel gage after transfer to make sure the tank hasn't reached its capacity.

Removing used oil using vacuum trucks (AST-2 only):

1. Extinguish all smoking materials.

2. Non-CTARNG personnel removing oil from tanks at the Facility shall obtain authorization to conduct fuel transfer operations from the EC or a designated alternate.

3. Park the vacuum truck outside of the hazardous waste storage area gate with filling connections close to the gate. Bring enough hose to reach the tank.

4. If necessary, leave the engine on to operate the vacuum pump so used oil may be loaded onto the truck; otherwise shut off the engine.

5. Set the parking brake and place wheel chocks on the wheels.

6. The vacuum truck operator shall inspect the oil level in the tank and compare it to the available storage capacity of the truck to determine if the truck has enough storage capacity.

7. Connect the tank truck hose to the extraction point or lower the hose into the tank.

8. Inspect the hose and valves for damage.

9. Start filling the tank on the truck.

10. If a leak is detected from any point along the hose, cease filling operations, and correct the leak if it is safe to do so. Report any spills or leaks to the EC or designated alternate. The EC shall follow the Emergency Procedures Flow Chart.

11. The vacuum truck operator shall attend the fuel transfer operation at all times to closely monitor fuel transfer operations and product level in the tank being filled.

12. Once the volume of oil to be removed is completed, cease filling operations by turning off the vacuum and closing valves that are on the truck.

13. Disconnect the fill line being careful not to spill residual oil that may be in the hose and place the cap on the extraction point.

14. Document fuel transfer with the EC or designated alternate at AASF. If any used oil remains in the tank, then document the approximate quantity.

15. Remove wheel chocks before departing with the vehicle.

16. Obtain proper signatures for the fuel transfer.

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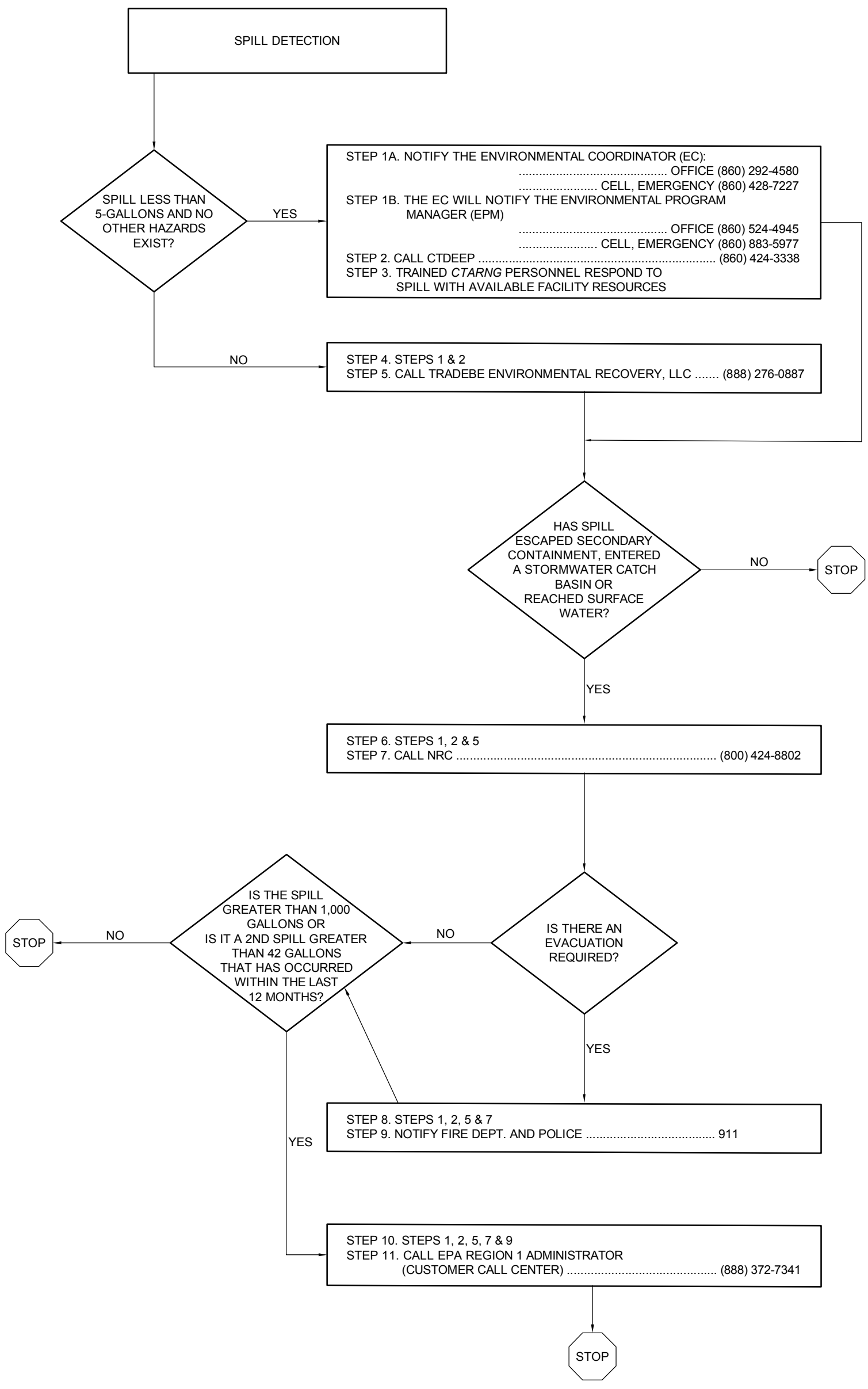
APPENDIX C

Emergency Procedures Flowchart and Emergency Spill Response Procedures

CTARNG - AASF
EMERGENCY PROCEDURES FLOW CHART FOR OIL SPILLS



OCTOBER 2015

O:\DWG\CT Army National Guard\Windsor Locks\2015\Flow Chart - Oil Spill.dwg, Layout1, 10/15/2015 10:19:04 AM, AcroPlot.pc3

CONNECTICUT ARMY NATIONAL GUARD
ARMY AVIATION SUPPORT FACILITY
BRADLEY INTERNATIONAL AIRPORT
WINDSOR LOCKS, CONNECTICUT

EMERGENCY SPILL RESPONSE PROCEDURES

A minimum of spill emergency equipment is maintained on-site because the primary emergency response during a significant spill event will include communicating with the appropriate oil spill response contractor companies and agencies. The Emergency Procedures Flow Chart in this appendix will be used to guide the response at the Facility and may include evacuating the affected area and taking actions to prevent a spill from escaping secondary containment areas or entering surface water. For the purposes of this document, a significant spill event will be defined as one of the following:

1. a spill of 5 gallons or more; or
2. a spill of any size that personnel cannot safely reach because of another hazard (electrical, fire, explosion, chemical, physical, etc.).

The contents and locations of emergency spill response supplies that are maintained at the Facility for use by personnel during an incidental "minor" spill is noted in Section 4.

The Facility relies on the truck operator to use their cell phone, so he or she can communicate with the EC or designated alternate in emergency situations. Once the EC or designated alternate is notified of an emergency, he/she will notify the necessary agencies and spill clean-up contractor immediately. Tradebe Environmental Services, LLC (Tradebe) is the on-call spill response contractor to be contacted in the event of a significant spill. Tradebe has the ability to respond quickly (within 2 hours) to a spill and has the necessary resources to remediate a spill according to applicable local, state and federal regulations. The oil spill control and emergency response procedures for the Facility are presented below.

1. Protect yourself and co-workers before taking any actions to mitigate the spill.
2. Identify the source of the spill and type of fluid involved (if the spill is related to fuel delivery, then the operator should discontinue filling or unloading operations and immediately shut down power to the pump to minimize the quantity spilled).
3. If safe to do so, try to close valves or de-energize pumps to stop the flow of oil and minimize the size of the spill.
4. Report the spill to the EC or designated alternate as soon as possible.
5. The truck operator or the person discovering the spill will communicate the situation to the EC or designated alternate, who will then determine if it is an

incidental (minor) or significant spill and contact the appropriate agencies and off-site services (e.g., spill response contractors) for additional clean-up help if it is required.

6. Use personal protective equipment and safety supplies (goggles, gloves, boots, caution tape, safety cones, etc.) as needed.
7. Isolate and contain the spill (if minor) using safety cones and absorbent materials.
8. Verify that the entire spill has been identified and contained.
9. If the spill is minor, clean-up the spill with spill kit supplies. If the spill is significant, then clean-up should be completed using a licensed spill response contractor (Tradebe).
10. Place used clean-up supplies in dedicated dumpsters used for temporarily storing Connecticut-Regulated waste or use disposable plastic bags/drums. Do not throw away used clean-up supplies in the trash.
11. Use the Incident Report attached in Appendix A of this plan to summarize and document the release. Store the Incident Report in a dedicated folder with the SPCCP for at least 10 years.
12. Replace any spill supplies or equipment that was used in the response and clean-up.
13. The EC or designated alternate shall coordinate for proper off-site disposal of oil or used clean-up supplies.

Prepare a report of the spill incident which includes the date, time, location, material spilled, quantity, source, clean-up methods, name of contractor responding to the spill (if applicable), injuries sustained (if applicable) and damage estimate. Submit the report to the CTDEEP if they request it and retain a copy of the report onsite for at least five years.

APPENDIX D

CTDEEP Spill Response Procedures

Connecticut Department of Energy & Environmental Protection

Reporting Requirements for Spill Incidents

Report of Pollution Incident by Petroleum or Chemical Products as required by Chapter 446k, Section 22a-450, of the Connecticut General Statutes.

- the master of any ship, boat, barge or other vessel, or
- the person in charge of any terminal for the loading of any oil or petroleum or chemical liquids or solid, liquid or gaseous products or hazardous wastes, or
- the person in charge of any establishment, or
- the operator of any vehicle, trailer or other machine

which by accident, negligence or otherwise causes the discharge, spillage, uncontrolled loss, seepage or filtration of oil or petroleum or chemical liquids or solid, liquid or gaseous products or hazardous wastes, **shall immediately report** such facts to:

The Department of Energy and Environmental Protection (DEEP), Emergency Response Unit, **860-424-3338 or toll free 1-866-DEP-SPIL (1-866-337-7745)**, 24 hours/day. Should these number become unavailable for any reason, call 860-424-3333.

Immediately after the spill you are required to report facts such as:

- the location;
- the quantity and type of substance, material or waste;
- the date and the cause of the incident;
- the name and address of the owner; and
- the name and address of the person making the report and his relationship to the owner.

Note: Unless specifically requested, the DEEP does not require a written submission when reporting a spill.

Penalties

Any person who fails to report incidents as required by Chapter 446k, Section 22a-450 may be fined not more than $1,000 and the employer of such person not more than $5,000.

Federal Reporting

Incidents that are required to be reported under the Emergency Planning and Community Right-to-Know, SARA Title III, CERCLA, RCRA, Federal Code of Regulations Title 40 (Environmental Protection) and/or Title 49 (Transportation) are reportable to the State Emergency Response

Commission (Connecticut Department of Energy and Environmental Protection) at 860-424-3338 and the National Response Center, 800-424-8802 and the local community emergency coordinator. A report to the local fire department is also recommended (911 throughout Connecticut.).

Statutory References

- CGS 22a-450: Report of Discharge, "Any and Immediate"
- CGS 22a-451: Responsibility, "Strict Liability"
- CGS 22a-454: Clean-up must be performed by a permitted spill contractor

Content Last Updated November 7, 2011

APPENDIX E

Inspection Forms, Fuel Inv. Forms, O/W Sep. Maint. Log and Drainage Log

Monthly
SPCC Inspection Form

Facility: CTARNG - AASF BRADLEY INTERNATIONAL AIRPORT WINDSOR LOCKS, CONNECTICUT Inspection Date _____ Inspection performed by _____		AST-1 AND DIESEL DISPENSER	AST-2	AST-3 AND AST-4	AST-5	AST-6	Comments and Corrective Action
		300-GALLON OFF-SPEC FUEL TANK	264-GALLON USED OIL TANK	TWO 350-GALLON DIESEL TANKS IN PUMP HOUSE	120-GALLON DIESEL TANK FOR E. GEN. (BLDG. 162)	973-GALLON DIESEL (BELLY) TANK FOR E. GEN (WLRC)	
Complete questions 1-9 for each AST (including ancillary equipment) that is listed in the SPCC Plan. Use additional sheets as needed.							
1	Perform a visual inspection of the tank/dispenser, the secondary containment and surrounding ground to identify leaks, stains or spills.	☐OK ☐Not OK	☐OK ☐Not OK	☐OK ☐Not OK	☐OK ☐Not OK	☐OK ☐Not OK	
2	Check primary tank for water. (Use water finding paste if required. All water must be removed, disposed of properly and documented on this form.)	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	
3	Drain valves operable and in the closed position.	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	
4	Tank liquid level gauge readable and in good condition? (All tanks must have a liquid level gauge installed.)	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	
5	Check that all tank openings and fill ports are capped or properly sealed.	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	
6	Overfill spill buckets on fill ports contain oil or oily water.	☐Yes ☐No ☐ N/A	☐Yes ☐No ☐ N/A	☐Yes ☐No ☐ N/A	☐Yes ☐No ☐ N/A	☐Yes ☐No ☐ N/A	
7	Inspect condition of any aboveground piping, pipe supports, valves or expansion joints.	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	
8	Any spilled fuel in secondary containment?	☐Yes ☐No	☐Yes ☐No	☐Yes ☐No	☐Yes ☐No	☐Yes ☐No	
9	Do spill supplies need to be replenished? Does waste from spill cleanup activities need to be removed?	☐Yes ☐No	☐Yes ☐No	☐Yes ☐No	☐Yes ☐No	☐Yes ☐No	

Monthly
SPCC Inspection Form

Facility: CTARNG - AASF BRADLEY INTERNATIONAL AIRPORT WINDSOR LOCKS, CONNECTICUT Inspection Date _____ Inspection performed by _____		FUEL TRANSFER AREA FOR AST-1 AND AST-2	FUEL TRANSFER AREA FOR AST-3 AND AST-4	FUEL TRANSFER AREA FOR AST-5	FUEL TRANSFER AREA FOR AST-6	AVIATION PARKING APRON (UH-60 AND CH-47 HELICOPTERS	Comments and Corrective Actions
Answer Questions 10-12 for the fuel transfer areas and aviation parking apron							
10	Any spills, oil stains, debris or other fire hazards on the ground	☐Yes ☐No	☐Yes ☐No	☐Yes ☐No	☐Yes ☐No	☐Yes ☐No	
11	Inspect the fuel transfer area or parking apron for good housekeeping practices. Any issues with snow/ice preventing the use of these areas?	☐Yes ☐No	☐Yes ☐No	☐Yes ☐No	☐Yes ☐No	☐Yes ☐No	
12	Inspect the areas for obstructions between the parking location of the fuel truck and the fill port.	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	

Facility: CTARNG - AASF BRADLEY INTERNATIONAL AIRPORT WINDSOR LOCKS, CONNECTICUT Inspection Date _____ Inspection performed by _____		MOTOR POOL AND HEMTT PARKING AREA	DRUM STORAGE AREAS FOR NORTH AND SOUTH HANGARS	HYDRAULIC OIL FOR ELEVATOR (WLRC)	TRANSFORMER T-1 (BLDG 162)	TRANSFORMER T-2 (WLRC)	Comments and Corrective Actions
Answer Questions 13-18 and 20 for Motor Pool and HEMTT Parking Area. **Answer Questions 17-20 for the drum storage areas.** **Answer Questions 17, 18 and 20 for the hydraulic oil and transformers.**							
13	Any puddling in bermed HEMTT parking areas. If so, is there any oily water or an oil sheen.	☐Yes ☐No					
14	Is the O/W separator and/or hydrodynamic separator due for maintenance or in need of maintenance (refer to Section 7.2 of SPCCP and the O/W sep. log).	☐Yes ☐No					
15	Are drip pans underneath military vehicles in the motor pool.	☐Yes ☐No					
16	Drain valves in motor pool and HEMTT parking area in good working order.	☐OK ☐Not OK ☐ N/A					
17	Any spills, oil stains, debris, or other fire hazards on the ground or on concrete pads, as applicable.	☐Yes ☐No	☐Yes ☐No	☐Yes ☐No	☐Yes ☐No	☐Yes ☐No	

Monthly
SPCC Inspection Form

18	Any damage to berms, drums, transformers, or hydraulic oil tank for elevator, as applicable.	☐Yes ☐No	☐Yes ☐No	☐Yes ☐No	☐Yes ☐No	☐Yes ☐No	
19	Any oil in secondary containment area for drums.		☐Yes ☐No				
20	Do spill supplies need to be replenished? Does waste from spill cleanup activities need to be removed?	☐Yes ☐No ☐ N/A	☐Yes ☐No ☐ N/A	☐Yes ☐No ☐ N/A	☐Yes ☐No ☐ N/A	☐Yes ☐No ☐ N/A	

Notes: 1. Any items answered as “Not OK” or “Yes” shall be brought to the attention of the EC or designated alternate immediately.
2. Completed inspection forms shall be signed and dated and brought to the EC or designated alternate in a timely manner.

Annual
SPCC Inspection Form

Facility: CTARNG - AASF BRADLEY INTERNATIONAL AIRPORT WINDSOR LOCKS, CONNECTICUT Inspection Date _____ Inspection performed by _____		AST-1 AND DIESEL DISPENSER	AST-2	AST-3 AND AST-4	AST-5	AST-6	Comments and Corrective Action
		300-GALLON OFF-SPEC FUEL TANK	264-GALLON USED OIL TANK	TWO 350-GALLON DIESEL TANKS IN PUMP HOUSE	120-GALLON DIESEL TANK FOR E. GEN. (BLDG. 162)	973-GALLON DIESEL (BELLY) TANK FOR E. GEN (WLRC)	
• ***This inspection must be completed annually. During the month that this inspection is being performed the monthly inspection MUST also be performed.*** • ***The annual inspection is only required for fixed storage tanks. The transformers, drums and hydraulic oil reservoir for the elevator in the WLRC are NOT required to have an annual inspection.***							
Tank Secondary Containment							
1	Is secondary containment structure in satisfactory condition? (check for cracks, damage, corrosion, paint failure, etc.)	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	
2	Containment valves operable and locked?	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	
Tank Foundation and Supports							
3	Inspect tank supports, tank cradle or tank legs for damage, corrosion and paint failure, as applicable.	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	
4	Inspect floor or ground where tank is resting for cracks, damage and settling, as applicable.	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	
5	Inspect area around tank to ensure water is able to drain away from tank. There should not be any evidence of ponding water around the tank	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	
6	Is tank properly grounded and strap secured and in good condition, if applicable.	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	

Annual
SPCC Inspection Form

Facility: CTARNG - AASF BRADLEY INTERNATIONAL AIRPORT WINDSOR LOCKS, CONNECTICUT Inspection Date _____ Inspection performed by _____		AST-1 AND DIESEL DISPENSER	AST-2	AST-3 AND AST-4	AST-5	AST-6	
		300-GALLON OFF-SPEC FUEL TANK	264-GALLON USED OIL TANK	TWO 350-GALLON DIESEL TANKS IN PUMP HOUSE	120-GALLON DIESEL TANK FOR E. GEN. (BLDG. 162)	973-GALLON DIESEL (BELLY) TANK FOR E. GEN (WLRC)	
Tank and Tank Equipment							
7	Inspect all accessible sides of the tank for dents, buckling, bulging, paint failure and cracking.	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	
8	Inspect the visible connections to the tank for tightness, as well as the bolts, nuts and washers for condition.	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	
9	Are visible electrical conduits and wiring in good condition?	☐OK ☐Not OK	☐OK ☐Not OK	☐OK ☐Not OK	☐OK ☐Not OK	☐OK ☐Not OK	
10	Are tank vents free from obstructions? Are emergency vents operable?	☐OK ☐Not OK	☐OK ☐Not OK	☐OK ☐Not OK	☐OK ☐Not OK	☐OK ☐Not OK	
11	Test emergency shutoff to ensure it is working properly, as applicable.	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	
12	Test the tank liquid level gauge for proper operation as per manufacturer's standards.	☐OK ☐Not OK	☐OK ☐Not OK	☐OK ☐Not OK	☐OK ☐Not OK	☐OK ☐Not OK	
13	Is the interstitial leak monitoring device in proper working condition, if applicable?	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	
14	Ensure that all labels, tags and signs are intact and readable	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	☐OK ☐Not OK ☐ N/A	

Notes: 1. Any items that are "Not OK" shall be brought to the attention of the EC or designated alternate immediately.
2. Completed inspection forms shall be signed and dated and brought to the EC or designated alternate in a timely manner.

HAZARDOUS MATERIALS STORAGE INVENTORY FORM

Facility Name_____ STORAGE LOCATION_____

SLN	FSC (2)	NINN (3)	PRODUCT NAME (4)	MANUFACTURER (5)	UI (6)	UNIT OF MEASURE (7)	QTY (8)	IN DATE (9)	SHELFLIFE PERIOD (10)	MSDS # (11)	HCC (12)	COMMENTS
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11A												
11B												
12												
13												
14												
15												
16												
17												
18												

(1) Shelf Location Number
(2) First Four Numbers of NSN
(3) Remaining number of NSN
(4) Product Name
(5) Manufacturer Name
(6) Unit of Issue: BT-Bottle, DM-Drum, CN-Can, BX-Box
(7) Unit of Measure: OZ, QT, GAL, PT
(8) Quantity Present at time of Inventory
(9) Shelflife - Product Good Until Date
(10) Shelflife Period in Months
(11) Material Safety Data Sheet Identification Sheet
(12) Hazardous Characteristics Code

Date of Inventory: _____ Signature: _____ PAGE 1 of 2

APPENDIX E

CONNECTICUT ARMY NATIONAL GUARD
ARMY AVIATION SUPPORT FACILITY
BRADLEY INTERNATIONAL AIRPORT
WINDSOR LOCKS, CONNECTICUT

O/W Separator Maintenance Log

O/W Sep. ID No.	O/W Sep. Location	Date	Inspector			O/W Separator Measurements			O/W Separator Maintenance		
			Name	Title	Signature	Sand (in.) 1/	Oil & Grease (in.) 1/	Working Depth (in.) 2/	Clean-Out Date 1/	Clean-out Contractor 1/	Other

Notes

1. The O/W separator shall be completely cleaned by a certified waste hauler as often as necessary to assure that the O/W separator continues to operate effectively and efficiently. The quantity of oil, grease and grit located within the O/W separator at any time shall not exceed twenty percent (20%) of the distance between the O/W separator base and the static liquid level. Transport and disposal shall be completed in accordance with Section 5.0 of the SPCCP.

2. The working depth is the distance between the separator base and the static liquid level.

ADDITIONAL COMMENTS

APPENDIX E

CONNECTICUT ARMY NATIONAL GUARD
ARMY AVIATION SUPPORT FACILITY
BRADLEY INTERNATIONAL AIRPORT
WINDSOR LOCKS, CONNECTICUT

Secondary Containment Drainage Log

This log is to be completed whenever liquid is removed from an interstitial space of a double-walled tank. Transport and dispose of this liquid in accordance with Section 5.0 of this Plan. NEVER DISCHARGE THIS LIQUID TO STORM DRAINS, DRYWELLS OR FLOOR DRAINS!

Tank ID No.	Date	Volume of Liquid Removed	Transport and Disposal Company	Manifest ID No.	Signature

APPENDIX F

SPCC Sign-In Sheet for Annual Training

APPENDIX F

CONNECTICUT ARMY NATIONAL GUARD
ARMY AVIATION SUPPORT FACILITY
BRADLEY INTERNATIONAL AIRPORT
WINDSOR LOCKS, CONNECTICUT

Annual Training Agenda and Roster

Synopsis of SPCC Material Covered in the Annual Training:

1. **What is safe and efficient operating procedures for oil-handling equipment used at the Facility**
2. **Proper procedures to unload, receive and store oil handled at the Facility**
3. **Hazards for oil and fuel**
4. **Spill response and control procedures in the event of a spill**
5. **Proper internal and external reporting procedures**
6. **Proper procedures to inspect the Facility and monitor fuel inventory.**
7. **Emergency Procedures**
8. **Snow Removal Management**
9. **Other:**

Attendee

Name (Print)	**Signature**	**Military ID Number**

Instructor: _____

Date: ____/____/____ Time: _____:_____

APPENDIX G

Emergency Contact List

EMERGENCY CONTACT LIST

Connecticut Army National Guard
Army Aviation Support Facility
Bradley International Airport
Windsor Locks, Connecticut

1. CTARNG Facility Personnel:	
Environmental Coordinator– EC (Primary Contact)	(860) 292-4580 (office)
2. CTARNG Off-Site Personnel:	
Robert Dollak – EPM Environmental Manager (EPM)	(860) 524-4945 (office) (860) 883-5977 (cell) Robert.Dollak@us.army.mil
3. CTDEEP – Spill Reporting (notify with any size spill)	(860) 424-3338
4. Tradebe Environmental Services, LLC Spill Response Contractor (notify if spill is >= 5 gallons or other hazards exist)	1-888-276-0887
5. National Response Center (notify if release travels beyond secondary containment, enters a stormwater catch basin or directly impacts surface water)	1-800-424-8802
6. Windsor Locks Police Department	911 (Emergency) (860) 627-1461
7. Windsor Locks Fire Department	911 (Emergency) (860) 627-1461
8. Connecticut State Police	911 (Emergency) (860) 685-8190 (other)
9. St. Francis Hospital 114 Woodland St. Hartford, CT	(860) 714-4000 (Main No.)
10. EPA – Region 1 Administrator	(888) 372-7341 (Customer Call Center)

APPENDIX H

Certification for the Applicability of the Substantial Harm Criteria

CERTIFICATION OF THE APPLICABILITY OF THE SUBSTANTIAL HARM CRITERIA

Facility Name: Connecticut Army National Guard – Army Aviation Support Facility

Facility Address: Bradley International Airport, Windsor Locks, Connecticut

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

   Yes_____ No___X__

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest above-ground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?

   Yes _____ No___X___

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III of Appendix C to the FRP rule or a comparable formula [1]) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environment, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Plans: Fish and Wildlife and Sensitive Environments" (See Appendix E to this part, Section 13, for availability) and the applicable Area Contingency Plan.

   Yes _____ No__X____

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III of Appendix C to the FRP rule or a comparable formula [1]) such that a discharge from the facility would shut down a public water intake[2]?

   Yes_____ No__X____

5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil discharge in an amount greater than or equal to 10,000 gallons within the last 5 years?

   Yes_____ No__X____

CERTIFICATION OF THE APPLICABILITY OF THE SUBSTANTIAL HARM CRITERIA (continued)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry or those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

_____
Signature

_____
Name (please type or print)

_____
Title

_____
Company

_____
Date

1. If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

2. For the purposes of 40 CFR Part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).

H:\CT Army National Guard\Windsor Locks - SPCC\Appendix H\Appendix H - Certification of Substantial Harm.docx

APPENDIX I

Secondary Containment Calculations for AST-3 and AST-4 Diesel Tanks in Pump House

CONNECTICUT ARMY NATIONAL GUARD
ARMY AVIATION SUPPORT FACILITY
BRADLEY INTERNATIONAL AIRPORT
WINDSOR LOCKS, CONNECTICUT

SECONDARY CONTAINMENT CALCULATIONS FOR AST-3 AND AST-4 - DIESEL TANKS IN PUMP HOUSE

							Secondary Containment Dimensions				
Area	**Tank ID**	**Mat'l Stored**	**Indoors or Outdoors**	**Construction Material of the Tank**	**Size of Tank (gal.)**	**Volume of Tank below the height of the berm wall (gal.)**	**Length (ft)**	**Width (ft)**	**Height (ft)**	**Overall Volume (gal.)**	**Secondary Containment Adequately Sized**
Pump House	AST-3	Diesel Fuel	Indoors	Steel	350	0	24.0	20.0	0.16	574	yes
Pump House	AST-4	Diesel Fuel	Indoors	Steel	350	0	24.0	20.0	0.16	574	yes

Notes
1. The volume occupied by pump equipment within secondary containment and below the height of the berm is considered negligible.

Preliminary Assessment Interview Questionnaire

Date of Interview: 11-29-17

Installation Name: Army Aviation Support Facility

Interviewer

Name: Jordan Martin

Affiliation: CT Haz-Waste Manager

Interviewee

Name of interviewee: CW3 Jason Lerette

Current affiliation: Aircraft Maintenance Supervisor

Role or activity with the installation (or other entity Years working with installation (or other entity):

- Supervise aircraft maintenance, Environmental Compliance Off.
- 29 years

DRAFT

How would you like to be contacted for any follow up questions?

Telephone number:

* Email: jason.b.lerette.mil@mail.mil

May we use your full name in the PA report? (Yes) No (circle one)

If not, you will be identified by your role. Yes No (circle one)

What entity/organization performs the Environmental Performance Assessment System audits?

CFMO-Environmental / Contractor

Where can I find previous installation ownership information?

Preliminary Assessment Interview Questionnaire

AFFF Use

What can you tell us about the history of aqueous film forming foam (AFFF) at the installation? Was it used for any of the following activities, circle all that applies? Identify these locations on an installation map.

Maintenance

Fire Training - on washrack, leads to OWS. 2 years

Firefighting (Active Fire)

Crash

Pest Management

Non-Technical/Recreational

Fire Suppression System

Metals Plating Facility

Waterproofing Uniforms

Laundry Facilities (on post)

Other

DRAFT

Is AFFF, being used at the installation? Identify all possible locations.

- All portal AFFF units are discontinued and swapped for drychemical units. Still use AFFF fire supression in two main hangars

What type of AFFF has been/is being used (3%, 6%)? Manufacturer (3M, Dupont, Ansul)?

- Aero-lite 3% (National Foam), Tri-max ESF 3% (ESF Enterprise), FC-203CF Light Water 3% (3M)

During what timeframe was AFFF used at each location?

- currently have supression system
- 2009 to 2016 for portable AFFF systems

What was the frequency of use at each location?

- once a year for routine maintenance & training

Preliminary Assessment Interview Questionnaire

Did AFFF come in tanks? Above ground storage/ below ground storage? Is there a tank inventory and/or specifications on the tanks (tank type, size of tanks, double-walled)?

- one big tank for main hangars
- 60 gal portable tanks (no longer used)

Did/do the AFF tank lots expire? What was/is done with expiring AFFF (discharged on the ground surface, sent to Defense Logistics Agency or local recipient, used in training event for the purpose of expending)?

- portable tanks expired annually, expired material was used in training and discharged to OWS then to POTW

If AFFF was discharged/used at the installation, can the area be located on a map?

Yes, wash rack

Is there someone to talk to about materials ordered for the installation?

Nick Berube

Are you aware of supply/inventory records?

Are any building constructed with AFFF dispensing systems? How often are these systems tested?

- yes, one tank supplies Hangars 200 & 152 on site map. System is inspected & sampled quarterly, material replaced as needed. 900 gal tank in room 102 between two main hangars

Who responds to fire emergencies now for the installation? Was it always this way? If not how was it managed prior to ARNG taking over operations of the installation?

- Bradley Int'l airport fire department / Windsor Locks F.D.

Are there specific crash incidents with incident reports? If so, may we please copy these reports? Who (entity) was the responder?

None..

DRAFT

Preliminary Assessment Interview Questionnaire

Was AFFF used for forest fires or fire management on post/off post? If so, please describe what happened and who was involved?

None

Are there mutual aid/use agreements between county, city, local fire department? Please list, even if informal. If formalized, may we have a copy of the agreement?

Can you recall specific times when city, county, state personnel came on post for training? If so, please state which state/county agency, military entity? Do you have any records, including photos to share with us?

No outside training events

Did military routinely or occasionally fire train off post? List units that you can recall used/trained at various areas.

None

Did individual units come with their own safety personnel, did they also bring their own AFFF? Was training with AFFF part of these exercises? How were emergencies handled under these circumstances?

None

Are you aware of any other creative uses of AFFF? If so, where and who was involved?

None

DRAFT

Preliminary Assessment Interview Questionnaire

Are there past studies you are aware of with environmental information on plants/animals/groundwater/soil types, etc. Such as Integrated Cultural Resources Management Plans or Integrated Natural Resources Management Plans?

- phase I, II Site Investigation
- Cultural Resources management Plan applies

What other records might be helpful to us (environmental compliance, investigation records, Admin record) and where can we find them?

If there is an active airfield, what is the contact information for the flight line officer?

- yes, flight control for Bradley International Airport

Do you recommend anyone else we can interview? If so, do you have contact information for them?

DRAFT

STATE OF CONNECTICUT

MILITARY DEPARTMENT

STATE ARMORY, 360 BROAD STREET, HARTFORD, CONNECTICUT 06105-3780

For Official Use Only
2/27/2018

Dear Sir or Madam:

This letter is written as a requirement of the hazardous waste regulations (40 CFR 262.16(b)(8)(vi) adopted by the State of Connecticut requiring small quantity generators of hazardous waste make arrangements with local authorities who may be involved in emergency response. The purpose of this material is to familiarize your agency with the layout of Connecticut Army National Guard's (CTARNG) Army Aviation Support Facility (AASF), the location of the Hazardous Waste Storage Area (HWSA), and the properties of the hazardous waste generated at this facility.

AASF is a 37.9 acre aviation maintenance facility located on Route 75 adjacent to Bradley International Airport in Windsor Locks, Connecticut. Its primary function is a helicopter operations center where minor repairs, servicing, and refueling are completed to maintain aviation readiness. As a result, hazardous waste is generated and stored onsite until it is transported for disposal at an approved treatment, storage and disposal facility (TSDF).

In accordance with 40 CFR 262.16(b)(8)(vi)(2) we are providing you with the following supplemental information:

- Site plan disclosing the location of the hazardous waste storage area, satellite accumulation points, fire extinguishers, first aid kits, spill response kits, eyewash/safety showers, etc.
- The properties of hazardous waste handled at the facility and associated hazards
- Evacuation routes

We are requesting that your agency provide emergency, fire, and/or medical services in the event of a hazardous material/waste incident at CTARNG's AASF. If you have read the enclosed information and agree to provide emergency services in the event of a hazardous material/waste emergency please complete and return the Preparedness and Prevention Plan Acknowledgement form. Please note if we do not receive a response within thirty (30) days we will assume you agree to the arrangements described above and that our attempt has been made to notify responding agencies of the hazards associated with our site.

If you have any questions or concerns regarding the supplied information please contact me directly at (860)493-2727.

Sincerely,

Jordan E. Martin
Hazardous Waste Program Manager
State of Connecticut Military Department
jordan.e.martin4.nfg@mail.mil

Section I: Preparedness and Prevention Plan

A. Introduction

The Connecticut Army National Guard (CTARNG) Army Aviation Support Facility (AASF) is submitting this information to fulfill the obligations set forth in 40 CFR 262.16(b)(8) regarding hazardous waste preparedness and prevention. AASF is a registered Small Quantity Generator (SQG) with an EPA ID# CTD983869785. This designation means the hazardous waste generation onsite is greater than 100kg but less than 1000kg per month and accumulated hazardous waste never exceeds 1000kg at any one time (40 CFR 262.34(d) & CGS 22a-449(c)-102(a)(1)(O)). Per regulation cited above and Connecticut General Statutes (CGS), SQG's must attempt to make arrangements with local emergency response teams to familiarize them with the layout of the facility, the properties of hazardous waste handled at the facility, entrance roads into the facility, evacuation routes, and the types of injuries that can result from fires, explosions, or releases of hazardous waste at the facility.

B. Design and Operation of Facility

The facility consists of primarily two main hangars with attached offices, the Windsor Locks Readiness Center (WLRC), two storage buildings, a maintenance shop and fenced in motor pool. The site also contains a hazardous waste storage area (HWSA), above ground storage tanks (AST's), a pump house, water tower and emergency generators. Please note that building 154 is currently home to the 14th Civil Support Team and is considered part of the facility. The 14th CST is in the process of moving to a new building at CTARNG's Camp Hartell, therefore the site map does not include building 154 because its future use has not been determined.

As a result of the operations and services rendered, hazardous materials/wastes are purchased/created, stored, and finally transported off site for disposal. The satellite accumulation points (SAP) are located in in the two main hangars (buildings 152 and 200) and one in the WLRC. The Hazardous Waste Storage Area (HWSA) is located in a concrete hazardous materials shed located between building 152 and the motor pool. This room is equipped with a hazardous waste storage cabinet, one (1) two (2) drum spill containment pallet and spill kit. This room is inspected for compliance weekly and is locked at all times. The universal waste storage area is located in a blue cabinet in building 152 and in room 1164 of the WLRC.

C. Required Equipment

1. Internal Communication and Alarms
    a. Alarm pull stations are located throughout the facility. Most pull stations are found by the nearest exit and will notify employees of a potential hazardous situation requiring evacuation once activated.

    b. The HWSA is not equipped with an internal alarm system and a cell phone is required prior to entry.

2. External Communication and Alarms

a. Alarm pull stations noted above also directly dispatch to Bradley International Airport Fire Department.

b. Landline telephones are located in all offices and are capable of calling outside of the network. Please note that you must dial number "9" and then the external number when using an internal phone.

3. Portable Fire Extinguishers
   a. 20 lb portable fire extinguishers (Class ABC) are located throughout the site and are note by "FE" on the site map.

   b. 10 x 40 gallon mobile Aqueous Fill Forming Foam suppression systems can be found throughout the site. Primarily kept in the hangars 152 and 200.

4. Fire Hydrants/Systems
   a. Fire hydrants can be found throughout the site.

   b. Nearest water source to the HWSA is a fire hydrant outside of the water tower.

   c. All buildings are equipped with fire sprinkler systems (except for the HWSA and materials shed).

5. Personal Protective Equipment
   a. Reusable safety and protective equipment is available throughout the site and includes, but not limited to:
      - Face shields, safety glasses/goggles
      - Ear plugs/muffs
      - Nitrile, neoprene, polyvinylchloride gloves

6. Eyewash and safety showers are noted by "EW/SS" on site map.

7. Spill kits are noted as "SK" on the site map and are equipped with, but not limited to:
   - White (oily only) and grey (universal) absorbent spill pads
   - White and grey absorbent socks of various lengths
   - Yellow "May contain hazardous waste" bags
   - Nitrile gloves, safety goggles, white Tyvek suit
   - Neutral Absorbent (Speedi-dri)
   - Containers housing spill equipment can be used to collect spill residues

D. Testing and Maintenance of Equipment

Eyewash/safety showers and spill kits are inspected monthly. Items are fixed/restocked as necessary. Fire extinguishers are inspected monthly and first aid kits are restocked as necessary. All equipment is inspected by onsite personnel and is maintained in ready, working order for the potential of an emergency situation.

E. Required Aisle Space

CTARNG complies with Connecticut Department of Energy and Environmental Protection memorandum requiring 30 inches of isle space allowing for the movement of emergency equipment.

F. Arrangement with Local Authorities

This plan has been sent out to local authorities in which a letter of acknowledgement has been requested in return to document the efforts made.

Potential Responding Agencies:

EMERGENCIES DIAL 911

Tradebe Treatment and Recycling, LLC-Spill Response Contractor 47 Gracey Ave, Meriden, CT 06470 1-888-276-0887	St. Francis Hospital 114 Woodland Street Hartford, CT 06105 860-714-4000
Bradley International Airport Fire Department Bradley International Airport Windsor Locks, CT 06096 860-627-3360	Connecticut State Police: Troop W(BIA) 236 Firehouse Avenue, Windsor Locks, CT 06096 860-292-7400
Windsor Locks Police Department 4 Volunteer Drive Windsor Locks, CT 06096 860-627-1461	CT Department of Energy and Environmental Protection-Spill Reporting 79 Elm St, Hartford, CT 06106 860-424-3338
Windsor Locks Fire Department 2 Volunteer Drive Windsor Locks, CT 06096 Station: 860-627-1468 Dispatcher: 860-627-1461 Fire Marshal: 860-627-1467	EPA Region 1 5 Post Office Square - Suite 100 Boston, MA 02109-3912 1-888-372-7341
National Response Center 1-800-424-8802	

Section II: Spills and Leaks of Hazardous Material/Waste

A. Spill Procedures

For all spill procedures please consult CTARNG's Spill Prevention Control and Countermeasure (SPCC) Plan dated November, 2015 (available upon request).

Designated Emergency Coordinator Information:

Primary:	CW3 Jason Lerette Aircraft Maintenance Supervisor Work: 860-292-4554 Cell: 860-933-3181
Backup:	CPL Richelle Jackson Cell:

B. List of Hazardous Waste Streams and Associated Hazards

The CTARNG makes every effort to mitigate releases by complying with federal, state, and local regulations while implementing best management practices, SOP's, engineering controls, etc. in hazardous waste/materials management. Below is a list of materials/waste streams present at AASF and the hazards they present. Please note this is not a comprehensive list, rather a summary. Please consult the hazardous waste profile and/or associated Safety Data Sheet for more detailed precautions and handling procedures.

1. Petroleum, Oil, Lubricants (POL)

The largest hazard at AASF is the potential for a fire due to the amount of POL that is stored onsite. This site has 29,234 gallons total capacity for POL products, not including civilian vehicles or containers less than 55 gallons. A list of tanks with their capacities and locations onsite can be found in table 1 of the SPCC Plan. Please note that AASF does not have any underground storage tanks (UST's). These products also pose a toxic hazard which has the potential to cause adverse health effects.

Major Physical Hazard: Potential to cause/sustain fire. Explosion hazard if container is pressurized.
Major Health Hazard: Respiratory distress, hypertension, coordination loss, nausea, and in acute doses can lead to respiratory and/or cardiac failure.
Major Routes of Exposure: Inhalation and absorption (through digestion or skin contact).

2. Waste Solvents/Waste Solvent Based Paints/Sealants/Adhesives

Various waste solvents and solvent based paints, sealants, and adhesives are generated throughout different processes onsite. The largest threat in the event of a release would be the wastes ignitability characteristic and potential to cause a fire. Products in this waste class give off sufficient vapors under normal temperatures which can ignite.

Major Physical Hazard: Potential to cause/sustain fire. Explosion hazard if container is pressurized.
Major Health Hazard: damage to the central nervous system, liver or kidney damage, reproductive hazards, products contain known carcinogens.
Major Routes of Exposure: Inhalation and absorption.

3. Amine based adhesives

Several two part adhesives are used in various aircrafts maintenance procedures. Some are amine based with a pH greater than 12 causing a potential physical hazard and are DOT category 8 corrosives.

Major Physical Hazard: Causes severe skin burns and eye damage.
Major Health Hazard: Inhalation of mist, vapor, or liquid may cause severe irritation or burns to respiratory system.
Major Routes of Exposure: Inhalation, skin, eyes.

4. Chromic acid solutions

A second particular adhesive contains chromic acid creating the potential for a corrosive and toxic hazard. These solutions have a pH less than 2 and pose a significant corrosive hazard.

Major Physical Hazard: Causes severe skin burns and eye damage.
Major Health Hazard: Chromium is a known carcinogen, may aggravate or worsen pre-existing conditions such as liver/kidney disorders.
Major Routes of Exposure: Contact with skin, inhalation.

Letter of Acknowledgement

State of Connecticut Military Department
360 Broad Street,
Hartford, CT 06105
Attention: Jordan Martin

Dear Mr. Martin,

I have reviewed the attached information and am aware of the hazardous waste generated/stored at the Connecticut Army National Guard's Army Aviation and Support Facility and am familiar with the associated hazards. I am also familiar with the layout of the facility in the event our services are requested.

Sincerely,

_____	_____
(Print Name)	(Signature)
_____	_____
(Title)	(Agency)
_____	
(Date)	

WPS CT052

3M

MATERIAL SAFETY DATA SHEET

3M
3M Center
St. Paul, Minnesota
55144-1000
1-800-364-3577 or (651) 737-6501 (24 hours)

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DIVISION: 3M SPECIALTY MATERIALS
TRADE NAME:
FC-203CF LIGHT WATER(TM) AFFF 3%
ID NUMBER/U.P.C.:

98-0211-5617-3	00-51135-10152-0	98-0211-5618-1	00-51135-10153-7
98-0211-5619-9	00-51135-10154-4	98-0211-5620-7	00-51135-10155-1
98-0211-5621-5	00-51135-10156-8	98-0211-5622-3	00-51135-10157-5
98-0211-5623-1	- - -	98-0211-9304-4	00-51135-11130-7
ZF-0002-0554-0	- - -	ZF-0002-0620-9	- - -
ZF-0002-0789-2	- - -		

ISSUED: December 17, 1999
SUPERSEDES: March 17, 1999
DOCUMENT: 10-4322-3

1. INGREDIENT	C.A.S. NO.	PERCENT
WATER	7732-18-5	69.0 - 71.0
DIETHYLENE GLYCOL BUTYL ETHER	112-34-5	20.0
AMPHOTERIC FLUOROALKYLAMIDE DERIVATIVE +(5803P)	TradeSecret	1 - 5
ALKYL SULFATE SALTS(2) +(5805P, 5806P)	TradeSecret	1.0 - 5.0
PERFLUOROALKYL SULFONATE SALTS(5) +(5804P)	TradeSecret	0.5 - 1.5
TRIETHANOLAMINE	102-71-6	0.5 - 1.5
TOLYL TRIAZOLE	29385-43-1	0.05
RESIDUAL ORGANIC FLUOROCHEMICALS	Mixture	Unknown

The components of this product are in compliance with the chemical notification requirements of TSCA. All applicable chemical ingredients in this material are listed on the European Inventory of Existing Chemical Substances (EINECS), or are exempt polymers whose monomers are listed on EINECS.

New Jersey Trade Secret Registry Number (EIN) 04499600-+

This product contains the following toxic chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Emergency Planning and Community Right-To-Know Act of 1986 and 40 CFR Part 372:
DIETHYLENE GLYCOL BUTYL ETHER

Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

2. PHYSICAL DATA

BOILING POINT:..... 100 C
(Typical)
VAPOR PRESSURE:..... ca. 17.4 mmHg
Calc @ 20C
VAPOR DENSITY:..... ca. 0.77 Air=1
Calc @ 20C
EVAPORATION RATE:..... < 1 BuOAc=1
SOLUBILITY IN WATER:..... Miscible
SPECIFIC GRAVITY:..... 1.0 Water=1
PERCENT VOLATILE:..... 90 % by wt
pH:..... 8.5
VISCOSITY:..... N/D
MELTING POINT:..... N/A

APPEARANCE AND ODOR:
Clear, amber colored liquid.

3. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:..... None (Setaflash CC)
FLAMMABLE LIMITS - LEL:..... N/A
FLAMMABLE LIMITS - UEL:..... N/A
AUTOIGNITION TEMPERATURE:..... N/A

EXTINGUISHING MEDIA:
Product is a fire-extinguishing agent.

SPECIAL FIRE FIGHTING PROCEDURES:
Not applicable

UNUSUAL FIRE AND EXPLOSION HAZARDS:
See Hazardous Decomposition section for products of combustion.

4. REACTIVITY DATA

STABILITY: Stable

INCOMPATIBILITY - MATERIALS/CONDITIONS TO AVOID:
Not applicable.

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur.

4. REACTIVITY DATA (continued)

HAZARDOUS DECOMPOSITION PRODUCTS:
Carbon Monoxide and Carbon Dioxide, Oxides of Nitrogen, Oxides of Sulfur, Hydrogen Fluoride

Thermal decomposition of usage concentrations does not present a hazard.

5. ENVIRONMENTAL INFORMATION

SPILL RESPONSE:
Observe precautions from other sections. Ventilate area. Contain spill. Cover with absorbent material. Collect spilled material. Clean up residue with water. Place in a closed container.

RECOMMENDED DISPOSAL:
Discharge spent solutions and small quantities (less than 5 gal.(19 L)) to a wastewater treatment system. Reduce discharge rate if foaming occurs. Large quantities may adversely affect biological wastewater treatment systems. Incinerate large quantities in an industrial or commercial incinerator. Combustion products will include HF.

ENVIRONMENTAL DATA:
A Product Environmental Data Sheet (PED) is available.

5-Day Biochemical Oxygen Demand (BOD5): 0.35 g/g; 20-Day Biochemical Oxygen Demand (BOD20): 0.75 g/g; 20-Day BOD/COD: 0.96; Chemical Oxygen Demand (COD): 0.75 g/g; 96-Hr LC50, Fathead minnow (Pimephales promelas): >1,000 mg/L; 48-Hr EC50, Water flea,(Daphnia magna): >1,000 mg/L; 96-Hr EC50, Algae (Selenastrum capricornutum): 143 mg/L (130-156); 30-Min EC50, Photobacterium phosphoreum (Microtox System): 280 mg/L (260-300); 3-Hr, 20C EC50, Activated Sludge Respiration (OECD Method #209): >1,000 mg/L.

REGULATORY INFORMATION:
Volatile Organic Compounds: 200 gms/liter South Coast Air Quality Mgmt Dist Method Calc. @ 20 C..
VOC Less H2O & Exempt Solvents: N/A.

Since regulations vary, consult applicable regulations or authorities before disposal. In the event of an uncontrolled release of this material, the user should determine if the release qualifies as a reportable quantity. U.S. EPA Hazardous Waste Number = None (Not U.S. EPA Hazardous).

The components of this product are in compliance with the chemical registration requirements of: TSCA, EINECS, CDSL, AICS, MITI.

5. ENVIRONMENTAL INFORMATION (continued)

OTHER ENVIRONMENTAL INFORMATION:
This product contains one or more organic fluorochemicals that have the potential to resist degradation and persist in the environment.

EPCRA HAZARD CLASS:
FIRE HAZARD: No PRESSURE: No REACTIVITY: No ACUTE: Yes CHRONIC: No

6. SUGGESTED FIRST AID

EYE CONTACT:
Immediately flush eyes with large amounts of water. Get immediate medical attention.

SKIN CONTACT:
Immediately wash skin with soap and large amounts of water. Remove contaminated clothing. If signs/symptoms occur, call a physician. Wash contaminated clothing before reuse and dispose of contaminated shoes.

INHALATION:
If signs/symptoms occur, remove person to fresh air. If signs/symptoms continue, call a physician.

IF SWALLOWED:
If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

7. PRECAUTIONARY INFORMATION

EYE PROTECTION:
Avoid eye contact with vapor, spray, or mist. Wear vented goggles.

SKIN PROTECTION:
Avoid skin contact. Wear appropriate gloves when handling this material. A pair of gloves made from the following material(s) are recommended: butyl rubber.

RECOMMENDED VENTILATION:
If exhaust ventilation is not adequate, use appropriate respiratory protection. Provide ventilation adequate to control vapor concentrations below recommended exposure limits and/or control spray or mist.

7. PRECAUTIONARY INFORMATION (continued)

RESPIRATORY PROTECTION:
Avoid breathing of airborne material. Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Half-mask organic vapor respirator with dust/mist prefilter.

PREVENTION OF ACCIDENTAL INGESTION:
Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Wash hands after handling and before eating.

RECOMMENDED STORAGE:
Store away from areas where product may come into contact with food or pharmaceuticals. Store at temperatures below 120 degrees F (49 degrees C). Store at temperatures above 32 degrees F (0 degrees C). Keep container closed when not in use. Keep container in well-ventilated area.

FIRE AND EXPLOSION AVOIDANCE:
Not applicable.

HMIS HAZARD RATINGS: HEALTH: 2 FLAMMABILITY: 0 REACTIVITY: 0
PERSONAL PROTECTION: X (See precautions, section 7.)

EXPOSURE LIMITS

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
WATER	NONE	NONE	NONE	NONE	
DIETHYLENE GLYCOL BUTYL ETHER	35	PPM	TWA	CMRG	
AMPHOTERIC FLUOROALKYLAMIDE DERIVATIVE +(5803P)	NONE	NONE	NONE	NONE	
ALKYL SULFATE SALTS(2) +(5805P, 5806P)	NONE	NONE	NONE	NONE	
PERFLUOROALKYL SULFONATE SALTS(5) +(5804P)	0.1	MG/M3	TWA	3M	Y
TRIETHANOLAMINE	5	MG/M3	TWA	ACGIH	
TOLYL TRIAZOLE	NONE	NONE	NONE	NONE	
RESIDUAL ORGANIC FLUOROCHEMICALS	0.1	MG/M3	TWA	3M	Y

* SKIN NOTATION: Listed substances indicated with 'Y' under SKIN refer to the potential contribution to the overall exposure by the cutaneous route including mucous membrane and eye, either by airborne or, more particularly, by direct contact with the substance. Vehicles can alter skin absorption.

SOURCE OF EXPOSURE LIMIT DATA:
- 3M: 3M Recommended Exposure Guidelines
- ACGIH: American Conference of Governmental Industrial Hygienists
- CMRG: Chemical Manufacturer Recommended Exposure Guidelines

EXPOSURE LIMITS (continued)

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
- NONE: None Established					

8. HEALTH HAZARD DATA

EYE CONTACT:
Moderate Eye Irritation: signs/symptoms can include redness, swelling, pain, tearing, and hazy vision.

SKIN CONTACT:
Mild Skin Irritation (after prolonged or repeated contact): signs/symptoms can include redness, swelling, and itching.

Prolonged or repeated exposure may cause:

Allergic Skin Reaction: signs/symptoms can include redness, swelling, blistering, and itching.

INHALATION:
Single overexposure, above recommended guidelines, may cause:

Central Nervous System Depression: signs/symptoms can include headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness.

Irritation (upper respiratory): signs/symptoms can include soreness of the nose and throat, coughing and sneezing.

IF SWALLOWED:
Animal studies conducted on organic fluorochemicals which are present in this product indicate effects including liver disturbances, weight loss, loss of appetite, lethargy, and neurological, pancreatic, adrenal and hematologic effects. There are no known human health effects from anticipated exposure to these organic fluorochemicals when used as intended and instructed.

Ingestion may cause:

Aspiration Pneumonitis: signs/symptoms can include coughing, difficulty breathing, wheezing, coughing up blood and pneumonia, which can be fatal.

WHILE THE FOLLOWING EFFECTS ARE ASSOCIATED WITH ONE OR MORE OF THE INDIVIDUAL INGREDIENTS IN THIS PRODUCT AND ARE REQUIRED TO BE INCLUDED ON THE MSDS BY THE U.S. OSHA HAZARD COMMUNICATION STANDARD, THEY ARE NOT EXPECTED EFFECTS DURING FORESEEABLE USE OF THIS PRODUCT.

Ingestion may cause:

8. HEALTH HAZARD DATA (continued)

Irritation of Gastrointestinal Tissues: signs/symptoms can include pain, vomiting, abdominal tenderness, nausea, blood in vomitus, and blood in feces.

Central Nervous System Depression: signs/symptoms can include headache, dizziness, drowsiness, muscular weakness, incoordination, slowed reaction time, fatigue, blurred vision, slurred speech, giddiness, tremors and convulsions.

OTHER HEALTH HAZARD INFORMATION:
A Product Toxicity Summary Sheet is available.

This product contains one or more organic fluorochemicals that have the potential to be absorbed and remain in the body for long periods of time, either as the parent molecule or as metabolites, and may accumulate with repeated exposures. There are no known human health effects from anticipated exposure to these organic fluorochemicals when used as intended and instructed.

The presence of organic fluorochemicals in the blood of the general population and subpopulations, such as workers, has been published dating back to the 1970's. 3M's epidemiological study of its own workers indicates no adverse effects.

SECTION CHANGE DATES

PRECAUTIONARY INFO. SECTION CHANGED SINCE March 17, 1999 ISSUE

The information in this Material Safety Data Sheet (MSDS) is believed to be correct as of the date issued. 3M MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

3M provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, 3M makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the MSDS available directly from 3M.

MATERIAL SAFETY DATA SHEET

ESF 3% AFFF

AQUEOUS FILM FORMING FOAM

Section 1. CHEMICAL PRODUCT / COMPANY IDENTIFICATION

Material Identification
Product: ESF 3% AFFF
Synonyms: Aqueous Film Forming Foam (AFFF)
CAS No.: Complex Formula

Company Identification:
Manufacturer:
ESF Enterprise, LLC
PO Box #6166
Wyomissing, PA 19610
Emergency Phone Number (610) 334-2615

Section 2: COMPOSITION / INFORMATION ON INGREDIENTS

Components	CAS Number
Water	7732-18-5
Proprietary surfactant blend	(preparation only no number)
Fluoro Polymer	(preparation only no number)

Section 3. HAZARDS IDENTIFICATION

Potential Health Effects:
Inhalation
Product cannot normally be inhaled unless present as a mist. If inhaled move to fresh air, observe for signs of illness, if observed seek medical advice.
Skin Contact
No adverse effects have been documented.
Eye Contact
No adverse effects have been documented or noted under normal use. Exposure to the liquid concentrate should be flushed with ample amounts of water.
Ingestion
Product should not be ingested. No adverse effects have been documented.
Additional Health Effects
None
Carcinogenicity Information
No known adverse affects.

Section 4. FIRST AID MEASURES

Inhalation
If inhaled as a mist, move to fresh air.
Skin Contact
If allergic reaction occurs, flush with fresh water.
Eye Contact
Wash eyes with fresh water for at least five minutes.
Ingestion
Dilute by drinking at least two glasses of warm water.

Section 5. FIRE FIGHTING MEASURES

Flammable Properties
None.
Fire and Explosion Hazards
Avoid contact with water reactive materials, Class D fires (burning metals) and Class C fires (electrical energized equipment).
Extinguishing Media
Not applicable.
Special Fire Fighting Instructions
Not applicable.

Section 6. ACCIDENTAL RELEASE MEASURES

Safeguards (Personnel)
None specified.
Accidental Release Measures
Concentrate
Spills may be mopped or soaked up using inert absorbent material, e.g. sand or diatomaceous earth. Wash spill area with water.
Foam/Foam Solution
See above.

Special Note: As prescribed by law under the "Clean Streams Act", any quantity of any material other than water that may become involved in the water table or any body of water constitutes a reportable incident.

Section 7. HANDLING AND STORAGE

Handling (Personnel)
No special handling measure are required as the product when used under normal conditions will not harm personnel or the environment.
Storage
Recommended storage is in the original sealed containers within 35°F (2°C) to 120°F (49°C).

Section 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls
Special ventilation is not required under normal conditions.
Personal Protective Equipment
Respiratory
Exposure limits according to OSHA-PEL and ACGIH-TLV have not been established.
Protective Clothing
None specified.
Eye Protection
None specified, but safety glasses or eye shield will limit eye contact.
Other Hygienic Practices
None specified

Exposure Guidelines
Exposure Limits
None specified.

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Data

Boiling Point:	N/A
Vapor Pressure:	N/A
Vapor Density:	N/A
Melting Point:	N/A
Evaporation Rate:	not determined
Solubility in Water:	100%
Freeze Point	$28^{O}F$ ($-2^{O}C$)
pH:	6.9
Specific Gravity:	1.016
Odor:	Mild
Form:	Liquid
Color:	Light Amber

Section 10. STABILITY AND REACTIVITY

Chemical Stability
Stable.
Incompatibility, Materials to Avoid
Avoid use of product on Class D fires (burning metals), Class C fires (electrically energized equipment), and contact with water reactive materials.
Polymerization
Will not occur.

Section 11. TOXICOLOGICAL INFORMATION

Mammalian Toxicity
Ingestion
No known adverse affects.
Eye
No known adverse affects.
Skin
No known adverse affects.
Inhalation
No known adverse affects.
Carcinogenic, Developmental, Reproductive, Mutagenic Effects
No known adverse affects.

Section 12. ECOLOGICAL INFORMATION

Ecotoxicological Information Aquatic Toxicity
96 hr. LC50 for Fathead Minnows (pimephales promelas)
>1700 ppm
48 hr. LC50 for Ceriodaphnia Dubia
>699 ppm
96 hr. LC50 Rainbow Trout 15.8 gl^{-1}
HNOEC 5 gl^{-1} LOEC 50 gl^{-1}

Environmental Fate

BOD5 3% Solution	2750 mg/l
COD 3% Solution	3400 mg/l

Section 13. DISPOSAL CONSIDERATIONS

Water Disposal
As prescribed by law under the “Clean Streams Act”, any quantity of any material other than water that may become involved in the water table or other body of water constitutes a reportable incident.

Section 14. TRANSPORTATION INFORMATION

Shipping Information

Shipping Name:	ESF 3% AFFF AFFF
Identification No:	none
Hazard Class:	none
DOT Shipping Class:	55
Warning Labels Requires:	none

Section 15. REGULATORY INFORMATION

U.S. Federal Regulations
Superfund Amendments and Reauthorization Act of 1998 (SARA), Title III
This material does not contain any components subject to reporting requirements.
Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)
This material does not contain any components subject to reporting requirements.

STATE REGULATIONS
PENNSYLVANIA RIGHT-TO-KNOW HAZARDOUS SUBSTANCES LIST
This material does not contain any components subject to reporting requirements.

Section 16. OTHER INFORMATION

NFPA Rating

Health	0	Flammability	0
	Reactivity	0	

The information presented herein is furnished without warranty either express or implied. This data sheet is not a part of any contract of sale. The information contained herein is believed to be correct or is obtained from sources believed to be generally reliable. However, it is the responsibility of the user of these materials to investigate, understand and comply with federal, state, or local guidelines and procedures for safe handling and use of this product and ESF Enterprise, LLC assumes no obligation or liabilities for reliance on the information contained herein or omissions herefrom.

June 15, 2004

SAFETY DATA SHEET – NMS#300
Aer-O-Lite TMC6 3%
Aqueous Film Forming Foam

1. IDENTIFICATION

Product Name	Aer-O-Lite TMC6 3% Aqueous Film Forming Foam
Recommended use of the chemical and restrictions on use	
Identified uses	Firefighting Foam Concentrate
Restrictions on Use	See Section 15
Company Identification	National Foam 350 East Union Street West Chester, PA 19382
Customer Information Number	(610) 363-1400
Emergency Telephone Number	Infotrac at (800) 535-5053
Issue Date	September 21, 2018
Supersedes Date	November 2, 2016

Safety Data Sheet prepared in accordance with OSHA's Hazard Communication Standard (29 CFR 1910.1200, the Canadian Hazardous Products Regulations (HPR) and the Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

2. HAZARD IDENTIFICATION

Hazard Classification
Eye Damage/Irritation – Category 2A

Label Elements
Hazard Symbols

Signal Word: Warning

Hazard Statements
Causes serious eye irritation.

Precautionary Statements

Prevention
Wash hands thoroughly after handling.
Wear eye protection and face protection.
Response
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
Storage
None
Disposal
None

Other Hazards
This product contains fluoroalkyl surfactants and should be disposed of by high temperature incineration. See Section 13 for additional information.

2. HAZARD IDENTIFICATION

Specific Concentration Limits
The values listed below represent the percentages of ingredients of unknown toxicity.

Acute oral toxicity	<10%
Acute dermal toxicity	<10%
Acute inhalation toxicity	30 - 40%
Acute aquatic toxicity	30 - 40%

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture.

Component	CAS Number	Concentration*
Dipropylene Glycol Monomethyl Ether	34590-94-8	1 - 5%
Sodium decyl sulfate	142-87-0	1 - 5%
Sodium octyl sulfate	142-31-4	1 - 5%
Alkylpolyglycoside	132778-08-6	1 - 5%

*Exact concentration withheld as trade secret.

4. FIRST- AID MEASURES

Description of necessary first-aid measures
Eyes
Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention if soreness or redness persists.
Skin
Wash skin thoroughly with soap and water. Obtain medical attention if irritation persists.
Ingestion
Dilute by drinking large quantities of water and obtain medical attention.
Inhalation
Move victim to fresh air. Obtain medical attention immediately for any breathing difficulty.

Most important symptoms/effects, acute and delayed
Aside from the information found under Description of necessary first aid measures (above) and Indication of immediate medical attention and special treatment needed, no additional symptoms and effects are anticipated.

Indication of immediate medical attention and special treatment needed
Notes to Physicians
Treat symptomatically.

5. FIRE - FIGHTING MEASURES

Suitable Extinguishing Media
This preparation is used as an extinguishing agent and therefore is not a problem when trying to control a fire. Use extinguishing agent appropriate to other materials involved.

Specific hazards arising from the chemical
None known

5. FIRE - FIGHTING MEASURES

Special Protective Actions for Fire-Fighters
Wear full protective clothing and self-contained breathing apparatus as appropriate for specific fire conditions.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Wear appropriate protective clothing. Prevent skin and eye contact.

Environmental Precautions
Prevent foam concentrate or foam solution from entering ground water, surface water, or storm drains. Discharge and disposal of concentrate or foam solution should be made in accordance with federal, state, and local regulations.

Methods and materials for containment and cleaning up
Contain and absorb using appropriate inert material and transfer into suitable containers for recovery or disposal.

7. HANDLING AND STORAGE

Precautions for safe handling
Wear appropriate protective clothing. Prevent skin and eye contact.

Conditions for safe storage
Store in original containers between 20°F and 120°F (-7°C and 49°C). Storage area should be: - cool - dry - well ventilated - under cover - out of direct sunlight

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters
Exposure limits are listed below, if they exist.

Dipropylene Glycol Monomethyl Ether
ACGIH: TLV 100 ppm, 8hr; 15 min STEL 150 ppm; Skin Designation: air sampling alone is insufficient to accurately quantitate exposure. Measures to prevent significant cutaneous absorption may be required.
OSHA Z-1 PEL: 100 ppm (600 mg/m3) Limit applies to skin.
Sodium Decyl Sulfate
None established
Sodium Octyl Sulfate
None established
Alkylpolyglycoside
None established

Appropriate engineering controls
Use with adequate ventilation. If this product is used in a pressurized system, there should be local procedures for the selection, training, inspection and maintenance of this equipment. When used in large volumes, use local exhaust ventilation.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Individual protection measures
Respiratory Protection
Wear respiratory protection if there is a risk of exposure to high vapor concentrations, aerosols or if applied to hot surfaces. A NIOSH approved full face respirator may be worn. The specific respirator selected must be based on the airborne concentration found in the workplace and must not exceed the working limits of the respirator.

Skin Protection
Gloves
Eye/Face Protection
Chemical goggles or safety glasses with side shields.
Body Protection
Normal work wear.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	
Physical State	Liquid
Color	Straw yellow
Odor	Mild, pleasant
Odor Threshold	No data available
pH	8.0
Specific Gravity	1.03
Boiling Range/Point (°C/F)	No data available
Melting Point (°C/F)	No data available
Flash Point (°C/F)	>200°F
Vapor Pressure	No data available
Evaporation Rate (BuAc=1)	No data available
Solubility in Water	Soluble
Vapor Density (Air = 1)	Not applicable
VOC (%)	No data available
Partition coefficient (n-octanol/water)	No data available
Viscosity	No data available
Auto-ignition Temperature	Not applicable
Decomposition Temperature	No data available
Upper explosive limit	Not applicable
Lower explosive limit	Not applicable
Flammability (solid, gas)	Not applicable

10. STABILITY AND REACTIVITY

Reactivity
No data available.

Chemical Stability
Stable under normal conditions.

Possibility of hazardous reactions
Hazardous polymerization will not occur.

10. STABILITY AND REACTIVITY

Conditions to Avoid
Contact with incompatible materials

Incompatible Materials
Water reactive materials – burning metals – electronically energized equipment

Hazardous Decomposition Products
Oxides of carbon – hydrogen fluoride – aldehydes – ketones – organic acids

11. TOXICOLOGICAL INFORMATION

Acute Toxicity
Product
Oral LD50 (rat) >5000mg/kg (tested on a similar product)
Dipropylene Glycol Monomethyl Ether
Oral LD50 (rat) >5000 mg/kg
Dermal LD5 (rabbit) >9510 mg/kg
Inhalation LC50 (rat) > 3.35 mg/l,7h, vapour, no deaths occurred at this concentration

Specific Target Organ Toxicity (STOT) – single exposure
Available data indicates this product is not expected to cause target organ effects after a single exposure.

Specific Target Organ Toxicity (STOT) – repeat exposure
Available data indicates this component not expected to cause target organ effects after repeated exposure.

Serious Eye damage/Irritation
Product: Primary irritant (rabbit) (tested on a similar product)
Sodium decyl sulfate: Risk of serious eye damage (>=20%) Causes serious eye irritation (>=10 - <20%).
Alkylpolyglycoside: Severely irritating (rabbit) (50% solution)
Sodium Octyl Sulfate: Risk of serious eye damage (>=20%) Causes serious eye irritation (>=10 - <20%).

Skin Corrosion/Irritation
Product: Not a primary irritant (rabbit) (tested on a similar product)

Respiratory or Skin Sensitization
Available data indicates this product is not expected to cause skin sensitization.

Carcinogenicity
Not considered carcinogenic by NTP, IARC, and OSHA.

Germ Cell Mutagenicity
Available data indicates this product is is not expected to be mutagenic.

Reproductive Toxicity
Available data indicates this product is not expected to cause reproductive toxicity or birth defects.

Aspiration Hazard
Not an aspiration hazard.

12. ECOLOGICAL INFORMATION

Ecotoxicity
No relevant studies identified.

Mobility in soil
No relevant studies identified.

Persistence/Degradability
No relevant studies identified.

Bioaccumulative Potential
No relevant studies identified.

Other adverse effects
No relevant studies identified.

13. DISPOSAL CONSIDERATIONS

Disposal Methods
This product, as sold, is not a RCRA-listed waste or hazardous waste as characterized by 40 CFR 261. However, state and local requirements for waste disposal may be more restrictive or otherwise different from federal regulations. Therefore, applicable local and state regulatory agencies should be contacted regarding disposal of waste foam concentrate or foam/foam solution.
Concentrate
Prevent foam concentrate from entering ground water, surface water or storm drains. Small quantities of foam concentrate may be collected on absorbents which can then be disposed of. Disposal should be made in accordance with local, state and federal regulations. High temperature incineration is recommended.
Foam/Foam Solution
Prevent foam/foam solution from entering ground water, surface water or storm drains. Small quantities of foam solution may be collected on absorbents which can then be disposed of. Disposal should be made in accordance with local, state and federal regulations, high temperature incineration is recommended.
NOTE: Please consult National Foam for additional information regarding the disposal of foam concentrates and foam solutions.

14. TRANSPORT INFORMATION

Shipping Information

Shipping Description	Fire Extinguisher Charges or Compounds N.O.I., Class 70
National Motor Freight Code	69160 Sub 0

This information is not intended to convey all transportation classifications that may apply to this product. Classifications may vary by container volume and by regional regulations. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules when transporting this material.

15. REGULATORY INFORMATION

United States TSCA Inventory
This product contains an ingredient that has restricted use under the EPA Toxic Substance Control Act
This product may only be used as a firefighting foam. Any other use of this product is strictly prohibited.

Canada DSL Inventory
All ingredients in this product have been verified for listing on the Domestic Substance List (DSL) or the Non-Domestic Substance List (NDSL).

SARA Title III Sect. 311/312 Categorization
Eye Irritation

SARA Title III Sect. 313
This product does not contain any chemicals that are listed in Section 313 at or above de minimis concentrations.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)
None

16. OTHER INFORMATION

NFPA Ratings
NFPA Code for Health - 0
NFPA Code for Flammability - 0
NFPA Code for Reactivity - 0
NFPA Code for Special Hazards - None

Legend
ACGIH: American Conference of Governmental Industrial Hygienists
BOD_5:Biochemical Oxygen Demand (5 day)
CAS#: Chemical Abstracts Service Number
COD: Chemical Oxygen Demand
EC50: Effect Concentration 50%
IARC: International Agency for Research on Cancer
LC50: Lethal Concentration 50%
LD50: Lethal Dose 50%
N/A: Denotes no applicable information found or available
OSHA: Occupational Safety and Health Administration
PEL: Permissible Exposure Limit
RQ: Reportable Quantity
STEL: Short Term Exposure Limit
N/A: Denotes no applicable information found or available
OSHA: Occupational Safety and Health Administration
PEL: Permissible Exposure Limit
RQ: Reportable Quantity
STEL: Short Term Exposure Limit
TLV: Threshold Limit Value
TSCA: Toxic Substance Control Act

Revision Date: September 21, 2018
Replaces: November 2, 2016
Changes made: Changes to Sections 1, 2, 3, 8, 11 and 15.

16. OTHER INFORMATION

Information Source and References
This SDS is prepared by Hazard Communication Specialists based on information provided by internal company references.

Prepared By: EnviroNet LLC.

Aer-O-Lite is a registered trademark of Angus International.

The information and recommendations presented in this SDS are based on sources believed to be accurate. National Foam assumes no liability for the accuracy or completeness of this information. It is the user's responsibility to determine the suitability of the material for their particular purposes. In particular, we make NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, with respect to such information, and we assume no liability resulting from its use. Users should ensure that any use or disposal of the material is in accordance with applicable Federal, State, and local laws and regulations.

(WO#148325) - SP450015D0007: DO# 0142

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: CTD983869785
2. Page 1 of 2
3. Emergency Response Phone: (800) 424-9300
4. Manifest Tracking Number: 008912602 FLE

5. Generator's Name and Mailing Address: Environmental Management Office
ATTN: Jordan Martin
360 BROAD STREET
Hartford, CT 06105
860-493-2727
Generator's Phone:

Generator's Site Address (if different than mailing address): AASF WINDSOR LOCKS BIA
ROUTE 75
WINDSOR LOCKS, CT 06096

6. Transporter 1 Company Name: American Transportation Solutions, LLC.
U.S. EPA ID Number: PAR000521740

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address: AES Environmental, LLC. - Calvert
1689 Shar-Cal Road
Calvert City, KY 42029
270-395-0504
Facility's Phone:
U.S. EPA ID Number: KYD985073196

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1 RQ, UN1263, Waste Paint related material, 3, PG-II (D001, D007)	1	DF	105	P	D001 D005 D007 D035 U159
X	2 RQ, UN1133, Waste Adhesives, 3, PG-II (D001, D007, D008)	3	DM	525	P	D001 D005 D007 D008 D035
X	3 UN2735, Waste Amines, liquid, corrosive, n.o.s., (Diethylenetriamine), 8, PG-II	1	DF	12	P	D002
X	4 RQ, UN1755, Waste Chromic acid solution, 8, PG-II (D007)	1	DF	15	P	D002 D007

14. Special Handling Instructions and Additional Information
1: ER G#126: MGT-2502-GR38 - HIGH BTU LIQUIDS OP (SM. CONTAINERS)
2: ER G#126: MGT-2502-GR38 - HIGH BTU LIQUIDS OP (SM. CONTAINERS)
3: ER G#153: MGT-2504-GR38 - LAB PACK
4: ER G#154: MGT-50199 ALODINE

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Jordan Martin
Signature: [signature]
Month 7 Day 14 Year 16

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Stuart Workman
Signature: Stuart Workman
Month 07 Day 14 Year 16
Transporter 2 Printed/Typed Name:
Signature:
Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H141 2. H141 3. H141 4. H141

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: [signature]
Signature: [signature]
Month 7 Day 18 Year 16

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)

21. Generator ID Number: CTD983869785

22. Page: 2 of 2

23. Manifest Tracking Number: 008912602FLE

24. Generator's Name: AASF - WINDSOR LOCKS (BRADLEY IAP)
ROUTE 75, BRADLEY INTERNATIONAL AIRPORT
WINDSOR LOCKS, CT 06096

25. Transporter _____ Company Name — U.S. EPA ID Number

26. Transporter _____ Company Name — U.S. EPA ID Number

27a. HM	27b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	28. Containers No.	28. Containers Type	29. Total Quantity	30. Unit Wt./Vol.	31. Waste Codes		
	5. Non-RCRA liquids, D.O.T. Non-regulated (STATE REGULATED LIQUID) (AFFF CONCENTRATE)	7	DF	280	P	CR04		

GENERATOR

32. Special Handling Instructions and Additional Information
5.MGT-2450-GR38

TRANSPORTER

33. Transporter _____ Acknowledgment of Receipt of Materials
Printed/Typed Name — Signature — Month — Day — Year

34. Transporter _____ Acknowledgment of Receipt of Materials
Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

35. Discrepancy

36. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

H132

EPA Form 8700-22A (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

FINAL

PERFLUORINATED COMPOUNDS PRELIMINARY ASSESSMENT SITE VISIT REPORT

BRADLEY AIR NATIONAL GUARD BASE
EAST GRANBY, CONNECTICUT

Prepared For:

Headquarters Air National Guard
Joint Base Andrews, Maryland

January 2016

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FINAL

PERFLUORINATED COMPOUNDS PRELIMINARY ASSESSMENT SITE VISIT REPORT

BRADLEY AIR NATIONAL GUARD BASE
EAST GRANBY, CONNECTICUT

Prepared For:

Headquarters Air National Guard
Joint Base Andrews, Maryland

Prepared By:

BB&E, Inc.
January 2016

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LIST OF ACRONYMS

AFB	Air Force Base
AFFF	Aqueous Film Forming Foam
ANG	Air National Guard
ANGRC	Air National Guard Readiness Center
AOC	Area of Concern
AW	Air Wing
BB&E	BB&E, Inc.
BDL	Bradley International Airport
bgs	below ground surface
CIP	Community Involvement Plan
CT DEEP	Connecticut Department of Energy & Environmental Protection
ft	feet
EDR	Environmental Data Resources
FD	Fire Department
FTA	Fire Training Area
GPS	Global Positioning System
IRP	Installation Restoration Program
LTM	Long-term Monitoring
NFA	No Further Action
OWS	oil/water separator
PA	Preliminary Assessment
PAH	polynuclear aromatic hydrocarbons
PFCs	Perfluorinated Compounds
PFOA	perfluorooctanoic acid
PFOS	perfluorooctane sulfonate
PHAL	Provisional Health Advisory Levels
POL	Petroleum Oil and Lubricants
RI	Remedial Investigation
SI	Site Inspection
USEPA	United States Environmental Protection Agency

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1.0 INTRODUCTION

A preliminary assessment (PA) site visit was conducted by BB&E, Inc. (BB&E) from August 19 – 21, 2015 at the Bradley Air National Guard (ANG) Base (the Base) in East Granby, Hartford County, Connecticut. The Bradley ANG Base is located on a portion of the Bradley International Airport (BDL), of which approximately 144 acres in the southwest corner is leased by the ANG. The site location is shown on Figure 1. The purpose of the visit was to identify potential sites of historic environmental releases of perfluorinated compounds, specifically from Aqueous Film Forming Foam (AFFF) usage and storage, as shown on Figure 2. Prior to the site visit, BB&E conducted research of any documented Fire Training Areas (FTAs) in operation since 1970, or any other use or release of AFFF in accordance with the Final Perfluorinated Compound (PFC) Preliminary Assessment Work Plan (BB&E, 2015). During the site visit, BB&E conducted personnel interviews, reviewed on-site documentation and toured each potential site.

Individuals contributing to this PA effort included the following:

Ted Grabarz – 103d AW, Base Environmental Manager

William Hoerle –103d AW, State Environmental Officer

Robert Cross – 103d AW, Fire Chief

John Gwiazdowski – 103d AW, Senior Fire Captain

Colonel Frederick Miclon – 103d AW, Vice Wing Commander

Major Krzysztof Kucharski – 103d AW, Former Base EM (2006-2008) and Former Base Civil Engineer (pre-2006)

Sections 2.0 and 3.0 of this report outline the potential PFC sources identified on the Bradley ANG Base during the records review and site visit, while Section 4.0 provides conclusions and recommendations for potential follow-on actions. References are included in Section 5.0. Representative photos of the subject sites taken during the site visit are attached as Appendix A,

and the records of communication are attached as Appendix B. Supporting documentation is included in Appendix C.

1.1 Hydrogeologic Setting

Hydrogeologic information was obtained from the Final Community Involvement Plan (CIP)(ANG, 2011) and the Final Preliminary Assessment/Site Inspection Report (AECOM, 2015).

Groundwater flows to the east-southeast across the Bradley ANG Base at depths of 8 to 18 feet below ground surface. The uppermost aquifer consists of sands and silts, and the deeper aquifers are composed of course grained, drift sediments. The only surface water at the Bradley ANG Base is a retention basin, which contains water during and immediately following rain events. Stormwater runoff from the Base flows southwest to DeGrayes Brook to Stoney Brook, which then discharges into the Connecticut River. Off the Base, there is a small pond located about 50 feet west of the petroleum, oil and lubricants (POL) storage area. No drinking water wells are located on the Base.

According to the Connecticut Department of Energy & Environmental Protection (CT DEEP), the subject property is classified as a Class GA groundwater and surface water resource area. A Class GA groundwater area is defined as an area where groundwater may be designated as a potential drinking water supply, fish and wildlife habitat, recreational use, and agricultural and industry supply (AECOM, 2015).

Representative localized groundwater elevations and inferred flow directions generated from data collected during the remedial investigation (RI) (Aneptek, 2002), PA/SI (AECOM, 2015), and the long-term monitoring (LTM) events conducted by BEM (BEM, 2015), are included in Appendix C-1. Further discussion of onsite and area wells is included in Section 3.2.1.1 of this report.

2.0 FIRE TRAINING AREAS

Based on this PA investigation, there is no evidence that a FTA is or was located within the current footprint of the Bradley ANG Base site boundary. A review of the original PA (ANGRC, 1996), CIP (ANG, 2011) and the Environmental Baseline Survey (ANG, 2002) did not indicate any FTAs were ever present (Appendix C-2). This is consistent with information provided by Base personnel. Fire Department personnel indicated fire training would have been conducted at BDL facilities or the Fire Academy of Connecticut which is located approximately two miles north of the Base off the north end of BDL. In addition, the Base did not have a fire department until approximately 1981 when the current fire station (Building 19) was completed consistent with establishment of the current ANG location at Bradley circa 1980.

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3.0 NON-FIRE TRAINING AREAS

Non-FTA Areas of Concern (AOCs) are sites where AFFF has been stored or released and may include crash sites, hangars, fuel spill areas, hazardous waste storage facilities, firefighting equipment testing areas, etc. The following section includes a description of any non-fire training AOCs identified during this PA effort including operational history, waste characteristics, and pathway evaluations, as applicable.

3.1 AOC Description, Operational History, and Waste Characteristics

The following are the Non-FTA AOCs that were identified during this PA investigation. Appendix A includes photos of these areas from the August 2015 site visit, and Figure 2 depicts the areas.

3.1.1 Building 15 – Warehouse Supply

Building No. 15 is the former fuel cell maintenance (east bay) and corrosion control (west bay) facility used historically to service aircraft. The facility is now used as a logistics storage facility (since approximately 2005). The building was constructed in 1980, is approximately 18,000 square feet in size, and is constructed with a concrete floor, masonry block walls, and metal sided (ANG, 2002). The building has an AFFF-based fire suppression system that was deactivated in approximately 2005 when the facility was no longer needed as a fuel cell maintenance facility. The AFFF system was originally installed in approximately 1993. Four AFFF floor-mounted deck guns were utilized in the building. Per ANG personnel, there has never been an AFFF fire suppression system release in this building. The system could only be activated via manual connection via a fire truck to the southern exterior of the building were a fire hose connection is present. Trench floor drains are located in both the east and west bays of the building. The east bay (former fuel cell maintenance) floor drains discharge to a 12,000 gallon underground concrete holding tank (also called the AFFF release tank). The west bay (former corrosion control) floor drains discharge to a 12,000 gallon holding tank that drains to an oil/water separator (OWS) that discharges to the sanitary sewer.

3.1.2 Building 11 – AFFF Storage

Building 11 is currently used as a logistics warehouse and staging area. The building is approximately 9,900 square feet in size; metal framed and sided, with a concrete floor. The Fire Department (FD) uses Building 11 to store excess AFFF (approximately 500 gallons in inventory including both 5-gallon totes and 55-gallon drums). There are no reported spills or releases of AFFF within this facility. AFFF when needed is transferred to the fire station where it would be loaded into crash trucks and fire vehicles on an as needed basis.

3.1.3 Building 19 – Fire Station

AFFF is stored by the Fire Department (FD) at the current Fire Station which was built in 1981 and occupied since. The Fire Station is approximately 5,000 square feet in size, constructed with brick and masonry walls, and a concrete floor. Floor drains are in-place that drain to an OWS prior to discharge to the sanitary sewer. There are two FD crash trucks that hold 3% AFFF for a total of approximately 250 gallons of AFFF. The AFFF transfers occur manually, typically by pouring the 5-gallon AFFF totes into the crash trucks. Any spills or releases within the building would have gone to the floor drains which drain to the OWS and sanitary sewer. No releases of AFFF have been reported in the Fire Station.

3.1.4 Stormwater Drainage Basin (IRP Site 2)

A stormwater drainage/retention basin is located to the southeast of the POL facility. This location was previously identified as part of Installation Restoration Program (IRP) Site 2. The area drainage basin is grass-covered and typically does not have standing water except after large rain events. Site 2 was investigated under the IRP program. Remedial actions are pending for 2016 to address shallow soils/sediments due to low levels of polynuclear aromatic hydrocarbons (PAHs) and pesticides. The area is surrounded by trees. FD personnel reported the periodic annual testing of fire equipment in the grassy and wooded areas surrounding the drainage basin. Small amounts of AFFF would likely have been used for these test events (less than approximately one pint per incident).

3.1.5 Fire Department Equipment Test Area

Per FD personnel, this grassy area behind the current hush house was once used for nozzle testing. It is assumed that AFFF was used during these exercises; however the quantities used and dates of use are unknown.

3.2 Pathway and Environmental Hazard Assessment

The following is a preliminary evaluation of the threats and targets associated with each potential exposure pathway. In their anionic forms, perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA) are water soluble and can migrate readily from soil to groundwater. The United States Environmental Protection Agency (USEPA) has not established provisional health advisory levels (PHALs) for PFOS and PFOA in soil (USEPA, 2014). The primary exposure pathway for PFOS and PFOA would be the ingestion of contaminated drinking water.

3.2.1 Groundwater

No documentation was available showing that groundwater at the Base has been tested for PFCs; therefore it is unknown whether PFCs are present in the groundwater. However, based on historical practices, they may be present in the groundwater at the following locations:

- Building 15 – Warehouse Supply
- Building 11 – AFFF Storage
- Building 19 – Fire Station
- Stormwater Drainage Basin (IRP Site 2)
- Fire Department Equipment Test Area

In general, groundwater contamination associated with historic contaminated sites at the Base does not migrate significantly either vertically or horizontally. Based on this, potential releases of AFFF to groundwater also may not migrate significantly.

3.2.1.1 Water Wells

There are currently no potable water wells on the Base. The Base currently receives drinking water from the local water utility (Connecticut Water Company) (ANG, 2002).

A review of the EDR Radius Map™ Report with Geocheck® dated July 21, 2015 shows 17 water wells within a one-mile radius of the Base (Appendix C-3) (EDR, 2015). Two of these wells appear in the state database, but it is unclear if they are private water wells.

A review of original PA (ANGRC, 1996) and RI (Aneptek, 2002) information indicates there are 26 water wells within a one-mile radius of the Base. A map and historical information regarding these wells is included in Appendix C-4.

3.2.2 Soil

No documentation was available showing that soils at the Base have been tested for PFCs; therefore it is unknown whether PFCs are present in the soil. However, based on historical practices, they are most likely to be present in the soil at the following locations:

- Building 15 – Warehouse Supply
- Building 11 – AFFF Storage
- Building 19 – Fire Station
- Stormwater Drainage Basin (IRP Site 2)
- Fire Department Equipment Test Area

3.2.3 Sediment

No documentation was available showing that sediments at the Base have been tested for PFCs; therefore it is unknown whether PFCs are present in sediments. However, based on historical practices, PFCs could be present in the sediment at the Stormwater Drainage Basin (IRP Site 2) due to the testing of fire equipment in close proximity to the site.

3.2.4 Surface Water

Generally, there is no standing water within the Stormwater Drainage Basin. It is a grass-covered, mowed surface. In general, surface releases at the Base will predominately infiltrate into the sandy and permeable surface soils. Releases to paved surfaces could enter the storm drains which ultimately discharge to the drainage features. The Base is located in the Connecticut River drainage basin. The northern 75 percent of the Base, including the Main Hangar (Building 1), aircraft parking apron, and Building 15, drain northward into the drainage ditch located northeast of Building 24. The drainage ditch then traverses northward off the installation and discharges to DeGrayes Brook, located approximately one-third of a mile northwest of the Base boundary. DeGrayes Brook flows northeasterly into Stony Brook, which then flows easterly and discharges into the Connecticut River, 5 miles downstream. The southern 25 percent of the Base, including the POL Facility, drains into the detention basin associated with IRP Site 2, then westerly into the headwaters of DeGrayes Brook. The detention basin contains water only during and immediately after heavy rain (ANG, 2002). Wetlands may exist in the northern part of the Base. Another potential wetland area is located in the southwest corner of the Base. Both potential wetland areas are associated with the drainage-ways described above (ANG, 2002).

Drainage patterns at the Base and immediate surrounding areas are included in Appendix C-5.

Several potential environmentally sensitive areas surrounding the Base are identified to be on the National Wetland Inventory according to the EDR report, as shown in Appendix C-6.

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4.0 FINDINGS AND CONCLUSIONS

Five potential areas of concern have been identified at the Base during this PA as summarized in Table 1 below. Of these five sites, all five are recommended for further investigation. There were no identified FTAs on the Base nor any hangar or building with an AFFF-based fire suppression system that had a known discharge or release. There were no documented crash sites where AFFF might have been utilized. There were no known incidental releases of AFFF.

Further investigation is recommended at the Base to characterize potential soil, groundwater, surface water, and sediment PFC contamination. Table 1 summarizes the recommendation and rationale for each potential AOC identified at the Bradley ANG Base.

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Table 1: Preliminary Assessment Report Summary and Recommendations

No.	Potential AFFF PFC AOC	GPS Coordinates		Rationale	Recommendation
		Latitude	Longitude		
1	Building 15 – Warehouse Supply	41.934290°	-72.702892°	No documented or suspected AFFF release.	Proceed to SI. Sample soil and groundwater.
2	Building 11 – AFFF Storage	41.934167°	-72.701230°	No documented or suspected AFFF release.	Proceed to SI. Sample soil and groundwater.
3	Building 19 – Fire Station	41.933773°	-72.702194°	No documented or suspected AFFF release.	Proceed to SI. Sample soil and groundwater.
4	Stormwater Drainage Basin (IRP Site 2)	41.931350°	-72.704745°	Minor amounts of AFFF likely released to ground surface in vicinity of drainage basin from historic periodic testing of fire equipment.	Proceed to SI. Sample sediment and groundwater.
5	Fire Department Equipment Test Area	41.935323°	-72.696815°	AFFF likely used during equipment testing activities.	Proceed to SI. Sample soil and groundwater.

AFFF – Aqueous Film Forming Foam
PFC – Perfluorinated Compound
AOC – Area of Concern
GPS – Global Positioning Satellite
SI – Site Investigation
IRP – Installation Restoration Program

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5.0 REFERENCES

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FIGURES

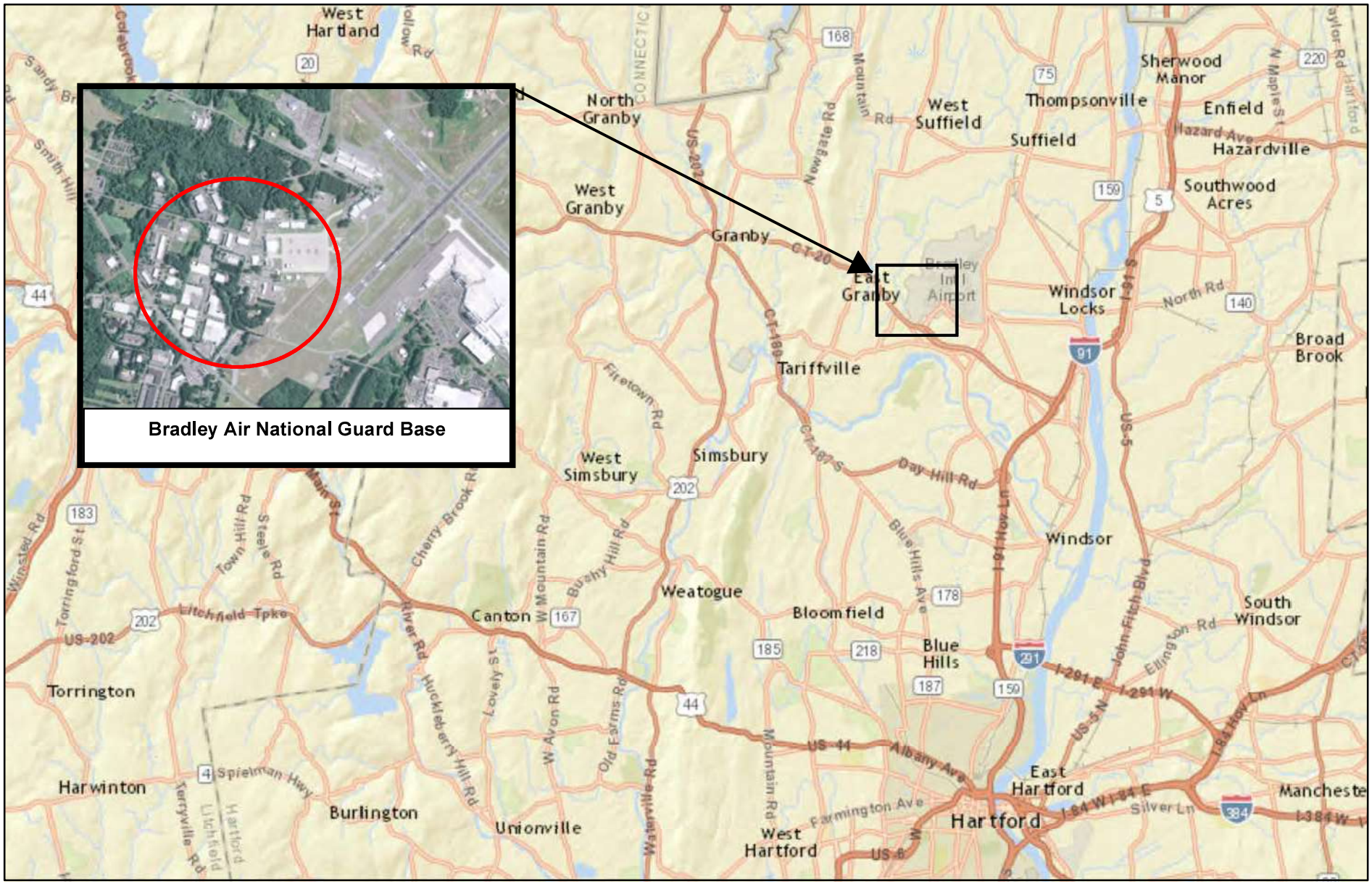

Figure 1
Site Location Map

Bradley Air National Guard Base
East Granby, Connecticut

BB&E

Document Path: H:\IT\GIS\ANG\AFFF PFC\Bradley\Site Location Map Bradley.mxd

Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

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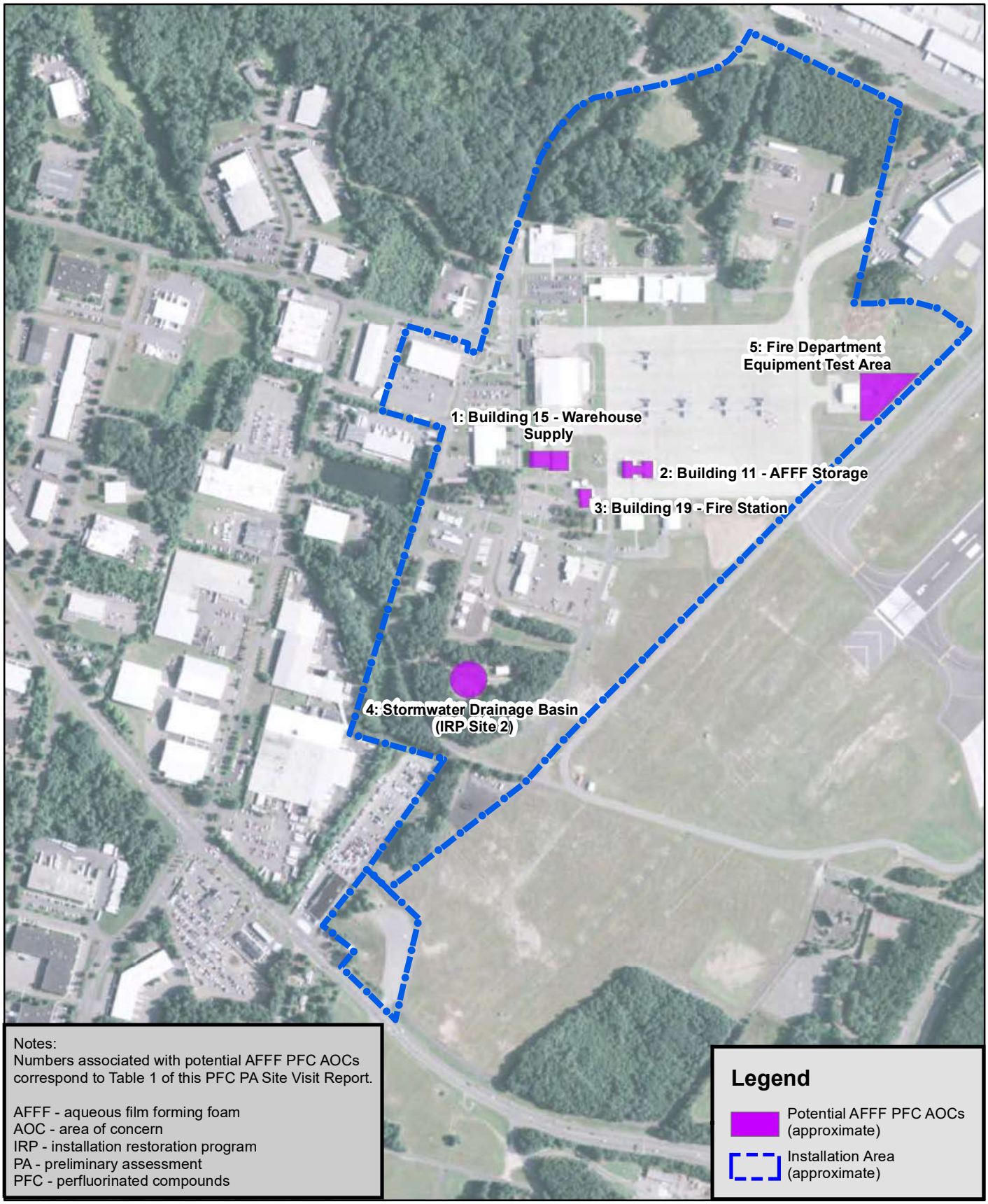


NORTH

0 500 1,000

Feet

Figure 2
Site Features and Potential AOCs

Bradley Air National Guard Base
East Granby, Connecticut

BB&E

Document Path: H:\IT\GIS\ANG\AFFF PFC\Bradley\Site Features Map Bradley.mxd

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community
KMG 8/28/2015

APPENDIX A

PHOTO DOCUMENTATION

Appendix A
Bradley ANG Base, PFC PA Site Visit, East Granby, CT – August 2015

Photo 1: Fire Station Floor Drains

Photo 2: Fire Station OWS to Sanitary (from floor drains)

Appendix A
Bradley ANG Base, PFC PA Site Visit, East Granby, CT – August 2015

Photo 3: Fire Station AFFF Inventory/Storage – Bldg 11

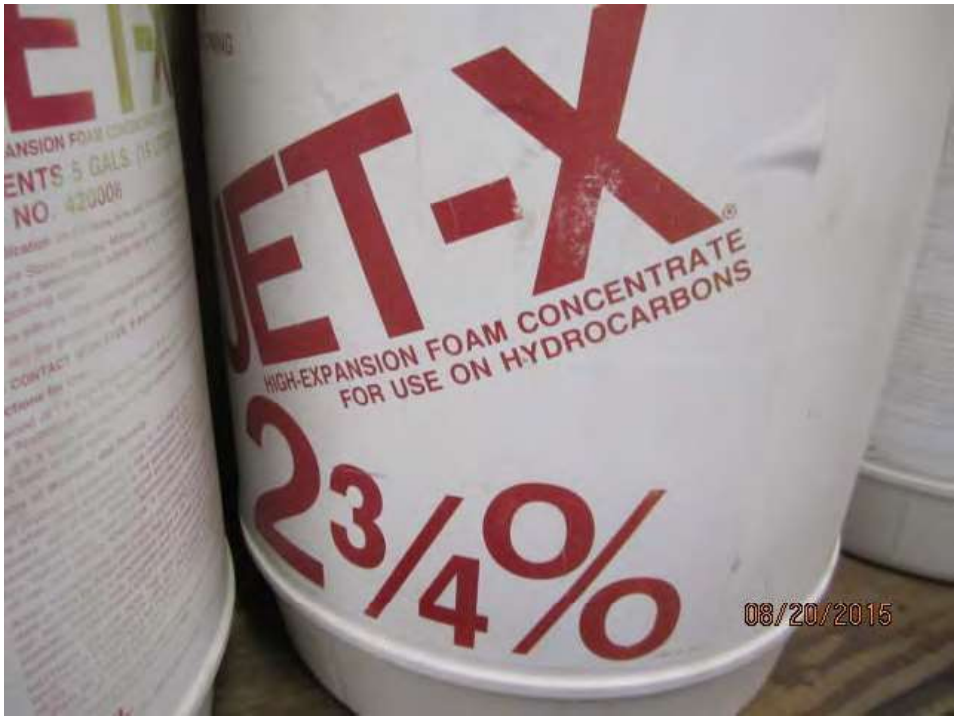


Photo 4: HEF Inventory for Hangars

Appendix A
Bradley ANG Base, PFC PA Site Visit, East Granby, CT – August 2015

Photo 5: Fire Station (From Ramp Side)

Photo 6: Stormwater Drainage Basin (IRP Site 2)

Appendix A
Bradley ANG Base, PFC PA Site Visit, East Granby, CT – August 2015

Photo 7: Hanger/Bldg 15 – Fire Hose Exterior Connection Outside Fire Room

Photo 8: Hangar/Bldg 15 Southeast Corner

Appendix A
Bradley ANG Base, PFC PA Site Visit, East Granby, CT – August 2015

Photo 9: AFFF Gun (4-Typical), Hangar/Bldg 15

Photo 10: Hangar/Bldg 15 Floor Trench Drains

Appendix A
Bradley ANG Base, PFC PA Site Visit, East Granby, CT – August 2015

Photo 11: Hangar/Bldg 15 – AFFF Release Tank (Underground)

Photo 12: Hangar/Bldg 15 - OWS to Sanitary Sewer

APPENDIX B

INTERVIEW QUESTIONS AND RECORDS OF COMMUNICATION

Interview Questions regarding AFFF use
(At Present and back to 1970)

Name: William E. Hoerle, Environmental Analyst, 7+ years Date: 8/20/15
(william.hoerle.ctr@ang.af.mil) phone: (860) 292-2359
State Env. Officer

1. When did AFFF first start being used on this installation?

Don't know

2. What are the years of active use for each Fire Training Area (FTA), Aircraft Hangar, Fire Department, other places AFFF may have been used (collectively Potential Areas of Concern (PAOC)?

Don't know

3. What type of AFFF is used or has been used on this installation (i.e. 3%, 6%, High Expansion Foam)?

2-3/4%, 6% (HEF is 2-3/4 %)

4. What manufacturer's AFFF products are used or were used on this installation (i.e. 3M, Ansul, Chemguard, etc.)?

I have seen 2.75% (manufacturer?), 6% 3M, 6% Ansulite

5. Did you ever dispose of old bulk AFFF, if so, when and where?

See 14 below.

6. Is the AFFF stored as a mixed solution (3% or 6%) or do you formulate the AFFF on the installation?

Don't know

7. If AFFF is formulated on base, where is the solution mixed, contained, transferred, etc.?

Don't know

8. Are your automated fire suppression systems currently charged with AFFF or have they been retrofitted for use of high expansion foam?

Don't know

9. If retrofitted, when was that done?

Don't know

10. Do you have an inventory of the amount of AFFF stored on the installation, (20 barrels now +- Bill Hoerle confirm) now and in the past, or present in automated fire suppression systems? Don't know Were retention ponds built to store discharged AFFF? No Was the AFFF trickled to the sanitary sewer or left in the pond to infiltrate? Don't know

The holding tank underground at building 15 for AFFF collection was pumped out in ~2009 and delivered to the sanitary sewer via fire hose at a rate < or = 500gpd (12,000 gallons total). It is my belief that only washwaters from aircraft and AGE equipment inside the Fuel Cell Shop were stored in this tank.

11. Provide a list of vehicles that carried AFFF, now and in the past, and where are/were they located? Any vehicles have a history of leaking AFFF?

Don't know

12. How much AFFF (gallons) is/was carried/stored in the specified vehicles?

Don't know

13. Do you ever dispose of unused AFFF? If so, how and where?

See 14 below.

14. Has unused AFFF ever been disposed of in the past? If so, how and where?

Yes, Environmental has shipped off-site 1 drum to DRMO (DLA) in 2011 and 4 drums in 2012. We have 10 to 20 drums stored in building 11, west end, and possibly 1 to 2 drums in center section of building 15. Note, 1-drum AFFF appears present in Fire room in Bldg 15 based on 8/21 inspection, none other identified.

15. Do you/did you test the vehicles spray patterns to make sure equipment is working properly?

Don't know

16. How often are/were these spray tests performed and can you provide the locations of these tests, now and in the past?

Don't know

17. Can you describe the procedure on how vehicles and systems are/were supplied with AFFF?

Don't know

18. Can you provide the procedures on how these vehicles are/were cleaned/decontaminated and where vehicle cleaning is performed currently as well as performed in the past?

Don't know

19. Is/was there a specified area on the installation where vehicles are filled with AFFF and does this area have secondary containment in case of spills?

Don't know

20. When a release of AFFF occurs during a fire training exercise, now and in the past, how is the AFFF cleaned and disposed of?

Don't know

21. How many FTAs are/were on this installation and where are they?

Don't know

22. How many FTAs are active and inactive?

Don't know

23. What types of fuels/flammables were used at the FTAs?

Don't know

24. For inactive FTAs, when was the last time that fire training using AFFF was conducted at them? Find out ahead of time in Admin Record for former FTAs.

Don't know

25. What are/were the non-FTA locations where PFCs or AFFF release systems are installed (i.e. Hangars, Wastewater Treatment Plants, Fire Stations, etc.)? Where are/were these locations (Building numbers)?

Don't know

26. Do you have a list (Building names and numbers, current and demolished) where the fire suppression systems either currently contain or have contained AFFF?

Hanger 10001 and Building 15???
(HEF) (AFFF previously ~1993 - 2005)

27. Do you have records of fuel spill logs and emergency response logs? Knowledge of aircraft mishaps/crashes?

Chief Cross/Gwiazdowski

28. Do you have recollection or records of AFFF being used as a precaution in response to fuel releases to prevent fires?

Don't know

29. Do you have recollection or records of historical emergency response sites (i.e. crash sites and fires) where AFFF was used?

Don't know

30. Do you have recollection or record of emergency runway landings where foam might have been used as a precaution?

Don't know

31. If not written records or incomplete written records, do you have anecdotal/verbal information and locations of spills or other emergency response incidents where AFF was used?

Krzysztof Kucharski may have information in his previous capacity as Deputy BCE.

32. What is the typical procedure for removing dispensed AFFF from an area where it has been used?

Don't know

33. Can you provide any other locations where AFFF has been stored, released, or used (i.e. hangars, buildings, fire stations, firefighting equipment testing and maintenance areas, emergency response sites, storm water/surface water, waste water treatment plants, and AFFF ponds)?

I can only speak to storage where AFFF was/is stored in buildings 11 and 15 (1 to 2 drums)

– confirmed 1-drum in Bldg 15 Fire Rm on 8/21.

34. Do you have or did you have a chrome plating shop on base? If no, skip to Question #38.

Not applicable

35. What were/are the years of operation of that chrome plating shop?

Not applicable

36. Do you know whether the shop has/had a foam blanket mist suppression system or used a fume hood for emissions control?

Not applicable

37. If foam blanket mist suppression was used, where was the foam stored, mixed, applied, etc.?

Not applicable

38. Is there anyone else or other base organization personnel that you would recommend we interview? Name, organization, position, phone number, e-mail.

Krzysztof Kucharski

39. Was it common practice to wash away fuel spills with AFFF?

Don't Know

40. Identify drainage patterns around flightline/ramp area. Point source discharge is likely AFFF Area of Concern (AOC).

SWPPP

From: Fire Dept. 8/20/2015
John Gwiazdowski; current senior Fire Captain

Interview Questions regarding AFFF use
(At Present and back to 1970)

1. When did AFFF first start being used on this installation?

   - 1996, started John Gwiazdowski, current Captain FD (senior)
   AFFF been used since at least 1996 when started at Bradley.
   (860-292-2708 FD phone) (cell: 860-794-1563) (19 years)

2. What are the years of active use for each Fire Training Area (FTA), Aircraft Hangar, Fire Department, other places AFFF may have been used (collectively Potential Areas of Concern (PAOC)?

   No known active FTAs; go to other bases for training at CT Academy
   Note, Hangar #1 has HEF, previously nothing, installed early 2000s.

3. What type of AFFF is used or has been used on this installation (i.e. 3%, 6%, High Expansion Foam)?

   3% is used most; some left over 6%; direct fill, no pre mix required for Trucks

4. What manufacturer's AFFF products are used or were used on this installation (i.e. 3M, Ansul, Chemguard, etc.)?

   3M + Ansul typ.

5. Did you ever dispose of old bulk AFFF, if so, when and where?

   None / No.

6. Is the AFFF stored as a mixed solution (3% or 6%) or do you formulate the AFFF on the installation?

   No mix required, use as is.

7. If AFFF is formulated on base, where is the solution mixed, contained, transferred, etc.?

   No, use as received.

8. Are your automated fire suppression systems currently charged with AFFF or have they been retrofitted for use of high expansion foam?

   HEF used at Hangar - 1; Bldg 15 nuclear, would need to check; historically only used water at Bldg 15.

9. If retrofitted, when was that done?

Hangar 01 had HEF installed in early 2000s.

10. Do you have an inventory of the amount of AFFF stored on the installation, now and in the past, or present in automated fire suppression systems? Were retention ponds built to store discharged AFFF? Was the AFFF trickled to the sanitary sewer or left in the pond to infiltrate?

- Est. 500 gallons in inventory; kept in Bldg 11, + some in Bldg supply (Bldg 2)
- 210 + 40 = in use on trucks (Typ) (250 gallons)

11. Provide a list of vehicles that carried AFFF, now and in the past, and where are/were they located? Any vehicles have a history of leaking AFFF?

- Striker P109(52) – 210 gallons AFFF (Vehicle # 52)
- Rapid Intervention vehicle (53) – 40 gallons AFFF (Veh # 53)

12. How much AFFF (gallons) is/was carried/stored in the specified vehicles?

see above

13. Do you ever dispose of unused AFFF? If so, how and where?

- Transfer old AFFF from old trucks to new trucks, none disposed.

14. Has unused AFFF ever been disposed of in the past? If so, how and where?

- none known

15. Do you/did you test the vehicles spray patterns to make sure equipment is working properly?

- Typical annual check w/refractometer; drive out to wooded area near IRP site 2.

16. How often are/were these spray tests performed and can you provide the locations of these tests, now and in the past?

- annual typ, very small amts AFFF used (< 1 pint)

17. Can you describe the procedure on how vehicles and systems are/were supplied with AFFF?

— pour by hand for 5 gallon pails (typ.)

18. Can you provide the procedures on how these vehicles are/were cleaned/decontaminated and where vehicle cleaning is performed currently as well as performed in the past?

— any vehicle washes in FD / drains on floor, go to OWS + sanitary sewer.

19. Is/was there a specified area on the installation where vehicles are filled with AFFF and does this area have secondary containment in case of spills?

— in FD

20. When a release of AFFF occurs during a fire training exercise, now and in the past, how is the AFFF cleaned and disposed of?

— Not applicable

21. How many FTAs are/were on this installation and where are they?

— None

22. How many FTAs are active and inactive?

— None
— used foam at CT Fire Academy

23. What types of fuels/flammables were used at the FTAs?

— NA

24. For inactive FTAs, when was the last time that fire training using AFFF was conducted at them? Find out ahead of time in Admin Record for former FTAs.

— NA

25. What are/were the non-FTA locations where PFCs or AFFF release systems are installed (i.e. Hangars, Wastewater Treatment Plants, Fire Stations, etc.)? Where are/were these locations (Building numbers)?

– None known.

26. Do you have a list (Building names and numbers, current and demolished) where the fire suppression systems either currently contain or have contained AFFF?

– None known.
Most of Base newer, rebuilt in 1980s after Tornado

27. Do you have records of fuel spill logs and emergency response logs? Knowledge of aircraft mishaps/crashes?

– None.

28. Do you have recollection or records of AFFF being used as a precaution in response to fuel releases to prevent fires?

– None

29. Do you have recollection or records of historical emergency response sites (i.e. crash sites and fires) where AFFF was used?

– None

30. Do you have recollection or record of emergency runway landings where foam might have been used as a precaution?

– No, not done by ANG; Bradley Airport FD did on occassion.

31. If not written records or incomplete written records, do you have anecdotal/verbal information and locations of spills or other emergency response incidents where AFF was used?

– No; FD not really active until 1994 (full-time); previously 1-wk/month

32. What is the typical procedure for removing dispensed AFFF from an area where it has been used?

— allowed to dissapate

33. Can you provide any other locations where AFFF has been stored, released, or used (i.e. hangars, buildings, fire stations, firefighting equipment testing and maintenance areas, emergency response sites, storm water/surface water, waste water treatment plants, and AFFF ponds)?

No, see above.

34. Do you have or did you have a chrome plating shop on base? If no, skip to Question #38.

None known.

35. What were/are the years of operation of that chrome plating shop?

—

36. Do you know whether the shop has/had a foam blanket mist suppression system or used a fume hood for emissions control?

—

37. If foam blanket mist suppression was used, where was the foam stored, mixed, applied, etc.?

—

38. Is there anyone else or other base organization personnel that you would recommend we interview? Name, organization, position, phone number, e-mail.

None

39. Was it common practice to wash away fuel spills with AFFF?

No

40. Identify drainage patterns around flightline/ramp area. Point source discharge is likely AFFF Area of Concern (AOC).

See SWPPP

– Note, Chief Robert Cross, out on vacation;
Chief Cross started at Bradley ~ 2004 or 2005.

From: Ted Grabarz - Base EM
phone: (860) 292-2790
email: theodore.l.grabarz.civ@mail.mil

8/21/15

Interview Questions regarding AFFF use
(At Present and back to 1970)

1. When did AFFF first start being used on this installation?

Spoke with CAPT Gwiazdowski (pre-1996)

2. What are the years of active use for each Fire Training Area (FTA), Aircraft Hangar, Fire Department, other places AFFF may have been used (collectively Potential Areas of Concern (PAOC)?

Not applicable - No FTAs identified at Bradley

3. What type of AFFF is used or has been used on this installation (i.e. 3%, 6%, High Expansion Foam)?

Spoke with CAPT Gwiazdowski

4. What manufacturer's AFFF products are used or were used on this installation (i.e. 3M, Ansul, Chemguard, etc.)?

Spoke with CAPT Gwiadowski

5. Did you ever dispose of old bulk AFFF, if so, when and where?

Bill Hoerle indicates 20 barrels still stored (location?) - Bldg 11 + 15.

6. Is the AFFF stored as a mixed solution (3% or 6%) or do you formulate the AFFF on the installation?

Spoke with CAPT Gwiazdowski

7. If AFFF is formulated on base, where is the solution mixed, contained, transferred, etc.?

Spoke with CAPT Gwiazadowski

8. Are your automated fire suppression systems currently charged with AFFF or have they been retrofitted for use of high expansion foam?

Retrofitted to HEF. CAPT Gwiazdowski confirmed.

9. If retrofitted, when was that done?

CAPT Gwiazdowski confirmed around 2004.

10. Do you have an inventory of the amount of AFFF stored on the installation, (20 barrels now +- Bill Hoerle confirm) now and in the past, or present in automated fire suppression systems? Chief Cross Were retention ponds built to store discharged AFFF? Negative Was the AFFF trickled to the sanitary sewer or left in the pond to infiltrate? Sanitary during the one release in hanger. (HEF only)

11. Provide a list of vehicles that carried AFFF, now and in the past, and where are/were they located? Any vehicles have a history of leaking AFFF?

CAPT Gwiazdowski provided

12. How much AFFF (gallons) is/was carried/stored in the specified vehicles?

CAPT Gwiazdowski confirmed.

13. Do you ever dispose of unused AFFF? If so, how and where?

CAPT Gwiazdowski confirmed small amount approx. 1 pint during test once per year. (near wooded/grassy area by drainage basin east of POL)

14. Has unused AFFF ever been disposed of in the past? If so, how and where?

CAPT Gwiazdowski confirmed negative.

15. Do you/did you test the vehicles spray patterns to make sure equipment is working properly?

CAPT Gwiazdowski confirmed yes per above minimal.

16. How often are/were these spray tests performed and can you provide the locations of these tests, now and in the past?

CAPT Gwiazdowski did.

17. Can you describe the procedure on how vehicles and systems are/were supplied with AFFF?

CAPT Gwiazdowski did.

18. Can you provide the procedures on how these vehicles are/were cleaned/decontaminated and where vehicle cleaning is performed currently as well as performed in the past?

Not addressed.

19. Is/was there a specified area on the installation where vehicles are filled with AFFF and does this area have secondary containment in case of spills?

Not addressed

20. When a release of AFFF occurs during a fire training exercise, now and in the past, how is the AFFF cleaned and disposed of?

Not applicable

21. How many FTAs are/were on this installation and where are they?

Addressed by CAPT Gwiazdowski

22. How many FTAs are active and inactive?

Not applicable

23. What types of fuels/flammables were used at the FTAs?

Not applicable

24. For inactive FTAs, when was the last time that fire training using AFFF was conducted at them? Find out ahead of time in Admin Record for former FTAs.

Not applicable

25. What are/were the non-FTA locations where PFCs or AFFF release systems are installed (i.e. Hangars, Wastewater Treatment Plants, Fire Stations, etc.)? Where are/were these locations (Building numbers)?

Addressed by CAPT Gwiazdowski

26. Do you have a list (Building names and numbers, current and demolished) where the fire suppression systems either currently contain or have contained AFFF?

Hanger 10001 – HEF only

27. Do you have records of fuel spill logs and emergency response logs? Knowledge of aircraft mishaps/crashes?

Not addressed as not applicable.

28. Do you have recollection or records of AFFF being used as a precaution in response to fuel releases to prevent fires?

Not applicable

29. Do you have recollection or records of historical emergency response sites (i.e. crash sites and fires) where AFFF was used?

Addressed by CAPT Gwiazdowski – none occurred.

30. Do you have recollection or record of emergency runway landings where foam might have been used as a precaution?

Chief Cross/Gwiazdowski addressed-no.

31. If not written records or incomplete written records, do you have anecdotal/verbal information and locations of spills or other emergency response incidents where AFF was used?

Lt Col (Bill Hoerle indicated the current finance director may have information in his previous capacity. Spoke with an negative.

32. What is the typical procedure for removing dispensed AFFF from an area where it has been used?

Chief Cross/Gwiazdowski addressed. Not used.

33. Can you provide any other locations where AFFF has been stored, released, or used (i.e. hangars, buildings, fire stations, firefighting equipment testing and maintenance areas, emergency response sites, storm water/surface water, waste water treatment plants, and AFFF ponds)?

Chief Cross/Gwiazdowski addressed-negative.

34. Do you have or did you have a chrome plating shop on base? If no, skip to Question #38.

Not applicable

35. What were/are the years of operation of that chrome plating shop?
Not applicable

36. Do you know whether the shop has/had a foam blanket mist suppression system or used a fume hood for emissions control?

Not applicable.

37. If foam blanket mist suppression was used, where was the foam stored, mixed, applied, etc.?

Not applicable .

38. Is there anyone else or other base organization personnel that you would recommend we interview? Name, organization, position, phone number, e-mail.

Lt Col (Bill Hoerle indicated the current finance director may have information in his previous capacity.

39. Was it common practice to wash away fuel spills with AFFF?

Chief Cross/Gwiazdowski addressed. Negative

40. Identify drainage patterns around flightline/ramp area. Point source discharge is likely AFFF Area of Concern (AOC).

Storm on outside and sanitary on inside- drawings previous sent today for storm system.

8/20/15	Time: pm	**COMMUNICATION RECORD**

Name of Base, State: BRADLEY ANG Base - 103d AW	
Interviewer: TOM BARZYK	
Organization: BB+E	**Phone:** 248-489-9636x302
Position/role on this project:	**Email:** tbarzyk@bbande.com
Interviewee: Col Frederick Miclon	
Organization: 103d AW-Bradley	**Phone:** 860-292-2588
Position/Job Title: Vice Wing Commander	**Email:** federick.s.miclon.mil@mail.mil
How Long in this Postion? Since 2009 (6-Years)	
How long at this Base in current and previous positions? Since 1980 at Bradley (35yrs)	
Have you held similar positions at other bases? —	
Which bases? —	
How long? —	

Discussion: Met w/ Col Miclon to discuss Bradley AFFF usage history. Col Miclon has been w/ ANG @ Bradley since 1980. Confirms HEF system installed in main hangar (Bldg-1) in early 2000s. Did not have a foam system before this, only water deluge system in main hanger. Hush-House (T-10) installed in approx. 1992, initially had a Halon based suppression system which was converted to foam, HEF, in early 2000s around same time as main hanger. Smaller Hush-house (T-9) never completed, no system. Believes Bldg-15 had foam system.

- Call CMSgt Larry Delisle w/ Col, Larry is current FLT Line Chief. Indicates there was no system installed initially in Bldg #15. 1st installation in approx. 1993 (AFFF), system subsequently removed/deactivated in 2005-2006 timeframe when base mission + aircraft changed. Believes system had to be activated manually w/ external Fire Truck connection. AFFF stored in Red tank in Fire Rm, est. 500 gallons storage capacity. CMSgt Larry Delisle email: lawrence.h.delisle.mil@mail.mil

- Call CMSgt Jerry Apruzzese (Engine Shop Chief) w/ Col, gerardo.p.apruzzese.mil@mail.mil (phone: 860-292-2578); Confirms Hush House (T-10) had a Halon system initially + converted to HEF likely in early 2000s, No AFFF.

Signature of Interviewer: _____ Date: 8/20/15

8/20/15	Time: PM	**COMMUNICATION RECORD**

Name of Base, State: BRADLEY ANG Base – 103d AW	
Interviewer: TOM BARZYK	
Organization: BBDE	**Phone:** 248-489-9636x302
Position/role on this project:	**Email:** tbarzyk@bbande.com
Interviewee: Major Krzysztof Kucharski	
Organization: 103d AW – Finance Dpt	**Phone:** 860-292-2477
Position/Job Title: Financial Management Specialist / Eng PLT officer in charge	**Email:** Krzysztof.Kucharski.mil@mail.mil
How Long in this Postion?	
How long at this Base in current and previous positions?	
Have you held similar positions at other bases? 28 years at Bradley (12 - Full-time) (16 - part-time)	
Which bases?	
How long?	

Discussion: met w/ major Kucharski briefly on 8/20/15. Krzysztof was the former Base EM (2006-2008) + Deputy Base CE (pre-2006). He was aware of 2 - Foam releases from main Hanger, both occurred approx 11 yrs ago (~2004). System is HEF foam. Does not know of Any AFFF releases on base.

Signature of Interviewer: _____ Date: 8/20/15

Tom Barzyk

From: Cross, Robert F SMSgt USAF (US) <robert.f.cross.mil@mail.mil>
Sent: Friday, August 28, 2015 10:52 AM
To: Tom Barzyk
Cc: Grabarz, Theodore L CIV USAF 103 AW (US)
Subject: RE: Bradley AFFF Questions

1. Fire Training - if conducted at all, appears to have historically occurred on the Bradley Airport property or property associated with the Connecticut Fire Academy (or potentially off-site completely). Can you confirm this or elaborate on where fire training was conducted?

***Live Fire Training is conducted off installation. We conduct different types of live fire training (class A &B) and all are extinguished WITHOUT the use of FOAM, water ONLY.

2. Fire equipment testing - can you elaborate on where current and historical fire equipment testing was performed using AFFF? This might include monthly or annual calibration tests, etc. It was my understanding that any fire equipment testing was typically conducted in grassy/wooded areas east and southeast of the POL area.

***That is correct, any discharges for testing equipment, historical, would have been East of the POL area or next to the Hush House off the flight line. In addition, any refractometer tests were accomplished either at the CT Fire Academy or next to Bradley Fire Station #2 when they conducted their testing.

3. Are you aware of any releases of AFFF either accidentally or in response to a crash or incident (fuel spill, etc.).

***I do not have any records on accidental use of foam for emergencies since my arrival in 2005.

Robert F. Cross, SMSgt, USAF
103 Airlift Wing
Chief, Fire Emergency Services
Comm 860-292-2525 DSN 220-2525
FAX 860-292-2471 DSN 220-2471
email: robert.cross.2@ang.af.mil (acct expires 12/31/15)

NEW EMAIL EFFECTIVE 7/30/15
Robert.f.cross.mil@mail.mil

___|___
---x-x--(_)--x-x---

-----Original Message-----
From: Tom Barzyk [mailto:tbarzyk@bbande.com]
Sent: Friday, August 28, 2015 9:59 AM
To: Cross, Robert F SMSgt USAF (US)
Cc: Grabarz, Theodore L CIV USAF 103 AW (US)
Subject: Bradley AFFF Questions

Hi Robert, welcome back. I was hoping to speak with you briefly about AFFF usage at Bradley. I conducted a Preliminary Assessment site visit to Bradley last week and had some followup questions as follows:

1. Fire Training - if conducted at all, appears to have historically occurred on the Bradley Airport property or property associated with the Connecticut Fire Academy (or potentially off-site completely). Can you confirm this or elaborate on where fire training was conducted?

2. Fire equipment testing - can you elaborate on where current and historical fire equipment testing was performed using AFFF? This might include monthly or annual calibration tests, etc. It was my understanding that any fire equipment testing was typically conducted in grassy/wooded areas east and southeast of the POL area.

3. Are you aware of any releases of AFFF either accidentally or in response to a crash or incident (fuel spill, etc.).

Any information is appreciated.

Feel free to call if easier.

Sincerely,

Tom

Note: I can be reached on my cell phone today. I will be back in the office on Monday.

Thomas E. Barzyk, PE, CSP | Principal

BB&E, Inc | Consulting Engineers & Professionals

235 East Main Street, Suite 107 | Northville, MI 48167

Office 248.489.9636 ext 302 | Cell 248.766.4143

APPENDIX C

SUPPORTING DOCUMENTATION

APPENDIX C-1

GROUNDWATER ELEVATION CONTOURS

Final
Regional Compliance Restoration Program Preliminary Assessment/Site Inspection Bradley Air National Guard Base East Granby, Connecticut

RS015 – Building 15 Drain
TU016 – Building 3 Underground Storage Tanks (USTs)
TU017 – Former Hydraulic Lift in Building 3
TU018 – Former Hydraulic Lifts in Building 16
ZZ019 – Building 78 Potable Water Well
TU020 – Building 3 Oil Collection System and Sump
TU021 – Building 3 Suspected Former Fuel Oil UST
RS022 – Building 16 Drain
TU023 – Building 1 Pipelines

August 2015

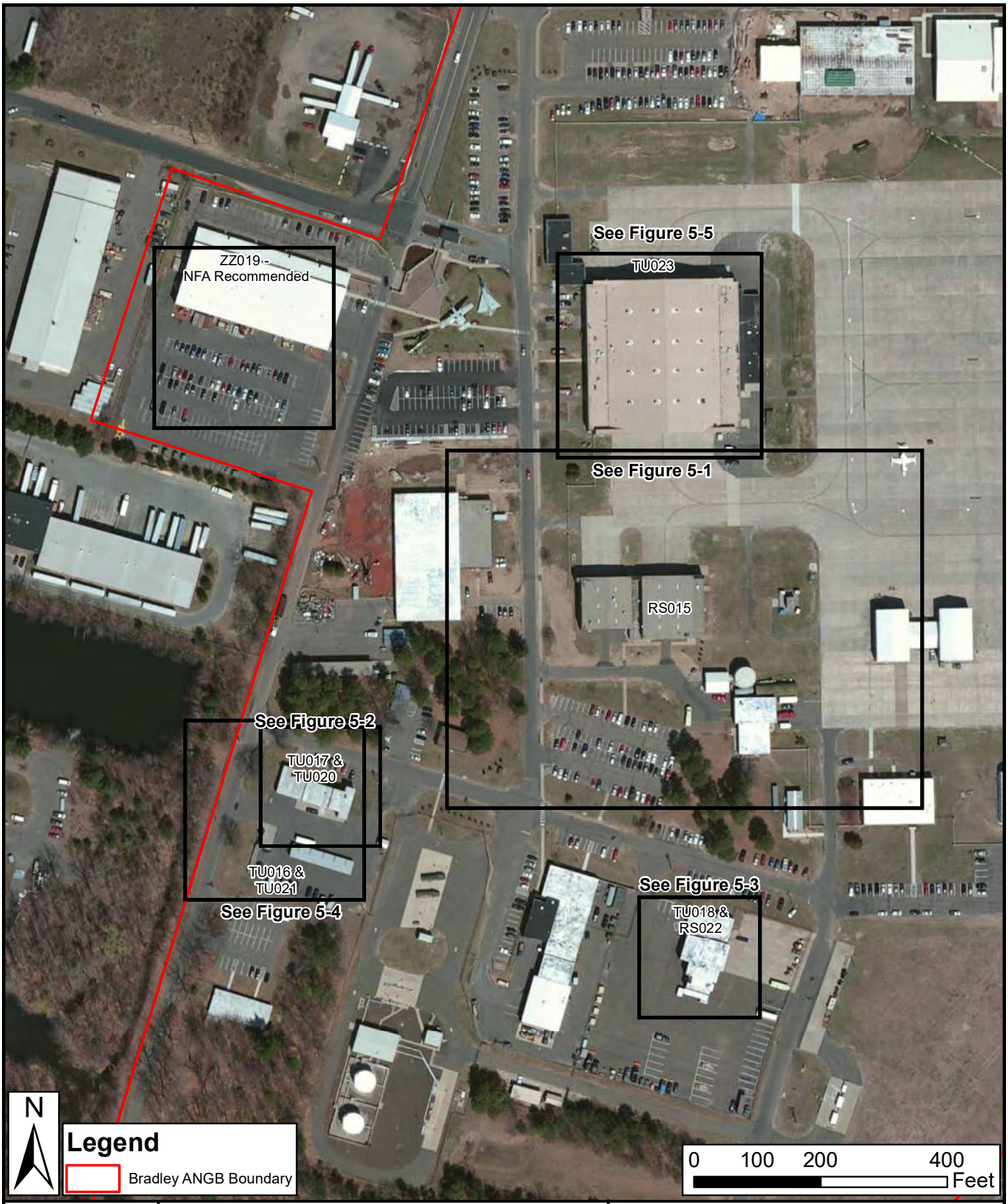
Contract No. W912DR-12-D-0014
Task Order No. 0001

AIR NATIONAL GUARD
GUARDING AMERICA DEFENDING FREEDOM

CONTRACT NO 60308608	Bradley Air National Guard Base
CARTOGRAPHY BY A. Weber	Figure 1-1 Bradley Air National Guard Base Vicinity Map East Grandby, Conneticut
CHECKED BY M. Donahue / DATE December 2013	
SCALE 1" = 650' / SHEET 1 of 1	
Fig_1-1_Bradley_ANGB_Vicinity.mxd	

AECOM

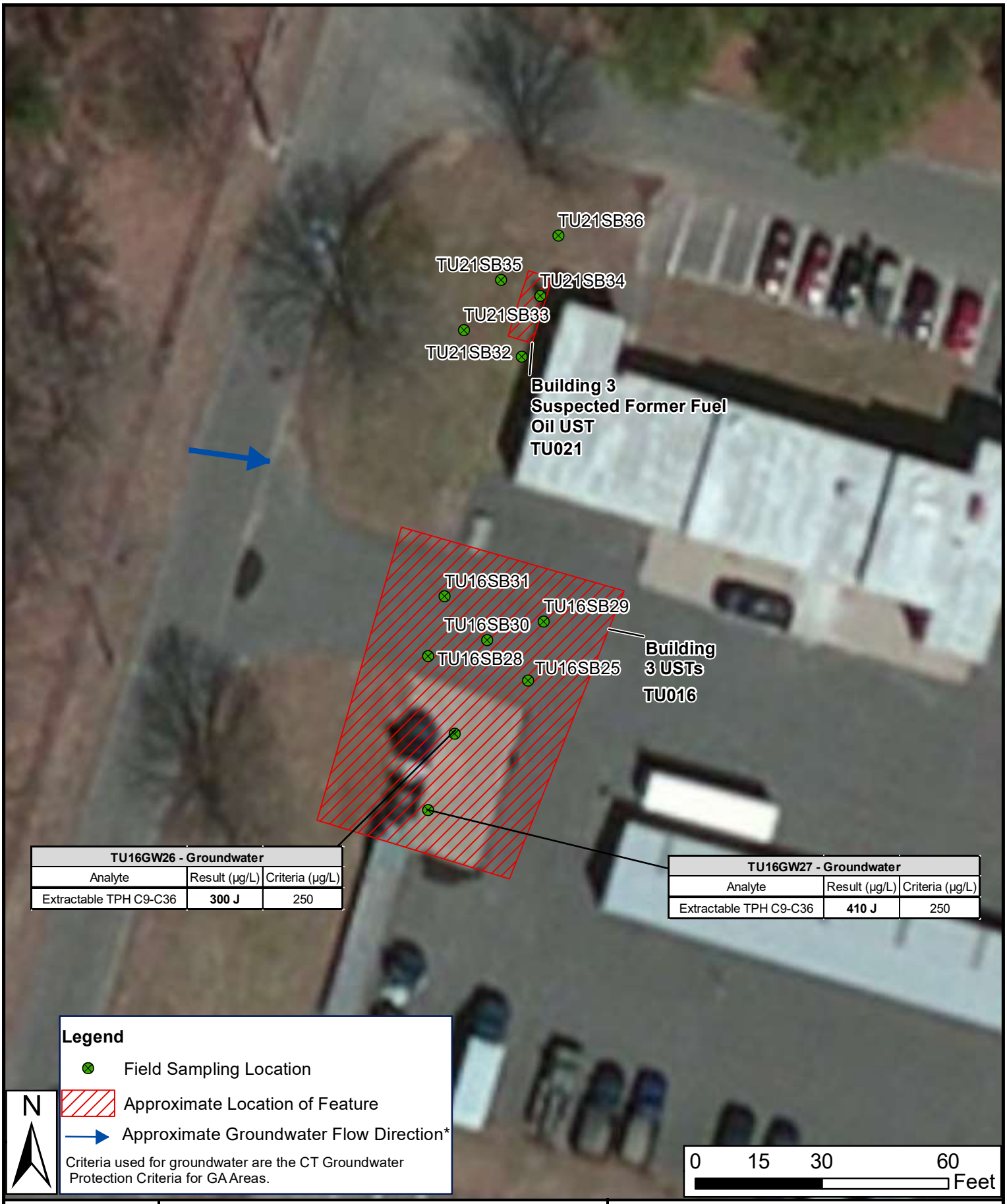
Source: Esri, 2013; Bing Maps, 2011



CONTRACT NO 60308608	Bradley Air National Guard Base
CARTOGRAPHY BY B. Perrigo	Figure 2-1 Bradley Air National Guard Base Areas of Concern Locations East Granby, Conneticut
CHECKED BY K. Kwasniak / DATE March 2015	
SCALE 1" = 200' / SHEET 1 of 1	
Fig_2-1_Bradley_ANGB_AOC.mxd	

AECOM

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



TU16GW26 - Groundwater		
Analyte	Result (µg/L)	Criteria (µg/L)
Extractable TPH C9-C36	**300 J**	250

TU16GW27 - Groundwater		
Analyte	Result (µg/L)	Criteria (µg/L)
Extractable TPH C9-C36	**410 J**	250

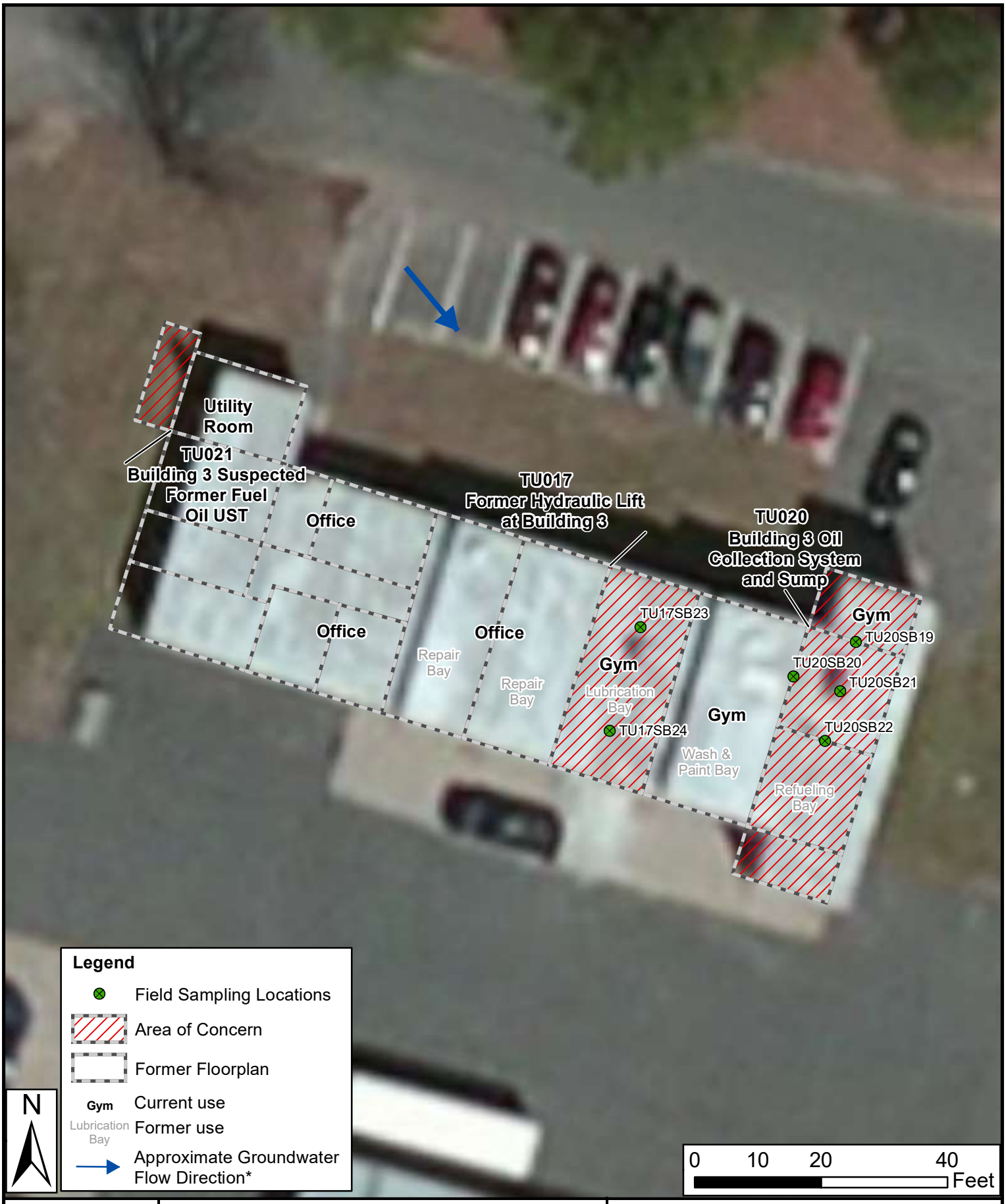
CONTRACT NO 60308608	
CARTOGRAPHY BY B. Perrigo	
CHECKED BY K. Kwasniak	DATE March 2015
SCALE 1" = 30'	SHEET 1 of 1
Fig_5-2_Bradley_Field_Sampling_Locations_TU016_TU021.mxd	

Bradley Air National Guard Base

Figure 5-2
Bradley Air National Guard Base
TU016 and TU021 SI Field Sampling Locations
East Granby, Conneticut

AECOM

Source: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community; *ANG, 2013.



CONTRACT NO 60308608	Bradley Air National Guard Base
CARTOGRAPHY BY B. Perrigo	Figure 5-3 Bradley Air National Guard Base AOCs Associated With Building 3 (TU017 & TU020) SI Field Sampling Locations East Granby, Conneticut
CHECKED BY K. Kwasniak / DATE March 2015	
SCALE 1" = 20' / SHEET 1 of 1	
Fig_5-3_Bradley_Field_Sampling_Locations_TU017_TU020.mxd	

AECOM

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community; *ANG, 2013.

BALANCED ENVIRONMENTAL MANAGEMENT
BEM SYSTEMS
100 PASSAIC AVENUE • CHATHAM, NJ 07928
P 908.598.2600 • F 908.598.2622
WWW.BEMSYS.COM

20 February 2015
Contract # W9133L-05-D-0007 TO 31

Mr. Stan Moore - NGB/A7OR
Air National Guard
Conway Hall
3500 Fetchet Ave.
Joint Base Andrews, MD 20762-5157

Re: Long Term Monitoring (LTM) Event No. 5 (Sites 2, 3, 4 and 6) – September 2014
Installation Restoration Program Sites 2, 3, 4, and 6
Bradley Air National Guard Base
East Granby, CT

Mr. Moore:

Please find enclosed one hard copy and one compact disk of the Draft LTM Report for Sites 2, 3, 4, and 6 at Bradley Air National Guard Base, CT for your review and comment.

A CD-ROM containing an electronic copy of the report is enclosed along with the review comment matrix sheet that can be utilized to track your comments associated with the Draft LTM Report. We ask that you provide comments within seven business days after receipt of the Draft LTM Report. Upon obtaining your comments, we will proceed with developing a response to comments matrix sheet and then proceed with the preparation of the Draft Final LTM Report.

Please feel free to contact me at (407) 402-4440, should you have any questions or concerns.

Sincerely,

BEM Systems, Inc.

Chris Pisarri
NGB Program Manager

cc: Mr. Jim Colmer (BB&E)
William Hoerle (103d AW)

Groundwater Monitoring Well (Groundwater Elevation)

Groundwater Contours 0.20 Foot Intervals (Elevation In Feet AMSL)

Groundwater Flow Direction

Installation Boundary

Note:

1) Monitoring wells 2-MW02 and 3-MW06 were not used in groundwater contour modeling data set due to lack of survey data.
2) Groundwater Contours are dashed where inferred.
3) AMSL = Above Mean Sea Level
4) Groundwater elevation data was recorded at the Bradley ANGB on 15 and 17 September 2014.

Data Sources: Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

103d Air Wing
Connecticut Air National Guard
Bradley Air National Guard Base

LTM Event No. 5

Figure 5:
Groundwater Elevation Contour Map

Project Number:
07-ANG31CNEF

Date:
February 2015

FINAL
REMEDIAL INVESTIGATION REPORT
IRP SITES 1, 3, 4, 5, AND 6

103rd FIGHTER WING
CONNECTICUT AIR NATIONAL GUARD
BRADLEY AIR NATIONAL GUARD BASE
EAST GRANBY, CONNECTICUT

VOLUME II OF III

JANUARY 2002

Prepared For
AIR NATIONAL GUARD READINESS CENTER
ANDREWS AFB, MARYLAND 20331-6008

FINAL
REMEDIAL INVESTIGATION REPORT
IRP SITES 1, 3, 4, 5, AND 6

103rd FIGHTER WING
CONNECTICUT AIR NATIONAL GUARD
BRADLEY AIR NATIONAL GUARD BASE
EAST GRANBY, CONNECTICUT

VOLUME I OF III

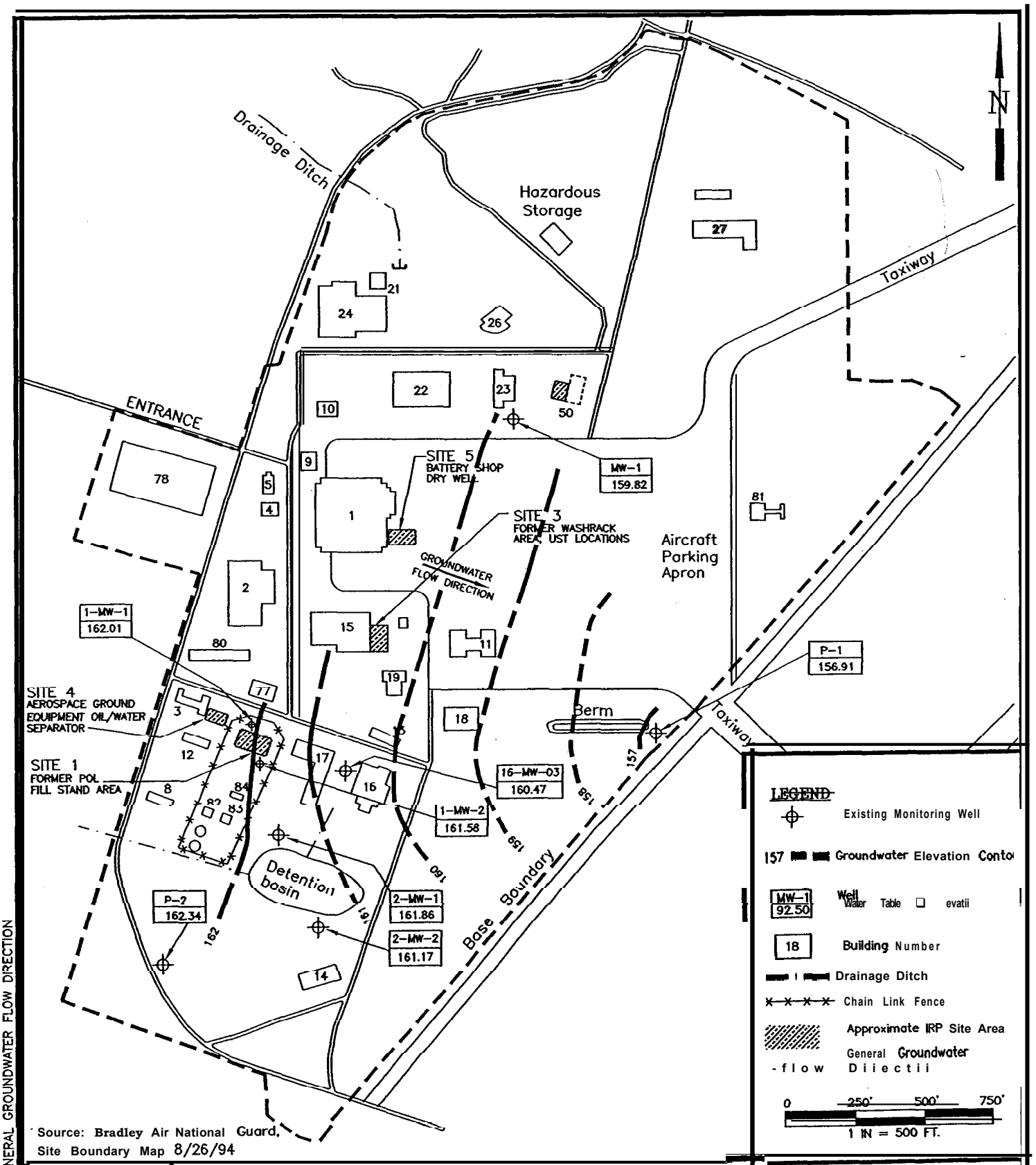
JANUARY 2002

Prepared For

AIR NATIONAL GUARD READINESS CENTER
ANDREWS AFB, MARYLAND 20331-6008

Prepared By

ANEPTEK CORPORATION
408 Pleasant Street
Worcester, Massachusetts 01609



Source: Bradley Air National Guard, Site Boundary Map 8/26/94

103rd FIGHTER WING

WATER TABLE ELEVATION MAP

BRADLEY AIR NATIONAL GUARD
EAST GRANBY, CONNECTICUT

ANEPTEK CORPORATION
Analytic, Environmental and Process Technologies

FIGURE: 1

C:\DRAW\BRADLEY\RI\GENERAL GROUNDWATER FLOW DIRECTION

APPENDIX C-2

IRP SITE INFORMATION

Air National Guard
Environmental Restoration Program

FINAL
COMMUNITY INVOLVEMENT PLAN

for the

103rd Airlift Wing and Air Control Squadron

Connecticut Air National Guard
Bradley Air National Guard Base and the Orange Air National Guard Station,
East Granby, Orange and West Haven, Connecticut

February 2011

Prepared for the Air National Guard
3500 Fetchet Ave
Andrews AFB, MD 20762-5157

Figure 4. Location of the Identified ERP Sites at the 103rd Airlift Wing, Bradley ANG Base within East Granby, Connecticut

3.2.1 Site 1: Former POL Fill Stand Area

Site 1, previously referred to as AOC B, is located north of Building 84 (formerly building 6) and is the area of a former POL Fill Stand Area. The POL Fill Stand Area was used from 1958 to 1993 to fill aircraft refueling vehicles with JP-4 fuel prior to actual refueling operations on the aircraft parking apron. Bradley ANG Base documentation reports that one spill of approximately 120 gallons of fuel, numerous smaller spills, and several cases where untreated wash water from truck washing activities drained into unpaved areas.

In 1993, the JP-4 tanks and fill stand piping was removed. In 2002 and 2005, results from groundwater and soil sampling indicated that JP-4 impacted soil and groundwater exceeded both of their respective CT DEP Remediation Standards. Soil constituents of concern include: Volatile Organic Compounds (VOCs) (ethyl benzene, m,p-xylenes, and o-oxylene), 2-methylnapthalene, and extractable petroleum hydrocarbons (EPH). Groundwater contaminants of concern (COCs) consist of VOCs (ethyl benzene, m,p-xylenes, and o-oxylene) and extractable total petroleum hydrocarbons (ETPH). An FS was recommended for the site to evaluate remedial alternatives for soil and groundwater COCs. A horizontal well biosparge system was constructed in 2005 and began operating in March 2006. The system was shut down in March 2008 and then reactivated in June 2010. Since initial start-up in 2006, groundwater has been sampled on a quarterly basis. Quarterly monitoring reports for the horizontal well biosparge system indicate that ETPH remains above CTDEP Remediation Standards in groundwater. The RPO conducted in July 2010, along with future monitoring results will be used to develop future remedial plans for the site. Site 1 is approximately 0.1 acres.

3.2.2 Site 2: Detention Basin

Site 2, previously referred to as AOC C, is located approximately 200 feet southeast of the current POL area. Between 1956 and 1992, a detention basin was used to intercept stormwater runoff from Site 1: Former POL fill stand area, as well as temporary storm drainage from the southern quadrant of the Base. Site 2 is currently regulated under a National Pollutant Discharge Elimination System (NPDES) Stormwater Permit for the discharge of storm water to surface water (DeGrayes Brook being the receiving water for storm water discharges). The results presented in the 2010 RI Addendum Report indicate CTDEP criteria was exceeded in soil (organics), sediment (organics and arsenic), and groundwater (organics). The 2010 RI Addendum Report recommended that an FS be prepared for Site 2 to evaluate further actions to address criteria exceedances. Site 2 encompasses approximately 1.7 acres.

3.2.3 Site 3: Former Washrack Area

Site 3, previously referred to as AOC A, is located off the southeast corner of the current Building 15. Site 3 consists of the former aircraft wash rack and two former underground storage tanks (USTs). One UST contained waste oil and the other, waste solvents. The wash rack operated from 1956 to 1979. During aircraft washing operations, wash water drained from the planes to the edges of the concrete and onto the ground. The USTS were installed in 1979 and removed in 1996. Wash water as well as spills and leaks from the USTs contributed to contamination in this area. The results presented in the 2010 RI Addendum Report indicate CTDEP criteria were exceeded for soil (organics) and groundwater (naphthalene and lead). The

INSTALLATION RESTORATION PROGRAM

103rd AIRLIFT WING
CONNECTICUT AIR NATIONAL GUARD
BRADLEY AIR NATIONAL GUARD BASE
EAST GRANBY, CONNECTICUT

FINAL

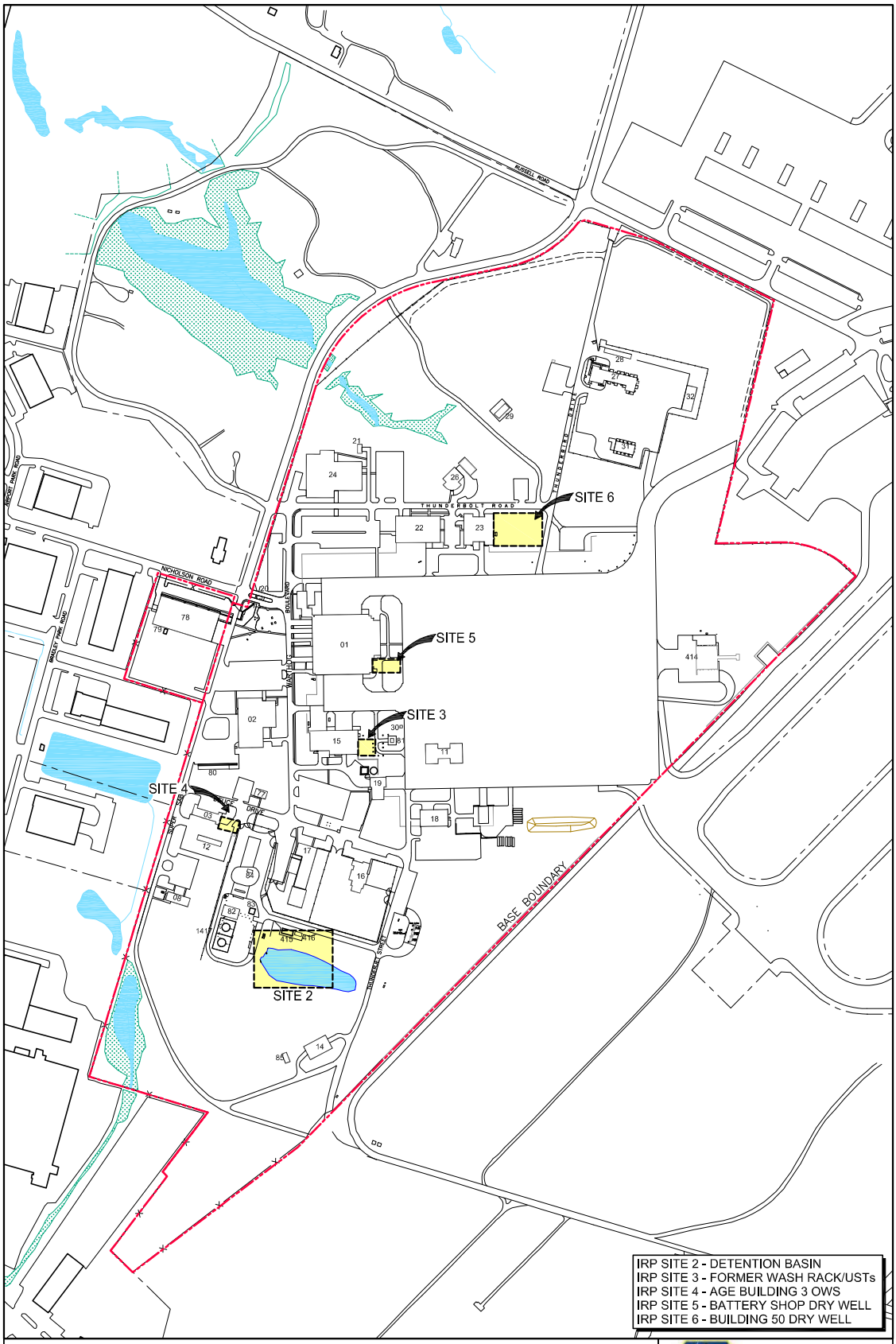
RECORD OF DECISION
IRP SITES 2, 3, 4, 5, AND 6

Submitted to:

NGB/A7OR
Joint Base Andrews, Maryland 20762-5157

ANG Contract No. DAHA92-01-D-0008
Delivery Order No. 0134

December 2012



LEGEND:

- BUILDING
- ASPHALT ROAD
- FENCE LINE
- PROPERTY BOUNDARY
- STREAM
- POND OR BASIN
- WETLAND
- APPROXIMATE IRP SITE AREA

0 200 400 800

SCALE: 1" = 400'

N

SAIC

Figure 1-2
SITE LOCATION MAP
BRADLEY ANGB

DRAWN BY:	REV. NO./DATE:	CAD FILE:
P. HOLM	REV. 1/09-13-12	12021/DWGS/L97-FIG1-2

APPENDIX C-3

EDR ONE-MILE RADIUS WATER WELLS MAP

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	USGS40000229966	1/4 - 1/2 Mile NW
A2	USGS40000229972	1/4 - 1/2 Mile NNW
A3	USGS40000229973	1/4 - 1/2 Mile NNW
A4	USGS40000229974	1/4 - 1/2 Mile NNW
A5	USGS40000229975	1/4 - 1/2 Mile NNW
B6	USGS40000229931	1/2 - 1 Mile WSW
C9	USGS40000229898	1/2 - 1 Mile SSE
C10	USGS40000229896	1/2 - 1 Mile SE
C11	USGS40000229897	1/2 - 1 Mile SE
12	USGS40000229995	1/2 - 1 Mile NNW
13	USGS40000229892	1/2 - 1 Mile SE
14	USGS40000229969	1/2 - 1 Mile WNW
15	USGS40000229863	1/2 - 1 Mile South
16	USGS40000229857	1/2 - 1 Mile South
17	USGS40000230020	1/2 - 1 Mile NNW

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

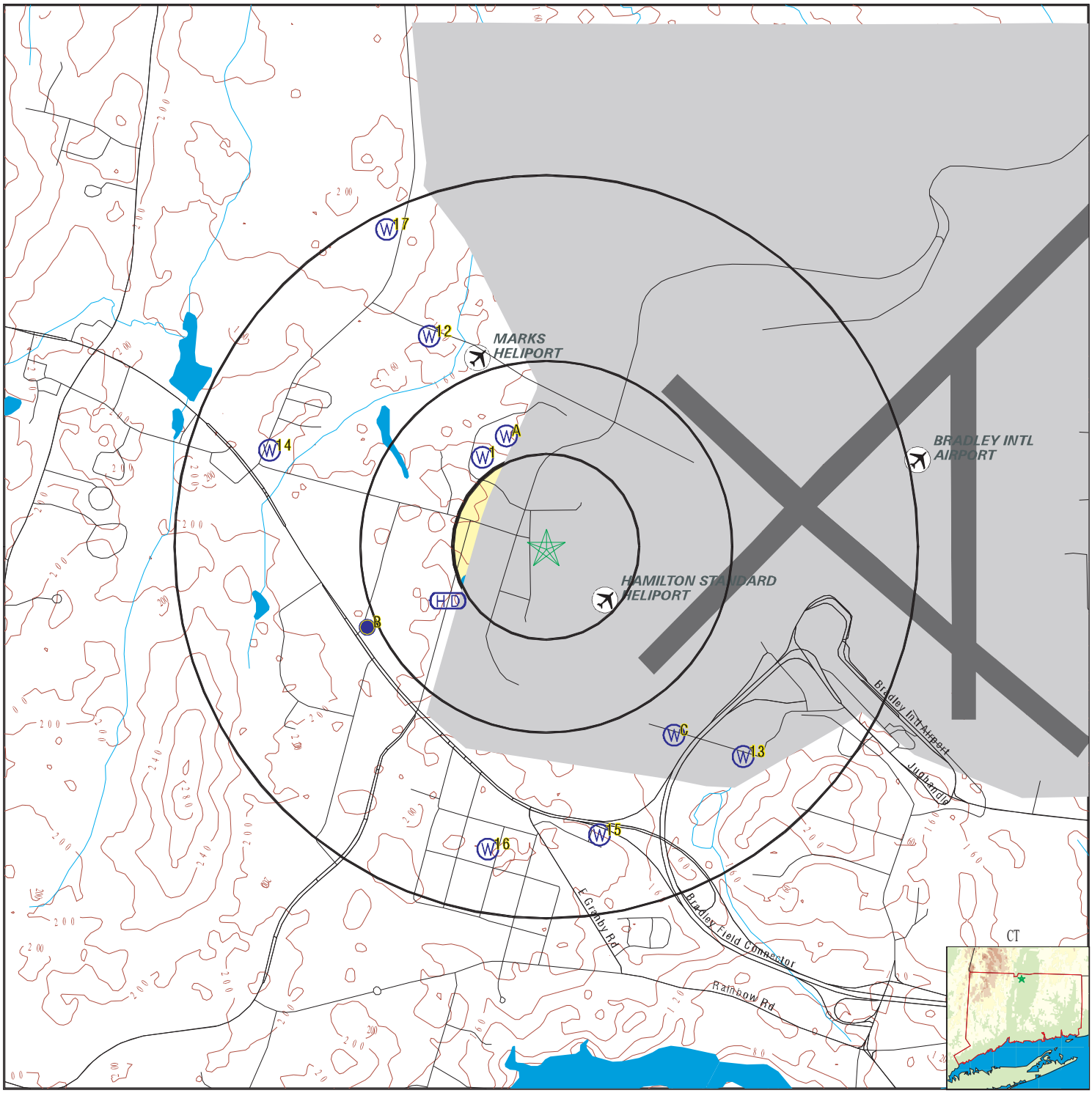
MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
B7	CTNC00000000009	1/2 - 1 Mile WSW
B8	CTNC00000000008	1/2 - 1 Mile WSW

PHYSICAL SETTING SOURCE MAP - 4359500.1s



County Boundary
Major Roads
Contour Lines
Airports
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

0 1/4 1/2 1 Miles

Groundwater Flow Direction
Indeterminate Groundwater Flow at Location
Groundwater Flow Varies at Location
Closest Hydrogeological Data
EPA Designated Sole Src. Aq.

N

SITE NAME: Bradley ANGB	CLIENT: B.B. & E
ADDRESS: 100 Nicholson Road East Granby CT 06026	CONTACT: Veronica Allen
LAT/LONG: 41.9355 / 72.7026	INQUIRY #: 4359500.1s
	DATE: July 21, 2015 9:34 am

Copyright © 2015 EDR, Inc. © 2010 Tele Atlas Rel. 07/2009.

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation	Database	EDR ID Number
B7 **WSW** **1/2 - 1 Mile** **Higher**	**CT WELLS**	**CTNC00000000009**

CT Non-Community Well

Well ID:	12	Well Name:	Well
Supply System ID:	400212	Supply System Name:	Magnatech
Source Status:	Active	Type:	Drilled
Groundwater Aquifer Type:	Bedrock	GIS Date/Method:	1993 EPA-GPS
Depth:	0 Feet	Depth to Bedrock:	0 Feet
Well Diameter:	0	Casing Diameter:	0
Pump Capacity:	0	Safe Yield:	0
New ID:	CT0400212		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation	Database	EDR ID Number
B8 **WSW** **1/2 - 1 Mile** **Higher**	**CT WELLS**	**CTNC00000000008**

CT Non-Community Well

Well ID:	11	Well Name:	Well
Supply System ID:	400212	Supply System Name:	Magnatech
Source Status:	Active	Type:	Drilled
Groundwater Aquifer Type:	Bedrock	GIS Date/Method:	1993 EPA-GPS
Depth:	0 Feet	Depth to Bedrock:	0 Feet
Well Diameter:	0	Casing Diameter:	0
Pump Capacity:	0	Safe Yield:	0
New ID:	CT0400212		

APPENDIX C-4

HISTORICAL WATER WELLS INFORMATION

START FIELD WORK

DCN: Bradley 2 26128
Title: PA/SI Work Plan
ARF Final 01 Jun 1994

FINAL

INSTALLATION RESTORATION PROGRAM

PRELIMINARY ASSESSMENT/SITE INSPECTION WORK PLAN

103RD FIGHTER GROUP
CONNECTICUT AIR NATIONAL GUARD
BRADLEY AIR NATIONAL GUARD BASE
EAST GRANBY, CONNECTICUT

JUNE 1994

Prepared For
AIR NATIONAL GUARD READINESS CENTER
ANDREWS AFB, MARYLAND 20331-6008

3.7.4 Hydrogeology

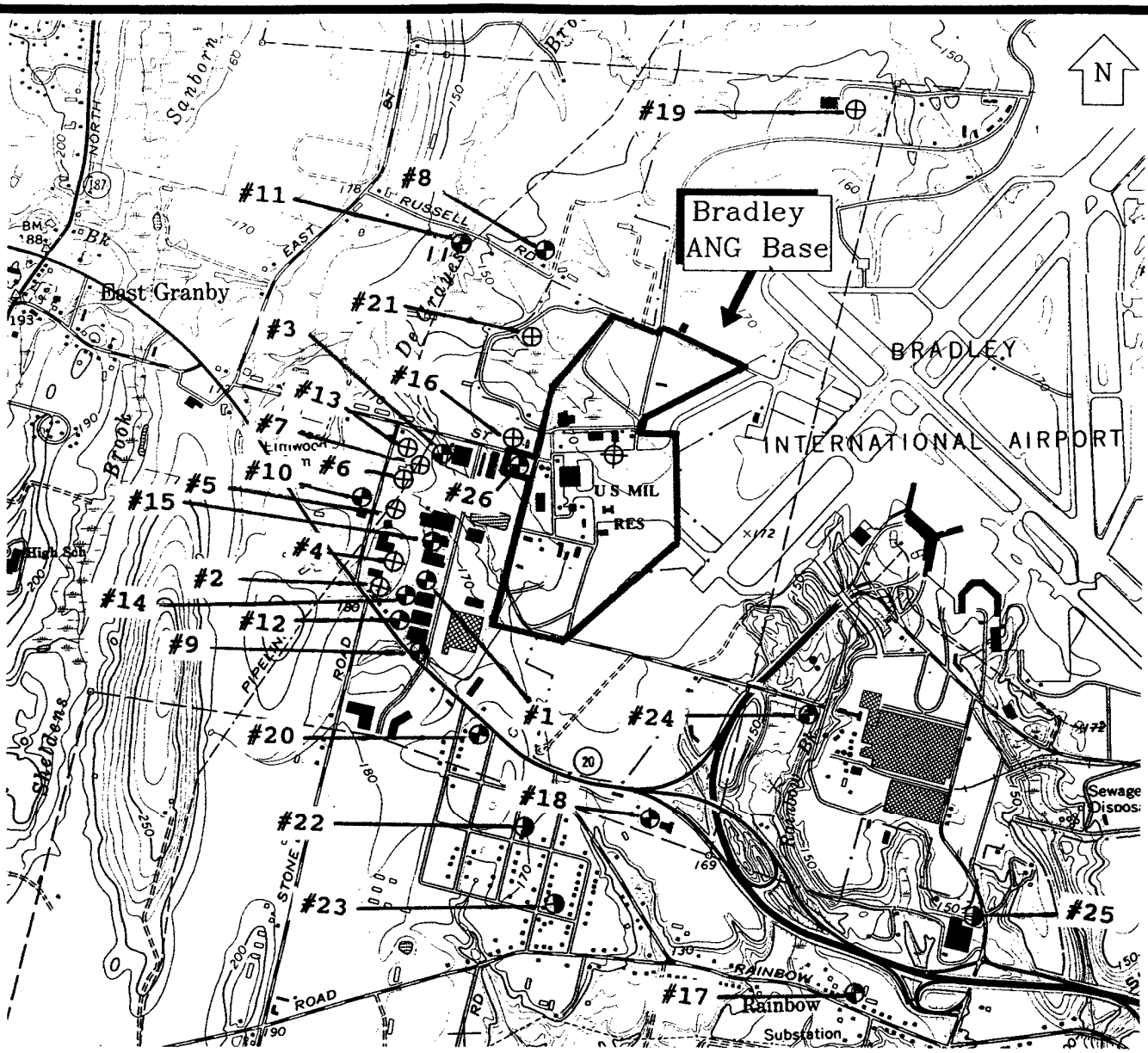
The highest water bearing unit is the Pleistocene deltaic silts and sands. Groundwater is located approximately six feet below ground surface (bgs) at the Base in these deposits, as measured in the monitoring well located near Building No. 23. Recharge to this unit is predominantly by percolation of precipitation through the well-drained soils (refer to Section 3.7.2 for a discussion of soil types present).

As depicted on the Water Resources Bulletin No. 24, Plate B from the Water Resource Inventory of Connecticut (USGS, 1981) coarse-grained stratified drift overlies fine-grained stratified drift at the Base. These units may produce more than 400 gallons per minute (gpm) from properly developed wells. Highest yields were reported as generally obtained from wells tapping the thickest, most transmissive parts of coarse-grained stratified drift and from areas near major streams. The lower fine-grained stratified drift is generally unproductive with wells yielding less than 20 gpm. The Bedrock aquifers in the area is the Triassic Portland Arkose. Drilling logs indicate refusal (bedrock) was located at 61 to 86 feet in depth.

Water wells in the general vicinity of the Base include two wells used to supply water to the airport and wells in the surrounding industrial and residential areas. A well exists in the Avionics Building of the Base that is not used according to Base personnel. Both the Pleistocene deltaic deposits and the Triassic Portland Arkose are used as aquifers. Figure 3.6 shows the location of the water supply wells that were retrieved from the CTDEP water well log files, and from the Unconsolidated Materials Map (USGS, 1976). Table 3.5 lists the depth and uses of the wells; the boring logs are included in Appendix D.

Groundwater flow is likely to be to the northeast towards the drainage ditch in the northern 75 percent of the Base and towards the south in the southern 25 percent of the Base. This assumption is based upon Base topography and surface water drainage direction. Because the watertable is in deltaic sands, which are presumed to be laterally uniform, the groundwater flow direction should be in a topographically downgradient direction. However, because the watertable is situated in silts and sands approximately six feet below grade, sewer lines, storm drains, or other utility lines may extend to this depth modifying the localized groundwater flow direction along the backfilled material around the utilities. At this time it has not been determined if utilities extend below the watertable affecting groundwater movement.

The CTDEP has developed water quality standards that are designed to protect surface and groundwaters of high quality from degradation. The water quality standards and criteria were developed as part of the Connecticut Clean Water



SCALE 1: 24000

0 1/2 1 MILE

CONTOUR INTERVAL 10 FEET

Source: U.S.G.S. Unconsolidated Materials Map, Map MF-450E, 1976
CT DEP Well log files, 1994

LEGEND

- Water supply well screened in bedrock
- Water supply well screened in overburden
- Water supply well, screened interval unknown
- Monitoring Well
- Base Boundary
- # Well Number

FIGURE: 3.6

Well Location Map

Bradley Air National Guard Base
East Granby, Connecticut

CONNECTICUT

ANEPTEK CORPORATION
Analytic, Environmental and Process Technologies

DATE: 5/11/94

TABLE 3.5

Well Information

WELL NO.	TYPE	DEPTH (feet)	USE
1	Bedrock	400	Business Establishment
2	Overburden	24	Domestic
3	Bedrock	230	Industrial
4	Overburden	30	Business Establishment
5	Overburden	30	Business Establishment
6	Overburden	30	Business Establishment
7	Overburden	29	Business Establishment
8	Bedrock	198	Domestic
9	Bedrock	245	Business Establishment
10	Bedrock	275	Business Establisment
11	Bedrock	200	Domestic
12	Bedrock	400	Business Establishment
13	Overburden	30	Industrial
14	Bedrock	247	Industrial
15	Bedrock	205	Business Establishment
16	Overburden	25	Domestic
17	Bedrock	206	Domestic
18	Bedrock	200	Other - Public Works
19	Overburden	106	Public Supply
20	Bedrock	88	Domestic
21	Overburden	98	Unknown
22	Bedrock	40	Domestic
23	Bedrock	80	Domestic
24	Bedrock	53	Unknown
25	Bedrock	102	Unknown
26	Bedrock	240	Not in Use

REFERENCE: State of Connecticut Department of Protection Well Drilling Board
U.S.G.S Unconsolidated Materials Map, Map MF-450E, 1976

Program. These standards establish designated uses for groundwater. The groundwater in the area of the Base is designated as GB/GA, which means it may not be suitable for human consumption without treatment due to waste discharges, spills, or land use impacts. Groundwater class GAA is designated for existing or potential drinking water supply and is applicable to the two wells located northwest of the Base. The water is presumed suitable for direct human consumption without the need for treatment. Water usage at the Base averaged just over 10,500 gallons per day between 1985 and 1990 (ANGRC, 1992). This water was from the well fields within the boundaries of Bradley International Airport.

FINAL
REMEDIAL INVESTIGATION REPORT
IRP SITES 1, 3, 4, 5, AND 6

103rd FIGHTER WING
CONNECTICUT AIR NATIONAL GUARD
BRADLEY AIR NATIONAL GUARD BASE
EAST GRANBY, CONNECTICUT

VOLUME I OF III

JANUARY 2002

Prepared For
AIR NATIONAL GUARD READINESS CENTER
ANDREWS AFB, MARYLAND 20331-6008

3.6 Hydrogeology

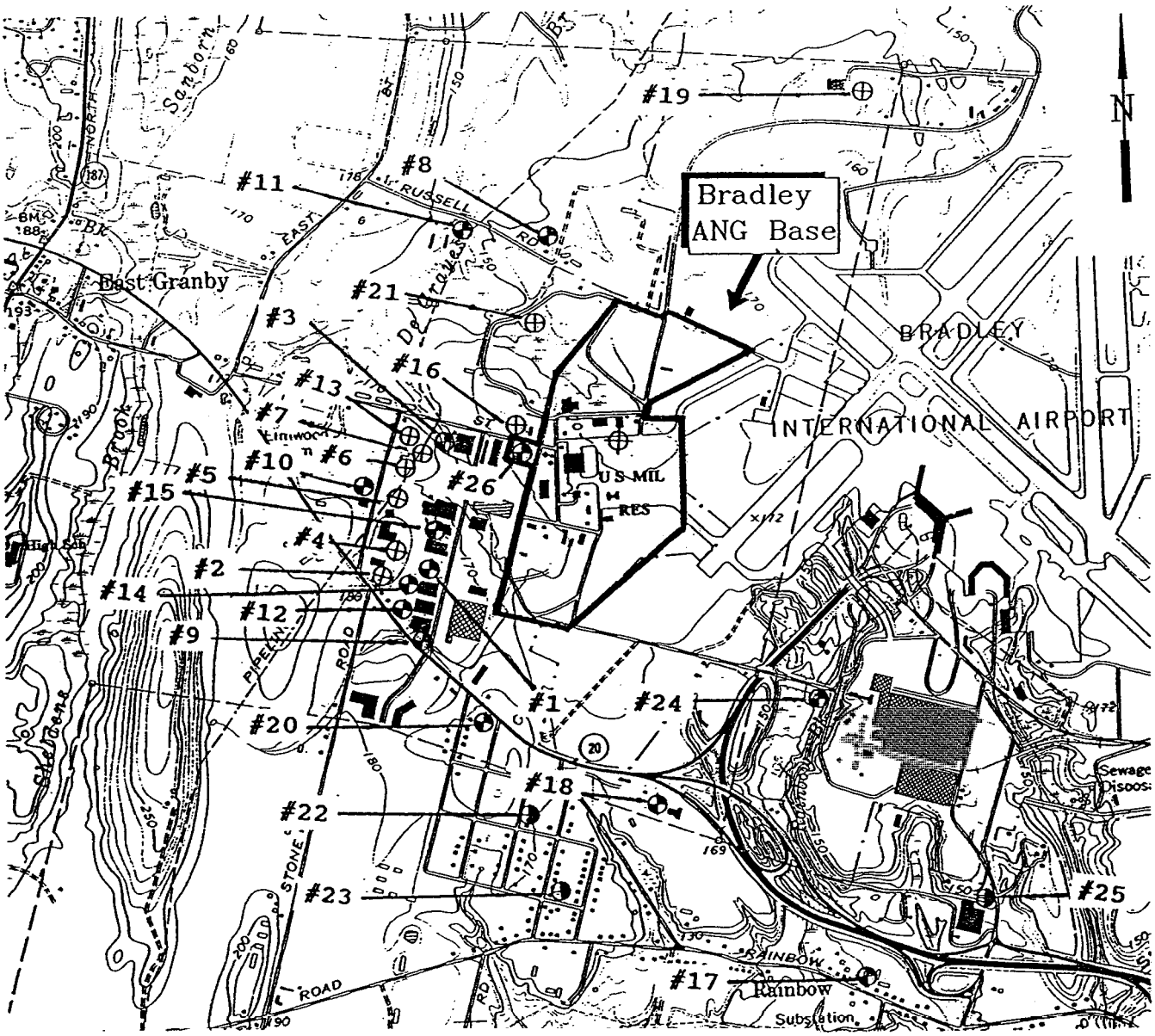
The highest water bearing unit is the Pleistocene deltaic silts and sands. Information presented in the PA/SI (Aneptek, 1996) indicates that the depth to the water table beneath the Base has historically ranged from between 8 and 18 feet below ground surface. During performance of this RI, groundwater was encountered in borings at depths of between approximately 10 and 12 feet below ground surface. Recharge to this unit is predominantly by percolation of precipitation through the well-drained soils (refer to Section 3.4 for a discussion of soil types present).

As depicted on the Water Resources Bulletin No. 24, Plate B from the Water Resource Inventory of Connecticut (USGS, 1981) coarse-grained stratified drift overlies fine-grained stratified drift at the Base. These units may produce more than 400 gallons per minute (gpm) from properly developed wells. Highest yields were reported as generally obtained from wells tapping the thickest, most transmissive parts of coarse-grained stratified drift and from areas near major streams. The lower tine-grained stratified drift is generally unproductive with wells yielding less than 20 gpm. The Bedrock aquifer in the area is the Triassic Portland Arkose. Drilling logs indicate the top of bedrock lies at depths of between 50 and 120 feet in the vicinity of the Base.

As shown on Figure 3-4, water wells in the vicinity of the Base include numerous bedrock and overburden wells in the surrounding industrial and residential areas. According to Base personnel, a deep bedrock well located outside the southern side of Building 78 near the Base entrance is currently not in use. The information presented in Figure 3-4 was initially presented in the PA/SI (Aneptek, 1996). To determine whether additional wells had been installed in the vicinity of the Base since completion of the PA/SI, well records were once again reviewed. The well completion records, which are maintained by the Farmington Valley Health District (FVHD) located in Avon Connecticut, indicated that no additional wells had been installed in the vicinity of the Base since completion of the PA/SI. Well records do not indicate which wells are currently in use.

Groundwater elevation data collected prior to performance of the RI indicated a southeasterly groundwater flow direction. Groundwater elevation data collected during the RI indicates an overall southeasterly flow direction, with local variations in flow direction (i.e., converging or diverging flow). Groundwater elevation data and Base-wide hydrogeology are discussed in greater detail within Section 5 of this RI Report.

The CTDEP has developed water quality standards that are designed to protect surface and groundwater of high quality from degradation. The water quality standards and criteria were developed as part of the Connecticut Clean Water Program. These standards establish designated uses for groundwater. The groundwater in the area of the Base is designated as GA, which refers to potential public or private supply sources suitable for drinking without treatment. Although groundwater in the vicinity of the Base is classified as GA, the Base obtains potable water from the local water utility (the Connecticut Water Company) rather than local potable wells.



SCALE 1:24000

0 1/2 1 MILE

CONTOUR INTERVAL 10 FEET

LEGEND

- Water supply well screened in bedrock
- Water supply well screened in overburden
- Water supply well. screened interval unknown
- Monitoring Well
- Bose Boundary
- # Well Number

Sources: USGS Unconsolidated Materials Map MF-450E, 1976.
CTDEP Well Log Files - reviewed in 1994 for PAN.
Well records, Farrington Valley Health District, Avon, CT - reviewed in 2001 for RI.

WELL LOCATION MAP

BRADLEY ANG BASE

EAST GRANBY, CONNECTICUT

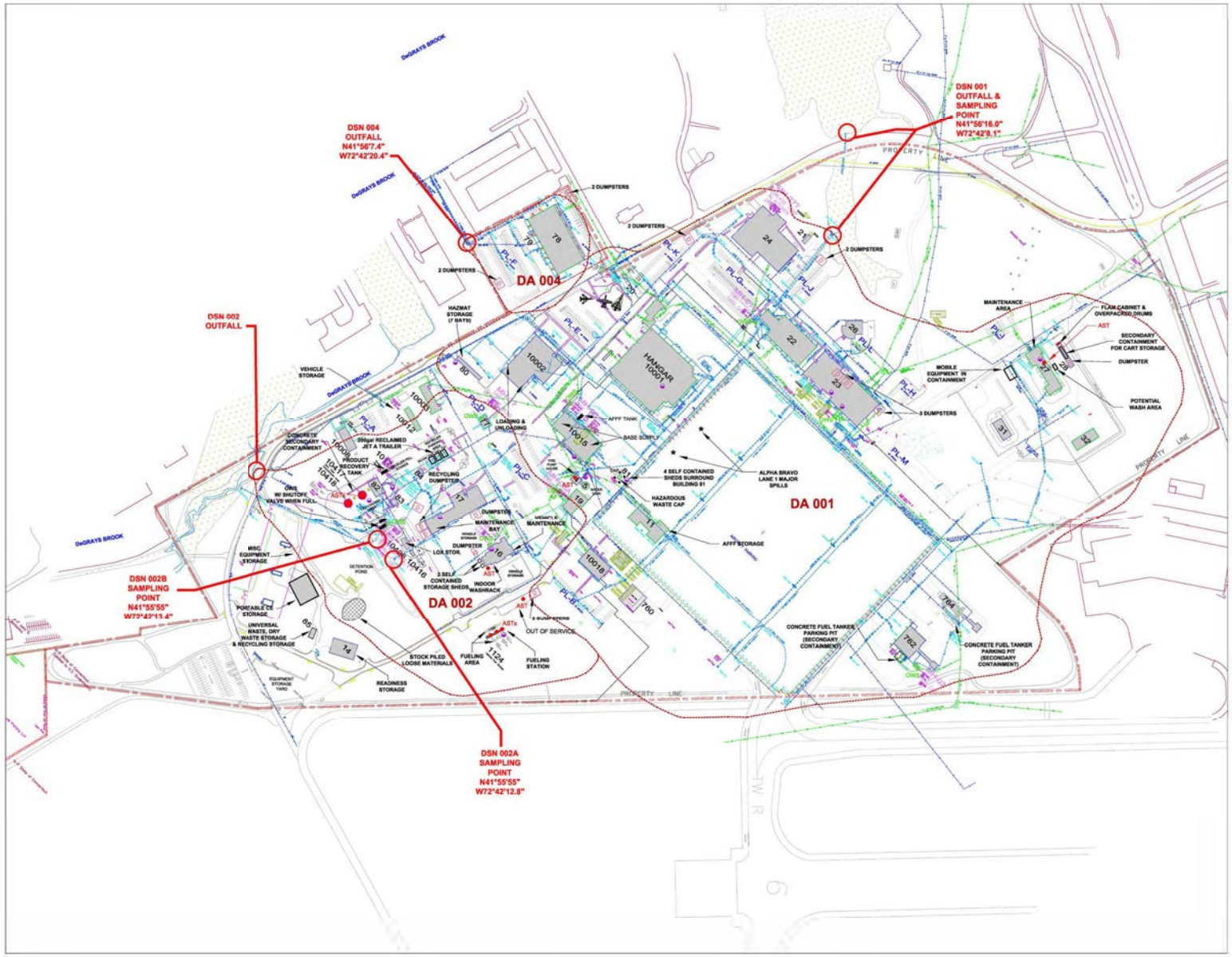
ANEPTEK CORPORATION
Analytic, Environmental and Process Technologies

FIGURE: 3-4

\DRAW\BRAD

APPENDIX C-5

BASE STORMWATER DRAINAGE BOUNDARY MAP



LEGEND

- PROPERTY LINE
- FENCE LINE
- STORM DRAINAGE AREA BOUNDARY LINE
- DA 00X — STORM WATER DRAINAGE BASIN
- DSN 00X OUTFALL — DISCHARGE SERIAL NUMBER (STORM WATER DRAINAGE OUTFALL)
- OWS — OIL/WATER SEPARATOR
- STORM WATER DRAINAGE PIPE
- STORM WATER DRAINAGE INLET
- STORM WATER DRAINAGE MANHOLE
- AST — ABOVEGROUND STORAGE TANK
- AFFF — AFFF STORAGE TANK
- WETLAND
- POND OR CREEK
- DUMPSTER(S)
- DRY WELL
- SPILL KIT

DRAINAGE BASIN	ON-SITE DRAINAGE AREA	ON-SITE PERCENT IMPERVIOUS
DSN 001	86.8 ACRES	65%
DSN 002	22.6 ACRES	30%
DSN 004	3.4 ACRES	85%

APPROXIMATE SCALE IN FEET

0 100 200 400 600

DRAWING MODIFIED BY: 103rd CE

JUNE 10, 2015

REVISION			
UPDATED CONTAINMENT LOCATIONS BY 103d CE	KB	Aug 9, 2013	
	KB	June 10, 2015	

103d AIRLIFT WING
BRADLEY AIR NATIONAL GUARD BASE
EAST GRANBY, CONNECTICUT

PROJECT No

STORM WATER POLLUTION PREVENTION SITE PLAN

DRAWN BY: CRR

CHECK BY: RST

ENGINEER: RST

APPROVED CHIEF ENGINEER:

APPROVED:

DATE: JUNE 10, 2015

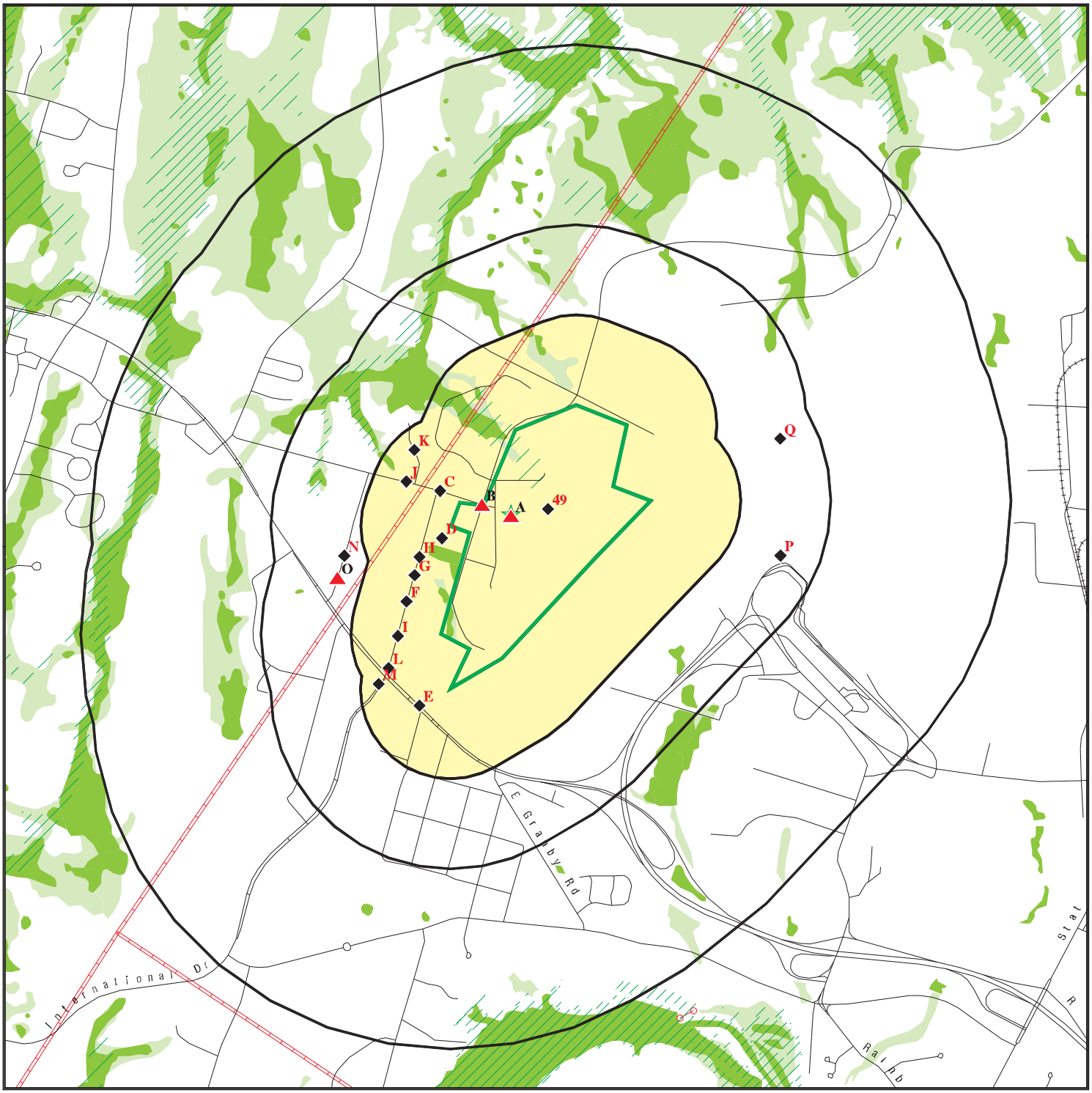
SHEET No.

FIGURE 3

APPENDIX C-6

EDR POTENTIAL ENVIRONMENTALLY SENSITIVE AREAS MAP

OVERVIEW MAP - 4359500.1S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

0 1/4 1/2 1 Miles

Indian Reservations BIA

Power transmission lines

Pipelines

100-year flood zone

500-year flood zone

National Wetland Inventory

State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Bradley ANGB	CLIENT: B.B. & E
ADDRESS: 100 Nicholson Road East Granby CT 06026	CONTACT: Veronica Allen INQUIRY #: 4359500.1s
LAT/LONG: 41.9355 / 72.7026	DATE: July 21, 2015 9:30 am

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FINAL WORK PLAN

FY 16 PHASE 1 REGIONAL SITE INSPECTIONS FOR PERFLUORINATED COMPOUNDS

103rd AIRLIFT WING
CONNECTICUT AIR NATIONAL GUARD
BRADLEY AIR NATIONAL GUARD BASE
EAST GRANBY, CONNECTICUT

Contract #: W9133L-14-D-0002

Delivery Order 0006

Amec Foster Wheeler Project #: 2-9133-0006

July 20, 2017

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ACRONYMS

103rd AW	103rd AIRLIFT WING
AFFF	Aqueous film forming foam
Amec Foster Wheeler	Amec Foster Wheeler Environment & Infrastructure, Inc.
amsl	Above Mean Sea Level
ANG	Air National Guard
BANGB	Bradley Air National Guard Base
BB&E	BB&E, Incorporated
bgs	Below Ground Surface
CBYD	Call Before You Dig
COCs	Constituents of Concern
COR	Contracting Officer's Representative
CT	Connecticut
CTANG	Connecticut Air National Guard
CTDEEP	Connecticut Department of Energy and Environmental Protection
DO	Delivery Order
DoD	Department of Defense
DPT	Direct Push Technology
DQO	Data Quality Objectives
EDR	Environmental Data Resources, Inc.
ELAP	Environmental Laboratory Accreditation Program
ERP	Environmental Restoration Program
FAA	Federal Aviation Administration
FD	Fire Department
FSP	Field Sampling Plan
ft	Feet/foot
FTA	Fire Training Area
HA	Health Advisory
HASP	Health and Safety Plan
IDW	Investigation-Derived Waste
IRP	Installation Restoration Program
LEP	Licensed Environmental Professional
µg/kg	micrograms per kilogram
µg/L	micrograms per liter
NFA	No Further Action
NGB	National Guard Base
NGB/A4OR	ANG Readiness Center/National Guard Bureau
PA	Preliminary Assessment
PFAS	Perfluorinated Alkylated Substances
PFBS	Perfluorobutane Sulfonate
PFOA	Perfluorooctanoic Acid
PFOS	Perfluorooctanesulfonic Acid
PFC	Perfluorinated Compounds
POC	Point of Contact
POL	Petroleum, Oil, and Lubricants
PRL	Potential Release Location

ACRONYMS (continued)

PVC	Polyvinyl Chloride
QA	Quality Assurance
QAPP	Quality Assurance Project Plan
QC	Quality Control
RI	Remedial Investigation
RSL	Regional Screening Level
RSRs	Remediation Standard Regulations
SI	Site Inspection
SOP	Standard Operation Procedures
UCMR	Unregulated Contaminant Monitoring Rule
USAF	United States Air Force
USEPA	United States Environmental Protection Agency
WP	Work Plan

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1.0 INTRODUCTION

Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler) was contracted by the National Guard Bureau (NGB) under Contract # W9133L-14-D-0002, Delivery Order (DO) 0006 to conduct Phase 1 Regional Site Inspections (SIs) for Perfluorinated Compounds (PFCs) at multiple Air National Guard (ANG) Installations. The scope of the DO includes preparation of this Work Plan (WP) to conduct SIs at on-Base Potential Release Locations (PRLs) identified at the 103rd Airlift Wing (103rd AW), Connecticut Air National Guard (CTANG), Bradley Air National Guard Base (BANGB), in East Granby, Connecticut. This Work Plan and associated FSP have been prepared consistent with the Technical Scope of Work included in the Prime Contractor's ANG contract. This SI WP has been prepared by Amec Foster Wheeler and presents site background information and findings from the January 2016 BB&E, Incorporated (BB&E) Final PFCs Preliminary Assessment Site Visit Report, Bradley Air National Guard Base, East Granby, Connecticut (PA), and also describes the objectives, procedures, and activities to be conducted to execute the work. Five PRLs were identified at BANGB based on locations where Aqueous Film Forming Foam (AFFF) was potentially discharged or stored. A list of the PRLs evaluated during the PA and resulting recommendations are presented in **Table 1** below.

Table 1
Preliminary Assessment Summary
103rd Airlift Wing, Connecticut Air National Guard
Bradley Air National Guard Base, East Granby, Connecticut

List of PRLs		
PRL	**Use**	**Recommendation**
1. Building 15 – Warehouse Supply	Building has a deactivated AFFF-based fire suppression system	Soil and Groundwater Inspection
2. Building 11 – AFFF Storage	AFFF Storage	Soil and Groundwater Inspection
3. Building 19 – Fire Station	Fire Station	Soil and Groundwater Inspection
4. Stormwater Drainage Basin (Installation Restoration Program Site 2)	Stormwater Drainage Basin, Historic Periodic Testing of Fire Equipment	Soil and Groundwater Inspection
5. Fire Department Equipment Test Area	Fire Department Equipment Test Area	Soil and Groundwater Inspection

In addition to these five PRLs, groundwater quality at the Base boundary will be assessed during

the SI to evaluate the potential for off-site migration of PFCs.

1.1 Site Location

The BANGB is located in East Granby, Connecticut, approximately 15 miles north of Hartford, Connecticut, on a portion of the Bradley International Airport, which is approximately 144 acres in the southwest corner is leased by the ANG (**Figure 1**). BANGB is the home of the 103rd AW. The area surrounding the Base consists of commercial airport businesses to the north, east, and west, and residential properties and undeveloped land to the south. The Base is located approximately 2 miles west of Windsor Locks and 15 miles north of Hartford, Connecticut. The Windsor Locks Town Line runs north-south through the Bradley International Airport immediately east of the Bradley Air National Guard property.

1.2 Site History

Bradley International Airport was built on farmland and woods starting in 1939. The Army Air Corps used the facilities during World War II, while the area of the current Air National Guard Base was used as a German prisoner of war camp. After World War II, the prisoner of war camp was dismantled, and the State of Connecticut took over the land to expand the airport. The CTANG facility layout is depicted on **Figure 2**.

Activities at the Base have been typical of those at most airports and military air bases, including fueling and maintenance operations. These activities include the usage, handling, storage, and disposal of various products, including potentially hazardous materials.

The Department of Defense (DoD) began investigations at military bases under the Installation Restoration Program (IRP) with the goal of identifying, evaluating, and remediating areas of contamination (the program is now referred to as the Environmental Restoration Program or ERP). Under this program, investigations began at the BANGB in 1993. These investigations included PAs, SIs, removal action investigations, and a remedial investigation (RI) which were performed pursuant to the Connecticut Department of Energy and Environmental Protection (CTDEEP) Remediation Standard Regulations (RSRs). Prior to the PFC PA (BB&E, 2016), potential releases of PFCs from use and storage of AFFF had not been evaluated at BANGB.

Based on the 2016 PA investigation conducted by BB&E, there is no evidence that a Fire Training Area (FTA) is or was located within the current footprint of the Bradley ANG Base site boundary.

In addition, the Base did not have a fire department until approximately 1981 when the current fire station (Building 19) was completed consistent with establishment of the current ANG location at Bradley circa 1980. Non-FTA Areas of Concern are sites where AFFF has been stored or released and may include crash sites, hangars, fuel spill areas, hazardous waste storage facilities, firefighting, equipment testing areas, etc.

1.3 Project Purpose and Scope

The objective of the SI is to determine the presence/absence of constituents of concern (COCs) in soil and/or groundwater at each of the PRLs and in groundwater at the Base boundary. The information collected will be used to develop appropriate path(s) forward, either No Further Action (NFA) or establishing data quality objectives (DQOs) for an RI phase.

2.0 PROJECT MANAGEMENT APPROACH

The general parties comprising the management structure implementing the SI include ANG Readiness Center/National Guard Bureau (NGB/A4OR), CTANG, BANGB, the CTDEEP, the town of East Granby, Connecticut, BB&E, Amec Foster Wheeler, and Amec Foster Wheeler subcontractors. The NGB is the contracting entity through which this project is being executed. CTDEEP is the state's regulatory agency whose role is to enforce the state's environmental regulations, the RSRs. As this Base is within the state of Connecticut, any release of oil and or hazardous materials to the environment is governed by the RSRs.

Amec Foster Wheeler personnel that will be involved with the SI include the following:

- Mr. Jay Mullett, Engineer– Program Manager;
- Mr. Rob Singer, Engineer – Senior Project Manager;
- Mr. Kerry Tull, Geologist - Senior Project Manager;
- Mr. Todd Coffin, Geologist - Regional Base Lead, Primary Point of Contact (POC);
- Ms. Ann Bernhardt, Certified Quality Manager – QA/QC Manager;
- Ms. Cynthia Sundquist, Certified Industrial Hygienist, Certified Safety Professional – Health and Safety Manager;
- Mr. Brad LaForest, Environmental Analytical Chemist– Senior Chemist;
- Mr. Andrew Harris, Licensed Environmental Professional (LEP) – Base Lead;
- Mr. Michael Cote, LEP – Project Technical Lead;
- Ms. Amberlee Clark – Field Operations Lead; and
- Other supporting staff, as necessary.

Key NGB, CTANG, BANGB, CTDEEP, and technical support personnel that will be involved with the SI include the following:

- Mr. Keith Freihofer – NGB/A4OR Restoration Program Manager
- Mr. Dennis Pinigis – Contracting Officer's Representative (COR)
- LT Dawn Suprenant - Base Environmental Manager
- Bill Hoerle – On Site Environmental Representative
- Ken Bergeron – On Site ANG Engineer
- Mr. Kevin Neary – CTDEEP POC; and
- Mr. Tom Barzyk – BB&E Technical Support Contractor

Mr. Todd Coffin will serve as Amec Foster Wheeler's primary POC for this SI. Mr. Coffin will ensure that project objectives are addressed, and will be responsible to meet quality, cost, and schedule performance requirements. Supporting staff, as identified above, will include technical and administrative support personnel involved with the completion of the various SI tasks.

Anticipated subcontractors include a driller for soil borings and temporary monitoring well

installation, a private utility locating company, and a laboratory for sample analysis. The selected laboratory will be DoD Environmental Laboratory Accreditation Program (ELAP) accredited, and maintain a National Environmental Laboratory Accreditation Program certification via reciprocity in the State of Connecticut. Subcontractors utilized on this project were pre-qualified by Amec Foster Wheeler. These laboratories will contract directly with and will be monitored by Amec Foster Wheeler to document project performance.

SI activities include, but are not limited to, the following tasks:

- Preparation of a program-wide Quality Assurance Project Plan (QAPP) that includes a program-wide Health and Safety Plan (HASP);
- Preparation of the Draft SI WP that includes a Base specific short-form HASP;
- Preparation of the Draft-Final SI WP;
- Preparation of the Final SI WP;
- Completion of SI field activities;
- Preparation of the Draft SI Report;
- Preparation of the Draft-Final SI Report; and
- Preparation of Final SI Report.

The site-specific Project Schedule is presented in **Appendix A**.

Following CTANG approval and notice to proceed, Amec Foster Wheeler will initiate performance of the SI field activities described in the Final SI Field Sampling Plan (FSP; **Appendix B**). Amec Foster Wheeler and its subcontractors will mobilize to the site and conduct the field activities. CTANG will be verbally updated by the Amec Foster Wheeler POC, or appointee, of significant observations during the implementation of field activities. Amec Foster Wheeler will document in writing (email, fax, or letter) any significant deviations from the planned activities.

3.0 PRELIMINARY ASSESSMENT SITE VISIT AND BACKGROUND INFORMATION

BB&E conducted a PA site visit for CTANG at BANGB on August 19 - 21, 2015 to identify potential locations of historic environmental releases of PFCs (PRLs), specifically from AFFF usage and storage. The PA site visit process included a review of documented FTAs in operation since 1970, and any other use or release of AFFF, and the completion of a site reconnaissance.

Based on past use and storage of AFFF at BANGB, the PA identified five PRLs where releases of PFCs might have occurred, including warehouse supply and AFFF storage areas, a stormwater drainage basin, a fire station, and a firefighting equipment testing area. Each of the five PRLs were recommended for further inspection. The findings of AFFF use and storage at each of the PRLs included in the SI, as documented in the PA Site Visit Report, are summarized below.

3.1 Potential Release Locations

The following sections summarize the five PRLs included in the BB&E PA based on use and storage of AFFF:

1) Building 15 – Warehouse Supply
2) Building 11 – AFFF Storage
3) Building 19 – Fire Station
4) Stormwater Drainage Basin (IRP Site 2)
5) Fire Department Equipment Test Area

3.2 Operational History

The following sections summarize the operational history at each PRL as described in the PA. The PRLs and pertinent site features described below are depicted on **Figure 3**.

3.2.1 PRL 1: Building 15 – Warehouse Supply

Building No. 15 is the former fuel cell maintenance (east bay) and corrosion control (west bay) facility used historically to service aircraft. The facility is now used as a logistics storage facility. The building was constructed in 1980, is approximately 18,000 square feet in size, and is constructed with a concrete floor, masonry block walls, and is metal-sided. The building had an AFFF-based fire suppression system, installed in approximately 1993, that was deactivated in

approximately 2005 when the facility was no longer needed as a fuel cell maintenance facility. The system was comprised of four AFFF floor-mounted deck guns. The guns were activated via manual connection to a fire truck through a fire hose connection on the southern exterior of the building. Per ANG personnel, there has never been an AFFF fire suppression system release in this building. Trench floor drains are located in both the east and west bays of the building. The east and west bay floor drains discharge to a 12,000 gallon underground concrete holding tank (also called the AFFF release tank) on the northern side of the building which discharge to the sanitary sewer system via an oil-water separator. Because the potential for historic AFFF releases associated with this concrete holding tank system exists, testing is proposed in this PRL.

3.2.2 PRL 2: Building 11 – AFFF Storage

Building 11 is used as a logistics warehouse and staging area. The building is approximately 9,900 square feet in size; metal framed and sided, with a concrete floor. The Fire Department (FD) uses Building 11 to store excess AFFF. There are no reported spills or releases of AFFF within this facility. AFFF, when needed, is transferred to the fire station where it is loaded into crash trucks and fire vehicles on an as needed basis. Based on the handling and potential for release of AFFF, testing is proposed in this PRL.

3.2.3 PRL 3: Building 19 – Fire Station

AFFF is stored by the FD at the current Fire Station which was built and occupied since 1981. The Fire Station is approximately 5,000 square feet in size, constructed with brick and masonry walls, and a concrete floor. Floor drains are routed to an oil water separator prior to discharge to the sanitary sewer. There are two fire department crash trucks that hold 3% AFFF, a total of approximately 250 gallons of AFFF. AFFF transfers occur manually, typically by pouring the 5-gallon AFFF totes into the crash trucks. Spills or releases within the building would have gone to the floor drains which discharge to the Oil/Water Separator and sanitary sewer. No releases of AFFF have been reported in the Fire Station. Based on the handling and potential for release of AFFF, testing is proposed in this PRL.

3.2.4 PRL 4: Stormwater Drainage Basin (IRP Site 2)

A stormwater drainage/retention basin is located to the southeast of the petroleum, oil, and lubricant (POL) facility, which was previously investigated as part of IRP Site 2. The drainage

basin is grass-covered, is surrounded by trees and typically does not have standing water except after large rain events. Remedial actions are pending for 2016 to address shallow soils/sediments due to low levels of polynuclear aromatic hydrocarbons and pesticides. FD personnel reported the periodic annual testing of fire equipment in the grassy and wooded areas surrounding the drainage basin. Small amounts of AFFF would likely have been used for these test events (less than approximately one pint per incident).

3.2.5 PRL 5: Fire Department Equipment Test Area

FD personnel reported that this grassy area behind the current Hush House was once used for nozzle testing. It is assumed that AFFF was used during these exercises; however the quantities used and dates of use are unknown. Based on the handling and potential for release of AFFF, testing is proposed in this PRL.

3.3 Pathway Evaluation and Hazard Assessment

A preliminary evaluation of the threats and targets of PFCs was performed during the PA; at the time, sampling for PFCs had not been performed. Results of the pathway evaluation and hazard assessment as documented in BB&E's January 2016 PA Report are summarized below.

3.3.1 Soil

PA Report information indicates that no documentation was available showing that soils at the Base have been tested for PFCs; therefore it is unknown whether PFCs are present in the soil. However, based on historical practices, evaluation of soil quality was recommended at each of the five PRLs.

3.3.2 Groundwater

No documentation showing that groundwater at the Base has been tested for PFCs was identified by the PA; therefore it is unknown whether PFCs are present in the groundwater. Evaluation of groundwater quality was recommended at each of five PRLs.

3.3.3 Water Wells

A July 21, 2015 Environmental Data Resources (EDR) Radius Map™ Report with Geocheck® shows seventeen water wells within a 1 mile radius of the Base (BB&E, 2016). Two of these wells

were reportedly listed in the state database, but it is unclear if they are private water wells. The PA also states that information from prior reports indicates there are 26 water wells within a one-mile radius of the Base (ANGRC, 1996; Aneptek, 2002).

3.3.4 Sediment

At the time of the PA site visit, no documentation was available showing that sediments at the Base have been tested for PFCs; therefore it is unknown whether PFCs are present in sediments. However, based on historical practices, PFCs could be present in surface soils/sediment at PRL 4 at the Stormwater Drainage Basin (IRP Site 2) due to the testing of fire equipment in close proximity. An evaluation of surface soils/sediment were recommended at PRL 4.

3.3.5 Surface Water

According to the PA, surface water is not present on Base; therefore, an evaluation of PFCs in surface water was not recommended. Generally, there is no standing water within the Stormwater Drainage Basin, which has a grass covered, mowed surface. Surface releases at the Base are expected to predominately infiltrate into the sandy, permeable surface soils. Releases to paved surfaces could enter the storm drains which ultimately discharge to the drainage features described in detail in the PA.

With the exception of the Stormwater Drainage Basin (PRL 4), which is currently regulated under a National Pollutant Discharge Elimination System Stormwater Permit for the discharge of storm water to surface water (DeGrayes Brook) the other PRLs are not located proximal to stormwater discharge points mapped in the PA.

4.0 ENVIRONMENTAL SETTING

The following sections provide information on the environmental setting at BANGB. This information is summarized from the January 2002 ANEPTEK RI Report.

4.1 Climate

The climate in East Granby, Connecticut is characterized by cold winters and moderate summers with occasional hot spells. Temperatures range between 25 and 73 degrees Fahrenheit. Annual precipitation averages approximately 44 inches.

4.2 Topography

Surface elevations at the BANGB range from approximately 164 feet above mean sea level (amsl) to 173 feet amsl. Elevations of approximately 173 feet amsl were noted west of the Aircraft Apron and appear to represent the topographic high for the Base. The topographic low of approximately 164 feet amsl is located within the Detention Basin located in the southern portion of the Base.

4.3 Geology

Bedrock underlying the Base consists of reddish-brown, upper Triassic age arkosic siltstone which is geologically categorized as Portland Arkose. The depth to bedrock map of the Windsor Locks Quadrangle (USGS, 1973) depicts bedrock underlying the Base ranging in depth from 50 to 100 feet below ground surface (bgs) in the western areas and 100 to 150 feet bgs in the eastern areas. Boring logs for wells drilled near the Base indicate that the top of the Portland Arkose lies at depths between 50 and 120 feet bgs, and that this geologic unit extends to depths of greater than 400 feet bgs in the vicinity of the Base.

4.4 Surface Water Hydrology

The Base is located in the Connecticut River drainage basin. The northern 75 percent of the Base, including the hangar, parking apron, corrosion control facilities, heat plant, and roads drains northward into a drainage ditch located northeast of Building No. 24. The drainage ditch then trends northwestward off the Base and connects to DeGrayes Brook, located one-third of a mile northwest of the Base boundary. The brook flows northeasterly into Stony Brook, then easterly towards the Connecticut River five miles away. The southern 25 percent of the Base, including

the former and current POL area, the ground maintenance building, and motor pool, drains into the detention basin then westerly into the headwaters of DeGrayes Brook.

Flood plains are located along the drainage ditch in the northwestern area of the Base and further northwest off the Base along DeGrayes Brook (FEMA, 1982). The floodplains in the Base are defined on the Flood Insurance Rate Maps as Zone B which are areas between the limits of the 100-year flood and 500-year flood.

There are no permanent surface water bodies located on the Base. The detention basin reportedly contains water only during and immediately after rain. One small rectangular pond (l/4 acre in size) is located off the Base immediately west of the POL and ground vehicle maintenance building. This pond is situated adjacent to an East Granby water and sewer pump house.

4.5 Hydrogeology

The shallow overburden groundwater bearing unit is the Pleistocene deltaic silts and sands. Information presented in the PA/SI (Aneptek, 1996) indicates that the depth to the water table beneath the Base has historically ranged from between 8 and 18 feet below ground surface, with recent water table depths of between approximately 10 and 12 feet bgs. Groundwater flow in the shallow overburden is generally from the west to the east-southeast.

As depicted on the Water Resources Bulletin No. 24, Plate B from the Water Resource Inventory of Connecticut (USGS, 1981) coarse-grained stratified drift overlies fine-grained stratified drift at the Base. The bedrock aquifer in the area is the Triassic Portland Arkose. Drilling logs indicate the top of bedrock lies at depths of between 50 and 120 feet bgs in the vicinity of the Base. The CTDEEP has classified the groundwater in the Base vicinity as “GA”, which presumes that the water is suitable for potable uses without prior treatment.

4.6 Critical Habitat and Threatened/Endangered Species

The CTDEEP Diversity Data Base Areas mapping for East Granby, CT, dated December 2016, depicts that State and/or Federal Listed Species and Significant Natural Communities may exist on or in the vicinity of the Base. The PA references mapped sensitive near site areas, but does not describe them further.

4.7 Town of East Granby Water Supply

There are currently no potable water wells on the Base, which receives its potable water from the Connecticut Water Company. The Connecticut Water Company serves East Granby and Windsor Locks, in addition to numerous other Connecticut towns and cities.

5.0 PERMITS

Construction or alteration at an airport, including an airport that is operated by an armed force of the United States, requires notification of the Federal Aviation Administration (FAA) pursuant to 14 CFR 77.9. As necessary through consultation with BANGB personnel, Amec Foster Wheeler will submit Form 7460-1 to the FAA at least two-months prior to initiating SI field activities. Work will not proceed until the permit is reviewed and approved by FAA.

Amec Foster Wheeler will obtain Call Before You Dig (CBYD) clearance within two weeks prior to initiating SI exploration activities. After the CBYD ticket has been obtained, Amec Foster Wheeler will work with the BANGB Environmental Manager to obtain work clearance approval (i.e., Base dig permits, as necessary) for activities to be conducted at each of the PRLs.

6.0 SOIL AND GROUNDWATER STANDARDS

A soil or groundwater standard is an environmental and/or public health statute or rule used in identifying concentrations of contaminants that may pose a risk to human health or the environment. Soil and groundwater standards and guidelines (e.g., Health Advisories, see below) are used to:

- Determine the appropriate levels of site clean-up;
- Define and formulate remedial action alternatives; and,
- Govern implementation and operation of the selected remedial action.

In accordance with *Interim AF Guidance on Sampling and Response Actions for Perfluorinated Compounds at Active and BRAC Installations* (United States Air Force [USAF], August 2012) and United States Environmental Protection Agency (USEPA) lifetime drinking water Health Advisories (HAs) for Perfluorooctanesulfonic Acid (PFOS) (PFOS, USEPA, May 2016a) and Perfluorooctanoic Acid (PFOA) (PFOA, USEPA, May 2016b), a release will be considered confirmed if the following concentrations are exceeded:

PFOS:

- 0.07 micrograms per liter (µg/L) in groundwater/surface water that is used as or contributes to a drinking water source (the HA level, the total of PFOA and PFOS concentrations).
- 1,260 micrograms per kilogram (µg/kg) in soil (calculated in the absence of Regional Screening Level [RSL] values).
- 1,260 µg/kg in sediment (calculated in the absence of RSL values).

PFOA:

- 0.07 µg/L in groundwater/surface water (the HA level, the total of PFOA and PFOS concentrations).
- 1,260 µg/kg in soil (calculated in the absence of RSL values).
- 1,260 µg/kg in sediment (calculated in the absence of RSL values).

USEPA has also derived RSL values for perfluorobutane sulfonate (PFBS), for which there is a Tier 2 toxicity value (Provisional Peer-Reviewed Toxicity Value) (USEPA, May 2016c). The USAF will also consider a release to be confirmed if the following concentrations are exceeded:

PFBS:

- 380 µg/L in groundwater/surface water.
- 1,600,000 µg/kg in soil/sediment.

To streamline reporting and discussion of PFOS, PFOA, and PFBS sampling and analysis, these compounds will hereafter be referred to, collectively, as Perfluorinated Alkylated Substances (PFAS). **Table 2** presents the screening values for comparing the analytical results for each PFAS compound.

Table 2
Health-Based Screening Values
103rd Airlift Wing, Connecticut Air National Guard
Bradley Air National Guard Base, East Granby, Connecticut

Parameter	Chemical Abstract Number	USEPA Regional Screening Level Table (May 2016)[a]		Air Force Guidance for Soils and Sediments[b] (µg/kg)	USEPA Health Advisory Drinking Water (Surface Water or Groundwater) (µg/L)[c]
		Residential Soil (µg/kg)	Tap Water (µg/L)		
Perfluorobutane sulfonate (PFBS)	375-73-5	1,600,000	380	NL	NL
Perfluorooctanoic acid (PFOA)	335-67-1	NL	NL	1,260	0.07*
Perfluorooctane sulfonate (PFOS)	1763-23-1	NL	NL	1,260	

[a] EPA Regional Screening Levels (May 2016) [https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables-may-2016]

[b] Screening levels calculated using the EPA Regional Screening Level calculator [https://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search]. The toxicity value input for the calculator is the Tier 3 value reference dose of 0.00002 mg/kg/day derived by USEPA in their Drinking Water Health Advisories for both PFOS and PFOA (May 2016).

[c] USEPA, May 2016a. *Drinking Water Health Advisory for Perfluorooctanoic Acid (PFOA)* and USEPA, May 2016b. *Drinking Water Health Advisory for Perfluorooctane Sulfonate (PFOS).*

* Note: When PFOA and PFOS are both present, the combined detected concentrations of the compounds should be compared with the 0.07 µg/L health advisory value. Neither tap water nor surface water will be sampled during the SI; analytical results for groundwater will be compared to the HAs and Tap Water Screening Level.

NL = not listed

7.0 INVESTIGATIVE APPROACH

7.1 General Approach

The objective of the SI WP is to define field activities needed to perform the SI. Field activities will be performed at the five on-Base PRLs recommended for further inspection at BANGB and for groundwater along the Base boundary. The overall objective of the SI is to assess for the presence/absence of the six PFAS congeners included on the Unregulated Contaminant Monitoring Rule (UCMR) 3 list, through performance of the following:

- Advance up to fifteen soil borings to a maximum depth of 15 ft. bgs and collect a minimum of two soil samples from each boring: shallow sample (0-2 feet) and sample at water table; and
- Advance up to six borings for the installation of up to 6 temporary monitoring wells to allow for groundwater sample collection at locations hydraulically downgradient from each PRL and at the downgradient Base boundary.

Existing data, site history, and process information have been used, where possible, to design the SI. The work will be conducted in accordance with the FSP, QAPP and HASP presented in **Appendices B, C,** and **D**, respectively. This Work Plan has been prepared consistent with the Technical Scope of Work included in the Prime Contractors ANG contract.

Table 3 summarizes the inspection approach for each of the PRLs and groundwater at the base boundary:

Table 3
Site Inspection Summary
103rd Airlift Wing, Connecticut Air National Guard
Bradley Air National Guard Base, East Granby, Connecticut

PRL Name	Location Type	Confirmed (C) or Suspected (Sus) Release	SBs	Wells		No. Samples				Comments
				EW	TW	S	GW	SW	SD	
1. Building 15, Warehouse Supply	Warehouse	Sus	3	0	1	6	1	0	0	Building has a deactivated AFFF-based fire suppression system
2. Building 11, AFFF Storage	Warehouse and staging area	Sus	3	0	1	6	1	0	0	Fire Department AFFF Storage
3. Building 19 – Fire Station	Fire Station	Sus	3	0	1	6	1	0	0	Fire Station
4. Stormwater Drainage Basin (IRP Site 2)	Stormwater Drainage Basin	Sus	3	0	1	6	1	0	0	Historic Periodic Testing of Fire Equipment
5. Fire Department Equipment Test Area	Fire Department Equipment Test Area	Sus	3	0	1	6	1	0	0	Fire Department Equipment Test Area (Historical)
Base Boundary Wells			0	0	1	0	1	0	0	Five PRL downgradient TWs also act as Base Boundary wells. No additional wells required
TOTAL			15	0	6	30	6	0	0	

SBs – Soil Borings
TW – Temporary Well
GW – Groundwater
SD - Sediment
EW – Existing Well
S – Soil
SW – Surface Water
Sus -Suspected

7.1.1 PRL 1: Building 15 – Warehouse Supply

There are no documented AFFF releases at PRL 1; however, it is possible that AFFF might have been released within the building, which contains trench floor drains that discharge to a concrete underground holding tank and the sanitary sewer system. To determine if AFFF was released to the environment from the drainage system, three borings will be advanced to a maximum depth

of 15 ft bgs, or until the water table is reached, whichever occurs first. Two borings will be located proximal to the underground holding tank and one boring will be located hydrologically downgradient from the tank. At each soil boring location, one shallow soil sample (0 to 2 ft bgs) and one deeper soil sample just above the water table interface will be collected for analysis. The shallow soil samples in this area will test for possible AFFF handling issues in this area, and the deeper samples will test for possible tank and piping releases. One temporary monitoring well will be installed downgradient of Building 15 to assess potential impacts to groundwater from infiltrating stormwater. The locations of soil borings and the temporary monitoring well are shown on **Figure 3A**.

7.1.2 PRL 2: Building 11 – AFFF Storage

There are no documented AFFF releases at PRL 2; however, it is possible that AFFF might have been released during storage or transfer of AFFF. To determine if AFFF was released in this area three borings will be advanced to a maximum depth of 15 ft bgs. Two borings will be located outside the building's east bay, and one soil boring will be located adjacent to the southern side of the west bay. At each soil boring location, one shallow soil sample (0 to 2 ft bgs) and one deeper soil sample just above the water table interface will be collected for analysis. One temporary monitoring well will be installed downgradient of Building 11 to assess potential impacts to groundwater from infiltrating stormwater. The locations of soil borings and the temporary monitoring well are shown on **Figure 3B**.

7.1.3 PRL 3: Building 19 – Fire Station

No releases of AFFF have been reported at PRL 3, the Fire Station; however, it is possible that AFFF might have been released within the building during storage or transfer of AFFF. Floor drains in this building are routed to an oil water separator prior to discharge to the sanitary sewer. To determine if AFFF was released in this area, three soil borings will be advanced to a maximum depth of 15 ft bgs outside the building. At each soil boring location, one shallow soil sample (0 to 2 ft bgs) and one deeper soil sample just above the water table interface will be collected for analysis. One temporary monitoring well will be advanced downgradient of Building 19 to assess potential impacts to groundwater from infiltrating stormwater. The locations of soil borings and the temporary monitoring well are shown on **Figure 3C**.

7.1.4 PRL 4: Stormwater Drainage Basin (IRP Site 2)

At PRL 4, it is possible that small amounts of AFFF might have been released during the annual testing of fire equipment in the grassy and wooded areas surrounding the drainage basin. To determine if AFFF was released in this area, three soil borings will be advanced to a maximum depth of 15 ft bgs. At each location one soil/sediment sample from the upper 2 feet, and one deeper soil sample just above the water table will be collected. Sample locations will target areas near inlet pipes and any other likely depositional areas based on field reconnaissance. One temporary monitoring well will be installed at the water table downgradient of the basin to assess potential impacts to groundwater from infiltrating stormwater. This well will also be used to assess groundwater conditions near the downgradient Base boundary. The locations of soil borings and the temporary monitoring well are shown on **Figure 3D**.

7.1.5 PRL 5: Fire Department Equipment Test Area

At PRL 5, it is possible that small amounts of AFFF might have been released behind the current Hush House, which was once used for FD nozzle testing. To determine if AFFF was released in this area, three soil borings will be advanced to a maximum depth of 15 ft bgs to the east of the building. At each soil boring location, one shallow soil sample (0 to 2 ft bgs) and one deeper soil sample just above the water table interface will be collected for analysis. One temporary monitoring well will be installed downgradient of the Hush House building to assess potential impacts to groundwater from infiltrating stormwater. This well will also be used to assess groundwater conditions at the downgradient Base boundary. The locations of soil borings and the temporary monitoring well are shown on **Figure 3E**.

7.1.6 Base Boundary Wells

In addition to the temporary wells which will be installed at PRLs 1 through 5, one well will be installed at the base boundary to evaluate the potential for off-Base migration of PFC contaminated groundwater. This well will be installed at the base boundary southeast of three PRLs (PRLs 1 through 3) and only groundwater will be sampled. The locations of the temporary monitoring wells are shown on **Figure 3F**.

8.0 FIELD INVESTIGATION PROCEDURES

Field investigation procedures to be utilized are presented in the following sections.

8.1 Site Access and Restrictions

Prior to mobilization to the Site, a list of field personnel and vehicles will be provided to BANGB to coordinate access. Upon arriving at the Base each morning, field personnel will check in with the BANGB POC. Field personnel and vehicles will access the Base using the main drive and gate. Anticipated work hours are from 7:00 AM to 5:00 PM local time on weekdays.

8.2 Utility Location and Clearance

Prior to commencement of SI activities, Amec Foster Wheeler will review available site information, such as as-built drawings, to identify locations of subsurface utilities. In addition, Amec Foster Wheeler will schedule a site walk to mark out proposed ground disturbance locations with assistance from the BANGB POC. The BANGB POC will review and approve the locations with respect to avoidance of subsurface utilities and structures. After the locations have been pre-marked, Amec Foster Wheeler will contact “Call Before You Dig” the Connecticut one-call utility clearance hotline. Next, Amec Foster Wheeler will coordinate with the BANGB POC to complete a Base dig permit and/or utility clearance checklist, as required. Finally, a private utility locating subcontractor will be used to clear site utilities at the specified sampling locations.

8.3 Soil Boring Installation and Soil Sampling

Soil boring installation and soil sampling activities will be completed as summarized in the following sections. Soil boring locations are illustrated on **Figure 3 and Figures 3A through 3E**.

8.3.1 Soil Boring Installation

Soil boring locations are based on site use and physical characteristics to target the most probable release areas. Up to fifteen soil borings will be advanced in and around the five PRL areas using direct push technology (DPT) drilling methods. The soil borings will be advanced from the ground surface to an approximate depth of 15 ft. bgs, unless groundwater or refusal is encountered at a shallower depth. Soil cores will be collected continuously for field screening at 4- to 5-ft intervals in new, dedicated polyvinyl chloride (PVC) or acetate liners. Drilling rods/tools will be

decontaminated between borings in accordance with **Section 8.5.** Investigation-derived waste (IDW) generated during drilling activities will be containerized in 55-gallon steel drums and labeled for disposal in accordance with **Section 8.7**.

8.3.2 Soil Sampling

Soil samples will be collected in accordance with **Section 2.1** of the FSP (**Appendix B**). Samples will be analyzed to determine if PFCs are present in soil at each PRL as outlined in **Table 2** of the FSP.

8.3.3 Soil Boring Abandonment

Following completion of drilling activities, each boring will be backfilled to grade with cuttings (and hydrated bentonite chips as necessary) to seal the boring. Surface completions will be patched with like materials (i.e., asphalt, concrete, or topsoil/seed) in accordance with BANGB specifications.

8.4 Temporary Monitoring Well Installation and Groundwater Sampling

Temporary monitoring well installation, and groundwater sampling activities, will be completed as summarized in the following sections. Temporary monitoring well locations are illustrated on **Figure 3 and Figures 3A through 3F**.

8.4.1 Temporary Monitoring Well Installation

Up to six temporary well borings will be advanced using DPT drilling methods. The primary purpose of installing the temporary monitoring wells is to assess groundwater quality hydraulically downgradient of the PRLs; therefore, PFAS compounds are not expected to be present in shallow soil (i.e. above the water table) at the well locations. As such, soil samples will not be collected for laboratory analysis from temporary well borings. Soil cores will be collected continuously to verify soil lithology, then inspected, logged, and field screened in accordance with **Section 2.1.1** of the FSP. The temporary monitoring wells will be installed in accordance with Amec Foster Wheeler's PFC-specific Standard Operating Procedure (SOP) for installation of monitoring wells (AFW-04), which is included in Attachment E of the QAPP (**Appendix C**). Because the monitoring wells will be temporary, the SOP will be supplemented with the following installation-specific requirements:

- Each temporary monitoring well will be constructed using 1-inch diameter PVC pipe with a 5-ft long, 0.010-inch slotted screened interval.
- The annulus surrounding the well screen and riser will be backfilled with No.1 filter sand, which will be placed from the bottom of the borehole to the ground surface. Alternatively, a pre-packed screen assembly may be utilized.
- A surficial hydrated bentonite annular seal approximately 6 inches thick will be installed to prevent the infiltration of storm/surface water will be installed.
- A concrete pad and road box will not be installed.
- If the well is left unattended, an expandable cap will be placed within the riser, and a steel plate or traffic cone will be placed over the well to protect it.

Following temporary monitoring well completion, static water levels will be collected with an electronic water level indicator and recorded on a field data sheet. Well development will be conducted as described below and in accordance with Amec Foster Wheeler's Well Development SOP (AFW-05) included in Attachment E of the QAPP (**Appendix C**).

8.4.2 Monitoring Well Development

The temporary monitoring wells will be developed using a pump to develop the entire screened interval and remove fine particles that have accumulated. Water quality parameters will be monitored and recorded at periodic intervals. Monitoring wells will be considered adequately developed when water quality parameters have stabilized (see **Section 2.3.1** of the FSP) and turbidity is low (i.e., <50 NTU).

Well development water will be containerized in steel 55-gallon drums and managed in accordance with **Section 8.7**. All equipment and pumps inserted into the well will be decontaminated following each use in accordance with **Section 8.5**. A well development log will be prepared for each well and contain the following information:

- Project name and number
- Date
- Well number
- Sampler's name and title
- Depth to water prior to development

- Depth to bottom of well prior to development
- Type of pump
- Pumping rate
- Purge volumes (containerized for disposal)
- Characteristics of purge water (color, particulates, clarity, and odor)
- Field measurements (temperature, pH, dissolved oxygen, specific conductance, redox potential, turbidity)
- Estimated recharge rate
- Development time
- Depth to water following development
- Depth to bottom of well following development
- General remarks

8.4.3 Groundwater Sampling

Groundwater samples will be collected from the six temporary monitoring wells in accordance with **Section 2.2** of the FSP. Dedicated sampling equipment, including tubing, will be changed between well locations. Re-usable equipment will be decontaminated in accordance with **Section 8.5**. Samples will be analyzed for PFCs at each PRL area, as outlined in **Table 2** of the FSP.

8.4.4 Temporary Well Boring Abandonment

After sample collection, the temporary well risers and screens will be removed and the borings properly abandoned in accordance with **Section 8.3.3**. IDW generated during temporary well installation, development, and abandonment will be containerized in 55-gallon steel drums and labeled for disposal in accordance with **Section 8.7**.

8.4.5 Decontamination Procedures

Decontamination procedures will be conducted in accordance with **Section 2.7.5** of the FSP. Equipment (including sampling probes, rods, and tools) will be cleaned prior to initiating and following the completion of field activities. Non-dedicated sampling equipment will be decontaminated after each use during field activities. Decontamination fluids will be containerized in steel 55-gallon drums and managed in accordance with **Section 8.7**.

8.4.6 Site Survey

The horizontal position of all soil borings and temporary monitoring wells will be located with a hand-held Global Positioning System unit capable of achieving sub-meter horizontal accuracy.

8.4.7 Management of IDW

IDW (excess soil cuttings, purge water, development water, and decontamination fluids) will be collected and contained in labeled, secured, steel 55-gallon drums. Drums will remain on-site in an area designated by the BANGB POC, pending the results of laboratory testing. Waste characterization sampling is detailed in **Section 2.5** of the FSP. Appropriate disposal methods for these drums will be determined after reviewing the waste characterization analytical results. Drum disposal drums will be completed in a timely manner and in accordance with ANG policy for IDW.

9.0 PROJECT SCHEDULE AND DELIVERABLES

The anticipated project schedule is presented in **Appendix A**. It is anticipated that the deliverables and field efforts presented in the schedule will occur as noted. However, these dates are tentative and may be revised based upon agreements reached among parties during the project execution. The scheduled due dates for the project deliverables are presented in the **Table 4** below:

Table 4
Project Schedule and Deliverables Summary
103rd Airlift Wing, Connecticut Air National Guard
Bradley Air National Guard Base, East Granby, Connecticut

Deliverable	Scheduled Due Date	Distribution
Draft SI WP	10 March, 2017	COR, ANG
Draft-Final SI WP	20 June, 2017	COR, ANG and Regulatory Stakeholders
Final SI WP	20 July, 2017	COR, ANG and Regulatory Stakeholders
Draft SI Report	2 October, 2017	COR, ANG
Draft-Final SI Report	24 October, 2017	COR, ANG and Regulatory Stakeholders
Final SI Report	30 November, 2017	COR, ANG and Regulatory Stakeholders

10.0 REFERENCES

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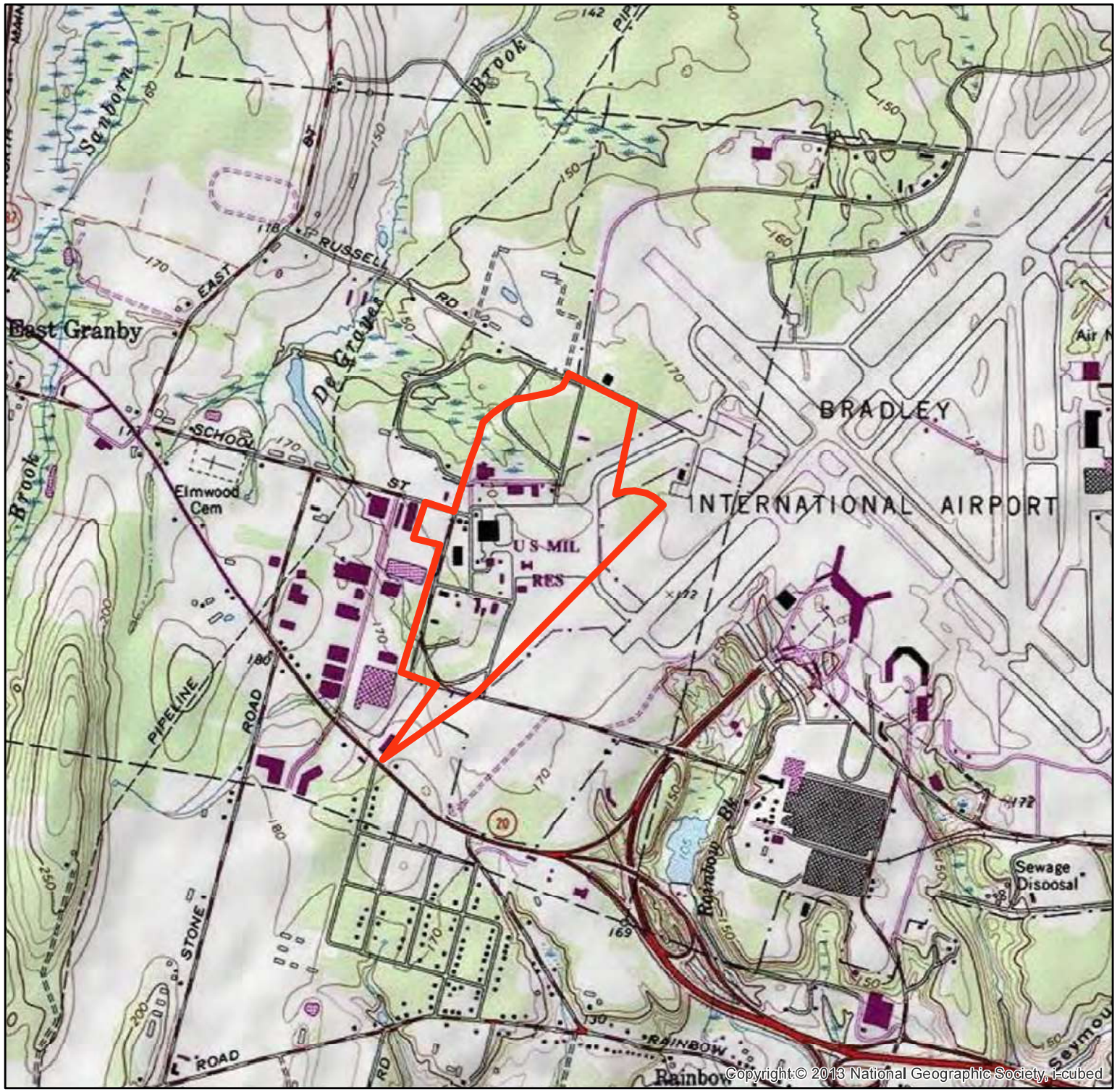
.

FIGURES



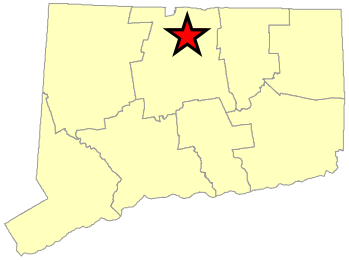
SITE LOCATION MAP

Bradley Air National Guard Base
East Granby, Connecticut

Legend

Installation Area (approximate)

Location of Site



Notes & Sources

Notes: Installation Area datalayers obtained from Figure 2 (Site Features and Potential AOCs) of the Final Perfluorinated Compounds Preliminary Assessment Site Visit Report prepared by BB&E and dated January 2016.

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FIGURE
1

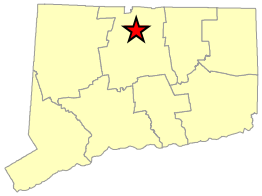
SITE AND AREA FEATURES

Bradley Air National Guard Base
East Granby, Connecticut

Legend

- Installation Area (approximate)
- Farmington River
- Rivers and Streams

Location of Site



Notes & Sources

Notes: AFFF - aqueous film forming foam. PFC - perfluorinated compounds.
Sources:Installation Area datalayer obtained from Figure 2 of the Final Perfluorinated Compounds Preliminary Assessment Site Visit Report prepared by BB&E and dated January 2016. Rivers and Streams and Farmington River (USGS National Hydrography Dataset) datalayers obtained from the CT DEEPDownload website, accessed 01/18/2016.

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FIGURE
2

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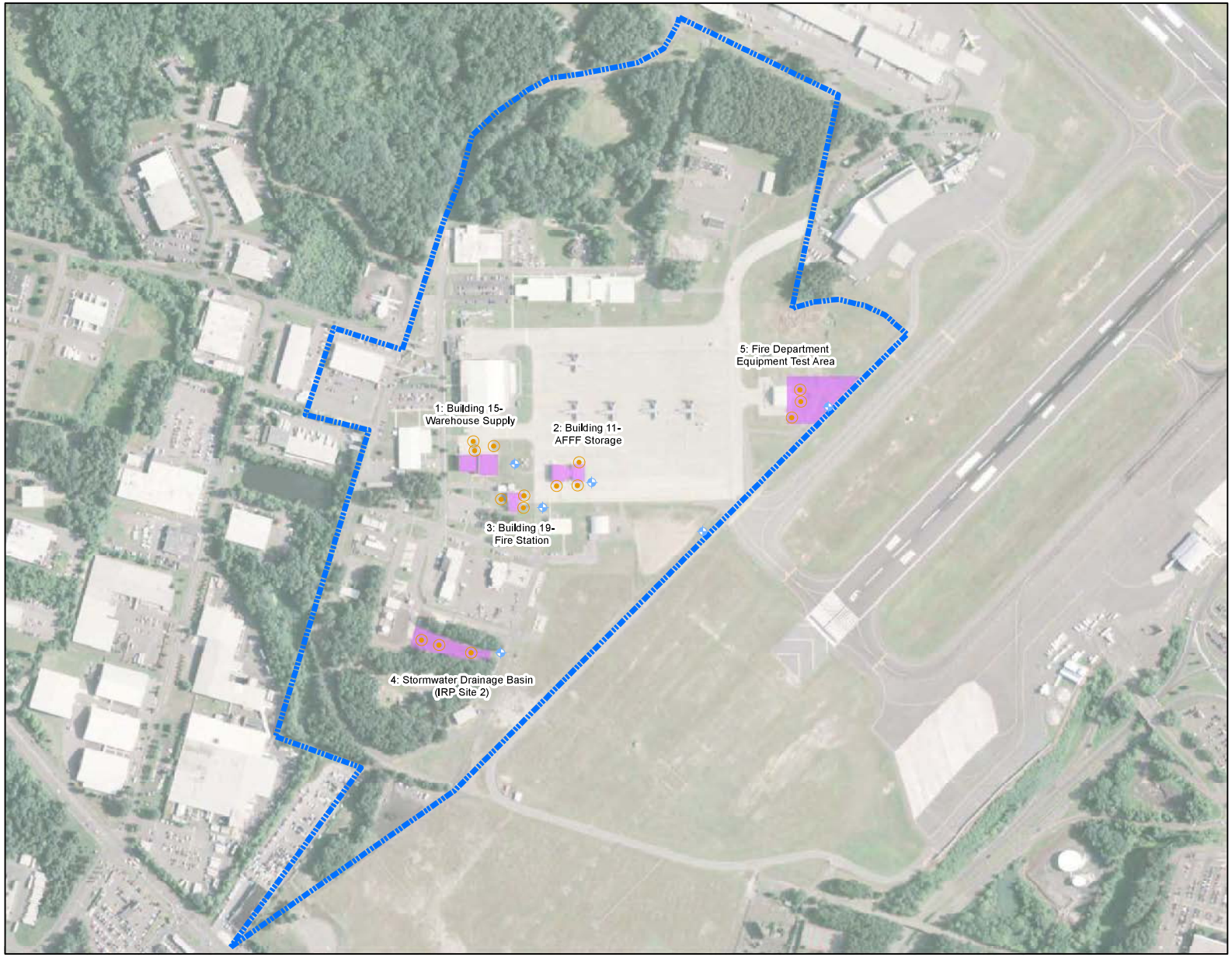


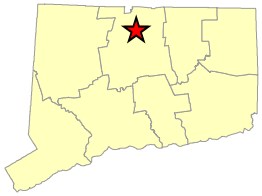
PROPOSED SAMPLE LOCATIONS

Bradley Air National Guard Base
East Granby, Connecticut

Legend

- Monitoring Well
- Soil Sample
- Installation Area (approximate)
- Potential AFFF PFC PRLs (approximate)

Location of Site



Notes & Sources

Notes: AFFF - aqueous film forming foam. PFC - perfluorinated compounds.
Sources:Installation Area datalayer obtained from Figure 2 of the Final Perfluorinated Compounds Preliminary Assessment Site Visit Report prepared by BB&E and dated January 2016.

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FIGURE
3

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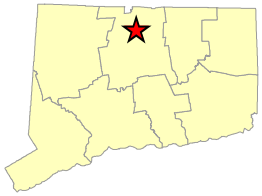
PROPOSED SAMPLE LOCATIONS
PRL 1

Bradley Air National Guard Base
East Granby, Connecticut

Legend

- Monitoring Well
- Soil Sample
- Approximate Groundwater Flow Direction
- Potential AFFF PFC PRLs (approximate)

Location of Site



Notes & Sources

Notes: AFFF - aqueous film forming foam. PFC - perfluorinated compounds.
Sources:Installation Area datalayer obtained from Figure 2 of the Final Perfluorinated Compounds Preliminary Assessment Site Visit Report prepared by BB&E and dated January 2016.

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FIGURE
3A

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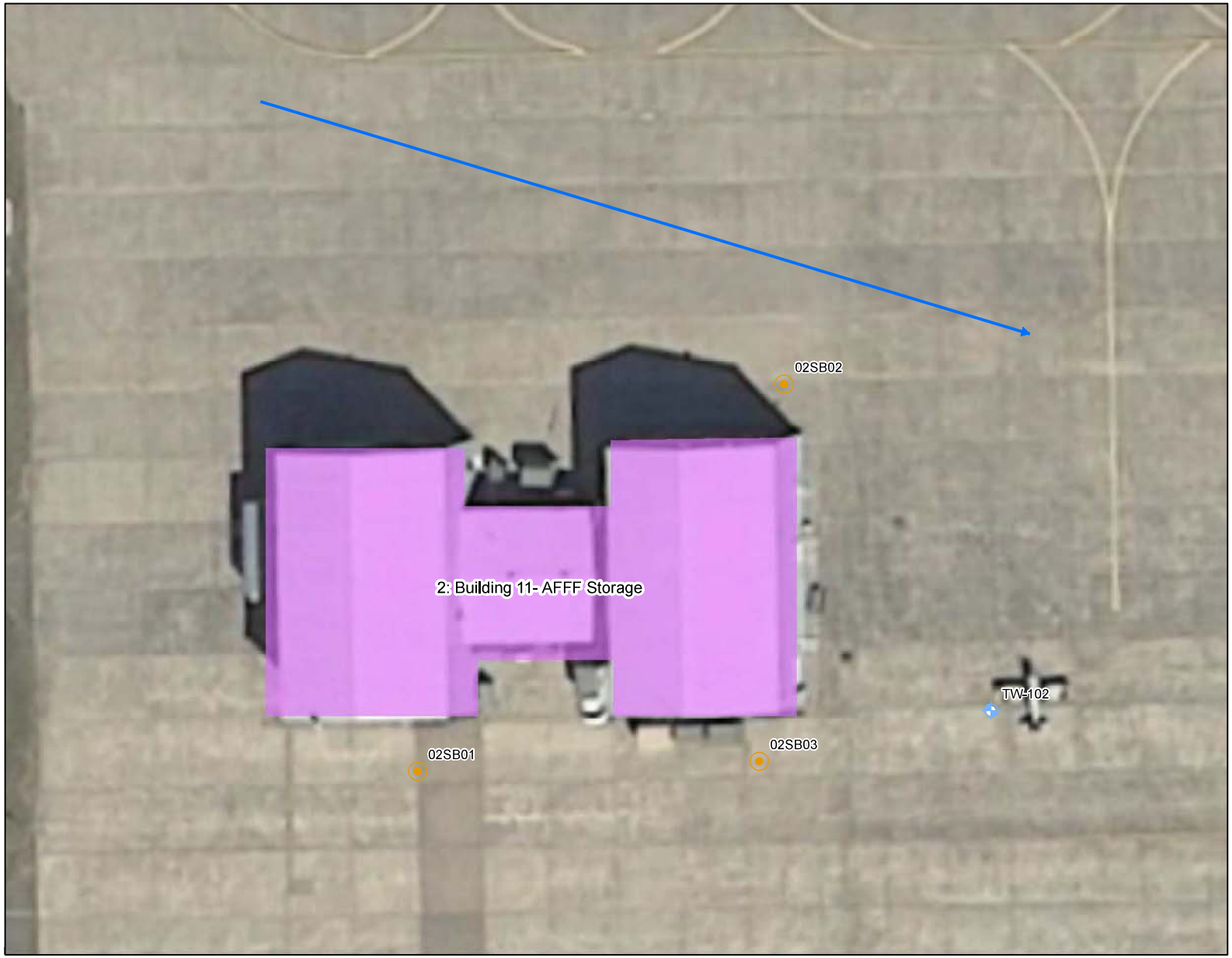


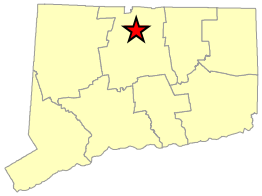
PROPOSED SAMPLE LOCATIONS
PRL 2

Bradley Air National Guard Base
East Granby, Connecticut

Legend

- Monitoring Well
- Soil Sample
- Approximate Groundwater Flow Direction
- Potential AFFF PFC PRLs (approximate)

Location of Site



Notes & Sources

Notes: AFFF - aqueous film forming foam. PFC - perfluorinated compounds.
Sources:Installation Area datalayer obtained from Figure 2 of the Final Perfluorinated Compounds Preliminary Assessment Site Visit Report prepared by BB&E and dated January 2016.

0 20 40 Feet

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amec foster wheeler
Amec Foster Wheeler
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Rocky Hill, CT 06067
(860) 529-7191

FIGURE
3B

P:\ANG - Air National Guard\Bradley - PFCs\Draft Workplan\GIS\ANGBradley_Fig3E.mxd March 06, 2017 DWN: amberlee.n.clark CHKD: MSC

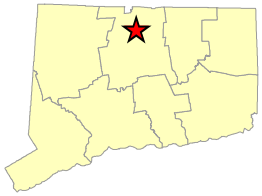
PROPOSED SAMPLE LOCATIONS
PRL 3

Bradley Air National Guard Base
East Granby, Connecticut

Legend

- Monitoring Well
- Soil Sample
- Approximate Groundwater Flow Direction
- Potential AFFF PFC PRLs (approximate)

Location of Site



Notes & Sources

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Sources:Installation Area datalayer obtained from Figure 2 of the Final Perfluorinated Compounds Preliminary Assessment Site Visit Report prepared by BB&E and dated January 2016.

0 20 40 Feet

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FIGURE
3C

P:\ANG - Air National Guard\Bradley - PFCs\Draft Workplan\GIS\ANGBradley_Fig3C.mxd March 06, 2017 DWN: amberlee.n.clark CHKD: MSC

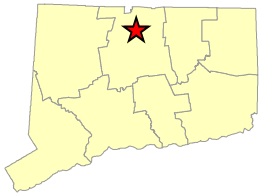
PROPOSED SAMPLE LOCATIONS
PRL 4

Bradley Air National Guard Base
East Granby, Connecticut

Legend

- Monitoring Well
- Soil Sample
- Approximate Groundwater Flow Direction
- Potential AFFF PFC PRLs (approximate)

Location of Site



Notes & Sources

Notes: AFFF - aqueous film forming foam. PFC - perfluorinated compounds.
Sources:Installation Area datalayer obtained from Figure 2 of the Final Perfluorinated Compounds Preliminary Assessment Site Visit Report prepared by BB&E and dated January 2016.

0 25 50 Feet

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(860) 529-7191

FIGURE
3D

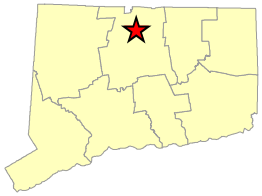
PROPOSED SAMPLE LOCATIONS
PRL 5

Bradley Air National Guard Base
East Granby, Connecticut

Legend

- Monitoring Well
- Soil Sample
- Approximate Groundwater Flow Direction
- Potential AFFF PFC PRLs (approximate)
- Installation Area (approximate)

Location of Site



Notes & Sources

Notes: AFFF - aqueous film forming foam. PFC - perfluorinated compounds.
Sources:Installation Area datalayer obtained from Figure 2 of the Final Perfluorinated Compounds Preliminary Assessment Site Visit Report prepared by BB&E and dated January 2016.

0 20 40 Feet

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FIGURE
3E

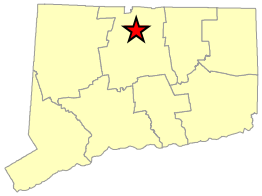
PROPOSED SAMPLE LOCATIONS
TW-106

Bradley Air National Guard Base
East Granby, Connecticut

Legend

- Monitoring Well
- Approximate Groundwater Flow Direction
- Installation Area (approximate)

Location of Site



Notes & Sources

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Sources:Installation Area datalayer obtained from Figure 2 of the Final Perfluorinated Compounds Preliminary Assessment Site Visit Report prepared by BB&E and dated January 2016.

0 25 50 Feet

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FIGURE
3F

APPENDIX A

PROJECT SCHEDULE

NGB/A4OR

Deliverable	Scheduled Due Date	Distribution
Draft SI WP	10 March, 2017	COR, ANG
Draft-Final SI WP	20 June, 2017	COR, ANG and Regulatory Stakeholders
Final SI WP	20 July, 2017	COR, ANG and Regulatory Stakeholders
Draft SI Report	2 October, 2017	COR, ANG
Draft-Final SI Report	24 October, 2017	COR, ANG and Regulatory Stakeholders
Final SI Report	30 November, 2017	COR, ANG and Regulatory Stakeholders

APPENDIX B

SITE HEALTH AND SAFETY PLAN

Site Health and Safety Plan
Preliminary Subsurface Investigation

General Information

Project Name:	Phase 1 Regional Site Inspections
Location:	Bradley Air National Guard Base, East Granby, Connecticut
Client	National Guard Bureau (NGB)
Plan Prepared By:	Craig Keating, revised Michael Cote
Plan Approved By:	TBD
Project Start Date:	~April 2017

Emergency Contacts

ÁÉÁÆÉÇÁÄÁ	Å ĂÁ	ĄÃÅÅÁÅÅCĂ AÁÆ
ÁĂ ÁÆÂÁÅÀÂ		
ĚÌ ÏÎHH	ÐĠÎKEJĠĬ ĢĹĚÌ ÏÎHHĎHĮ ĠJKĪ HĬK	ÂĀĀ
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ÊÌ HĠÏ ÈÌ ÎĮ ÎKĠĬ	ĘFÂÐJĠĬ HÎJ ÈÌ ÎĮ ÎKĠĬ ĀĀĀĠ ÌÌ ÁÏĠĬ ĤĘKÂ È ĠJKÌ JĤÀDF ÄÆĀÄĄ	CÆÄABĀĀĀĀÄÄÄ
ÊÌ HĠÏ ĊĪ ĢĶÏĠĬ HHÃÈHÎHĶH	ÐĪ HJÌ HĬ HĹ ĘHJLÎHH	ÂĀĀ
ĠÌ JĨ DĠJH		CCCAĀĀĀÂÁBBCB
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Ē ĘÈ Ċ ÐÎHÏÎĤ Ē IIÎHH		CÄÄAĂĀĀĀĀĀĄĂ

BĊDĢĈ	Å ĂÁ	ĄÃÅÅÁÅÅCĂ AÁÆ
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DÎÎHĬ KDÌ ĬKĠHKČÈ E Ç ĚJÌ ÌJĠĪ Ě ĠĬ ĠÌ HJ	Ĝ ÎĬ ÎJĶĬ DJÌ Ĺ	Ē IIÎHHČFÇĎ
DÎÎHĬ KDÌ ĬKĠHKČÇĠÎH ÐĬ LÎJÌ ĬĪ HĬKĠĬ Ě ĠĬ ĠÌ HJ	ÊF ĎĠĹ Ĭ ĘĶĮ JHĬ ĠĬ K	Ē IIÎHHČFÇĎ
ĘĶĢHÌ ĬKJĠHĶJ	FÇĎ	Ē IIÎHHČ DHÏÏČ

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Attachment C Incident Reporting Forms
Attachment D Route to Hospital Map

LIST OF ACRONYMS

AFFF	Aqueous Film Forming Foam
103rd AW	103rd Airlift Wing
BANGB	Bradley Air National Guard Base
CFR	Code of Federal Regulations
CHSM	Corporate Health and Safety Manual
CRZ	Contaminant Reduction Zone
CTANG	Connecticut Air National Guard
DA PAM	Department of the Army Pamphlet
EPA	Environmental Protection Agency
EZ	Exclusion Zone
H&S	Health & Safety
HA	Hazard Analysis
HASP	Health and Safety Plan
HAZWOPER	Hazardous Waste Operations and Emergency Response
HSE	Health, Safety and Environmental
JSA	Job Safety Analysis
OHSR	Office Health and Safety Representative
OSHA	Occupational Safety and Health Administration
PFC	Perfluorinated Compound
PFOA	Perfluorooctanoic Acid
PFOS	Perfluorooctyl Sulfonate
PPE	Personal Protective Equipment
PRL	Potential Release Location
SDS	Safety Data Sheet
SHSO	Site Health and Safety Officer
SI	Site Inspection
SZ	Support Zone

1.0 INTRODUCTION

1.1 Purpose and Policy

The purpose of this document is to outline the health and safety plan (HASP) for the Site Inspection (SI) activities that are scheduled to be completed at 5 Potential Release Locations (PRLs) identified at the 103rd Airlift Wing (103rd AW), Connecticut Air National Guard (CTANG), Bradley Air National Guard Base (BANGB), in the East Granby, Connecticut.

This HASP addresses those activities associated with the scope of work stated within this HASP and will be implemented by the Site Health & Safety Officer (SHSO) during site work. **Compliance with this HASP is required of all persons and third parties who enter this work site**. Assistance in implementing this plan can be obtained from the SHSO and Project Manager, and/or Health, Safety and Environmental (HSE) Coordinator. The content of this HASP may change or undergo revision based upon additional information made available to health and safety (H&S) personnel, monitoring results, or changes in the scope of work. Any changes proposed must be reviewed by H&S staff and are subject to approval by the HSE Coordinator and Project Manager.

This site-specific HASP has been prepared for the use of Amec Foster Wheeler Environment & Infrastructure, Inc. and its employees and supplements the Health and Safety training that each Amec Foster Wheeler employee receives. The H&S guidelines in this plan were prepared specifically for this site and encompass known hazards. If additional hazards are encountered, the level of personal protection will be evaluated and the HASP will be modified as necessary.

This HASP is not intended to be used by any other contractor or personnel of any such contractor. This HASP may not address the specific H&S needs or requirements of any other such contractor and its employees. Neither this HASP nor any part of it should be used on any other site.

1.2 Applicability

This HASP presents requirements and guidelines for work at the Site. It is in compliance with applicable sections of 29 Code of Federal Regulations (CFR) 1910.120 and 1926.65, Hazardous Waste Operations and Emergency Response (HAZWOPER).

1.2.1 Modification Plan

Occasionally, procedural conflicts may arise from different documents. The requirement most protective of workers health and safety, the public, and property shall take precedence.

1.2.2 Subcontractor's Responsibilities

Subcontractors employed by Amec Foster Wheeler shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with its work. The subcontractor shall give all notices and comply with all applicable laws, ordinances, rules, regulations, and lawful orders of any public authority bearing on the safety of persons or property, the subcontractor shall act to prevent threatened damage, injury or loss.

1.3 Site Location

The 103rd AW of the CTANG occupies facilities at BANGB in East Granby, Hartford County, Connecticut. BANGB is located on the southwest side of the airfield associated with Bradley International Airport and occupies approximately 144 acres. The area surrounding the Base consists of commercial airport businesses to the north, east, and west, and residential properties and undeveloped land to the south. The Base is located approximately 2 miles west of Windsor Locks and 15 miles north of Hartford, Connecticut. The Windsor Locks Town Line runs north-south through the Bradley International Airport immediately east of the Bradley Air National Guard facility.

1.4 Scope of Work

The scope of work included in the SI is intended to collect sufficient data to determine the presence or absence of Perfluorinated Compounds (PFCs) in soil, sediment and/or groundwater at each of the Potential Release Locations (PRLs) and in groundwater at the base boundary to develop appropriate path(s) forward.

It is anticipated that the project will take approximately five days to complete. Amec Foster Wheeler will provide on-site oversight during all field activities. All subcontractors will be responsible for ensuring compliance with this HASP and with their company specific HASP, among its employees during the field work. Planned Site activities include the following tasks, listed in sequence of occurrence.

1. Visual Site inspections;
2. Site clearance for all utilities;
3. Advancement of soil and well borings using direct-push drilling methods;
4. Convert select borings to temporary monitoring wells;
5. Collect soil samples;
6. Collect groundwater samples using low flow sampling procedures;
7. Soil and well boring abandonment;
8. Collect sediment samples.

1.5 Health and Safety Planning

The Supervisor identifies the work area and task to be performed and then leads the crew in performing task hazard assessment evaluation. The hazard assessment is specific to the work to be performed and requires the Supervisor to solicit crew participation in identifying hazards

and hazard control measures such as personal protective equipment (PPE), training requirements, permits, procedures, etc.

1.6 Project Organization and Responsibilities

Refer to the cover page of this HASP for emergency contact information.

1.6.1 Project Manager

Reports to upper-level management. Has authority to direct response operations. Assumes total control oversite activities.

Responsibilities:

- Prepares and organizes the background review of the situation, the Work Plan, the HASP, and the field team.
- Obtains permission for Site access and coordinates activities with appropriate officials.
- Ensures that the Work Plan is completed and on schedule.
- Briefs the field teams on their specific assignments.
- Uses the SHSO to ensure that health and safety requirements are met.
- Prepares the final report and support files on the response activities
- Serves as the liaison with public officials.

1.6.2 Site Health and Safety Officer

Advises the Project Manager on all aspects of health and safety on-site. Stops work if any operation threatens worker or public health safety.

Responsibilities:

- Periodically inspects protective clothing and equipment.
- Ensures that protective clothing and equipment are properly store and maintained.
- Controls entry and exit at the Access Control Points.
- Coordinates health and safety program activities with the Office Health and Safety Representative (OHSR).
- Confirms each team member's suitability for work based on a physician's recommendation.
- Monitors the work parties for signs of stress, such as cold exposure, heat stress, and fatigue.
- Implements the HASP.
- Conducts periodic inspections to determine if the HASP is being followed.
- Enforces the "buddy" system.
- Knows emergency procedures, evacuation routes, and the telephone numbers of the ambulance, local hospital, poison control center, fire department, and police department.
- Notifies, when necessary, local public emergency officials.
- Coordinates emergency medical care.
- Sets up decontamination lines and the decontamination solutions appropriate for the type of chemical contamination on the Site.

- Controls the decontamination of all equipment, personnel, and samples from the contaminated area.
- Assures proper disposal of contaminated clothing and materials.
- Ensures that all required equipment is available.
- Advises medical personnel of potential exposures and consequences.
- Notifies emergency response personnel by telephone or radio in the event of an emergency.

1.6.3 Field Manager

Responsibilities:

- Manages field operations.
- Executes the Work Plan and schedule.
- Enforces safety procedures.
- Coordinates with the SHSO in determining the personal protection level.
- Enforces Site control.
- Documents field activities and sample collection.
- Serves as a liaison with public officials.

1.6.4 Work Team

Responsibilities:

- Safely completes the on-site tasks required to fulfill the Work Plan.
- Complies with the HASP.
- Notifies SHSO or supervisor of suspected unsafe conditions.

1.7 Subcontractor's Safety Representative

The subcontractor shall take all reasonable precautions for the safety of, and shall provide all reasonable protection to prevent damage, injury or loss to:

a. all employees on the Work-Site and all other persons who may be affected.
b. all the Work and its materials and equipment.
c. other property at or adjacent to the Work-Site.

2.0 SAFETY AND HEALTH RISK ANALYSIS

2.1 Chemical Hazard Analysis

Workers may be exposed to chemical hazards from chemicals used during the field operations such as instrument calibration gases, sample preservatives, insect repellent, and chemicals brought to the Site by contractors. Safety Data Sheets (SDSs) are provided in **Attachment A**, and will be maintained at the project Site for all hazardous materials that are brought to the Site (e.g., calibration gases, sample preservatives, decontamination materials, etc.) and available for inspection at all times.

PFCs is a term used to refer to the group of chemicals that includes Perfluorooctanoic Acid (PFOA) and Perfluorooctyl Sulfonate (PFOS), and other per- and polyfluoroalkyl substances. PFCs are man-made fluorocarbon-based acids which have been and are still used in various industrial processes. PFCs do not biodegrade and can persistent in the environment and in the human body. These chemicals may be released during production processes, and during their use in manufacturing of new products. According to the Environmental Protection Agency (EPA) and the Centers for Disease Control and Prevention (CDC), exposure to these chemicals can occur through ingestion of food that has been contaminated during growing (contaminated soil and water), during cooking in affected cooking ware, during processing from equipment used to process the food, from food packaging, etc. Exposure may also occur during the normal use of consumer projects that contain these chemicals (carpets, leather and apparel, textiles, paper and packaging materials), and from drinking water that has been contaminated with these chemicals. Soil and groundwater contamination can occur in areas where a facility has produced or used these chemicals, or other locations where these chemicals were used for firefighting. According to the Agency for Toxic Substances and Disease Registry (ATSDR), food is expected to be the primary source of exposure for most people. Communities near facilities where PFOA and PFOS were previously manufactured may have these substances in drinking water.

While the exact quantity or type of releases which may have occurred on the Site are unknown, the scope of work requires an assessment of the potential historical release of PFCs at 5 PRLs where Aqueous Film Forming Foam (AFFF) was potentially used or stored, which included drainage basins, hangars, hush house, fire stations, and firefighting equipment testing areas. Workers may be exposed to Site contamination during field operations, with the greatest risk of exposure occurring during sampling of groundwater, soil, sediment, and surface water. The potential routes of exposure to Project contamination include inhalation, dermal contact, and incidental ingestion, with inhalation and dermal contact being the highest potential.

The Occupational Safety and Health Administration (OSHA) and the American Conference of Governmental Industrial Hygienists (ACGIH) have not established occupational exposure limits[1].

[1] Currently no Occupational Safety and Health Administration Permissible Exposure Limit (PEL) nor American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLV) exists for PFCs or PFOAs. However, the ACGIH® Biological Exposure Indices Commission determined that perfluorooctanoic acid may pose important risks to the health of workers and is encouraging the submission of new data since 2007 (ACGIH, TLVs and BEIs, 2016).

According to the ATSDR, some [illegible]

- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]

ATSDR also states that more studies are needed to evaluate the health effects of exposure to these chemicals.

Amec Foster Wheeler anticipates that the potential for personnel exposure to Site contamination via incidental ingestion of contaminated groundwater is low. Amec Foster Wheeler will enforce proper personal hygiene and decontamination practices at the Site, and require the use of appropriate PPE when conducting field operations. In addition, to minimize the potential for exposure to Site contaminants, eating, drinking, and smoking in potentially contaminated areas will be prohibited.

2.2 Physical Hazards

Work sites may contain hazards for Site workers, such as:

- Slips, trips and falls from:
  - Holes, pits, or ditches.
  - High-speed vehicular traffic in vicinity of Site.
  - Slippery surfaces.
  - Steep grades.
  - Uneven grades.
  - Weather conditions that make surfaces slippery and obscure visibility
- Punctures, abrasions, compressions from sharp objects, such as nails, metal shards, and broken glass.
- Surrounding animal, insect and plant life.
- Underground utilities.
- Overhead utilities.
- Lifting heavy loads.
- Traffic.

2.2.1 Heavy Equipment

Planned SI activities at the Site will include heavy equipment such as direct-push drilling rigs. Dangerous conditions can develop from heavy equipment use. The following should be taken into consideration:

- Appropriate personal protective equipment consistent with the hazard should be worn.

- Signing and traffic control on the Site should be completed.
- Avoid walking under suspended loads.
- Maintain eye contact with heavy equipment operators and do not walk into their red zone without confirmation they are aware of your approach.
- Use appropriate fall protection if needed.
- Heavy equipment must be equipped with a backup alarm to alert workers.
- Establish a work zone around construction equipment and permit only those personnel and equipment required for the task within the zone.
- Getting off or on any equipment while it is in motion is prohibited.
- Machinery or equipment will be operated in a manner that will protect persons or property, including the operation of equipment at safe speeds and weight limits to be enforced.
- Stay clear of rotating parts.
- Maintain a distance of at least 15 feet from wires for heavy equipment.

2.2.2 Noise Hazards

Planned activities will involve the use of noise producing equipment such as the Geoprobe™ direct push rig. The unprotected exposure of Site workers to this noise during activities could result in noise-induced hearing loss. Drilling/boring, and any other activity that involves the use of heavy equipment or powered tools have the potential to generate elevated noise levels. Hearing protection will be worn whenever drill rigs or other heavy equipment are being operated, when powered tools are used, and when monitored noise levels exceed 85 decibels on a time-weighted-average (TWA).

Activities conducted in close proximity to generators, steam cleaners, other machinery, construction activities, and heavy equipment may expose workers to noise exceeding the OSHA PEL of 90 decibel A-scale (dBA). The following effects can result from this noise:

- psychological effects: workers being startled, annoyed, or distracted
- physiological effects: pain, temporary and/or permanent hearing loss, reduced muscular control (when exposure is severe)
- communication interference: increase in potential hazards due to the inability to warn of danger or properly issue instructions

It is anticipated that situations may arise when workers may be exposed to noise levels in excess of the 85 dBA, OSHA 8-hour time-weighted average (TWA) action level.

Each person will be provided with hearing protection to be used when noise levels are near or exceed the TWA of 85 dBA, including during drilling operations and sampling operations when a generator is in use. Areas or equipment with noise levels greater than 85 dBA will be posted as high noise areas/equipment, requiring the use of hearing protection.

All hearing protectors available have been evaluated for attenuation using the Noise Reduction Rating (NRR); the NRR number appears on the equipment packaging. The NRR is the number

of decibels the hearing protector absorbs if worn properly. The NRR for hearing protection devices is established based upon laboratory conditions and rarely holds true in field situations. Additionally, improper hearing protection device use by employees lowers the stated NRR values for a particular hearing protection device. Because of this, a more reasonable use of these ratings would be to decrease the NRR value by half. The hearing protection must have a NRR sufficient to bring noise levels below the OSHA action level.

Hearing protection maintenance includes the following practices:

- Do not reuse disposable ear plugs
- Wash reusable plugs and canal caps to guard against dirt and bacteria
- Wash and disinfect earmuffs
- Discard reusable plugs or canal caps if they become hard or discolored
- Replace worn cushion on earmuffs

Store hearing protection in a clean plastic bag.

2.2.3 Explosions

Amec Foster Wheeler does not anticipate the presence of explosive atmospheres during this work.

2.2.4 Oxygen Deficient Atmosphere

Amec Foster Wheeler does not anticipate the presence of oxygen deficient atmospheres during this work.

2.2.5 Heat/Cold Related Stress/Illness and Prevention

Heat

There is a potential for heat related injuries during this period, especially when heavy manual labor-intensive activities are performed with semi-permeable and impermeable PPE. If air temperatures and/or humidity levels rise, the potential for development of heat-related illnesses increases. Heat-related illnesses occur when the body is unable to cool itself.

Potential heat-related illnesses include:

- Heat rash. Heat rash, usually red dots or small pimples, can occur when the body excessive sweating.
- Heat cramps. Heat cramps are the least severe and often are the first signals that the body is having trouble with the heat. Heat cramps are painful muscle spasms that result from overheating. They usually occur in the legs and abdomen (American Red Cross).
- Heat exhaustion. Heat exhaustion is a heat-related illness that can develop after exposure to high temperatures and inadequate or unbalanced replacement of fluids. It typically occurs when people exercise heavily or work in a warm, humid place where body fluids are lost through heavy sweating and the sweat does not evaporate as it should (American Red Cross)

- Fainting. Loss of consciousness, or fainting, can occur when the body experiences heat exhaustion. Fainting can also occur with the more severe heat-related illness, heat stroke.
- Heat stroke. Heat stroke is the least common, but most severe heat-related illness. It results from the total failure of the body's heat regulation system. This occurs when the body's temperature rises rapidly, the sweating system fails and the body cannot cool down. Heat stroke is a medical emergency. It can cause permanent disability or even death. Symptoms include red skin that can either be dry or moist; changes in consciousness; rapid, weak pulse; rapid, shallow breathing.

Prevention

- Workers are trained to recognize the symptoms of heat-related injuries and illnesses.
- Heat-related injury and illness recognition and prevention measures will be emphasized during daily safety tailgate meetings when the potential for such injuries and illnesses exists. Adjustments to the work-rest schedule must be considered if temperatures and/or humidity levels rise to unhealthy levels as indicated in the table below.
- Cool beverages will be available on-site. Workers will be encouraged to drink fluids. Depending on the activity and location, shade areas may be erected.

General Heat Indices

°F	RELATIVE HUMIDITY									
TEMP.	55%	60%	65%	70%	75%	80%	85%	90%	95%	100%
104	137									
102	130	137								
100	124	129	136							
98	117	123	128	134						
96	112	116	121	126	132					
94	106	110	114	119	124	129	135			
92	101	105	108	112	116	121	126	131		
90	97	100	103	106	109	113	117	122	127	132
88	93	95	98	100	103	106	110	113	117	121
86	89	91	96	95	97	100	102	105	108	112
84	86	88	89	90	92	94	96	98	100	103
82	84	84	85	86	88	89	90	91	93	95
80	81	82	82	83	84	84	85	86	86	87

Source: NOAA, National Weather Service

Possible Heat Disorders Based on Heat Index

Category	Heat Index	Possible Heat Disorders for People in High Risk Groups
Extreme Danger	>130°F	Heat stroke and sunstroke likely.
Danger	105°F – 129°F	Sunstroke, muscle cramps, heat exhaustion likely. Heatstroke likely w/prolonged exposure or physical activity.
Extreme Caution	90°F – 105°F	Sunstroke, muscle cramps, heat exhaustion possible w/prolonged exposure or physical activity
Caution	80°F – 90°F	Fatigue possible w/prolonged exposure or physical activity

Rest Periods for Temperatures Exceeding 72.5°F

Temperature	Normal Work Clothing	Impermeable Work Clothing
>90°F	After each 45 minutes of work	After each 15 minutes of work
87.5 °F -90°F	After each 60 minutes of work	After each 30 minutes of work
82.5 °F -87.5°F	After each 90 minutes of work	After each 60 minutes of work
77.5 °F -82.5°F	After each 120 minutes of work	After each 90 minutes of work
72.5 °F -77.5°F	After each 150 minutes of work	After each 120 minutes of work

Cold

Exposure to low temperatures presents a risk to employee safety and health both through the direct effect of the low temperature on the body and collateral effects such as slipping on ice, decreased dexterity, and reduced dependability of equipment. Specific potential hazards include:

- Frostbite. Frostbite is the freezing of body parts exposed to the cold. Severity depends on the air temperature, length of exposure and the wind. Frostbite can result in the loss of fingers, hands, arms, toes, feet and legs. The signals of frostbite include lack of feeling in the affected area, swelling and skin that appears waxy, is cold to the touch or is discolored (flushed, white, yellow or blue). In more serious cases, blisters may form and the affected part may turn black and show signs of deep tissue damage. (American Red Cross)
- Chilblains. This common condition is caused by local chilling of some part of the body and is most frequently seen in old people with poor circulation. The most common places for chilblains are the heel, toes, ears, nose and fingers. Symptoms include red skin, which appears when the part is brought near the heat, and considerable burning and itching. (American Red Cross)
- Hypothermia. In a hypothermic condition, the entire body cools because its ability to keep warm is failing. The air temperature does not have to be below freezing for people to develop hypothermia. This is especially true if the person is wet or if it is windy. Symptoms include Shivering, numbness, glassy stare, indifference, loss of consciousness. (American Red Cross)

Prevention

- Workers are trained to recognize the symptoms of frostbite and hypothermia.
- Cold injuries and illnesses recognition and prevention measures will be emphasized during daily safety tailgate meetings when the potential for cold injuries and illnesses exists.

- Work will cease under unusually hazardous conditions.
- Phenothiazine (a sedative) and beta blocker drug use will be prohibited.
- Heated vehicles will be available on-site.
- Insulating dry clothes will be available.
- Temperature will be recorded on-site.
- Warm beverages will be available on-site.
- Adjustments to the work-rest schedule must be considered if temperatures and/or wind conditions reach unhealthy levels as indicated in the table below.

Wind Chill Factors

	Local Temperature, ºF										
Wind Speed (mph)	32	23	14	5	-4	-13	-22	-31	-40	-49	-58
	Equivalent Temperature, ºF										
Calm	32	23	14	5	-4	-13	-22	-31	-40	-49	-58
5	29	20	10	1	-9	-18	-28	-37	-47	-56	-65
10	18	7	-4	-15	-26	-37	-48	-59	-70	-81	-91
15	13	-1	-13	-25	-37	-49	-61	-73	-85	-97	-109
20	7	-6	-19	-32	-44	-57	-70	-83	-96	-109	-117
25	3	-10	-24	-37	-50	-64	-77	-90	-104	-117	-121
30	1	-13	-27	-41	-54	-68	-82	-97	-109	-123	-137
35	-1	-15	-29	-43	-57	-71	-85	-99	-113	-127	-142
40	-3	-17	-31	-45	-59	-74	-87	-102	-116	-131	-145
45	-3	-18	-32	-46	-61	-75	-89	-104	-118	-132	-147
50	-4	-18	-33	-47	-62	-76	-91	-105	-120	-134	-148
LITTLE DANGER FOR PROPERLY CLOTHED PERSONS Maximum danger of false sense of security			**CONSIDERABLE DANGER** Danger from freezing of exposed flesh within one minute			**VERY GREAT DANGER** Flesh may freeze within 30 seconds					
Trenchfoot and immersion foot may occur at any point on this chart											

Table

Work/Warm-Up Schedule for Four-Hour Shift

Air Temp. - Sunny Sky	No Noticeable Wind		5 mph Wind		10 mph Wind		15 mph Wind		20 mph Wind	
°F (approx.)	Max. Work Period	No. of Breaks	Max. Work Period	No. of Breaks	Max. Work Period	No. of Breaks	Max. Work Period	No. of Breaks	Max. Work Period	No. of Breaks
-15° to -19°	norm. breaks	1	norm. breaks	1	75 min.	2	55 min.	3	40 min.	4
-20° to -24°	norm. breaks	1	75 min.	2	55 min.	3	40 min.	4	30 min.	5
-25° to -29°	75 min.	2	55 min.	3	40 min.	4	30 min.	5	Non-emergency work should cease ↓	
-30° to -34°	55 min.	3	40 min.	4	30 min.	5	Non-emergency work should cease ↓		↓	
-35° to -39°	40 min.	4	30 min.	5	Non-emergency work should cease ↓		↓		↓	
-40° to -44°	30 min.	5	Non-emergency work should cease ↓		↓		↓		↓	
-45° & below	Non-emergency work should cease		↓		↓		↓		↓	

NOTES:

1. Schedule applies to any 4-hour work period with moderate to heavy work activity, with warm-up periods in a warm location and with an extended break (*e.g.*, lunch) at the end of the 4-hour work period in warm locations. For light-to-moderate work (limited physical movement): apply the schedule one step lower.

2. The following is suggested as a guide for estimating wind velocity if accurate information is not available:

5 mph: light flag moves

10 mph: light flag fully extended

15 mph: raises newspaper sheet

20 mph: blowing and drifting snow

3. TLV applies only for workers in dry clothing.

3.0 PERSONNEL PROTECTION AND MONITORING

3.1 Medical Surveillance

Periodic Comprehensive Exam:
All personnel requiring access to controlled work areas will have a baseline medical examination and a periodic (usually annual) update examination prior to assignment, in accordance with Occupational Safety and Health Administration (OSHA) 29 CFR 1910.120(f). The exam must be

performed by an Occupational Health Physician, who will provide written clearance for hazardous waste Site work. Protocols for the baseline, periodic, and exit exams must be at least as stringent as those defined in the Amec Foster Wheeler Medical Surveillance Program, Volume III of Amec Foster Wheeler's Corporate Health and Safety Manual (CHSM).

Emergency Medical Treatment:
In the event that a worker requires transportation to a hospital, the routes to the hospital are located in **Attachment D**. The identified hospital facility is Baystate Noble Hospital. See also the Emergency Response Section for specific information regarding emergency services and logs, reports, and record keeping. Subcontractors should provide internal Workers' Compensation information to the SHSO during the pre-work meeting, for emergency use.

Medical Clearance Record Keeping:
Medical clearance documents are on file at the employee's home office. To ensure confidentiality, results of the medical exams or treatment records are maintained at the Medical Care Provider's clinical offices.

3.2 Site-Specific Training

All routine on-site general Site workers performing intrusive activity or having potential to receive exposures exceeding permissible limits will have completed the OSHA 40-hour Hazardous Waste Operations Training. Three days of on-site supervised training must be completed upon initial assignment. Appropriate annual refresher (within 12 months) updates must be completed by all HAZWOPER personnel. Supervisors will have completed the above and an additional 8 hours of OSHA Supervisory Training.

Occasional Site workers that are not expected to receive exposures exceeding permissible exposure limits (e.g., geophysical and land surveyors) require only 24 hours of OSHA Hazardous Waste Operations Training and 1 day of on-site training and supervision.

3.3 Personal Protective Equipment and Action Levels

The purpose of personal protective clothing and equipment is to shield or isolate individuals from the hazards that may be encountered when engineering and other controls are not feasible or cannot provide adequate protection. Adherence to all prescribed controls is vital to minimize exposures. Levels of protection will be upgraded or downgraded in response to Site conditions.

3.4 Monitoring Requirements

3.4.1 Air Monitoring

Based on the suspected contaminants, air monitoring for volatile organic compounds (VOCs) using a direct reading instrument (e.g., photoionization detector) would not be applicable.

PFCs may be contained within/on dust particles that become airborne and create an inhalation hazard; therefore, dust monitoring will be required during any activity that generates large volumes of dust (i.e., excavation).

3.4.2 Routine Monitoring for Explosive Environments

None anticipated.

3.4.3 Oxygen Monitoring

None anticipated.

3.4.4 Monitoring for Heat/Cold -Related Stress/Illnesses

Using the buddy system, team members will be responsible for observing their buddy for any signs of heat-related stress or illness. It is also the responsible of individual employees to minimize overexertion by taking frequent breaks; work during cooler or warmer hours; drink plenty of fluids (2 gal of water during an 8-hr shift); and wear cotton or thermal clothing when appropriate.

3.5 Background Readings

None anticipated.

3.6 Data Logging

None anticipated.

3.7 Dust Control

Dust suppression is not expected to be a concern during this field event.

3.8 Personal Protective Equipment

Based on evaluation of potential hazards, the following levels of personal protection have been designated for the applicable work zones.

Work Zone Exclusion Zone (EZ) **Level of Protection** D

Personal Protective Equipment			
Initial levels of protection were assigned to this work task based on the potential risk of exposure. These levels may be changed if warranted by monitoring data (see Action Levels) and Site conditions. Any change to these initial levels must be noted here and documented in the H&S Plan and in the field log book.			
USEPA level of protection	( ) A ( ) D Modified	( ) B (X) D	( ) C
Respirator (Level C and up)	( ) SCBA, airline ( ) P-100 Filter	( ) purif. resp. ( ) dust pre-filters	( ) OV/AG cart ( ) other_____
Protective clothing	( ) encap. Suit ( ) Saranex ® or equiv.	(X) Tyvek ® or equiv. ( ) splash suit	( ) PE Tyvek ® or equiv. (X) other: Reflective Vest
Head, face, eyes, ears	(X) hard hat ( ) splash shield	(X) safety glasses (X) ear plugs/muffs	( ) goggles ( ) other_____
Gloves (outer) (inner)	( ) nitrile_____ (X) nitrile _____	( ) neoprene ( ) vinyl	(X) other Leather work gloves _____
Footwear	(X) safety-toe leather ( ) hip waders	( ) overboots/covers ( ) shin/knee guards	( ) safety-toe rubber ( ) other _____

Modifications:_____

X = required PPE; * = modifications permitted; † =in case of upgrade.

Work Zone Contamination Reduction Zone **Level of Protection** D

Personal Protective Equipment			
Initial levels of protection were assigned to this work task based on the potential risk of exposure. These levels may be changed if warranted by monitoring data (see Action Levels) and Site conditions. Any change to these initial levels must be noted here and documented in the H&S Plan and in the field log book.			
USEPA level of protection	( ) A ( ) D Modified	( ) B (X) D	( ) C
Respirator (Level C and up)	( ) SCBA, airline ( ) P-100 Filter	( ) purif. resp. ( ) dust pre-filters	( ) OV/AG cart ( ) other_____
Protective clothing	( ) encap. Suit ( ) Saranex ® or equiv.	(X) Tyvek ® or equiv. ( ) splash suit	( ) PE Tyvek ® or equiv. (X) other Reflective Vest_
Head, face, eyes, ears	(X) hard hat ( ) splash shield	(X) safety glasses (X) ear plugs/muffs	( ) goggles ( ) other_____
Gloves (outer) (inner)	( ) nitrile_____ (X) nitrile _____	( ) neoprene ( ) vinyl	( ) other_____
Footwear	(X) safety-toe leather ( ) hip waders	( ) overboots/covers ( ) shin/knee guards	( ) safety-toe rubber ( ) other _____

Modifications:_____

X = required PPE; * = modifications permitted; † =in case of upgrade.

4.0 SITE CONTROL, MEASURES, ACCIDENT PREVENTION, AND CONTINGENCY PLAN

4.1 Site Control Measures

The Site control currently anticipated involves Site security (Section 4.6), and communications (Section 4.7). Work zones that will be utilized during the Site Investigation field effort are discussed in Section 4.2.

4.2 Work Zones

The work zones established for this field effort are as follows:

- Exclusion Zone (EZ)
- Contamination Reduction Zone (CRZ)
- Support Zone (SZ)

4.2.1 Exclusion Zone

The EZ is defined as an area with an approximately 30-foot radius around intrusive activities. Access is restricted to field sampling crews and necessary equipment operators

4.2.2 Contamination Reduction Zone

As necessary, two separate decontamination lines shall be established for personnel and sampling equipment in the CRZ. The CRZ is a narrow area through which personnel and equipment pass from the EZ to the SZ.

4.2.3 Support Zone

The SZ will be upwind or crosswind and away from the contaminated area. Vehicles, emergency equipment, telephone and break area, and any nonessential personnel will be maintained in this area.

4.3 Illumination

Amec Foster Wheeler does not anticipate conducting Site work during non-daylight hours. However, if necessary, Site lighting will meet OSHA requirements for illumination at 29 CFR 1926.56 and Section 7 of 385-1-1 Lighting. Lighting is measured in foot-candles (English) or lux (metric). The minimum illumination intensity of 3 foot-candles (33 lux) will be maintained for all areas where Site workers may pass through on foot or are present.

The area surrounding each work area will be illuminated with a minimum illumination intensity of 30 foot-foot candles (325 lux). Vehicle or equipment headlights are not considered an approved light source. A “work area” is defined as a ten-foot radius around each location where active work area, and will include lighting for vehicle and worker access to comply with OSHA and USACE requirements.

4.4 Sanitation

Amec Foster Wheeler will identify a public restroom/toilet facility to the Site prior to beginning work at the Site. A temporary, personnel washing station (adequate potable water source and soap) will be established at the Site to ensure personnel maintain good personal hygiene.

4.5 Safe Work Practices

- Unauthorized personnel are not allowed on-site, particularly in the EZ.
- Work groups will always consist of at least two team members.
- A high standard of personal hygiene will be observed. Smoking, eating, drinking, chewing gum or tobacco, taking medication, and applying cosmetics will not be permitted within any restricted area or EZ.
- Personnel under the obvious influence of alcohol or controlled substances are not allowed on-site; those taking medications must notify the SHSO.
- All Site personnel will familiarize themselves with these practices and the emergency procedures during daily tailgate and pre-work safety meetings.
- Workers who are passengers or drivers of vehicles (both off-site and on-site) will wear their seat belts any time the vehicle is in motion.
- Personnel will avoid skin contact with contaminated or potentially contaminated media. If such contact occurs, the affected areas should be washed thoroughly with soap and water.
- Personnel will discard and replace any damaged or heavily soiled protective clothing. Discarded PPE will be containerized/drummed at the end of each day.
- Personnel should notify the SHSO of any defective monitoring, emergency, or other protective/safety equipment.
- A supply of potable water, electrolyte replacement solutions, shaded break area, and sufficient lighting will be maintained on-site; sanitary facilities will be accessible to personnel.

4.6 Health and Safety Equipment Checklist

- Open flames are not allowed anywhere on-site without a hot-work permit.
- Owners/operators of heavy equipment will ensure that the equipment is in good working order by performing daily inspections and routine maintenance. Deficiencies affecting health and safety shall be corrected prior to equipment use.
- All unsafe conditions shall be made safe immediately. All unsafe conditions shall be reported to the Project Manager and the condition corrected.
- Loose-fitting clothing or loose long hair are prohibited near moving machinery
- All internal combustion engines must have spark arrestors that meet the requirements for hazardous atmospheres if they are to be used in such areas.
- Do not fuel engines while vehicle is running.
- Install adequate on-site roads, signs, lights, and devices.
- When portable electric tools and appliances can be used (where there is no potential for flammable or explosive conditions), they will be equipped only with 3-wire grounded power and extension cords to prevent electrical shock.
- Store tools in clean, secure areas so they will not be damaged, lost, or stolen.
- When exiting a vehicle, shift into park, set the parking brake, and shut off the engine. Never leave a running vehicle unattended.

4.7 Accident Prevention

The SHSO as well as all Site employees will inspect the work Site daily to identify and correct any unsafe conditions.

Adherence to the Safe Work Practices (to follow) and procedures outlined in this HASP will assist with accident prevention. Job Safety Analysis/Hazard Analysis (JSA/HA) forms are included in **Attachment B**.

4.7.1 Heavy Equipment Operation

Working with large motor vehicles and heavy equipment could be a major hazard at this Site. Injuries can result from equipment hitting or running over personnel, impacts from flying objects, or overturning of vehicles. Vehicle and heavy equipment design and operation will be in accordance with 29 CFR, Subpart O, 1926.602. In particular, the following precautions will be utilized to help prevent injuries/accidents.

- Brakes, hydraulic lines, light signals, fire extinguisher, fluid levels, steering, tires, horn, and other safety devices will be checked at the beginning of each shift.
- Large construction motor vehicles will not be backed up unless:

    1. The vehicles has a reverse signal alarm audible above the surrounding noise level; or,
    2. The vehicle is backed up only when an observer signals that it is safe to do so.

- Heavy equipment or motor vehicles cable will be kept free of all nonessential items, and all loose items will be secured.
- Large construction motor vehicles and heavy equipment will be provided with necessary safety equipment (seat belts, roll-over protection, emergency shut-off in case of roll-over, backup warning lights and audible alarms.)
- Blades and buckets will be lowered to the ground and parking brakes will be set before shutting off any heavy equipment or vehicles.

4.7.2 Underground Utility Clearance

Prior to commencement of SI activities, Amec Foster Wheeler will review available site information, such as As-Built drawings, to verify locations of subsurface utilities. In addition, Amec Foster Wheeler will schedule a site walk to mark out proposed ground disturbance locations with assistance from the BANGB POC. The BANGB POC will review and approve the locations with respect to avoidance of subsurface utilities and structures. After the locations have been pre-marked, Amec Foster Wheeler will contact “Call Before You Dig” the Connecticut one-call utility clearance hotline. Next, Amec Foster Wheeler will coordinate with the BANGB POC to complete a base dig permit and/or utility clearance checklist, as required. Finally, a private utility locating company will be used to locate site utilities at the specified sampling locations.

4.7.3 Drilling Activities

Underground utilities will be located prior to conducting drilling activities. Hard hats, safety glasses, high visibility safety vests, and safety boots must, as a minimum, be worn within 50 feet of the drilling rig. The Field Team Leader or his/her designee will provide constant on-site supervision of the drilling subcontractor to ensure they are meeting the H&S requirements. If deficiencies are noted, work will be stopped and corrective action will be taken (e.g., retrain, purchase additional safety equipment, etc). Reports of H&S deficiencies and the corrective action taken will be forwarded to the Project Manager.

4.8 Site Security

Access will be limited to all controlled areas via the prescribed administrative (certifications) controls. All Site personnel and visitors will note arrival and departure times in the Site logbook. All equipment, tools, and property shall be secured at the end of each day.

4.8.1 Visitor Access

All Site visitors (except OSHA inspectors) must receive prior approval from the PM, and client, and may do so only for the purposes of observing Site conditions or operations. Upon arrival, visitors will report to the SHSO. All visitors, regardless of their rank or professional level, will not be allowed into controlled work areas unless training and medical requirements have been met and documented.

4.9 Communications

The “buddy system” will be enforced for field activities involving potential exposure to hazardous or toxic materials, and during any work within the EZ. Each person will observe his/her buddy for symptoms of chemical or heat overexposure and will provide first aid or emergency assistance when warranted. A mobile phone will be maintained on-site for emergency use.

The following emergency hand signals will be used:

Thumbs up	=	OK; understand
Thumbs down	=	No; negative
Grasping buddy’s wrist	=	Leave Site now
Hands on top of head	=	Need assistance
Horn - one long blast	=	Evacuate Site
Horn - two short blasts	=	All clear, return to Site

4.10 Contingency Plan

4.10.1 Chemical Exposure

Although there are no OSHA or ACGIH established exposure limits and current information does not indicate that soil and/or groundwater sampling activities would cause an instantaneous reaction from exposure to PFCs in soil and/or groundwater, if a member of the field crew

demonstrates typical symptoms of chemical exposure (dizziness, fatigue, breathing difficulties, nausea/vomiting, eye irritation, redness or rash of the skin, nervousness, etc.) that cannot be attributed to another source (e.g., inhalation of vehicle exhaust fumes), the procedures outlined below will be followed:

- Another team member (buddy) will remove the individual from the immediate area of contamination whenever more than one person is working onsite. The buddy will communicate to the Field Team (via voice and hand signals) of the potential chemical exposure. The Site Manager will contact appropriate emergency response agency.
- Precautions will be taken to avoid exposure of other individuals.
- In case of eye irritation, flush the eyes with copious amounts of water and contact medical services.
- All chemical exposure incidents must be reported in writing to the OHSR. The SHSO or Site Manager is responsible for completing the accident report (See **Attachment C**).

4.10.2 Personal Injury

In the event of a work related injury or illness during normal working hours which requires either first aid or outside medical treatment to an employee, the following steps are to be taken:

- If the injury or illness requires First Aid Treatment only, the injured employee should immediately contact their immediate Supervisor and/or Manager and have first aid administered as required. First aid supplies are available in each vehicle and offices and qualified designated personnel have been identified to assist with this effort.
- If an injured person requires the services of outside medical services, such as paramedics, immediately contact 911 by cell phone.

4.10.3 Evacuation Procedures

Expeditious evacuation routes to the Safe Refuge Area(s) will be established daily for all work area locations, with respect to the wind direction. Evacuation notification will be a continuous blast on a canned siren, vehicle horn, or direct verbal communication. Emergency drills should be performed periodically. Any additions to evacuation procedures require an update to this HASP.

In the unlikely event that an evacuation is necessary, all personnel will immediately proceed to the predetermined Safe Refuge Area, decontaminating to the extent possible for personal safety, based on the emergency.

4.11 Decontamination Procedures

Procedures for the decontamination of sampling tools and other related equipment are specified in the work plan. Note that separate areas should be established for personnel and sampling equipment.

4.11.1 Personnel Decontamination

Amec Foster Wheeler will conduct decontamination procedures in accordance 29 CFR 1910.120(k). The decontamination procedures for Level D are as follows:

- Step 1: Outer glove removal. Place in plastic trash bag.
- Step 2: Inner glove removal. Place in plastic trash bag.
- Step 3: Field Wash (wash hands and face thoroughly).
- Step 4: Shower as soon as possible after leaving project.

In accordance with standard environmental sampling procedures, a fresh pair of outer gloves will be donned prior to the collection of each subsequent sample. Any re-usable safety gear will be washed with soap and water prior to re-use or removing from the work zone.

4.11.2 Sample Handling/Decontamination

Amec Foster Wheeler personnel will ensure that all sample containers are decontaminated prior to placing the sample container into the cooler for transport/storage/shipment. The outside of the sample bottle will be wiped clean and dry with a clean paper towel to remove any residual contamination.

4.11.3 Tools/Equipment Decontamination

Decontamination of sampling and hand tools will be performed between sample locations in accordance with the work plan. Safety Data Sheets (SDSs) for the chemicals used for equipment/tool decontamination are provided in **Attachment A**

4.11.4 Decontamination-Medical Emergencies

In an emergency, the primary concern is to prevent the loss of life or severe injury. If immediate medical attention is required to save a life, decontamination should be delayed until the victim is stabilized. If the decontamination can be performed without interfering with essential life-saving techniques or first aid, or if a worker has been contaminated with an extremely toxic or corrosive material that could cause severe illness or loss of life, decontamination must be performed immediately. If an emergency due to a heat-related illness develops, protective equipment should be removed carefully from the victim as soon as possible. See **Attachment D** for a map to the nearest hospital.

Any time emergency decontamination methods must be used, an Incident Report or Supervisor's Report of Injury or Illness must be completed by the SHSO and submitted to the OHSR.

4.11.5 Equipment Decontamination

Field sampling equipment (e.g. water level indicators, pumps, bowls, trowels, dip samplers, hand augers, and other downhole equipment) will require cleaning prior to initial use, and between samples. Alconox® and Liquinox® soap is acceptable for use since their safety data sheets do

not list fluoro-surfactants as an ingredient. However, Decon 90 will not be used during decontamination activities. Water used for the final rinse during decontamination of sampling equipment will be laboratory certified PFC-free water. For larger equipment (e.g. drill rig and downhole drilling and sampling equipment), decontamination will be conducted with potable water using a high-pressure washer and then rinsed using potable water.

4.11.6 Personal Decontamination

Disposable gloves will be used for sample handling and will be removed and disposed of following use. No other decontamination procedures will be necessary.

4.12 Places of Refuge

This will be discussed in the tailgate meetings by the SHSO daily, once on-site. It will be set up in the SZ or at an off-site location in the event of a site-wide evacuation. This area will be upwind, and the location and escape routes will be designated on-site control maps. It will contain emergency equipment, escape route maps, communications, and the Emergency Reference (call) List. This is required for all phases of work. In an emergency, the SHSO will take a "head count" against the Site personnel listed in the Site log book, initiate search/account for missing persons, notify the emergency crews (as applicable), and limit access into the hazardous emergency area to necessary rescue and response personnel in order to prevent additional injuries and possible exposures.

4.13 Fire

Fires and explosion are not anticipated. However, in the event of a fire or explosion, the emergency alarm will sound (continuous blast on a canned siren, vehicle horn, or direct oral communication) to summon the SHSO, who will then decide whether to call the Fire Department for outside assistance. Small-scale fires (less than one-half of the responder's height) should be extinguished with an accessible ABC fire extinguisher by any team member who has received training. Fires in boreholes may be smothered with a fire blanket. Trained emergency crews will be summoned to control any large-scale or potentially unmanageable incident. Any off-site responding agencies will be given the Site Map and briefed about site-specific hazards so they can be optimally helpful in an emergency situation. The SHSO will evacuate all non-response personnel and visitors to the Safe Refuge Area; will notify the Amec Foster Wheeler Project Manager (PM), as applicable, the client, and the OHSR; and will complete the appropriate reports.

4.14 Safety Eyewash

Field Crews are required to keep an eyewash/eye care kit readily available near their work area.

4.15 Incident Report

The SHSO will contact the OHSR and conduct an investigation jointly with the PM. The PM will complete the Supervisor's Report of Injury or Illness and the First Aid Incident Report (**Attachment C**). These completed reports must be transmitted to the OHSR within 24 hours of an occurrence; a fax is acceptable. The OHSR will submit the appropriate reports to the

appropriate Human Resources department (for Workers' Compensation), and OSHA (as applicable).

The foreman or field supervisor of subcontracting crews will investigate and complete an injury/illness report (similar in content to the Amec Foster Wheeler report) in accordance with their internal company policy. This report must be transmitted to the Amec Foster Wheeler OHSR within 24 hours.

In case of environmental incidents, property damage, power disruption, or mandated work "shutdowns," an Incident Report will be prepared by the PM. Any damage, loss, or theft of Amec Foster Wheeler property (items/tools/equipment) will be reported to the PM.

Any release of information in these reports to unauthorized persons or agencies is prohibited unless it is first approved by the client. Certain agencies or persons, such as OSHA or OSHA inspectors, can request this information and its release will be permitted. Review the Emergency Call List for additional contact names and phone numbers.

4.16 Operation Shutdown

If an operation shutdown is necessary, the steps below shall be followed:

- Personnel are to leave the work location (upwind) and assemble at a designated assembly point (if safe) after detecting the emergency signal for evacuation;
- If an emergency situation is of concern to local Site personnel, personnel will notify the SHSO who will notify the appropriate individuals.
- If appropriate and safe, the SHSO and a "buddy" are to remain at or near the location after the location has been evacuated to assist local responders and advise them of the nature and location of the incident;
- The field team leader/supervisor is to account for field team members at the assembly point; and
- The Site Manager is to complete an incident report (**Attachment C**) as soon as possible after the occurrence.

Evacuation routes and assembly points will be documented by the SHSO or Site Manager during the employee health and safety briefing and daily tailgate meetings. Such locations shall minimize the spread of contamination.

4.17 Spill or Hazardous Materials Release

In the event of a spill or release, notify the SHSO and Site Manager immediately. The SHSO or Site Manager will be responsible for ensuring that necessary notifications are given to the appropriate individuals.

4.18 Training and Medical Surveillance

4.18.1 Site-Specific Training

Visitor Training
If an official visitor seeks entry into the sampling area, the SHSO shall verify that the visitor has received health and safety training in accordance with 1910.120 and a medical surveillance examination, and has certification equivalent to that required for on-site work. In addition, a site-specific safety briefing shall be given by the SHSO.

Training Documentation
Documentation of training requirements is the responsibility of each employer. Written documentation verifying current first aid and CPR training and compliance with 29 CFR 191.120 (e)(3), (e)(4) (as applicable) and (e)(8) must be submitted to the SHSO prior to entering the EZ and CRZ. Documentation of worker's current training credentials will be kept on file at the employee's home office and can be provided upon request.

4.18.2 Medical Surveillance

Personnel engaged in hazardous waste operations must be enrolled in a medical monitoring program as required by 29 CFR 1910.120(f). A letter signed by a physician attesting to each individual's fitness for duty must be provided to the SHSO prior to beginning work.

4.19 Recordkeeping

The SHSO will establish and maintain a filing system on-site for Health and Safety records, reports, and information concerning individual training, medical surveillance, etc. Sections in this filing system will include:

- Personnel Records – Certificates for training required under 29 CFR 120, medical examination summary letters or certifications, signed acceptance forms, monitoring results, etc.
- Training – Sign-in sheets for on-site training with topics and dates;
- Visitor Logs – Sign-in sheets for Site visitors;
- Inspection Reports – Reports of daily inspections by SHSO and others concerning health and safety issues.
- Accident Prevention – Copies of all hazard analyses performed on new tasks or activities. Copies of any accident/incident reports and follow-up reports. Other pertinent correspondence;
- PPE – Records of periodic inspection, testing and maintenance performed on PPE;

Health & Safety Plan Acceptance

I have had the opportunity to read and ask questions about this HASP. My signature certifies that I understand the procedures, equipment, and restrictions of this plan and agree to abide by them. By signing below, all personnel are indicating they have received and are current with their

medical surveillance and training certification; in accordance with 29 CFR 1910.120 and Amec Foster Wheeler corporate health and safety policies.

Health and Safety Plan Acceptance

Signature*	Printed Name	Company	Date

* This acceptance form is required for all routine Site staff, subcontracting personnel, visitors, and non-routine subcontractors.

Attachment A

Safety Data Sheets

Safety Data Sheet

This safety data sheet complies with the requirements of: 2012 OSHA Hazard Communication Standard (29CFR 1910.1200)

Product name ANSULITE 3% (AFC-3A) AFFF Concentrate

1. Identification

1.1. Product Identifier

Product name	ANSULITE 3% (AFC-3A) AFFF Concentrate

1.2. Other means of identification

Product code	431499
Synonyms	None
Chemical Family	No information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use	Fire extinguishing agent
Uses advised against	Consumer use

1.4. Details of the Supplier of the Safety Data Sheet

Company Name	Tyco Fire Protection Products One Stanton Street Marinette, WI 54143-2542 Telephone: 715-735-7411
Contact point	Product Stewardship at 1-715-735-7411
E-mail address	psra@tycofp.com

1.5. Emergency Telephone Number

Emergency telephone	CHEMTREC 800-424-9300 or 703-527-3887

2. Hazards Identification

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

2.2. Label Elements

The product contains no substances which at their given concentration, are considered to be hazardous to health

Precautionary Statements

2.3. Hazards Not Otherwise Classified (HNOC)

Not Applicable.

2.4. OTHER INFORMATION

Unknown Acute Toxicity	4.824% of the mixture consists of ingredient(s) of unknown toxicity

3. Composition/information on Ingredients

3.1. Mixture

The following component(s) in this product are considered hazardous under applicable OSHA(USA)

Chemical name	CAS No	weight-%
2-(2-Butoxyethoxy)ethanol	112-34-5	5 - 10
Lauryl Imino Propionate, Sodium Salt	14960-06-6	1 - 5

4. First aid measures

4.1. Description of first aid measures

Eye Contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin contact Wash skin with soap and water. Get medical attention if irritation develops and persists.

Inhalation Remove to fresh air. If breathing is difficult, give oxygen. (Get medical attention immediately if symptoms occur.).

Ingestion Rinse mouth. Do not induce vomiting without medical advice. If swallowed, call a poison control center or physician immediately.

4.2. Most Important Symptoms and Effects, Both Acute and Delayed

Symptoms No information available.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

Note to physicians Treat symptomatically.

5. Fire-fighting measures

5.1. Suitable Extinguishing Media

Product is extinguishing agent. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2. Unsuitable Extinguishing Media

None.

5.3. Specific Hazards Arising from the Chemical

None known.

Hazardous Combustion Products Carbon oxides, Fluorinated oxides, Nitrogen oxides (NOx), Oxides of sulfur

5.4. Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

5.5. Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal Precautions Ensure adequate ventilation, especially in confined areas.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental Precautions

Environmental Precautions Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewers, basements or confined areas. See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Pick up and transfer to properly labeled containers.

7. Handling and Storage

7.1. Precautions for Safe Handling

Advice on safe handling Avoid contact with skin and eyes. Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Materials Strong oxidizing agents. Strong acids. Strong bases.

8. Exposure Controls/Personal Protection

8.1. Control Parameters

Exposure guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
2-(2-Butoxyethoxy)ethanol 112-34-5	TWA: 10 ppm inhalable fraction and vapor	-	-

ACGIH (American Conference of Governmental Industrial Hygienists) OSHA (Occupational Safety and Health Administration of the US Department of Labor) NIOSH IDLH Immediately Dangerous to Life or Health

8.2. Appropriate Engineering Controls

Engineering controls Showers
Eyewash stations
Ventilation systems.

8.3. Individual protection measures, such as personal protective equipment

Eye/Face Protection Avoid contact with eyes. Tight sealing safety goggles.

Skin and Body Protection Wear protective gloves and protective clothing.

Respiratory Protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
Ventilation	Use local exhaust or general dilution ventilation to control exposure with applicable limits

8.4. General hygiene considerations

Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical State	Liquid		
Odor	Characteristic	**Color**	Light yellow
odor threshold	No data available		

Property	**VALUES**
pH	7.5
Melting point/freezing point	No data available
Boiling point / boiling range	> 100 °C / 212 °F
Flash Point	> 100 °C / > 212 °F
Evaporation Rate	No data available
flammability (solid, gas)	No data available
Flammability limit in air	
Upper flammability limit:	No data available
Lower flammability limit:	No data available
Vapor Pressure	No data available
Vapor Density	No data available
Specific gravity	No data available
Water Solubility	No data available
Solubility in Other Solvents	No data available
Partition coefficient	No data available
Autoignition Temperature	No data available
Decomposition Temperature	No data available
Kinematic viscosity	2.9 mm2/s
density	1.03

10. Stability and Reactivity

10.1. Chemical Stability

Stable under recommended storage conditions.

10.2. Reactivity

No data available

10.3. Possibility of hazardous reactions

None under normal processing.

hazardous polymerization Hazardous polymerization does not occur.

10.4. Conditions to Avoid

Extremes of temperature and direct sunlight.

10.5. Incompatible Materials

Strong oxidizing agents. Strong acids. Strong bases.

10.6. Hazardous decomposition products

Carbon oxides. Nitrogen oxides (NOx). Oxides of sulfur. Fluorinated oxides.

11. Toxicological Information

11.1. Information on Likely Routes of Exposure

Product information no data available

INHALATION no data available.

Eye Contact no data available.

Skin contact no data available.

INGESTION no data available.

Acute Toxicity

Chemical name	Oral LD50	dermal LD50	Inhalation LC50
2-(2-Butoxyethoxy)ethanol 112-34-5	= 3384 mg/kg (Rat)	= 2700 mg/kg (Rabbit)	-

11.2. Information on Toxicological Effects

Symptoms No information available.

11.3. Delayed and immediate effects as well as chronic effects from short and long-term exposure

sensitization No information available.
Germ Cell Mutagenicity No information available
carcinogenicity No information available.
Reproductive Toxicity No information available.
STOT - Single Exposure No information available.
STOT - Repeated Exposure No information available.
Aspiration Hazard No information available.

11.4. Numerical Measures of Toxicity - Product information

The following values are calculated based on chapter 3.1 of the GHS document mg/kg

12. Ecological Information

12.1. ecotoxicity

Not classified

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical name	Algae/aquatic plants	Fish	Crustacea
2-(2-Butoxyethoxy)ethanol 112-34-5	EC50 96 h > 100 mg/L Desmodesmus subspicatus	LC50 96 h = 1300 mg/L Lepomis macrochirus static	EC50 24 h = 2850 mg/L Daphnia magna EC50 48 h > 100 mg/L Daphnia magna
2-Methyl-2,4-pentanediol 107-41-5	-	LC50 96 h 10500 - 11000 mg/L Pimephales promelas flow-through LC50 96 h = 10000 mg/L Lepomis macrochirus static LC50 96 h = 8690 mg/L Pimephales promelas flow-through LC50 96 h = 10700 mg/L Pimephales promelas static	EC50 48 h 2700 - 3700 mg/L Daphnia magna
t-Butanol 75-65-0	EC50 72 h > 1000 mg/L Desmodesmus subspicatus	LC50 96 h 6130 - 6700 mg/L Pimephales promelas flow-through	EC50 48 h = 933 mg/L Daphnia magna EC50 48 h 4607 - 6577 mg/L Daphnia magna Static
Sodium chloride 7647-14-5	-	LC50 96 h 5560 - 6080 mg/L Lepomis macrochirus flow-through LC50 96 h = 12946 mg/L Lepomis macrochirus static LC50 96 h 6020 - 7070 mg/L Pimephales promelas static LC50 96 h = 7050 mg/L Pimephales promelas semi-static LC50 96 h 6420 - 6700 mg/L Pimephales promelas static LC50 96 h 4747 - 7824 mg/L Oncorhynchus mykiss flow-through	EC50 48 h = 1000 mg/L Daphnia magna EC50 48 h 340.7 - 469.2 mg/L Daphnia magna Static
Polyethylene Glycol 25322-68-3	-	LC50 24 h > 5000 mg/L Carassius auratus	-
Formaldehyde 50-00-0	-	LC50 96 h 22.6 - 25.7 mg/L Pimephales promelas flow-through LC50 96 h = 1510 µg/L Lepomis macrochirus static LC50 96 h = 41 mg/L Brachydanio rerio static LC50 96 h 0.032 - 0.226 mL/L Oncorhynchus mykiss flow-through LC50 96 h 100 - 136 mg/L Oncorhynchus mykiss static LC50 96 h 23.2 - 29.7 mg/L Pimephales promelas static	LC50 48 h = 2 mg/L Daphnia magna EC50 48 h 11.3 - 18 mg/L Daphnia magna Static

12.2. Persistence and Degradability
No information available.

12.3. Bioaccumulation
No information available.

12.4. Other Adverse Effects
No information available

13. Disposal Considerations

13.1. Waste Treatment Methods
Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging Do not reuse container.

14. Transport Information

DOT	NOT REGULATED
TDG	NOT REGULATED
MEX	NOT REGULATED
ICAO (air)	NOT REGULATED
IATA	NOT REGULATED
IMDG	NOT REGULATED

15. Regulatory Information

15.1. International Inventories

TSCA	Complies
DSL/NDSL	Complies
ENCS	Does not comply
IECSC	Does not comply
KECL	Does not comply
PICCS	Does not comply
AICS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

15.2. US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	SARA 313 - Threshold Values %
2-(2-Butoxyethoxy)ethanol - 112-34-5	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	No
Chronic health hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

15.3. US State Regulations

California Proposition 65
This product contains the following Proposition 65 chemicals

Chemical name	California Proposition 65
Formaldehyde - 50-00-0	Carcinogen

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
2-(2-Butoxyethoxy)ethanol 112-34-5	X	-	X
t-Butanol 75-65-0	X	X	X
Formaldehyde 50-00-0	X	X	X

16. Other information, including date of preparation of the last revision

NFPA	**Health Hazards** 0	**flammability** 1	**Instability** 0	**Physical and chemical properties** -
HMIS	**Health Hazards** 0	**flammability** 1	**Physical Hazards** 0	**Personal Protection** X

Revision date 25-May-2015
Revision note
No information available
Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

Safety Data Sheet

This safety data sheet complies with the requirements of: 2012 OSHA Hazard Communication Standard (29CFR 1910.1200)

Product name ANSULITE 1% AFFF

1. Identification

1.1. Product Identifier

Product name	ANSULITE 1% AFFF

1.2. Other means of identification

Product code	055811
Synonyms	None
Chemical Family	No information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use	Fire extinguishing agent
Uses advised against	Consumer use

1.4. Details of the Supplier of the Safety Data Sheet

Company Name	Tyco Fire Protection Products One Stanton Street Marinette, WI 54143-2542 Telephone: 715-735-7411
Contact point	Product Stewardship at 1-715-735-7411
E-mail address	psra@tycofp.com

1.5. Emergency Telephone Number

Emergency telephone	CHEMTREC 800-424-9300 or 703-527-3887

2. Hazards Identification

Classification

OSHA Regulatory Status
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Corrosion/Irritation - Category 2
Serious eye damage/eye irritation - Category 1

2.2. Label Elements

Signal Word
DANGER

hazard statements
CAUSES SKIN IRRITATION
Causes serious eye damage

Precautionary Statements

Prevention
Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

2.3. Hazards Not Otherwise Classified (HNOC)

Not Applicable.

2.4. OTHER INFORMATION

Unknown Acute Toxicity — 3.89781% of the mixture consists of ingredient(s) of unknown toxicity

3. Composition/information on Ingredients

3.1. Mixture

The following component(s) in this product are considered hazardous under applicable OSHA(USA)

Chemical name	CAS No	weight-%
2-(2-Butoxyethoxy)ethanol	112-34-5	10 - 30
Sodium Decyl Sulfate	142-87-0	1 - 5
Perfluorinated Amphoteric Surfactant	Proprietary	1 - 5
Sodium Octyl Sulfate	142-31-4	1 - 5
Perfluoro Telomer	Proprietary	1 - 5

4. First aid measures

4.1. Description of first aid measures

Eye Contact — Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin contact — Wash skin with soap and water. Get medical attention if irritation develops and persists.

Inhalation — Remove to fresh air. If breathing is difficult, give oxygen. (Get medical attention immediately if symptoms occur.).

Ingestion — Rinse mouth. Do not induce vomiting without medical advice. If swallowed, call a poison control center or physician immediately.

4.2. Most Important Symptoms and Effects, Both Acute and Delayed

Symptoms — No information available.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

Note to physicians — Treat symptomatically.

5. Fire-fighting measures

5.1. Suitable Extinguishing Media
Product is extinguishing agent. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2. Unsuitable Extinguishing Media
None.

5.3. Specific Hazards Arising from the Chemical
None known.

Hazardous Combustion Products Carbon oxides, Fluorinated oxides, Nitrogen oxides (NOx), Oxides of sulfur

5.4. Explosion Data

Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

5.5. Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal Precautions Ensure adequate ventilation, especially in confined areas.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental Precautions

Environmental Precautions Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewers, basements or confined areas. See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Pick up and transfer to properly labeled containers.

7. Handling and Storage

7.1. Precautions for Safe Handling

Advice on safe handling Avoid contact with skin and eyes. Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Materials Strong oxidizing agents. Strong acids. Strong bases.

8. Exposure Controls/Personal Protection

8.1. Control Parameters

Exposure guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH

2-(2-Butoxyethoxy)ethanol 112-34-5	TWA: 10 ppm inhalable fraction and vapor	-	-

ACGIH (American Conference of Governmental Industrial Hygienists) OSHA (Occupational Safety and Health Administration of the US Department of Labor) NIOSH IDLH Immediately Dangerous to Life or Health

8.2. Appropriate Engineering Controls

Engineering controls Showers
Eyewash stations
Ventilation systems.

8.3. Individual protection measures, such as personal protective equipment

Eye/Face Protection Avoid contact with eyes. Tight sealing safety goggles.

Skin and Body Protection Wear protective gloves and protective clothing.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Ventilation Use local exhaust or general dilution ventilation to control exposure with applicable limits

8.4. General hygiene considerations
Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical State Liquid
Odor Characteristic
odor threshold No data available

Color Light yellow

Property	VALUES
pH	No data available
Melting point/freezing point	No data available
Boiling point / boiling range	> 100 °C / 212 °F
Flash Point	> 100 °C / > 212 °F
Evaporation Rate	No data available
flammability (solid, gas)	No data available
Flammability limit in air	
Upper flammability limit:	No data available
Lower flammability limit:	No data available
Vapor Pressure	No data available
Vapor Density	No data available
Specific gravity	No data available
Water Solubility	No data available
Solubility in Other Solvents	No data available
Partition coefficient	No data available
Autoignition Temperature	No data available
Decomposition Temperature	No data available
Kinematic viscosity	No data available

10. Stability and Reactivity

10.1. Chemical Stability

Stable under recommended storage conditions.

10.2. Reactivity

No data available

10.3. Possibility of hazardous reactions

None under normal processing.

hazardous polymerization Hazardous polymerization does not occur.

10.4. Conditions to Avoid

Extremes of temperature and direct sunlight.

10.5. Incompatible Materials

Strong oxidizing agents. Strong acids. Strong bases.

10.6. Hazardous decomposition products

Carbon oxides. Nitrogen oxides (NOx). Oxides of sulfur. Fluorinated oxides.

11. Toxicological Information

11.1. Information on Likely Routes of Exposure

Product information no data available

INHALATION no data available.

Eye Contact no data available.

Skin contact no data available.

INGESTION no data available.

Acute Toxicity

Chemical name	Oral LD50	dermal LD50	Inhalation LC50
2-(2-Butoxyethoxy)ethanol 112-34-5	= 3384 mg/kg (Rat)	= 2700 mg/kg (Rabbit)	-
Sodium Decyl Sulfate 142-87-0	= 1950 mg/kg (Rat)	-	-
Sodium Octyl Sulfate 142-31-4	= 3200 mg/kg (Rat)	-	-

11.2. Information on Toxicological Effects

Symptoms No information available.

11.3. Delayed and immediate effects as well as chronic effects from short and long-term exposure

sensitization No information available.

Germ Cell Mutagenicity No information available

carcinogenicity	No information available.
Reproductive Toxicity	No information available.
STOT - Single Exposure	No information available.
STOT - Repeated Exposure	No information available.
Aspiration Hazard	No information available.

11.4. Numerical Measures of Toxicity - Product information

The following values are calculated based on chapter 3.1 of the GHS document mg/kg

12. Ecological Information

12.1. ecotoxicity

Not classified

1E-05% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical name	Algae/aquatic plants	Fish	Crustacea
2-(2-Butoxyethoxy)ethanol 112-34-5	EC50 96 h > 100 mg/L Desmodesmus subspicatus	LC50 96 h = 1300 mg/L Lepomis macrochirus static	EC50 24 h = 2850 mg/L Daphnia magna EC50 48 h > 100 mg/L Daphnia magna
1,2-Propanediol 57-55-6	EC50 96 h = 19000 mg/L Pseudokirchneriella subcapitata	LC50 96 h = 51600 mg/L Oncorhynchus mykiss static LC50 96 h 41 - 47 mL/L Oncorhynchus mykiss static LC50 96 h = 51400 mg/L Pimephales promelas static LC50 96 h = 710 mg/L Pimephales promelas	EC50 48 h > 1000 mg/L Daphnia magna Static EC50 24 h > 10000 mg/L Daphnia magna
t-Butanol 75-65-0	EC50 72 h > 1000 mg/L Desmodesmus subspicatus	LC50 96 h 6130 - 6700 mg/L Pimephales promelas flow-through	EC50 48 h = 933 mg/L Daphnia magna EC50 48 h 4607 - 6577 mg/L Daphnia magna Static
1-Octanol 111-87-5	EC50 48 h = 14 mg/L Desmodesmus subspicatus static	LC50 96 h 11.4 - 12.9 mg/L Pimephales promelas flow-through LC50 96 h = 17.68 mg/L Oncorhynchus mykiss static	EC50 24 h 15 - 26 mg/L Daphnia magna
Formaldehyde 50-00-0	-	LC50 96 h 22.6 - 25.7 mg/L Pimephales promelas flow-through LC50 96 h = 1510 µg/L Lepomis macrochirus static LC50 96 h = 41 mg/L Brachydanio rerio static LC50 96 h 0.032 - 0.226 mL/L Oncorhynchus mykiss flow-through LC50 96 h 100 - 136 mg/L Oncorhynchus mykiss static LC50 96 h 23.2 - 29.7 mg/L Pimephales promelas static	LC50 48 h = 2 mg/L Daphnia magna EC50 48 h 11.3 - 18 mg/L Daphnia magna Static

12.2. Persistence and Degradability

No information available.

12.3. Bioaccumulation

No information available.

12.4. Other Adverse Effects

No information available

13. Disposal Considerations

13.1. Waste Treatment Methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging Do not reuse container.

14. Transport Information

DOT NOT REGULATED

TDG NOT REGULATED

MEX NOT REGULATED

ICAO (air) NOT REGULATED

IATA NOT REGULATED

IMDG NOT REGULATED

15. Regulatory Information

15.1. International Inventories

TSCA	Complies
DSL/NDSL	Complies
ENCS	Does not comply
IECSC	Does not comply
KECL	Complies
PICCS	Does not comply
AICS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

15.2. US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	SARA 313 - Threshold Values %
2-(2-Butoxyethoxy)ethanol - 112-34-5	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	No
Chronic health hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

15.3. US State Regulations

California Proposition 65
This product contains the following Proposition 65 chemicals

Chemical name	California Proposition 65
Formaldehyde - 50-00-0	Carcinogen

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
2-(2-Butoxyethoxy)ethanol 112-34-5	X	-	X
1,2-Propanediol 57-55-6	X	-	X
t-Butanol 75-65-0	X	X	X
1-Octanol 111-87-5	-	-	X
Formaldehyde 50-00-0	X	X	X

16. Other information, including date of preparation of the last revision

NFPA	**Health Hazards** 2	**flammability** 1	**Instability** 0	**Physical and chemical properties** -
HMIS	**Health Hazards** 2	**flammability** 1	**Physical Hazards** 0	**Personal Protection** X

Revision date 25-May-2015
Revision note
No information available
Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

Attachment B

Hazard Evaluations

AHA - Mobilization/Demobilization and Site Preparation
Activity Description

Activity/Work Task:	Mobilization/Demobilization and Site Preparation		
Project Location:	Barnes ANB, Westfield, MA		
Project Number:	**2-9133-0006**		
Date Prepared:	1/03/2017	Date Accepted:	1/04/2017
Prepared by (Name/Title):	Craig Keating, Field Operations Lead		
Reviewed by (Name/Title):	Laurie Gneiding/Project Health & Safety Officer		

Overall Risk Assessment Code (RAC) (Use highest code) **M**

Risk Assessment Code (RAC) Matrix

Severity	Probability				
	Frequent	Likely	Occasional	Seldom	Unlikely
Catastrophic	E	E	H	H	M
Critical	E	H	H	M	L
Marginal	H	M	M	L	L
Negligible	M	L	L	L	L

This AHA involves the following:

- Establishing site specific measures for mobilizing to, and demobilizing from the site

This AHA is not an exhaustive summary of all hazards associated with the Site. Refer to the site HASP for additional requirements. Contractor to follow general site safety controls for Slips Trips and Falls, Biological hazards, cuts lacerations and pinch points, and emergency procedures.

Step 1: Review each **"Hazard"** with identified safety **"Controls"** and determine RAC (See above)

"Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.

"Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible

Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.

RAC Chart
E = Extremely High Risk
H = High Risk
M = Moderate Risk
L = Low Risk

Equipment to be Used	Training Requirements/Competent or Qualified Personnel name(s)	Inspection Requirements
PPE (Hard Hat, safety glasses, gloves, safety toe work boots, high visibility safety vest) Note: When initially entering the site the following PPE must be donned: • Work Uniform or Work Clothes • Hard Hat • Safety Glasses • Steel Toe Boots • Reflective Vests	**Competent / Qualified Personnel:** Name – Position/Employer **Training requirements:** List specific certification (as applicable) Site Specific HASP Orientation Toolbox safety meeting Task kick-off meeting	Daily inspection of equipment per manufacturer's instructions. Tag tools that are defective and remove from service. Inspect power cord sets prior to use. Inspect all PPE prior to use

AHA - Mobilization/Demobilization and Site Preparation
Activity Description

Job Steps	Hazards	Controls	RAC
1. Prepare for Site Visit	1A) N/A	Prior to leaving for site: ▪ Obtain and review HASP prior to site visit, if possible ▪ Determine PPE needs – bring required PPE to the site, if not otherwise being provided at the site (e.g., steel toed boots) ▪ Determine training and medical monitoring needs and ensure all required Health and Safety training and medical monitoring has been received and is current ▪ Ensure all workers are fit for duty (alert, well rested, and mentally and physically fit to perform work assignment) ▪ If respiratory protection is required/potentially required, ensure that training and fit-testing has occurred within the past year. ▪ Familiarize yourself with route to the site	L
	1b) Vehicle defects	Inspect company owned/leased vehicle for defects such as: ▪ Flat tires ▪ Windshield wipers worn or torn ▪ Oil puddles under vehicle ▪ Headlights, brake lights, turn signals not working	L
	1c) Insufficient emergency equipment, unsecured loads	Insufficient emergency equipment, unsecured loads: ▪ Ensure vehicle has first aid kit and that all medications are current (if first aid kits are not provided at the site) ▪ Ensure vehicle is equpped with warning flashers and/or flares and that the warning flashers work ▪ Cell phones are recommended to call for help in the event of an emergency ▪ Vehicles carrying tools must have a safety cage in place. All tools must be properly secured ▪ Vehicles must be equipped with chocks if the vehicle is to be left running, unattended. ▪ Ensure sufficient gasoline is in the tank	L
2. Operating vehicles	2a) Collisions, unsafe driving conditions	Drive Defensively!: ▪ Seat belts must be used at all times when operating any vehicle on company business. ▪ Drive at safe speed for road conditions	L

AHA - Mobilization/Demobilization and Site Preparation
Activity Description

Job Steps	Hazards	Controls	RAC
		▪ Maintain adequate following distance ▪ Pull over and stop if you have to look at a map ▪ Try to park so that you don't have to back up to leave. ▪ If backing in required, walk around vehicle to identify any hazards (especially low level hazards that may be difficult to see when in the vehicle) that might be present. Use a spotter if necessary	
3. Driving to the jobsite (mobilization)	3a) Dusty, winding, narrow roads	Dusty, winding, narrow roads ▪ Drive confidently and defensively at all times. ▪ Go slow around corners, occasionally clearing the windshield.	L
	3b) Rocky or one-lane roads	Rocky or one-lane roads: ▪ Stay clear of gullies and trenches, drive slowly over rocks. ▪ Yield right-of-way to oncoming vehicles---find a safe place to pull over.	L
	3c) Stormy weather, near confused tourists	Stormy weather, near confused tourists: ▪ Inquire about conditions before leaving the office. ▪ Be aware of oncoming storms. ▪ Drive to avoid accident situations created by the mistakes of others.	L
	3d) When angry or irritated	When angry or irritated: ▪ Attitude adjustment; change the subject or work out the problem before driving the vehicle. Let someone else drive.	L
	3e) Turning around on narrow roads	Turning around on narrow roads: ▪ Safely turn out with as much room as possible. ▪ Know what is ahead and behind the vehicle. ▪ Use a backer if available.	L
	3f) Sick or medicated	Sick or medicated: ▪ Let others on the crew know you do not feel well. ▪ Let someone else drive.	L
	3g) On wet or slimy roads	On wet or slimy roads ▪ Drive slow and safe, wear seatbelts.	L

AHA - Mobilization/Demobilization and Site Preparation
Activity Description

Job Steps	Hazards	Controls	RAC
	3h) Animals on road	Animals on road ▪ Drive slowly, watch for other animals nearby. ▪ Be alert for animals darting out of wooded areas	L
4. Gain permission to enter site	4a) Hostile landowner, livestock, pets	Hostile landowner, livestock, pets ▪ Talk to land owner, be courteous and diplomatic ▪ Ensure all animals have been secured away from work area	L
5. Mobilization/ Demobilization of Equipment and Supplies	5a) Struck by Heavy Equipment/Vehicles	Struck by heavy equipment: ▪ Be aware of heavy equipment operations. ▪ Keep out of the swing radius of heavy equipment. ▪ Ground personnel in the vicinity of heavy equipment operations will be within the view of the operator at all times ▪ Employees shall wear a high visibility vest or T-shirt (reflective vest required if working at night). ▪ Ground personnel will be aware of the counterweight swing and maintain an adequate buffer zone. ▪ Ground personnel will not stand directly behind heavy equipment when it is in operation.	L
	5b) Struck by Equipment/Supplies	Struck by Equipment/Supplies: ▪ Workers will maintain proper space around their work area, if someone enters it, stop work. ▪ When entering another worker's work space, give a verbal warning so they know you are there.	L
	5c) Overexertion Unloading/Loading Supplies	Overexertion Unloading/Loading Supplies: ▪ Train workers on proper body mechanics, do not bend or twist at the waist while exerting force or lifting. ▪ Tightly secure all loads to the truck bed to avoid load shifting while in transit.	L
	5d) Overexertion Unloading/Loading Supplies	Caught in/on/between: ▪ Do not place yourself between two vehicles or between a vehicle and a fixed object.	L
	5e) Slip/Trip/Fall	Slip/Trip/Fall:	L

AHA - Mobilization/Demobilization and Site Preparation
Activity Description

Job Steps	Hazards	Controls	RAC
		▪ Mark all holes and low spots in area with banner tape. Instruct personnel to avoid these areas. ▪ Drivers will maintain 3 point contact when mounting/dismounting vehicles/equipment. ▪ Drivers will check surface before stepping, not jumping down.	
	5f) Vehicle accident	Vehicle accident: ▪ Employees should follow AMEC vehicle operation policy and be aware of all stationary and mobile vehicles.	L
6. Site Preparation	6a) Slip/Trip/Fall	Slip/Trip/Fall: ▪ Mark all holes and low spots in area with banner tape. Instruct personnel to avoid these areas	L
7. Installation of soil erosion and sediment controls	7a) Overexertion	Overexertion: ▪ Workers will be trained in the proper method of placing erosion controls. ▪ Do not bend and twist at the waist while lifting or exerting force.	L
	7b) Struck by Equipment/Supplies	Struck by Equipment/Supplies: ▪ Workers will maintain proper space around their work area, if someone enters it, stop work. ▪ When entering another worker's work space, give a verbal warning so they know you are there.	L
8. Driving back from the jobsite	7c) See hazards listed under item #3	See safe work practices under item #3	L

AHA - Field Work General

Activity/Work Task:	Field Work General		
Project Location:	Barnes ANB, Westfield, MA		
Project Number:	**2-9133-0006**		
Date Prepared:	1/03/2017	Date Accepted:	1/04/2017
Prepared by (Name/Title):	Craig Keating, Field Operations Lead		
Reviewed by (Name/Title):	Laurie Gneiding/Project Health & Safety Officer		

Overall Risk Assessment Code (RAC) (Use highest code): **L**

Risk Assessment Code (RAC) Matrix

Severity	Probability				
	Frequent	Likely	Occasional	Seldom	Unlikely
Catastrophic	E	E	H	H	M
Critical	E	H	H	M	L
Marginal	H	M	M	L	L
Negligible	M	L	L	L	L

This AHA involves the following:

- Establishing site specific measures for staying safe while performing general field work

This AHA is not an exhaustive summary of all hazards associated with the Site. Refer to the site HASP for additional requirements. Contractor to follow general site safety controls for Slips Trips and Falls, Biological hazards, cuts lacerations and pinch points, and emergency procedures.

Step 1: Review each **"Hazard"** with identified safety **"Controls"** and determine RAC (See above)

"Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.

"Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible

Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.

RAC Chart

- **E = Extremely High Risk**
- **H = High Risk**
- **M = Moderate Risk**
- **L = Low Risk**

Equipment to be Used	Training Requirements/Competent or Qualified Personnel name(s)	Inspection Requirements
PPE: safety glasses, gloves (per HASP), safety toe work boots. Hard hat if overhead heavy equipment involved	**Competent / Qualified Personnel:** All AMEC employees with 40 hour training **Training requirements:** Site Specific HASP Orientation Toolbox safety meeting Task kick-off meeting	Daily inspection of equipment per manufacturer's instructions. Tag tools that are defective and remove from service. Inspect all PPE prior to use

Job Steps	Hazards	Controls	RAC
1. Mobilization/ See Mobilization/Demobilization and Site Preparation AHA Demobilization and Site Preparation	1A) See Mobilization/Demobilization and Site Preparation AHA	1A) See Mobilization/Demobilization and Site Preparation AHA	L

AHA - Field Work General

2. Communication	2A) Safety, crew unity	2A) Talk to each other. ▪ Let other crewmembers know when you see a hazard. ▪ Avoid working near known hazard trees (trees that are rotten, dead, damaged, etc.). ▪ Always know the wherabouts of fellow crewmembers. ▪ Carry a radio and spare batteries or cell phone. ▪ Review Emergency Evacuation Procedures (see below).	L
3. Walking and working in the field	3A) Falling down, twisted ankles and knees, poor footing	3A) Always watch your footing. ▪ Slow down and use extra caution around logs, rocks, and animal holes. ▪ Extremely steep slopes (>50%) can be hazardous under wet or dry conditions; consider an alternate route. ▪ Wear laced boots with a minimum 8" high upper and non-skid Vibram-type soles for ankle support and traction.	L
	3B) Falling objects	3B) Protect head agains falling objects. ▪ Wear your hardhat for protection from falling limbs and pinecones, and from tools and equipment carried by other crewmembers. ▪ Stay out of the woods during extremely high winds.	L
	3C) Damage to eyes	3C) Protect eyes: ▪ Watch where you walk, ecpecially around trees and brush with limbs sticking out. ▪ Exercise caution when clearing limbs from tree trunks. Advise wearing eye protection. ▪ Ultraviolet light from the sun can be damaging to the eyes; look for sunglasses that specify significant protection from UV-A and UV-B radiation. If safety glasses require, use one's with tinted lenses	L
	3D) Bee and wasp stings	3D) See AHA for Insect Stings and Bites	L
	3E) Ticks and infected mosquitos	3E) See AHA for Insect Stings and Bites	L
	3F) Lifting Injuries (e.g., Back Injuries)	3F) Lifting Injuries (e.g., Back Injuries) • Site personnel will be instructed on proper lifting techniques. • Perform warm-up excercises before starting work. • **DO NOT EXCEED THE AMEC LIFTING LIMIT OF 50 POUNDS.** • Use two people to lift, lower, or carry equipment or materials heavier than 50 pounds. • Mechanical devices should be used to reduce manual handling of materials. • Drive the field vehicle as close to the point that the heavy equipment/material will be used as long as the area is safe to drive into and you do not create hazards to you, your co-worker, or the vehicle.	L

AHA - Field Work General

	3G) Slips/Trips/Falls	3G) Slips/Trips/Falls • Maintain work areas safe and orderly; unloading areas should be on even terrain; mark or repair possible tripping hazards. • Site SHSO inspect the entire work area to identify and mark hazards. • Be aware of work area conditions that can cause slip hazards such as ponding of water on concrete surfaces. Ponding of water on smooth surfaces, such as concrete, coupled with the warm or freezing weather conditions has the potential to cause slippery condiitons such as growth of scum or ice, as applicable. Adding a layer of clean fill to the surface may prevent the growth of scum, and/or create a non-slippery walking surface.	L
	3H) Vehicular Traffic	3H) Vehicular Traffic ▪ Spotters will be used when backing up trucks and heavy equipment and when moving equipment. ▪ High visibility vests will be worn when workers are exposed to vehicular traffic at the site or on public roads.	L
	3I) Overhead Hazards	3I) Overhead Hazards ▪ Personnel will be required to wear hard hats that meet ANSI Standard Z89.1. ▪ All ground personnel will stay clear of suspended loads. ▪ All equipment will be provided with guards, canopies or grills to protect the operator from falling or flying objects. ▪ All overhead hazards will be identified prior to commencing work operations.	L
	3J) Dropped Objects	3J) Dropped Objects ▪ Steel toe boots meeting ANSI Standard Z41 will be worn.	L
	3K) Noise	3K) Noise ▪ Hearing protection will be worn with a noise reduction rating capable of maintaining personal exposure below 85 dBA (ear muffs or plugs); all equipment will be equipped with manufacturer's required mufflers. Hearing protection shall be worn by all personnel working in or near heavy equipment.	L
	3L) Eye Injuries	3L) Eye Injuries ▪ Safety glasses meeting ANSI Standard Z87 will be worn.	L

	3M) Heavy Equipment (overhead hazards, spills, struck by or against)	3M) Heavy Equipment ▪ Equipment will have seat belts. ▪ Operators will wear seat belts when operating equipment. ▪ Do not operate equipment on grades that exceed manufacturer's recommendations. ▪ Equipment will have guards, canopies or grills to protect from flying objects. ▪ Ground personnel will stay clear of all suspended loads. ▪ Ground personnel will wear high visibility vests ▪ Spill and absorbent materials will be readily available. ▪ Drip pans, polyethylene sheeting or other means will be used for secondary containment. ▪ Ground personnel will stay out of the swing radius of excavators. ▪ Eye contact with operators will be made before approaching equipment. ▪ Operator will acknowledge eye contact by removing his hands from the controls. ▪ Equipment will not be approached on blind sides. ▪ All equipment will be equipped with backup alarms and use spotters when significant physical movement of equipment occurs on-site, (i.e., other than in place excavation or truck loading).	L
	3N) Struck by vehicle/equipment	3N) Struck by vehicle/equipment ▪ Be aware of heavy equipment operations. ▪ Keep out of the swing radius of heavy equipment. ▪ Ground personnel in the vicinity of heavy equipment operations will be within the view of the operator at all times and will wear high visibility vests. ▪ Ground personnel will be aware of the counterweight swing and maintain an adequate buffer zone. ▪ Ground personnel will not stand directly behind heavy equipment when it is in operation. ▪ Drivers will keep workers on foot in their vision at all times, if you lose sight of someone, Stop!	L
	3O) Struck/cut by tools	3O) Struck/cut by tools ▪ Cut resistant work gloves will be worn when dealing with sharp objects. ▪ All hand and power tools will be maintained in safe condition. ▪ Guards will be kept in place while using hand and power tools.	L
	3P) Caught in/on/between	3P) Caught in/on/between ▪ Workers will not position themselves between equipment and a stationary object. ▪ Workers will not wear long hair down (place in pony-tail and tuck into shirt) or jewelry if working with tools/machinery.	L

	3Q) Contact with Electricity/Lightning	3Q) Contact with Electricity/Lighting ▪ All electrical tools and equipment will be equipped with GFCI. ▪ Electrical extension cords will be of the “Hard” or “Extra Hard” service type. ▪ All extension cords shall have a three-blade grounding plug. ▪ Personnel shall not use extension cords with damaged outer covers, exposed inner wires, or splices. ▪ Electrical cords shall not be laid across roads where vehicular traffic may damage the cord without appropriate guarding. ▪ All electrical work will be conducted by a licensed electrician. ▪ All utilities will be marked prior to excavation activities. ▪ All equipment will stay a minimum of 10 feet from overhead energized electrical lines (50 kV). This distance will increase by 4 inches for each 10 kV above 50 kV. Rule of Thumb: Stay 10 feet away from all overhead powerlines known to be 50 kV or less and 35 feet from all others.) ▪ The SHSO shall halt outdoor site operations whenever lightning is visible, outdoor work will not resume until 30 minutes after the last sighting of lightning.	**L**
	3R) Equipment failure	3R) Equipment failure ▪ All equipment will be inspected before use. If any safety problems are noted, the equipment should be tagged and removed from service until repaired or replaced.	**L**
	3S) Hand & power tool usage, cuts, burns, etc.	3S) Hand & power tool usage ▪ Inspect the tool daily. ▪ Remove broken or damaged tools from service. ▪ Use the tool for its intended purpose. ▪ Use in accordance with manufacturers instructions.	**L**

	3T) Burns and Exposure to Exhaust from Portable Propane Torch Use	3T) Portable propane torch usage • Read the manual to become familiar with the propane torch and follow all safety precautions. Don PPE (safety glasses, heavy leather gloves) before using the torch. • Inspect the propane cylinder and the torch tip to ensure there are no defects, damage, etc. • Assemble the torch kit per instruction manual. The torch is designed to be used with the small propane cylinder, do not attempt to attach the torch to any other gas cylinder. • Do not use the torch in areas where gasoline or other liquids having flammable vapors are stored or used. • Do not smoke while igniting or operating the propane torch. • Have an ABC type fire extinguisher readily accessible to the work area. • Be sure the torch tip has a tight seal to the cylinder. If you smell gas, do not try to light the torch. Check the seal between the cylinder and torch. Do not attempt to light the torch until the seal is secure and no gas is leaking. • To ignite the torch flame, first position the point of the torch tip away from you. • If the unit requires a striker to ignite the torch, only use the striker provided with the unit. Never use a match or lighter to ignite torch. • Do not place hand or any part of your body in the path of the flame while lighting or operating the propane torch. • Never leave an ignited torch unattended while in operation. When not in use, the torch tip must be removed from the propane cylinder. • Be aware of the weather conditions. On bright sunny days, the torch flame may be barely visible. On windy days, the wind may carry the torch's heat back towards you. • The torch can produce combustion products such as carbon monoxide. Do not breathe in the exhaust. Propane vapors are heavier than air and can accumulate in low or confined areas. Use the torch only in a well ventilated area. • Heating a surface may cause heat to be conducted to adjoining surfaces that may be combustible or become pressurized when heated. Always check to make sure no unintended parts or materials are being heated. • Torch will be extremely hot, allow the torch to cool before touching it to remove it from the cylinder. • Never store a torch that is still hot. • When cooled, disconnect the torch from the cylinder for storage, and store them in a safe manner to prevent damage.	L

AHA - Field Work General

4. Environmental health considerations	4A) HEAT Stress	4A) Take precautions to prevent heat stress ▪ Remain constantly aware of the four basic factors that determine the degree of heat stress (air temperature, humidity, air movement, and heat radiation) relative to the surrounding work environmental heat load. ▪ Know the signs and symptoms of heat exhaustion, heat cramps, and heat stroke. Heat stroke is a true medical emergency requiring immediate emergency response action. NOTE: The severity of the effects of a given environmental heat stress is decreased by reducing the work load, increasing the frequency and/or duration of rest periods, and by introducing measures which will protect employees from hot environments. ▪ Maintain adequate water intake by drinking water periodically in small amounts throughout the day (flavoring water with citrus flavors or extracts enhances palatability). ▪ Allow approximately 2 weeks with progressive degrees of heat exposure and physical exertion for substantial acclimatization. ▪ Acclimatization is necessary regardless of an employee's physical condition (the better one's physical condition, the quicker the acclimatization). Tailor the work schedule to fit the climate, the physical condition of employees, and mission requirements. ▪ A reduction of work load markedly decreases total heat stress. ▪ Lessen work load and/or duration of physical exertion the first days of heat exposure to allow gradual acclimatization. ▪ Alternate work and rest periods. More severe conditions may require longer rest periods and electrolyte fluid replacement.	L
	4B) Wet Bulb Globe Temperature (WBGT) Index	4B) WBGT ▪ Curtail or suspend physical work when conditions are extremely severe (see attached Heat Stress Index). ▪ Compute a Wet Bulb Globe Temperature Index to determine the level of physical activity (take WBGT index measurements in a location that is similar or closely approximates the environment to which employees will be exposed).	L
		WBGT THRESHOLD VALUES FOR INSTITUTING PREVENTIVE MEASURES 80-90 degrees F — Fatigue possible with prolonged exposure and physical activity. 90-105 degrees F — Heat exhaustion and heat stroke possible with prolonged exposure and physical activity. 105-130 degrees F — Heat exhaustion and heat stroke are likely with prolonged heat exposure and physical activity.	.

	4C) Cold Extremes	4C) Take precautions to prevent cold stress injuries ▪ Cover all exposed skin and be aware of frostbite. While cold air will not freeze the tissues of the lungs, slow down and use a mask or scarf to minimize the effect of cold air on air passages. ▪ Dress in layers with wicking garments (those that carry moisture away from the body – e.g., cotton) and a weatherproof slicker. A wool outer garment is recommended. ▪ Take layers off as you heat up; put them on as you cool down. ▪ Wear head protection that provides adequate insulation and protects the ears. ▪ Maintain your energy level. Avoid exhaustion and over-exertion which causes sweating, dampens clothing, and accelerates loss of body heat and increases the potential for hypothermia. ▪ Acclimate to the cold climate to minimize discomfort. ▪ Maintain adequate water/fluid intake to avoid dehydration.	**L**
	4D) Wind	4D) Effects of the wind ▪ Wind chill greatly affects heat loss (see attached Wind Chill Index). ▪ Avoid marking in old, defective timber, especially hardwoods, during periods of high winds due to snag hazards.	**L**
	4E) Thunderstorms	4E) Thunderstorms ▪ Monitor weather channels to determine if electrical storms are forcased. ▪ Plan ahead and identify safe locations to be in the event of a storm. (e.g., sturdy building, vehicle, etc.) ▪ Suspend all field work at the first sound of thurnder. You should be in a safe place when the time between the lightning and thunder is less than 30 seconds. ▪ Only return to work 30 minutes after the after the last strike or sound of thunder	**L**
5. Check and calibrate industrial hygiene and other field instruments and equipment as required and as recommended by the manufacturer	5A) Exposure to Calibration Gases/Chemicals due to: • Use of damaged instruments.	5A) Verify proper operation of the instrument prior to calibration. Calibrate instruments in an area with adequate ventilation and follow the manufacturer's recommendations. ▪ Wear appropriate PPE to conduct calibrations as specified in the instrument manual.	**L**

	5B) Exposure to Site contaminants due to: • Improper instrument calibration; • Misinterpretation of calibration results; • Improper instrument repair; • Improper use of instrument due to lack of training.	5B) Calibrate the instrument in accordance with the manufacturer's recommendations (see instrument manual) using the applicable calibration standard and calibration procedure. • Perform calibrations at a frequency recommended by the manufacturer. Be aware of the instrument's limitations (e.g., detection limit, maximum sensitivity) and the conditions (e.g., humidity) that may affect correct operation or accuracy of that equipment. Possible sources of error that may affect the correct calibration of the instrument. • Use only calibration materials recommended by the manufacturer for calibration. Do not use substitutions. • Confirm that the connections between the instrument and the calibration gas/material is leak-free. • Record all instrument calibrations in the field logbook. Include the instrument ID (type/manufacture/serial number/lamp eV, etc.), calibration gas used (chemical and concentration), and instrument result. • Do not attempt to repair instrument. Return to the vendor for replacement. Report any damaged or malfunctioning instrument to the vendor. • All personnel must be familiar with operation of the instrument and understand: - Theroy of its operation including any alarms and their setpoints - Materials the instrument can and cannot detect, - Instrument's limitations - The expected responses to calibration gases/materials - Interfering gases/chemicals and their affects on the instrument readings - When re-zeroing is appropriate	L

AHA - Field Work General

Heat Index Chart

% Relative Humidity

Temperature	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
110	108	112	117	123	130											
105	102	105	108	113	117	122	130									
100	97	98	102	104	107	110	115	120	126	132						
95	91	93	95	96	98	100	104	106	109	113	119	124	130			
90	86	87	88	90	91	92	95	97	98	100	103	106	110	114	117	121
85	81	82	83	84	85	86	87	88	89	90	92	94	96	97	100	102
80	76	77	78	78	79	79	80	81	82	83	84	85	86	87	88	89

Legend	
80-89 degrees	Fatigue is possible with prolonged exposure and/or physical activity.
90-104 degrees	Sunstroke, heat cramps and heat exhaustion are possible with prolonged exposure and/or physical activity.
105-129 degrees	Sunstroke, heat cramps and heat exhaustion are likely. Heat stroke is possible with prolonged exposure and/or physical activity.
130+ degrees	Heatstroke/sunstroke is highly likely with continued exposure.

Wind Chill Chart

Wind (mph)	Temperature (°F)																	
Calm	40	35	30	25	20	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45
5	36	31	25	19	13	7	1	-5	-11	-16	-22	-28	-34	-40	-46	-52	-57	-63
10	34	27	21	15	9	3	-4	-10	-16	-22	-28	-35	-41	-47	-53	-59	-66	-72
15	32	25	19	13	6	0	-7	-13	-19	-26	-32	-39	-45	-51	-58	-64	-71	-77
20	30	24	17	11	4	-2	-9	-15	-22	-29	-35	-42	-48	-55	-61	-68	-74	-81
25	29	23	16	9	3	-4	-11	-17	-24	-31	-37	-44	-51	-58	-64	-71	-78	-84
30	28	22	15	8	1	-5	-12	-19	-26	-33	-39	-46	-53	-60	-67	-73	-80	-87
35	28	21	14	7	0	-7	-14	-21	-27	-34	-41	-48	-55	-62	-69	-76	-82	-89
40	27	20	13	6	-1	-8	-15	-22	-29	-36	-43	-50	-57	-64	-71	-78	-84	-91
45	26	19	12	5	-2	-9	-16	-23	-30	-37	-44	-51	-58	-65	-72	-79	-86	-93
50	26	19	12	4	-3	-10	-17	-24	-31	-38	-45	-52	-60	-67	-74	-81	-88	-95
55	25	18	11	4	-3	-11	-18	-25	-32	-39	-46	-54	-61	-68	-75	-82	-89	-97
60	25	17	10	3	-4	-11	-19	-26	-33	-40	-48	-55	-62	-69	-76	-84	-91	-98

Frostbite Times: 30 minutes, 10 minutes, 5 minutes

$$\text{Wind Chill (°F)} = 35.74 + 0.6215T - 35.75(V^{0.16}) + 0.4275T(V^{0.16})$$

Where, T= Air Temperature (°F) V= Wind Speed (mph)

Effective 11/01/01

WorkCare™
Making Health Count

[illegible]

Types of Ticks

- **Deer Tick (Ixodes Scapularis)** – Found in Northeast and Upper Midwest and transmits agents of Lyme, babesiosis, human granulocytic ehrlichiosis (anaplasmosis) and powassen encephalitis

From Left: adult female, adult male, nymph and larvae Deer Tick (cm scale)

- **Western Black Legged Tick (Ixodes Pacificus)**- Found in the West and transmits agents of Lyme, babesiosis and human granulocytic ehrlichiosis (anaplamosis)

- **Lone Star Tick (Amblyomma Americanum)**- Found throughout the United States and transmits agents of human monocytic ehrlichiosis, Lyme and Tularemia

- **American Dog Tick and Wood Tick (Dermacentor Variabilis)** – found throughout the US. and transmits agents of Rocky Mountain spotted fever and tularemia

American Dog Tick

American Wood Tick

Tick Bite Prevention

Ticks can be found all over the world, but are more present in warmer climates. Here are some ways to prevent a tick bite:

- Perform frequent visual inspections of the skin and clothes.
- Remove attached ticks promptly (preferably with the aid of fine-tip forceps).
- If portion of the tick's mouth parts remain embedded in the skin, use only topical disinfection on the site.
- Use protective clothing that includes:
    1. Long sleeve shirts tucked into the pants.
    2. Long pants tucked into the socks.
- Wear light colored clothing to allow for better recognition of the presence of ticks
- Put clothes in dryer for 30 minutes to kill the ticks
- Use tick and insect repellents that contain N,N-diethyl-3-methylbensamide (DEET)
    1. DEET should be applied to skin and clothing. Avoid applying DEET to face, hands and skin that is irritated or abraded.
    2. DEET may require reapplication for maximum effectiveness (timing of reapplication depends on the specific preparation utilized).
    3. After returning indoors, skin that was treated with DEET should be washed with soap and water.
- Permethrin is available in a spray solely for application to clothing (it is inactivated by skin lipids). It kills ticks on contact.

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Making Health Count

Tick Removal by an Employee

- Remove attached ticks promptly (preferably with the aid of fine-tip forceps).

- Pull tick straight out.
- If portion of the tick's mouth parts remain embedded in the skin, use only topical disinfection on the site.
- Do not burn or use any caustic substance on tick
- Do not grasp, squeeze or twist body of the tick

Facts About Lyme disease

- There is a very low risk that a person with a recognized bite will develop a serious complication of Lyme disease.
- The risk of Lyme disease is highest during the summer months when the nymph stage is seeking a blood meal.
- Most common clinical manifestation of Lyme disease is a skin lesion called erythema migrans resulting from a cutaneous infection.
- Lyme disease generally occurs in parts of New England, the Mid-Atlantic States and parts of Minnesota and Wisconsin.
- The best currently available method for preventing infection with B. burgdorferi is to avoid exposure to vector ticks.
- You can test serpositive and still not have Lyme disease.
- Not everyone who contracts Lyme disease gets a rash.
- Lyme disease is a clinical diagnosis based on a patient's symptoms, history and examination
- Lyme disease bacteria can cross the placenta into the fetus, and its DNA can be found in breast milk.
- Lyme disease symptoms generally appear in the acute phase but can develop days or even up to one month after a tick bite.
- When being treated for Lyme disease there are two differential diagnoses that should be considered: HGA and babesiosis.

- Doxycycline is very effective in treating Lyme disease. There is no biological evidence for the existence of symptomatic chronic Lyme disease infection among patients after receipt of recommended treatment regimens for Lyme disease. Therefore, long term antibiotic treatment is not recommended for patients with chronic subjective symptoms and should be considered for a differential diagnosis.

Lyme disease, HGA, & Babesiosis

According to the Centers for Disease Control (CDC), the most commonly reported tick-borne disease in the United States is Lyme disease. The two types of ticks that can pass Borrelia burgdorferi, commonly known as Lyme disease, include:

- **Deer Tick**
- **Western Black Legged Tick**

Other diseases to be concerned about when the tick has been identified as I. Scapularis include:

- **HGA** – human granulocytic anaplasmosis previously known as human granulocytic ehrlichiosis.
- **Babesiosis -** a malaria-like parasitic disease.

The bite from the deer tick may lead to one single infection. It is rare for the patient to contract Lyme disease, HGA, and Babesiosis from the same tick bite. When this occurs the patient is considered to have a coinfection.

Diagnosis of Lyme disease, HGA, and Babesiosis

Erythema Migrans (a rash) is the clinical manifestation of Lyme disease and is sufficiently distinctive to allow clinical diagnosis in the absence of laboratory confirmation. The majority of patients infected with Lyme disease present with Erythema Migrans and should do the following:

- Actively search for skin lesions that subsequently develop at the location of the tick bite (prognosis for those treated for erythema migrans is excellent).

- For persons with compatible epidemiologic and clinical history, the preferred means of diagnosis is visual inspection of the skin lesion. ***Serologic testing is too insensitive in the acute phase (the first two weeks of infection) to be helpful diagnostically***.

    1. In a minority of cases for which there may be diagnostic uncertainty, both acute-phase and convalescent-phase (two weeks after the acute-phase) serum samples should be tested using CDC guidelines.

2. ***It should be noted that the presence of seropositivity does not guarantee that a given medical condition is due to B. burgdorferi infection***. (This is because faint bands are commonly seen in samples from healthy people without tick exposure and with patients with illness other than Lyme disease).

- Erythema Migrans can be confused with hypersensitivity to the tick bite and should only be diagnosed by a trained clinician.

- If the person develops fever or clinical illness in areas of endemicity and the tick has been identified as a Deer Tick, HGA and babesiosis should be included in the differential diagnosis.

- To diagnose extracutaneous symptoms of Lyme disease, HGA, or babesiosis, testing with quality controls is required. Specimens should only be sent to laboratories that are familiar or that specialize in this type of testing.

- Laboratory tests should follow the recommendations of the Infectious Diseases Society of America (IDSA) to properly diagnose Lyme disease, HGA and babesiosis.

- ***Methods for determining the B. burgdorferi infection status of ticks removed from patients are not standardized, and the results do not necessarily correlate with the risk of infection. Testing of ticks removed from patients for B. burgdorferi is therefore, not recommended except in research studies.***

Persons who have been exposed to a tick bite (including those who have received antibiotic prophylaxis) should be monitored closely for signs and symptoms of tick borne diseases for up to 30 days.

Lyme disease, HGA, & Babesiosis Signs and Symptoms

The following signs and symptoms to monitor will include, but not be limited to, the following:

- **Rash**
  1. Expanding skin lesions at the tick bite site
  2. Bull's eye rash at tick bite site < 50%
  3. Rashes other than tick bite site
- **Musculoskeletal**
  1. Joint/muscle pain and burning in feet, swelling in toes and ankle pain
  2. Shin splints, joint pain or swelling, stiffness of the joints, neck creaks or cracks and neck stiffness
- **Neurological**
  1. Twitching of the face, eyelids or muscles
  2. Headache
  3. Burning or stabbing sensation

- **Upper Gastrointestinal**
    1. Nausea and vomiting
    2. Difficulty eating
    3. Change in bowel function
    4. Gastritis and abdominal cramping
- **Cardiac Symptoms**
    1. Irregular, slow heartbeat
    2. Dizziness, shortness of breath
- **Other**
    1. Development of skin lesions or viral infection-like illness within one month after removing an attached tick.

Treatment of Deer Tick and Western Black Legged Tick Bites

According to the Infectious Disease Society of America (IDSA), after a recognized tick bite, the routine use of antibiotics, serological testing to prevent Lyme disease, or clinical testing of the removed tick is <u>not currently recommended</u>. The rationale for this includes the following:

- ***There is no clinical based evidence that shows that the use of prophylactic antibiotics reduces the incidence of Lyme disease, HGA or babesiosis.***
- ***Currently, the tests for determining the B. burgdorferi infection status of ticks, removed from patients, are not standardized and the results do not necessarily correlate with the risk of infection.***
- ***The presence of seropositivity does not guarantee that a given medical condition is due to B. burgdorferi infection.***
- ***When infection is confirmed, there is a high rate of efficacy from treatment with antibiotic.***

A single-200 mg oral-dose of doxycycline may be offered when all of the following circumstances exist:

- The attached tick can be reliably identified as an adult or nymph Deer Tick. Identification should be completed by a health practitioner oriented in the process.

- Attachment time estimated to be □36 hours. Attachment time is based on degree of engorgement of the tick with blood or on the certainty of the exposure time of the tick. ***(Only a trained health practitioner can determine degree of engorgement).***

- Ecological information indicates that the local rate of infection with the Lyme disease organism (*B. burgdorferi*) is □20% in:
    1. Parts of New England
    2. Parts of the mid-Atlantic states
    3. Parts of Minnesota and Wisconsin
    4. Not generally in other parts of the USA

- Doxycycline is not contradicted (includes pregnant women and children younger than the age of 8).

Prophylaxis after Deer Tick bites is generally not necessary due to the low infection rates; however, if a higher infection rate (20%) is identified, then follow the above criteria.

Protocol for Deer Tick and Western Black Legged Tick Bites

- Nurse Case Manager (NCM) will follow all employees for 45 days with a suspected tick bite. (Per the CDC, the patient should be followed for 30 days to monitor symptoms.)
- WorkCare clinician will be responsible to identify the following questions:
    1. What were the employees' field and work activities four days prior to identifying the tick?
    2. What in the employees' history would expose them to tick infestation?
- WorkCare will assist in identifying the tick where applicable.
- NCM will monitor for flu like symptoms on a weekly basis and educate the employee on what symptoms to look for (see prior list of Lyme disease signs and symptoms).
- If at anytime the employee appears to exhibit Lyme disease, HGA or babesiosis symptoms, the NCM will refer the employee to the appropriate clinic.
    1. Clinician will contact treating physician and discuss appropriate treatment and diagnostic studies. Clinician will refer physician to IDSA for diagnosis and treatment guidelines. Treating physician and WorkCare physician will consult on appropriate plan of action and ensure it follows IDSA guidelines.
    2. If employee exhibits bull's eye rash or treating physician determines that employee requires medical management of tick bite, file will then be managed by NCM (if agreed upon in contract with client). NCM will consult with treating physician and WorkCare physician to ensure appropriate treatment is rendered, thus allowing the employee to reach his maximum medical improvement level. NCM will follow the employee until he is released form medical care.
        - In cases of individuals who develop symptoms of Lyme disease, HGA or babesiosis then the NCM will direct the physician to IDSA guidelines to ensure the employee receives appropriate care.

References:

1. The Clinical Assessment, Treatment, and Prevention of Lyme Disease, Human Granulocytic Anaplasmosis and Babesiosis: Clinical Practice Guidelines by the Infectious Diseases Society of America. *Clinical Infectious Diseases* 2009; 43:1089-1134
2. IDSA Guidelines,CID2006:43(1November),1089

Attachment C

Incident Reporting Forms

AMEC Earth & Environmental, Inc.
Tailgate Safety Meeting Report

Check One:

❑ Initial Kickoff Safety Meeting ❑ Regular/Daily Tailgate Safety Meeting ❑ Unscheduled Tailgate Safety Meeting

Date: _____ Site: _____

Field Manager: _____ Site Health and Safety Coordinator: _____
(print) *(print)*

Order of Business

Topics Discussed (check all that apply):

❑ Site History/Site Layout
❑ Scope of Work
❑ Personnel Responsibilities
❑ Medical Surveillance Requirements
❑ Training Requirements
❑ Safe Work Practices
❑ Logs, Reports, Recordkeeping
❑ Sanitation and Illumination
❑ Air Surveillance Type and Frequency
❑ Monitoring Instruments and Personal Monitoring
❑ Action Levels
❑ Accident Reporting Procedures
❑ Site Control (visitor access, buddy system, work zones, security, communications)
❑ Discussion of previous "near misses" including work crew suggestions to correct work practices to avoid similar occurrences
❑ Engineering Controls
❑ PPE Required/PPE Used
❑ Define PPE Levels, Donning, Doffing Procedures
❑ Physical Hazards and Controls (e.g., overhead utility lines)
❑ Decontamination Procedures for Personnel and Equipment
❑ General Emergency Procedures (e.g., locations of air horns and what 1 or 2 blasts indicate)
❑ Site/Regional Emergency Procedures (e.g., earthquake response, typhoon response, etc.)
❑ Medical Emergency Response Procedures (e.g., exposure control precautions, location of first aid kit, etc.)
❑ Hazardous Materials Spill Procedures
❑ Applicable SOPs (e.g., Hearing Conservation Program, Safe Driving, etc.)
❑ Injury/Illness Reporting Procedures
❑ Route to Hospital and Medical Care Provider Visit Guidelines
❑ Hazard Analysis of Work Tasks (chemical, physical, biological and energy health hazards and effects)

Safety suggestions by site workers: _____

_____

_____

Action taken on previous suggestions: _____

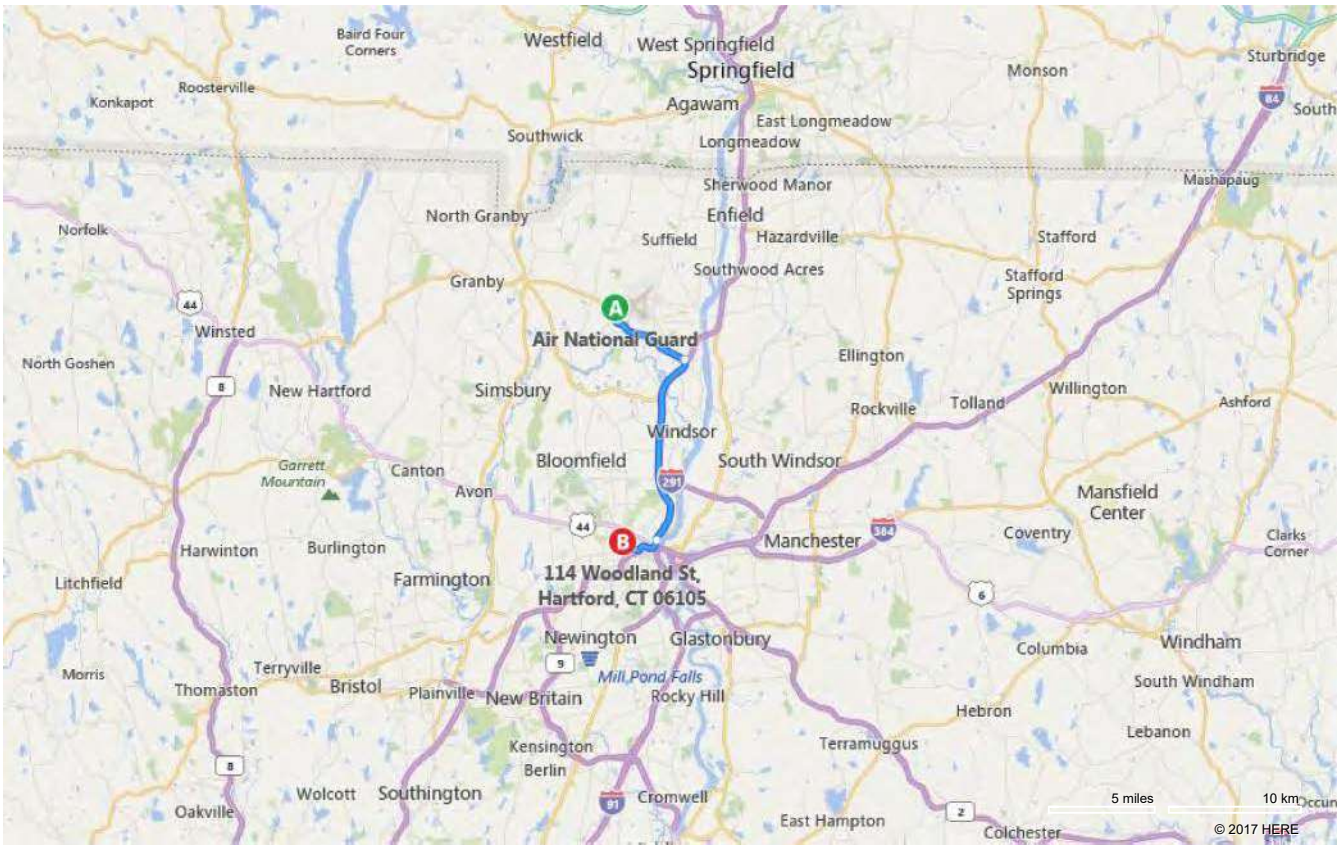
_____

_____

Injuries/accidents/personnel changes since previous meeting: _____

_____

_____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Mashapaug
North Granby
Enfield
Norfolk
Suffield
Hazardville
Stafford
Southwood Acres
Granby
Stafford Springs
Winsted
Air National Guard
Ellington
North Goshen
New Hartford
Simsbury
Rockville
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Willington
Ashford
Windsor
Garrett Mountain
Canton
Bloomfield
South Windsor
Avon
Mansfield Center
Harwinton
Burlington
Manchester
Coventry
Clarks Corner
Litchfield
Farmington
114 Woodland St, Hartford, CT 06105
Newington
Glastonbury
Columbia
Windham
Morris
Terryville
Mill Pond Falls
Thomaston
Bristol
Plainville
New Britain
Rocky Hill
South Windham
Hebron
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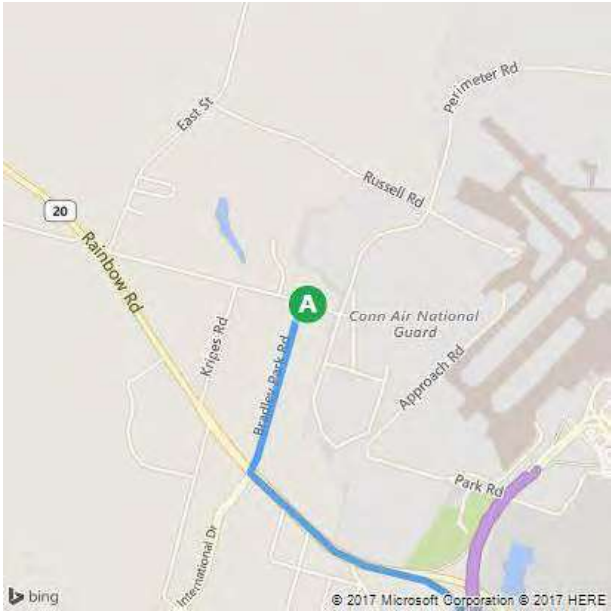
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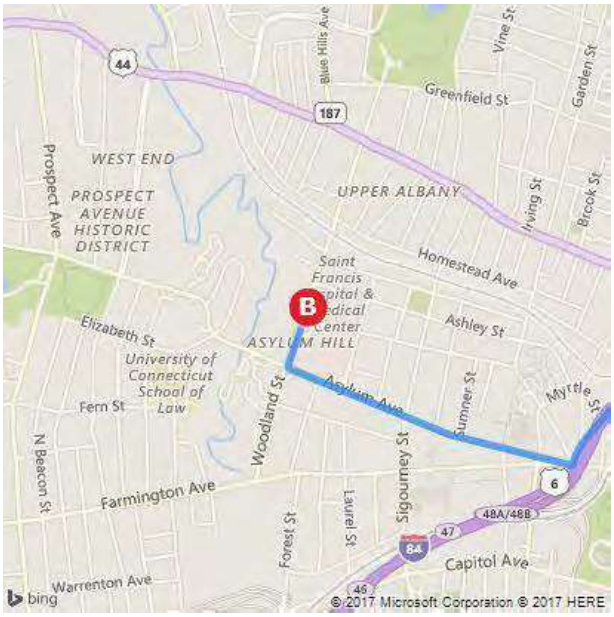
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Greenfield St
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Prospect Ave
PROSPECT AVENUE HISTORIC DISTRICT
UPPER ALBANY
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Saint Francis Hospital & Medical Center
Ashley St
Elizabeth St
ASYLUM HILL
University of Connecticut School of Law
Fern St
Woodland St
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Sumner St
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Farmington Ave
Forest St
Laurel St
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Observations of unsafe work practices/conditions that have developed since previous meeting: _____

_____

_____

Location of (or changes in the locations of) evacuation routes/safe refuge areas: _____

_____

_____

Additional comments: _____

_____

_____

Attendee signatures below indicate acknowledgment of the information and willingness to abide by the procedures discussed during this safety meeting.

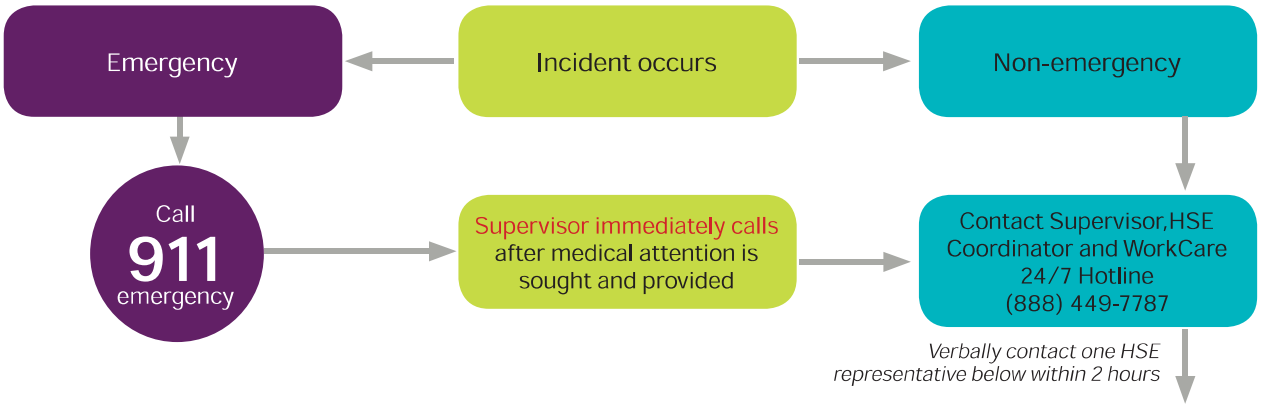
Name (print)	Company	Signature

Meeting conducted by: _____ Title: _____
(print)

Signature: _____ Time: _____

Incident ow chart

Call immediately



E&I Corporate HSE department contact list

Name/email	O ce location	Contact information
Bruce Voss bruce.voss@amecfw.com	Cathedral City, CA	760.202.3737 (o ce) 951.897.6381 (cell)
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Cindy Sundquist cynthia.sundquist@amecfw.com	Portland, ME	207.828.3309 (o ce) 207.650.7593 (cell) 207.892.4402 (home)
Gabe Sandholm gabe.sandholm@amec.com	Minneapolis, MN	612.252.3785 (o ce) 206.683.9190 (cell)
John Mazur john.mazur@amec.com	Wilmington, NC	910.444.2978 (o ce) 910.431.2330 (cell) 910.681.0538 (home)
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Vladimir Ivensky (can call 24/7) vladimir.ivensky@amec.com	Plymouth Meeting, PA	610.877.6144 (o ce) 484.919.5175 (cell) 215.947.0393 (home)
Kirby Lastinger kirby.lastinger@amec.com	Lakeland, FL	836-667-2345 x207 (o ce) 863-272-4775 (cell)

*High potential near misses, subcontractor incidents, regulatory inspections, spills, and property damage should be reported within 60 minutes to one of the above HSE Representatives.
WITHIN 24 HOURS - Local Supervisor, HSE Coordinator, Project HSE O cer, and any applicable safety committees must complete preliminary investigation, along with the initial Incident Analysis Report Form and forward it to the Corporate HSE Department

Check one
Initial Report: ☐
Update: ☐
Final Report: ☐ ____

Incident Potential Severity
Letter: Select One
Number: Select One
Investigation Level: Select One
Severity Matrix (LINK)

Group: Select One Group HSE Manager: ____ Incident Review Panel Team (if applicable): ____

Incident Date: _____ Report Date: _____

%&' ! !

Employee Name: ____ Sex: ☐ M ☐ F Date of Birth: ____ Age Range: Select One

Job Position: Select One Hire Date: ____ Time employee began work: _____ Time of incident: ____ ☐ am | ☐ pm

Business Line: Select One Department Number: ____ Project Manager: ____

Project Name: ____ Project Number: ____ Client: ____

Office where employee works from: ____ Immediate Supervisor: ____ Hours employee worked during last 7 days: ____ hrs

Location: Select One Is this a Company controlled work site: ☐ Yes ☐ No Incident Assigned to: Select One

Location description: ____

(&) * " (**mark at least ONE BOLD TYPE** and all that apply)

☐ **Fatality** ☐ **Environmental** ☐ **Injury/Illness Incident** If Injury/illness: Select One

☐ **Security** ☐ **Near Miss/Hazard ID** ☐ **Property Damage** If Damage: Select One ☐ 3rd Party?

☐ Hospitalization ☐ **Regulatory Inspection** ☐ **Notice of Violation or Citation** ☐ Agency Reportable

☐ Motor Vehicle Incident Involving Injury ☐ Other (describe): ____

Outcome/Result: Select One If "other", specify: ____ Source of Hazard: Select One If "other", specify: ____

Immediate Cause: Select One

A. If **injury/illness**: Indicate the part of the body: Select One If "other", specify: ____

Indicate body part location: Select One If "other", specify: ____

Injury Type: Select One If "other" specify: ____ Illness Type: Select One If "other", specify: ____

☐ Bleeding? Select One If yes, "First Aider" name: ____ ☐ Contact with blood/infectious material? Select One

Exposure Control Precautions taken by First Aider (check all that apply):

- ☐ None (If none, contact WorkCare)
- ☐ Immediate Personal Hygiene
- ☐ Eye protection
- ☐ Gloves
- ☐ One-way CPR valve
- ☐ Face mask
- ☐ Previous HBV Immunization
- ☐ Recommended for HBV Immunization
- ☐ Other (describe): ____

☐ Blood contaminated work area / surface? If contaminated, describe cleanup/disposal: ____

☐ Medical treatment provided (i.e. prescriptions, referrals, etc.). If medical treatment, describe: ____

☐ Physical limitations received from physician? If limitations, describe: ____ ☐ Modified Work Offer provided.

☐ Second medical opinion? If second opinion, describe: ____

☐ Workers Compensation claim filed? If filed, claim number: ____

B. If **property damage**: describe what happened and estimate ($) of damage to all objects involved? ____

C. If **environmental**: Environmental incident category: ☐ Pollution Event ☐ Non-conformance

Was Regulatory Action Taken: Select One If "Yes" describe: ____

Type of pollution event: Select One Type of substance: Select One Name, CAS#, physical state: ____

Quantity: ____ Substance Unit: Select One Source of release: Select One If "other", specify: ____

Duration of Breach: Select One Receiving Environment: Select One If "other", specify: ____

Level of Non-conformance: Select One Describe Non-conformance: ____

D. If **security**: Security Incident Type: Select One If Physical: Select One If Criminal: Select One If Intellectual: Select One

E. If an **inspection by a regulatory agency**, what agency, who were the inspectors, inspector contact information? ___

+ & *

Attach and number additional pages, as needed, to ensure all details related to the incident are captured.

A. List the names of all persons involved in the incident, and employer information: ___

B. List the names of any witnesses, their employer, and a local/company telephone number or address: ___

C. Name of Employee's supervisor: ___ Contact phone number for supervisor: ___

D. What specific job/task or action was the employee(s) doing just prior to the incident: ___

E. Was a tool or equipment involved? ☐ Yes ☐ No What was it: ___ Last Inspection Date: ___Defects: ___

F. Explain in **detail** what happened: ___

G. Explain in **detail** what object or substance directly harmed the employee: ___

H. What were the weather conditions at time of incident?: ___

I. What was the lighting like at time of incident? Bright ☐ Shadows ☐ Dark ☐ Other: ___

J. List any damaged equipment or property (other than motor vehicles). Provide model and serial number **and** estimated costs to repair/replace damaged equipment or property, if applicable: ___

, " !)

A. Was a Health and Safety Plan (HASP) or Activity Hazard Analysis (AHA) completed for the work being performed? ☐ Yes ☐ No
If "yes", Who prepared the document?: ___

B. Who and when was the last manager (Project, Unit, etc.) at the site of the incident?: ___

C. When and what safety training **directly related** to the incident has the person(s) involved had?: ___

D. List attached documentation (HASP acknowledgement forms, kickoff/daily/weekly meetings, inspections, photographs): ___

- " # $! . !

/ * /) ' . * 0 1 ! ! $ 2 3 . * * ! 3 . 4 ! ! 3 '5 ! . ! ' !) '5 ! . 6 6 7

Causal Factors (Acts or Omissions / Conditions) (Attach and number any additional pages as needed to completely address this section)			
	IMMEDIATE CAUSE	IMMEDIATE CAUSE SUB-TYPE	DESCRIPTION
1	Select One	_____	_____
2	Select One	_____	_____
3	Select One	_____	_____
4	Select One	_____	_____
Root Cause(s) Analysis - The below items represents major root cause categories which have been determined to be Less Than Adequate (LTA). A more detailed determination of the root cause will be facilitated, if needed, by the applicable Group HSE Manager / IRP.			
	ROOT CAUSE TYPE	ROOT CAUSE SUB-TYPE	DESCRIPTION
1	Select One	_____	_____

2	Select One	____	____
3	Select One	____	____
4	Select One	____	____

Amec Foster Wheeler Safety Rules and Safety Essentials

Safety Rules **Select all applicable breaches of rules or** ☐ None		**Safety Essentials** **Select all applicable breaches of behavioral expectations or** ☐ None	
☐ Permit to Work ☐ Ground Disturbance ☐ Driving ☐ Confined Spaces ☐ Working At Height	☐ Lifting Operations ☐ Energy Isolations ☐ Pressure Testing ☐ Plant and Equipment ☐ Housekeeping	☐ Always Take Care ☐ Follow the Rules ☐ Do a Risk Assessment	☐ You Must Intervene ☐ Manage Any Change ☐ Wear the Correct PPE

Corrective Actions

Root Cause #	**Corrective Actions Taken** (Attach additional pages as needed to completely address this section)	**Responsible Person**	**Proposed Completion Date**	**Closed on Date**	**Verified by and Date Verified**
____	____	____	____	____	____
____	____	____	____	____	____
____	____	____	____	____	____
____	____	____	____	____	____
____	____	____	____	____	____

8 " ! 4 ! * * #!

6 ! * * * ! / 9 ! $! * * ! / * ! # / ! 3 $! * * ! / $! : ! ;

Auto Insurance Carrier was called ☐ Group HSE Manager Notified ☐

WorkCare was called ☐ Post-incident Drug/Alcohol Testing Performed ☐

Incident Report prepared by: ___

Employee (s): ___	Date: ___	Employee's Supervisor: ___	Date: ___
HSE Coordinator/Project/Unit Manager: ___	Date: ___	Group HSE Manager: ___	Date: ___

TrackWise notification form - Injury incident
General information

Remember to complete any 'Actions'

Business unit	
Short description	
Incident assigned to	
Is incident work related?	

Parties involved table

Person involved	Type of involvement	Employing company

Operating unit		Project/Office	
Site/Unit		Office/Site/Offshore	
Discipline/Group (E&I only)			
Incident date		Time incident occurred	
Where did incident occur?		Specific location	
AMEC HSE Advisor		AMEC HSE Manager	
AMEC Project Manager		Person reporting incident	
Description		Immediate actions taken	
Incident outcome/result			
Height of fall (Meters)		Weight of object (kg)	
Source of hazard		OSHA Global Severity	
Select multiple options from this list			
Reportable to authorities			
		Related incident	
Potential letter		Potential number	
Is incident potential rating confirmed?			

Injury/Illness information

Person injured - First name		Person injured - Last name	
Employment status		Name of employer	
Injured party occupation		Length of service	
1st date of absence		Date IP returned to full duty	
1st date restricted/modified		Injury/Illness	
Injury/Illness type Select multiple options from this list		Injury location Select multiple options from this list	
Exact injury location			
Diagnosis comments		Treatment given	
Medical restrictions			
Date of birth		Shift	
Age profile			
Hours/Shift		Shifts/Week	
Days since last day off		Time into shift (hours)	
Activity at time of incident		Duty HR informed	

Investigation

AMEC Senior Site Rep.		Direct supervisor	
Investigation conducted by			

Investigation team	Team member	Invest' Relevance/Expertise

Incident review panel | | Has this investigation been through incident review panel?

Immediate causes	Immediate cause type	Immediate cause sub-type	Act/ Conditions	Immediate cause description
The first letter of 'Immediate cause sub-type' **MUST** match the first letter of 'Immediate cause type"			Acts or Omissions	
			Acts or Omissions	
			Acts or Omissions	
			Acts or Omissions	
			Acts or Omissions	

Root causes	Root cause type	Root cause sub-type	Job/ Personal factors	Root cause description
The first letter of 'Root cause sub-type' **MUST** match the first letter of 'Root cause type"			Job Factors	
			Job Factors	
			Job Factors	
			Job Factors	
			Job Factors	

Investigation findings summary		Conclusions summary	

Safety rules breaches		Safety essentials breaches	
Select multiple options from this list	# $ $ % & (	Select multiple options from this list	) " " * # +

Near Miss Report

Note: The office supervisor or field supervisor will complete this form when an event occurs that could have resulted in a serious injury, but did not. The goal of Near Miss Reports is to inform coworkers and management of potentially dangerous conditions or behavior to prevent future injuries or illnesses. The completed form must be submitted to the Unit Manager, Project Manager (as applicable), the SHE Coordinator, and the Corporate SHE Director within 1 day of the occurrence.

Date of Occurrence:	Time of injury: ❑ AM ❑ PM
Location:	
Employee's brief description of occurrence:	
Employee's recommendation to prevent further occurrence:	
Signed:	Date:
Supervisor recommendations:	
Management recommendations:	
Signed:	Date:

ATTACHMENT 2

Confidential - Privileged

Date of Incident: _____

Time incident occurred: _____ ☐ am | ☐ pm | Illumination: ☐ Dark ☐ Dusk ☐ Light | Road Condition: ☐ Dry ☐ Wet ☐ Icy/snow

Were police summoned to scene? ☐ Yes ☐ No Police Department and Location: _____

Report #; _____ Officer's Name: _____ Officer's Badge Number: _____

Driver's name: _____ D/L #: _____ State: _____

Driver's home office address: _____ Driver's Phone #: _____

Company Vehicle #: _____ Year: _____ Model: _____ License #: _____ State: _____

Company car?: ☐ Yes ☐ No Personal Vehicle?: ☐ Yes ☐ No Rental Vehicle?: ☐ Yes ☐ No

If rental, rented from: _____

Passenger/Witness Name(s): _____ Address: _____ Telephone: _____

Passenger/Witness Name(s): _____ Address: _____ Telephone: _____

Damage to vehicle: _____

Was an employee injured?: ☐ Yes ☐ No If yes, please describe: _____

Injuries to others?: ☐ Yes ☐ No If yes, please describe: _____

Vehicle was being used for: Company business ☐ Yes ☐ No Personal business ☐ Yes ☐ No

Towed?: ☐ Yes ☐ No If yes, by whom?: _____ To Where?: _____

Driver's Name: _____ D/L # : _____ State: _____

Current address: _____ City: _____ State: _____

Telephone: _____ Work: _____ Cell: _____

Registered Owner's Name: _____ Address: _____ City: _____ State: _____

(verify registration document)

The Other Vehicle: Make: _____ Model: _____ Year: _____ License #: _____ State: _____

Insurance company name: _____ Address: _____ Phone #: _____

Policy No.: _____ Contact Person: _____ Phone #: _____

Passenger/Witness Name(s): _____ Address: _____ Telephone: _____

Passenger/Witness Name(s): _____ Address: _____ Telephone: _____

Damage: (*Make note of pre-existing damage and take pictures if possible – you may attach additional pages if necessary):* _____

Injuries to other driver/passengers: _____

Form completed by (please print): _____ Date: _____

Signature: _____

Office/Project Manager (please print): _____ Date: _____

Signature: _____

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Things to Do First In The Event Of a Motor Vehicle Incident

GENERAL INFORMATION

1. Do not decide on your own whether a particular incident is "covered" by insurance. Should there be any doubt, it is always preferable to report an occurrence, as this allows underwriters, the Risk Management Department and insurance adjusters to determine if a covered loss has taken place.

2. Policy Conditions do require that all losses and occurrences, which may result in a claim be promptly reported.

3. Do not admit liability or offer your opinion of liability to anyone.

4. Complete this IAR/VIR form promptly and forward with all applicable supporting documentation. It is essential both division and location information be provided.

5. For automobile collisions within the **United States**, please indicate on the IAR form that you have contacted Zurich at:

Zurich Insurance Company
1-800-987-3373 or
1-877-928-4531
24 hours a day, 7 days a week

6. For automobile collisions within **Canada**, please indicate on the IAR form that you have contacted Crawford at:

Crawford Adjusters Canada
Claims Alert
1-888-218-2346
24 hours a day, 7 days a week

The more details you have the better but, don't delay reporting if you don't have all of the information - that may be obtained later. A Zurich trained operator will answer your call and ask for all relevant information regarding the incident. The initial information required includes:

- Your division,
- Office location and division contact name – advise that you are an AMEC Company
- Name, drivers license and phone number of the driver involved in the loss
- Description of the vehicle which he/she was driving (i.e., year, make, model, license plate number, serial number)
- Date, time and location of incident
- Passenger information (if applicable)
- Third party information (i.e., name, phone number, address, vehicle information, insurance information)
- If any injuries occurred (if applicable)
- Police information
- Witness information (if applicable)

Call 911 if there are serious injuries!

If you are injured or think you were injured, **contact your supervisor and call WorkCare at 888-449-7787**. Your supervisor will notify your HSE Coordinator and your Group HSE Manager. For additional instructions on what to do, go to AMEC's HSE website at:

http://ee.amecnet.com/she/sheweb/incident_reporting.htm

1. Call for an officer if the incident occurred on public property (streets, highways or roads). Disputes often arise between the parties involved as to who was at fault; therefore, a police report is important. If an officer is unable to attend the scene of the collision, a counter police report may be filed at most stations. Insurance companies rely on police reports to determine liability.

2. Complete the Incident Investigation Report and the Vehicle Incident Report forms. It is important that both these forms are completed in detail. Include a diagram of the incident on the provided sheet. Incomplete information may lead to delays in processing associated claims and in helping to prevent this type of incident from occurring again.

3. Give only information that is required by the authorities or as directed by AMEC contractual requirements.

4. Sign only those statements required by the authorities or as directed by AMEC contractual requirements. Do not sign away your or the company's rights.

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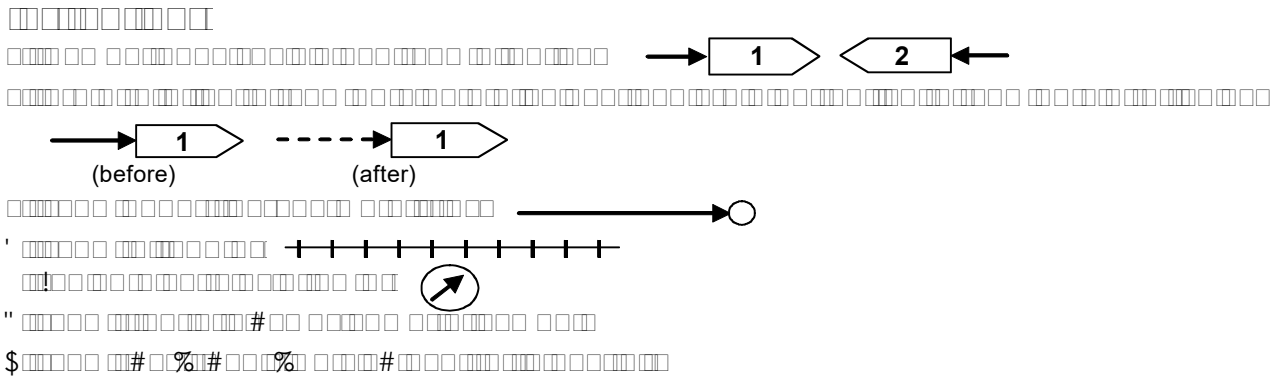
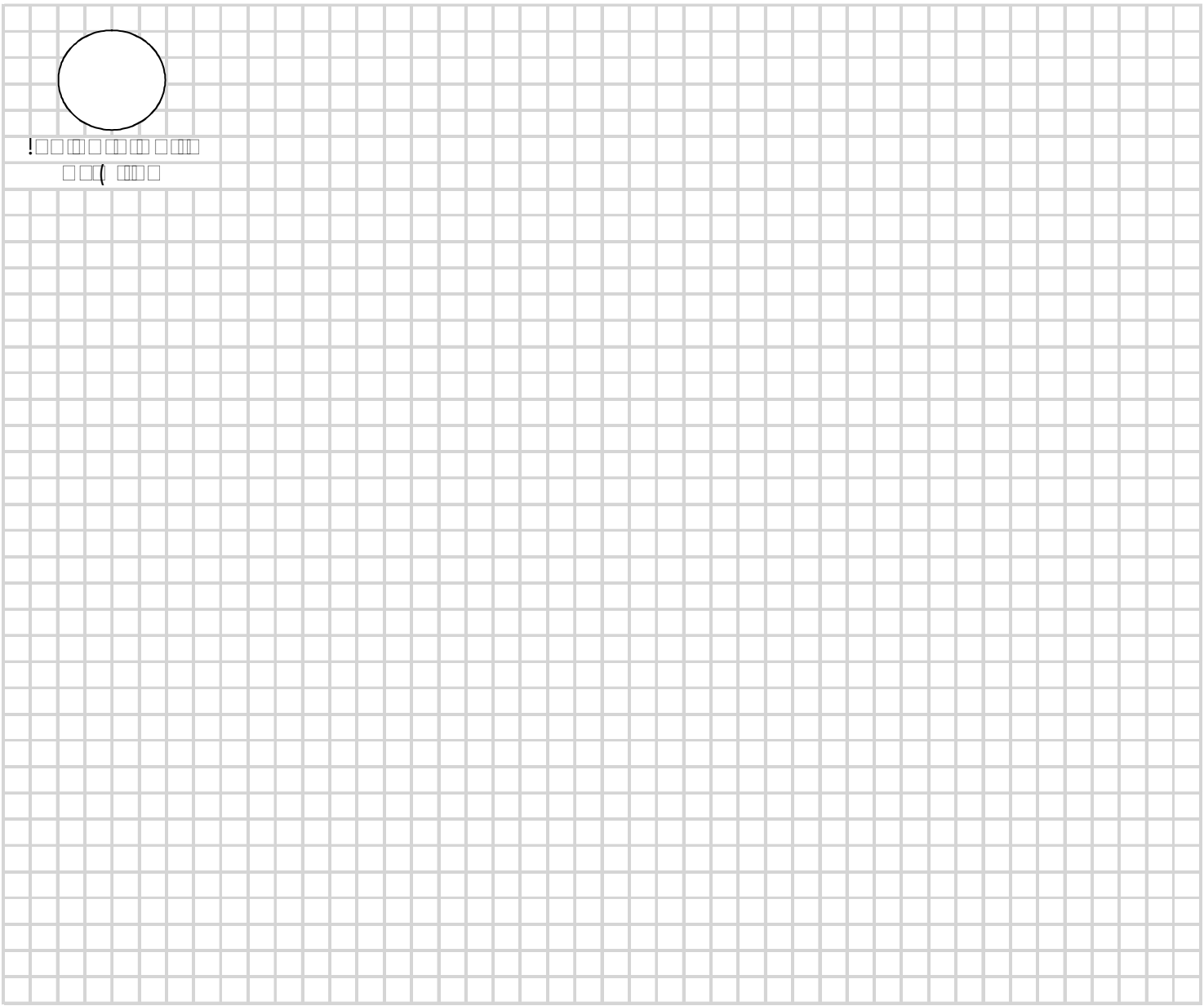
Vehicle Incident Diagram

This or a similar diagram <u>must be completed</u> with all VIRs





&

Date:

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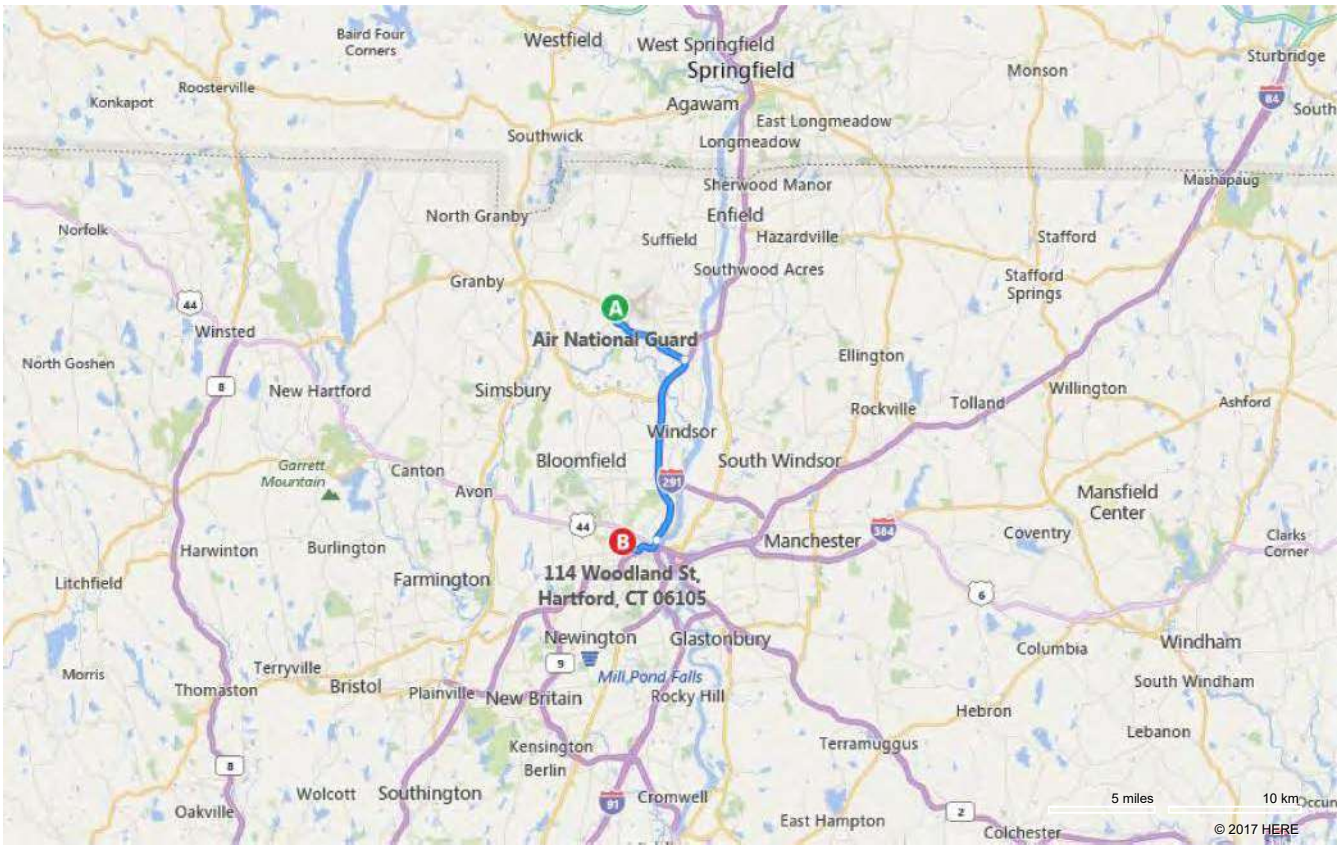
Attachment D

Route to Hospital Map

bing maps


Baird Four Corners
Westfield
West Springfield
Springfield
Monson
Sturbridge
Roosterville
Konkapot
Agawam
East Longmeadow
Southwick
Longmeadow
Sherwood Manor
Mashapaug
North Granby
Enfield
Norfolk
Suffield
Hazardville
Stafford
Southwood Acres
Granby
Stafford Springs
Winsted
Air National Guard
Ellington
North Goshen
New Hartford
Simsbury
Rockville
Tolland
Willington
Ashford
Windsor
Garrett Mountain
Canton
Bloomfield
South Windsor
Avon
Mansfield Center
Harwinton
Burlington
Manchester
Coventry
Clarks Corner
Litchfield
Farmington
114 Woodland St, Hartford, CT 06105
Newington
Glastonbury
Columbia
Windham
Morris
Terryville
Mill Pond Falls
Thomaston
Bristol
Plainville
New Britain
Rocky Hill
South Windham
Hebron
Lebanon
Kensington
Terramuggus
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Wolcott
Southington
Cromwell
Oakville
East Hampton
Colchester
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10 km
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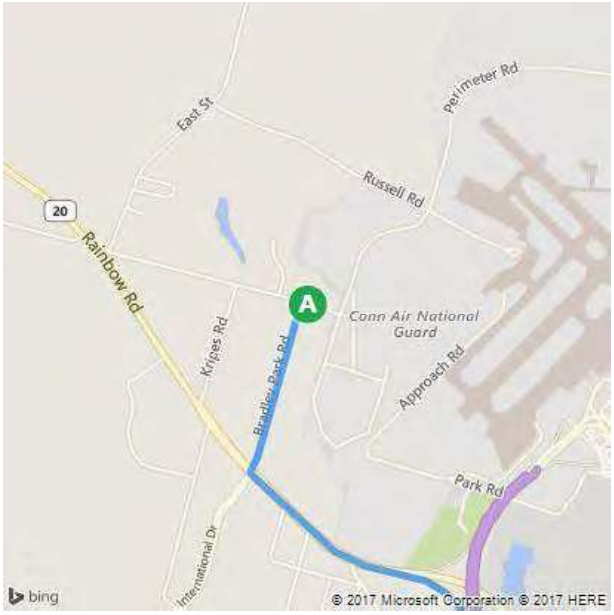
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Approach Rd
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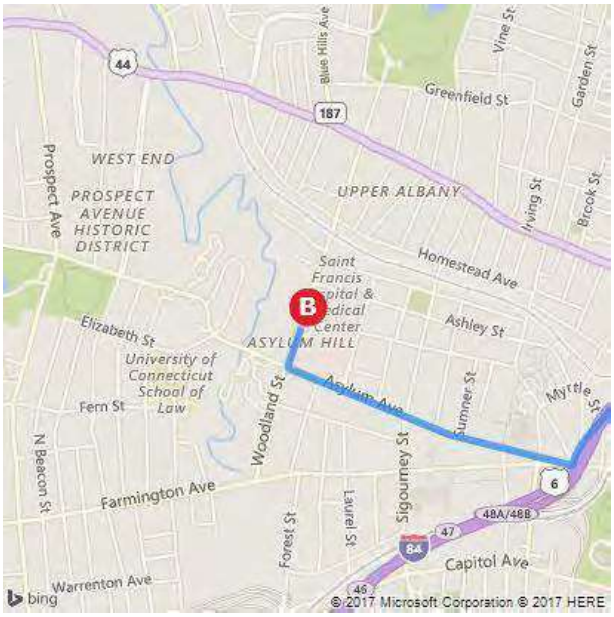
Blue Hills Ave
Vine St
Garden St
Greenfield St
WEST END
Prospect Ave
PROSPECT AVENUE HISTORIC DISTRICT
UPPER ALBANY
Irving St
Brook St
Homestead Ave
Saint Francis Hospital & Medical Center
Ashley St
Elizabeth St
ASYLUM HILL
University of Connecticut School of Law
Fern St
Woodland St
Asylum Ave
Sumner St
Myrtle St
N Beacon St
Farmington Ave
Forest St
Laurel St
Sigourney St
Capitol Ave
Warrenton Ave
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APPENDIX C

FIELD SAMPLING PLAN

FINAL
FIELD SAMPLING PLAN

FY16 PHASE 1 REGIONAL SITE INSPECTIONS FOR PERFLUORINATED COMPOUNDS

103rd AIRLIFT WING
CONNECTICUT AIR NATIONAL GUARD
BRADLEY AIR NATIONAL GUARD BASE
EAST GRANBY, CONNECTICUT

Contract #: W9133L-14-D-0002

Delivery Order 0006

Amec Foster Wheeler Project #: 2-9133-0006

July 20, 2017

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ACRONYMS

Amec Foster Wheeler	Amec Foster Wheeler Environment & Infrastructure, Inc.
AFFF	Aqueous Film Forming Foam
ANG	Air National Guard
BANGB	Bradley Air National Guard Base
bgs	below ground surface
°C	Degrees Celsius
COC	Chain of Custody
DO	Dissolved Oxygen
DPT	Direct-Push Technology
EB	Equipment Blank
ERPIMS	Environmental Resources Program Info Management System
FB	Field Blank
FD	Field Duplicate
FOL	Field Operations Lead
FSP	Field Sampling Plan
ft.	Feet/Foot
HASP	Health and Safety Plan
HDPE	High-Density Polyethylene
IDW	Investigation-Derived Waste
MMDDYY	Month-Month-Day-Day-Year-Year
MS	Matrix Spike
MSD	Matrix Spike Duplicate
NGB	National Guard Bureau
ORP	Oxidation-Reduction Potential
PFAS	Per- and Polyfluoroalkyl Substances
PFBS	Perfluorobutanesulfonic Acid
PFC	Perfluorinated Compounds
PHFPA	Perfluoroheptanoic Acid
PFHxS	Perfluorohexanesulfonic Acid
PFNA	Perfluorononanoic Acid
PFOS	Perfluorooctanesulfonic Acid
PFOA	Perfluorooctanoic Acid
PVC	Polyvinyl Chloride
PRL	Potential Release Location
QA	Quality Assurance
QAPP	Quality Assurance Project Plan
QC	Quality Control
SI	Site Inspection
SOP	Standard Operating Procedure
SVOC	Semi-Volatile Organic Compound
TW	Temporary Well
UCMR3	Unregulated Contaminant Monitoring Rule Three
USCS	Unified Soil Classification System
USEPA	United States Environmental Protection Agency
WP	Work Plan

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1.0 INTRODUCTION

Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler) has been contracted by the National Guard Bureau (NGB) under Contract # W9133L-14-D-0002, Delivery Order 0006, to conduct Phase 1 Regional Site Inspections (SIs) for Perfluorinated Compounds (PFCs) at multiple Air National Guard (ANG) Installations. This Field Sampling Plan (FSP) has been prepared to describe the procedures and activities to be conducted during performance of SI field sampling activities at Bradley Air National Guard Base (BANGB) located in East Granby, Connecticut (see Figure 1 of the SI Work Plan [WP] [Amec Foster Wheeler, 2017]).

1.1 Project Purpose and Scope

The purpose of the SI is to determine whether PFCs are present in soil and/or groundwater from potential historic releases of Aqueous Film Forming Foam (AFFF) at the BANGB. Based on locations where AFFF was potentially used or stored, five Potential Release Locations (PRLs) were identified at the Base in the Preliminary Assessment Site Visit Report (BB&E, 2016). The PRLs are illustrated on Figure 3 of the SI WP, and the SI summary is presented as **Table 1** of this FSP.

The objective of this FSP is to facilitate the collection of field samples and measurements sufficient to inspect soil and groundwater for the presence or absence of the six per- and polyfluoroalkyl substances (PFAS) included on the Third Unregulated Contaminant Monitoring Rule (UCMR 3) list. Included are perfluorooctanesulfonic acid (PFOS), perfluorooctanoic acid (PFOA), perfluorononanoic acid (PFNA), perfluorohexanesulfonic acid (PFHxS), perfluoroheptanoic acid (PFHpA), and perfluorobutanesulfonic acid (PFBS).

This FSP is intended to be used in conjunction with the SI Work Plan (Amec Foster Wheeler, 2017) and the Quality Assurance Project Plan (QAPP; Amec Foster Wheeler, 2016), prepared concurrently with this FSP. The specific activities planned at each of the five PRLs included in the SI are described below.

<u>PRL 1, Building 15 – Warehouse Supply</u>

- Advance three soil borings (01SB01, 01SB02, 01SB03) using direct-push technology (DPT) drilling techniques for collection of one shallow (0-2 feet [ft.] below ground surface [bgs]) and one deep (15 ft. bgs, or first encountered ground water) soil sample per boring (six soil samples total).

- Install one downgradient, temporary monitoring well (TW-101) utilizing DPT, and collect one shallow groundwater sample.

PRL 2: Building 11 – AFFF Storage

- Advance three soil borings (02SB01, 02SB02, 02SB03) using DPT drilling techniques for collection of one shallow (0-2 ft. bgs) and 1 deep (15 ft. bgs, or first encountered ground water) soil sample per boring (six soil samples total).
- Install one downgradient, temporary monitoring well (TW-102) utilizing DPT, and collect one shallow groundwater sample.

PRL 3: Building 19 – Fire Station

- Advance three soil borings (03SB01, 03SB02, 03SB03) using DPT drilling techniques for collection of one shallow (0-2 ft. bgs) and one deep (15 ft. bgs, or first encountered ground water) soil sample per boring (six soil samples total).
- Install one downgradient, temporary monitoring well (TW-103) utilizing DPT, and collect one shallow groundwater sample.

PRL 4: Stormwater Drainage Basin (IRP Site 2)

- Advance three soil borings (04SB01, 04SB02, 04SB03) using DPT drilling techniques for collection of one shallow (0-2 ft. bgs) and one deep (15 ft. bgs, or first encountered ground water) soil sample per boring (six soil samples total).
- Install one downgradient, temporary monitoring well (TW-104) utilizing DPT, and collect one shallow groundwater sample.

PRL 5: Fire Department Equipment Test Area

- Advance three soil borings (05SB01, 05SB02, 05SB03) using DPT drilling techniques for collection of one shallow (0-2 ft. bgs) and one deep (15 ft. bgs, or first encountered ground water) soil sample per boring (6 soil samples total).
- Install one downgradient, temporary monitoring well (TW-105) utilizing DPT, and collect one shallow groundwater sample.

Base Boundary Well

- Install one temporary monitoring well (TW-106) utilizing DPT downgradient of PRLs 1 through 3, and collect one shallow groundwater sample.

1.2 Document Organization

This FSP presents the sampling objectives and outlines for the following SI components:

- Soil sample collection and field screening;
- Groundwater sample collection and field screening;
- Waste characterization sampling;
- Laboratory analyses
- PFC-specific field procedures and considerations;
- Laboratory analytical program;
- Quality Assurance/Quality Control (QA/QC);
- Sample packaging and shipping
- Field equipment calibration; and
- Documentation.

Field work will be conducted in accordance with the Site Health and Safety Plan (HASP), provided in Appendix D of the SI WP (Amec Foster Wheeler, 2017, and with the Standard Operating Procedures (SOP) for PFCs provided in Attachment E of the QAPP (Amec Foster Wheeler, 2016), which is provided in Appendix C of the SI Work Plan.

Blank field reporting forms, such as soil boring logs and monitoring well construction diagrams, are provided in **Attachment A** of this FSP.

1.3 Project Setting

A detailed description of the site location and project setting for the PRLs located at BANGB, in East Granby, Connecticut is described in Sections 1 and 4 of the SI Work Plan and depicted on Figures 1 through 3F of the SI Work Plan (Amec Foster Wheeler, 2017).

2.0 SAMPLING AND ANALYSIS PLAN

2.1 Soil Sampling

Soil samples will be collected in accordance with Amec Foster Wheeler's Soil Sampling Standard Operating Procedure (AFW-02) developed specifically for collecting soil samples for analysis of PFCs, and included in Attachment E of the QAPP (Amec Foster Wheeler, 2016). Reusable equipment will be decontaminated prior to and between sample locations as described in **Section 2.5.5**.

Soil cores will be collected directly in single-use, polyvinyl chloride (PVC) or acetate liners. After retrieval from the core barrel, soil cores will be inspected and screened as described below in **Section 2.1.1**.

Shallow soil samples will be collected from the upper two feet of soil, directly beneath asphalt or pavement, if present. Deep soil samples will be collected from the 2-ft. interval above the water table. If refusal occurs prior to encountering groundwater, the deep sample will be collected from the bottom 2 ft. of the soil boring. If groundwater is not encountered in the upper 15 ft. of the boring, the deep sample will be collected from the bottom 2 ft. of the soil boring

Soil samples will be homogenized using clean stainless steel bowls and trowels, before being placed in laboratory-supplied containers. Samples will be immediately cooled with ice to less than 4 degrees Celsius (°C). New, disposable nitrile gloves will be donned prior to sample collection at each location and will be worn throughout the sample collection process.

2.1.1 Field Screening

The sample liner will be opened lengthwise and the soil will be inspected for evidence of organic contamination (e.g., odor, staining, sheen, and free product). Soil characteristics will be logged in accordance with the Unified Soil Classification System (USCS). A blank soil boring log is presented in **Attachment A**. Boring logs will be prepared for each soil boring and will contain the following information:

- Project name and number
- Date
- Boring number

- Driller
- Sampler's name and titler
- Sample number
- Sample depth interval (from, to ft. bgs)
- Sample description (USCS description [color, soil grain size, sorting, plasticity, strength, compaction, moisture], evidence of contamination, and general remarks)
- Depth to water ft. bgs

2.2 Groundwater Sampling

Groundwater samples will be collected in accordance with Amec Foster Wheeler's Groundwater Sampling SOP (AFW-03), developed specifically for collecting groundwater samples for analysis of PFCs, and included in Attachment E of the QAPP (Amec Foster Wheeler, 2016). Reusable equipment will be decontaminated prior to and between sample locations as described in **Section 2.5.5**. Groundwater samples will be collected once groundwater parameters have achieved stabilization as described below in **Section 2.2.1**.

Groundwater samples will be collected using either a peristaltic pump or submersible pump and tubing. The water level will be measured prior to placing the pump/tubing into the well, and measured again after placing the pump/tubing in the well. New or dedicated tubing will be used at each location. The pump/tubing will be lowered into the well to the depth of at least 2 ft. above the bottom of the well to prevent disturbance and re-suspension of sediment present in the bottom of the well. The well will be purged prior to sampling at a pump rate of 100 to 500 milliliters per minute with a steady flow rate maintained, such that drawdown of the water level within the well does not exceed a maximum allowable drawdown of 0.3 ft. Laboratory-supplied sample containers will be filled with minimal turbulence by allowing the groundwater to flow from the tubing gently down the inside of the container. Samples will be immediately cooled with ice to less than 4°C. New, disposable nitrile gloves will be donned prior to sample collection at each location and will be worn throughout the sample collection process. After sample collection is completed, the depth to water will be measured and recorded and the well will be closed and locked, except at temporary well locations, where the well casing will be removed and the well boring properly abandoned.

2.2.1 Field Screening

Field screening parameters (temperature, pH, dissolved oxygen [DO], specific conductance, oxidation-reduction potential [ORP], and turbidity) will be monitored and recorded approximately every five minutes during purging. The well is considered stabilized and ready for sample collection when the indicator parameters have stabilized for three consecutive readings as follows:

- +/-0.1 for pH
- +/-3% for specific conductance (conductivity)
- +/-10 mv for ORP
- +/-10% for dissolved oxygen and turbidity, and <50 Nephelometric Turbidity Units

If these parameters do not stabilize the well will be sampled after five well volumes have been purged. If the well goes dry, the well will be considered stabilized and ready for sample collection when there is enough water volume to collect the samples. A groundwater sampling log will be prepared for each well sampled and contain the following information:

- Project name and number
- Date
- Well number
- Type of well (temporary or permanent)
- Sampler's name and title
- Depth to water (ft below top of riser)
- Purge volumes (containerized for disposal)
- Field screening measurements
- Sample number
- Sample depth interval (from, to ft below top of riser)
- General remarks

2.3 Waste Characterization Sampling

After completion of sampling activities, waste characterization samples will be collected from 55-gallon drums containing Investigative-Derived Waste (IDW). Representative composite samples will be collected for both solid and liquid IDW. Samples will be placed in laboratory-supplied containers and immediately cooled with ice to less than 4°C. New, disposable nitrile

gloves will be donned prior to sample collection and will be worn throughout the sample collection process.

2.4 Laboratory Analyses

Soil, groundwater, and sediment samples will be analyzed for PFAS compounds on the UCMR 3 list by Modified United States Environmental Protection Agency (USEPA) Method 537.1, as described in **Table 1**.

Waste characterization samples will be analyzed for Toxicity Characteristic Leaching Procedure Resource Conservation and Recovery Act metals, Volatile Organic Compounds, Semi-volatile Organic Compounds, and total Polychlorinated Biphenyls, or as required by the disposal facility. Waste characterization samples will be collected in accordance with the methods outlined in the QAPP (Amec Foster Wheeler, 2016).

Containers will be labeled and the labels will provide the following information, if applicable:

- Site name
- Sample identification
- Date and time of sample collection
- Name of sampler
- Sample preservation
- Type of analysis

2.5 Field Procedures and Considerations

The following are procedures which will be followed as well as considerations which will be made during field activities that are conducted when assessing potential PFC releases. A summary of the prohibited and acceptable items for PFC investigation areas is included in Amec Foster Wheeler's PFC-Specific SOP Procedures (AFW-01) provided in Attachment E of the QAPP (Amec Foster Wheeler, 2016). The Field Operations Lead (FOL) shall review this table with field team members and subcontractors daily, prior to the commencement of field work to ensure compliance, and complete the Daily PFC Protocol Checklist included in the AFW-01 SOP.

2.5.1 Field Equipment & Supplies

The following list contains commonly used field items which are **prohibited** from within work zones.

- Teflon®-containing materials (e.g. Teflon® tubing, bailers, tape, plumbing paste, or other Teflon® materials).
- Waterproof field books other than Rite in the Rain® brand.
- Plastic clipboards, binders, or spiral hard cover notebooks.
- Post-It® notes.
- Markers other than Sharpie® brand.
- Chemical (blue) ice packs. This includes use for the storage of food and/or samples.
- Water resistant, waterproof, or stain resistant clothing. Field clothing made of synthetic and natural fibers (preferably cotton) are acceptable. Field clothing will be laundered without the use of fabric softener. New clothing will not be worn until it has been washed at least 6 times prior to use.
- Gore-Tex™ materials, including in clothing and boots.
- Laboratory-provided sample containers containing Teflon® materials.

The following list contains commonly used field items which are **permitted** for field sampling activities.

- High-density polyethylene (HDPE), low-density polyethylene, and silicon materials, provided they are not stored in containers with PFC-containing materials.
- Acetate or PVC sample liners for direct-push technology or during conventional drilling.
- Peristaltic pumps are preferred for groundwater sample collection at depths shallower than 25 feet. Amec Foster Wheeler will use ProActive SS Pumps with PVC leads or Geotech SS Geosub pumps for groundwater sample depths greater than 25 feet. Grundfos RediFlo pumps (or similar) may only be used due to pumping limitations (i.e. >150 feet deep) of ProActive or Geotech pumps.
- Rite in the Rain® products are the only brand of waterproof field books that shall be used to avoid plastic coatings or glue materials. If Rite in the Rain® products are not available, field reports will be documented on loose paper secured on Masonite or aluminum clipboards.

- Pens, pencils, and sharpies. Pens are preferred and will be used when documenting field activities in the field log and on field forms as well as sample containers and chain of custody.
- Safety footwear will consist of steel-toe boots made with polyurethane and PVC, untreated leather boots, or well-worn leather boots. Newer leather boots may be worn in they are covered with polypropylene, polyethane, or PVC boot covers.
- Disposable nitrile gloves, which must be worn during sampling and handling of related equipment (e.g., equipment transportation, decontamination, operation).

2.5.2 Personal Protective Equipment

Personal protective equipment, including safety-toe boots, reflective vest, safety glasses, hard hat, hearing protection, and disposable nitrile gloves must be worn as specified in the HASP, included as Appendix D of the SI Work Plan. Safety-toe boots must meet the requirements specified in **Section 2.5.1**. Further, a new pair of nitrile gloves shall be donned prior to the following activities at each sample location:

- Decontamination of re-usable sampling equipment;
- Prior to contact with sample bottles or water containers;
- Insertion of anything into the well;
- Insertion of silicon tubing into the peristaltic pump;
- Completion of monitoring well purging, prior to sample collection;
- Handling of any QA/QC samples including field blanks and equipment blanks.

2.5.3 Sample Containers

Different laboratories may supply sample collection containers of varying sizes dependent on the type of media to be sampled (e.g., soil, groundwater, etc.). All PFAS samples shall be collected in polypropylene or HDPE bottles. The screw cap will be made of polypropylene or HDPE and may be lined or unlined. However, if lined, the liner shall not be made of Teflon® or contain PFCs. Glass containers will not be used when collecting PFAS samples due to potential loss of analyte through adsorption. Glass containers may be used for waster characterization samples as appropriate. Container labels will be completed using pens after the caps have been placed back on each bottle.

2.5.4 Wet Weather

Field sampling occurring during wet weather (e.g., rainfall and snowfall) will be conducted while wearing the appropriate clothing that will not pose a risk of cross-contamination. Teams will avoid synthetic gear that has been treated with water repellant finishes containing PFCs. Teams shall use rain gear made from polyurethane, vinyl, and wax or rubber-coated materials. Teams shall consider the use of a gazebo tent, which can be erected overtop of the sample location and provide shelter from inclement weather. It should be noted that the canopy material is likely a treated surface and will be handled as such; therefore, gloves shall be worn when setting up and moving the tent, changed immediately afterwards and further contact with the tent will be avoided until all sampling activities have been finished and the team is ready to move on the next sample location. Further, care shall be taken when transferring samples from outside the tent to inside to prevent cross contamination, which would require passing beneath the drip edge.

2.5.5 Decontamination Procedures

Field sampling equipment (e.g. water level indicators, pumps, bowls, trowels, dip samplers, hand augers, and other downhole equipment) will require cleaning prior to initial use, and between samples. Alconox® and Liquinox® soap is acceptable for use since their safety data sheets do not list fluoro-surfactants as an ingredient. However, Decon 90 will not be used during decontamination activities. Water used for the final rinse during decontamination of sampling equipment will be laboratory certified PFC-free water. For larger equipment (e.g. drill rig and downhole drilling and sampling equipment), decontamination will be conducted with potable water using a high-pressure washer and then rinsed using potable water.

2.5.6 Personal Hygiene

Field personnel will not use cosmetics, moisturizers, hand cream, or other related products as part of their personal cleaning/showering routine on the morning of a sampling event, unless the products are applied to a part of the body that will be covered by clothing. These products may contain surfactants and represent a potential source of PFCs.

Manufactured sunblock and insect repellants containing PFCs will not be brought or used on-site. Sunblock and insect repellants used on-site shall consist of 100% natural ingredients, unless previously vetted by the project chemist.

For washroom breaks, field personnel will leave the exclusion zone and then remove gloves and overalls. Field personnel should wash as normal with extra time for rinsing with water after soap use. When finished washing, the use of a mechanical dryer is preferred and the use of paper towels for drying is to be avoided if possible.

2.5.7 Food Considerations

No food or drink shall be brought on-site, with the exception of bottled water and hydration drinks (e.g. Gatorade® and Powerade®), which will only be allowed to be brought and consumed within the staging area.

2.5.8 Visitors

Visitors to the investigation will be asked to remain outside of the exclusion zone during sampling activities.

2.6 Laboratory Analytical Program

The analytical program will consist of off-site laboratory analysis and QC samples to evaluate data quality.

Level II validation will be performed on 90% of the analytical results, and Level IV validation performed on 10% of the results. Contents of the Level IV data package will include:

- Analytical results
- Surrogate recoveries
- Chain-of-custody
- Method blanks
- Laboratory Control Sample summaries
- Matrix Spike (MS) Matrix Spike Duplicate (MSD) summaries
- Duplicate information
- Gas Chromatography/Mass Spectrometry tune information
- Initial calibrations
- Continuing Calibration Verification summaries

The laboratory will also provide an Environmental Resources Program Information Management System (ERPIMS) compliant electronic data deliverable. Laboratory analysis will be conducted

by a Department of Defense Environmental Laboratory Accreditation Program-certified laboratory on soil and groundwater for the six PFAS congeners included in the UCMR 3 list, including PFOS, PFOA, PFNA, PFHxS, PFHpA, and PFBS. This FSP is intended to be used in conjunction with the SI WP (Amec Foster Wheeler, 2017) and the QAPP (Amec Foster Wheeler, 2016), prepared concurrently with this FSP. The data generated from this analytical program will be validated using USEPA approved protocols for data validation. The analytical program is described in greater detail in the QAPP presented in Appendix C of the SI WP (Amec Foster Wheeler, 2017).

2.7 Quality Assurance/Quality Control

Sampling activities will follow the investigation procedures and QA/QC protocols stated in the QAPP presented in Appendix A of the SI WP. Investigation activities including documentation, sampling, decontamination, field screening, and analysis will be in accordance with this SI WP and ANG protocols.

Field Blank: For each sampling event one field blank of source water used for decontamination and final rinse will be collected and analyzed for PFAS. This field blank must to be collected, analyzed, and determined to be PFAS-free prior to use in the field. The field blank will consist of the potable, distilled, or deionized water used for decontamination. The purpose of the field blank is to demonstrate that the water used for decontaminating the sample tools and equipment does not contain potential contaminants, which may affect the analytical values of the samples.

Additional media specific QA/QC measures to be accomplished are discussed below.

2.7.1 Soil QA/QC Samples

The following QA/QC samples will be collected as part of the soil investigation and sampling procedures for the PRLs.

MS/MSD: One MS sample and one MSD sample will be collected for every 20 investigative soil samples collected or one per sample event if less than 20 samples are collected. MS/MSD analysis is conducted to understand the influence the matrix has on analyte recovery during analysis.

Equipment Blank: One equipment blank per field mobilization will be prepared for each soil sampling setup (e.g. bowl and spoon) that is re-used. The equipment blank will be prepared from the laboratory provided PFAS-free water.

Field Duplicate Sample: One field duplicate sample will be collected for every 10 investigative soil samples during the soil sampling (or one per event if less than 10 samples are collected). The field duplicates will be prepared by thoroughly mixing the soil from a sample location and then splitting the soil into two samples for individual laboratory analysis.

2.7.2 Groundwater QA/QC Samples

The following QA/QC samples will be collected as part of the groundwater investigation and sampling procedures at the PRL areas, and the base boundary wells.

MS/MSD: One MS sample and one MSD sample will be collected for every 20 investigative groundwater samples collected or one per sample event if less than 20 samples are collected. MS/MSD analysis is conducted to understand the influence the matrix has on analyte recovery during analysis.

Equipment Blank: One equipment blank per field mobilization will be prepared for each groundwater sampling setup (e.g. submersible pump and tubing) that is re-used. The equipment blank will be prepared from the laboratory provided PFAS-free water.

Field Duplicate Sample: One field duplicate sample will be collected for every 10 investigative groundwater samples during the sampling event (or one per event if less than 10 samples are collected). The field duplicates will be taken directly after the primary sample container has been filled before the pump has been removed from the well.

2.8 Sample Packing and Shipping

Immediately following sample collection, sample containers shall be placed in an insulated cooler. Plastic bags containing ice will be placed in coolers so that samples will be maintained at or below 4°C. Samples will be shipped as soon as possible to allow the laboratory to meet holding times for analyses. Prior to shipment, ice will be replaced to keep samples at or near 4°C during transport.

Glass containers will be wrapped with bubble wrap or other appropriate padding to prevent breakage during transport. The chain-of-custody (COC) will be placed in a sealable plastic bag and taped to the inside cover of the cooler. The cooler drain plug will be taped over to prevent opening, if applicable. Signed and dated custody seals will be placed in two locations such that

they will be broken if the cooler is opened. Packing tape will be used to encircle the sample cooler in two locations.

2.9 Field Equipment Calibration

Calibration of field instruments will be performed at the intervals specified by the manufacturer, or more frequently as conditions require. A water quality meter will be used for the collection of groundwater samples and will include a pH/ORP meter, thermometer, specific conductivity meter, turbidity meter, and dissolved oxygen meter. Calibration procedures and frequency will be recorded in a field logbook.

2.9.1 Water Quality Meter Calibration

The pH/ORP meter will be calibrated with standard buffer solutions prior to initiation of field activities. In the field, the meter will be calibrated daily with standard buffers before use. Thereafter, the meter will be checked against two buffers as deemed necessary by the FOL.

The thermometer will be calibrated by the manufacturer. No field calibration procedure is necessary.

The conductivity cells of the specific conductivity meter will be cleaned and checked against known conductivity standards prior to field activities. In the field, the instrument will be checked daily with calibration standards.

The turbidity meter will be calibrated using one or two standards provided by the manufacturer at the beginning of each sampling event and daily in the field prior to use.

The DO meter will be calibrated at the beginning of each sampling event and daily in the field prior to use.

2.9.2 Photo-Ionization Detector/Flame-Ionization Detector

If used, the photo-ionization detector/flame-ionization detector will be calibrated per the manufacturer's specifications prior to initiation of field activities. In the field, the meter will be calibrated daily before use.

2.10 Documentation

To demonstrate that field and laboratory data has been collected and managed appropriately, documentation procedures will be employed as described in the following sections.

2.10.1 Daily QC Reports

Fieldwork and daily on-site inspections of field equipment will be recorded on the Daily QC Report maintained by the FOL. Daily inspections of on-site field equipment will include drill rigs, monitoring equipment, and sampling devices. Field work descriptions will include the number and names of personnel working on-site, weather conditions, work activities, field measurements, and changes to scope. Daily QC Reports will also include equipment calibration logs as well as health and safety monitoring information.

2.10.2 Field Logbooks

Dedicated field logbooks will be maintained by the FOL throughout the duration of the SI. Pertinent information regarding on-site activities will be recorded in the field logbooks. Pertinent information includes, at a minimum, dates, names and details of on-site personnel, detailed descriptions of field activities, sampling activities, field measurements, sample locations, equipment calibrations, and problems encountered. Information recorded in the field logbooks will be entered with an indelible black or blue ink pen. Logbooks shall be permanently bound with sequentially-numbered pages. Each page will be signed and dated by the personnel documenting the on-site activities. Corrections shall be made by crossing out the error with a single line, and initialing and dating the correction.

2.10.3 Sample Identification

Amec Foster Wheeler personnel will perform sample labeling and identification in a consistent manner so that field samples are properly labeled and traceable. A unique alpha-numeric sample identification system will be used for sample collected using the following procedure for each matrix.

Soil Samples

The following nomenclature shall be used for soil samples (collected from soil borings) and sediment samples (collected from drainage structures, oil/water separators, retention basins, surface water bodies, etc.). Soil Sample Example: BRADL-01-SB01-042817-06-08-FD.

- **BRADL**-01-SB01-042817-06-08-FD: 5 digit ERPIMS installation code;
- BRADL-**01**-SB01-042817-06-08-FD: 2 digit PRL location;
- BRADL-01-**SB01**-042817-06-08-FD: Sample type and location within PRL (SB = Soil sample);
- BRADL-01-SB01-**042817**-06-08-FD: Date in Month-Month-Day-Day-Year-Year (MMDDYY) format;
- BRADL-01-SB01-042817-**06**-08-FD: Top of sample interval measured from the land surface or top of sediment;
- BRADL-01-SB01-042817-06-**08**-FD: Bottom of sample interval measured from the land surface or top of sediment;
- BRADL-01-SB01-042817-06-08-**FD**: Field duplicate. Leave blank for primary samples and MS/MSD samples.

Groundwater Samples

The following nomenclature shall be used for groundwater samples collected from existing permanent monitoring wells and temporary monitoring wells. Example: BRADL-GW-TW101-042817-FD.

- **BRADL**-GW-TW101-042817-FD: 5 digit ERPIMS installation code;
- BRADL-**GW**-TW101-042817-FD: Groundwater sample. PRL location not used for groundwater samples because some locations are linked to multiple PRLs, and others are base-boundary wells;
- BRADL-GW-**TW101**-042817-FD: Sample type and location (TW = Temporary monitoring well);
- BRADL-GW-TW101-**042817**-FD: Date in MMDDYY format;
- BRADL-GW-TW101-042817-**FD**: Field duplicate. Leave blank for primary samples and MS/MSD samples.

Field QC Samples

The following nomenclature shall be used for field QC samples, including field blanks and equipment blanks. Example: BRADL-FB-ATJ-042817.

- **BRADL**-FB-ATJ-042817: 5 digit ERPIMS installation code;
- BRADL-**FB**-ATJ-042817: Sample type. FB = Field Blank. EB = Equipment blank;
- BRADL-FB-**ATJ**-042817: Sampler initials;
- BRADL-FB-ATJ-**042817**: Date in MMDDYY format.

2.10.4 Chain of Custody

COC procedures will be used to establish, document, and maintain custody of field samples. A complete COC record will accompany samples while in the field, during shipment to the laboratory, and during analysis. When transferring samples, the individuals relinquishing and receiving will sign, date, and note the time on the COC record. Two copies (including the original) of the COC record will accompany the samples to the laboratory. One copy of the COC record will remain with the field team. The following information will be provided on the COC form:

- Site name
- Sample identification
- Date and time of sample collection
- Name and signature of sampler
- Sample preservation
- Matrix
- Type of analysis
- Signature(s) of individual involved in sample transfers
- Delivery of samples to the laboratory and storage at 4°C or below

2.10.5 Photo Log

Photographs will be taken to document field activities and site conditions. A description of each photograph will be recorded in the field logbook.

2.10.6 Project File

Incoming materials related to the project including sketches, correspondence, authorization, and logs will be forwarded to the Project Manager. These original documents will be placed in the project file as soon as is practical. If correspondence is required for reference by field staff, a copy will be provided. Records will be legible and easily identifiable. Examples of the types of records that will be maintained in the project file are:

- Field documents;
- Correspondences;
- Photographs;
- Laboratory data;
- Reports; and,
- Procurement agreements.

Outgoing project correspondences and reports will be reviewed and signed by the Project Manager prior to transmittal. The office copy of outgoing documents will bear distribution information.

3.0 REFERENCES

Amec Foster Wheeler, 2017. *Final Work Plan FY 16 Phase 1 Regional Site Inspections for Perfluorinated Compounds, 103rd Airlift Wing, Connecticut Air National Guard, Bradley Air National Guard Base.* July 20, 2017.

Amec Foster Wheeler, 2016. *FY 16 Phase 1 Regional Site Inspections for Perfluorinated Compounds Quality Assurance Project Plan*, *Multiple Air National Guard Installations.* December, 2016.

BB&E, 2016. *Final Perfluorinated Compounds Preliminary Assessment Site Visit Report, Connecticut Air National Guard, Bradley Air National Guard Base, East Granby, Connecticut. January* 2016.

TABLES

Table 1
Site Inspection Summary
103rd Airlift Wing, Connecticut Air National Guard
Bradley Air National Guard Base, East Granby, Connecticut

PRL Name	Location Type	Confirmed (C) or Suspected (S) Release	SBs	Wells		No. Samples				Comments
				EW	TW	S	GW	SW	SD	
1. Building 15, Warehouse Supply	Warehouse	Sus	3	0	1	6	1	0	0	Building has a deactivated AFFF-based fire suppression system
2. Building 11, AFFF Storage	Warehouse and staging area	Sus	3	0	1	6	1	0	0	Fire Department AFFF Storage
3. Building 19 – Fire Station	Fire Station	Sus	3	0	1	6	1	0	0	Fire Station
4. Stormwater Drainage Basin (IRP Site 2)	Stormwater Drainage Basin	Sus	3	0	1	6	1	0	0	Historic Periodic Testing of Fire Equipment
5. Fire Department Equipment Test Area	Fire Department Equipment Test Area	Sus	3	0	1	6	1	0	0	Fire Department Equipment Test Area
Base Boundary Well	Base Boundary	Not Applicable			1		1			Base boundary temporary well location downgradient of PRLs 1 through 3
TOTAL			15	0	6	30	6	0	0	

AFFF- Aqueous Film Forming foam
SBs – Soil Borings
TW – Temporary Well
GW – Groundwater
SD - Sediment

EW – Existing Well
S – Soil
SW – Surface Wate
Sus- Suspected

Table 2
Sample Summary
103rd Airlift Wing, Connecticut Air National Guard
Bradley Air National Guard Base, East Granby, Connecticut

PRL Name	Sample Location Type	Location ID	Number of Samples	Sample Collection Depth (ft. bgs)	Analysis
1. Building 15, Warehouse Supply	Soil Boring	01SB01	2	0-2 ft., 13-15 ft.[1]	PFCs (UCMR 3 List) [2]
		01SB02	2		
		01SB03	2		
	Temporary Well	TW-101	1	Middle of saturated well screen	
2. Building 11, AFFF Storage	Soil Boring	02SB01	2	0-2 ft., 13-15 ft.[1]	PFCs (UCMR 3 List) [2]
		02SB02	2		
		02SB03	2		
	Temporary Well	TW-102	1	Middle of saturated well screen	
3. Building 19 – Fire Station	Soil Boring	03SB01	2	0-2 ft. and 13-15 ft.[1]	PFCs (UCMR 3 List) [2]
		03SB02	2		
		03SB03	2		
	Temporary Well	TW-103	1	Middle of saturated well screen	
4. Stormwater Drainage Basin (IRP Site 2)	Sediment	04SB01	1	Sediment : 0-2 ft.;	PFCs (UCMR 3 List) [2]
		04SB02	1		
		04SB03	1		
	Soil Boring	04SB01	1	Soil : 13-15 ft.[1]	
		04SB02	1		
		04SB03	1		
	Temporary Well	TW-104	1	Middle of saturated well screen	
5. Fire Department Equipment Test Area	Soil Boring	05SB01	2	0-2 ft. and 13-15 ft.[1]	PFCs (UCMR 3 List) [2]
		05SB02	2		
		05SB03	2		
	Temporary Well	TW-105	1	Middle of saturated well screen	
Base Boundary Well	Temporary Well	TW-106	1	Middle of saturated well screen	PFCs (UCMR 3 List) [2]

Notes:

1 - If the water table is encountered shallower than 15 ft. bgs, then the deep soil sample (i.e. 13-15') will be collected from the two-foot interval directly above the water table.

2 - Analysis includes the six per- and polyfluoroalkyl Substances (PFAS) congeners included on the Third Unregulated Contaminant Monitoring Rule (UCMR 3) list; including perfluorooctanesulfonic acid (PFOS), perfluorooctanoic acid (PFOA), perfluorononanoic acid (PFNA), perfluorohexanesulfonic acid (PFHxS), perfluoroheptanoic acid (PFHpA), and perfluorobutanesulfonic acid (PFBS).

ATTACHMENTS

ATTACHMENT A

FIELD FORMS

FIELD ACTIVITY DAILY LOG

Project Name:	Phase 1 Regional Site Inspections for Per-Fluorinated Compounds at Multiple Air National Guard Installations	**Project Number:**	291330006
Contract:	W9133L-14-D-0002	**Task Order:**	0006
Installation:		**Investigation Area:**	
Technician Name:		**Date and Time:**	
Personnel Onsite:			
Weather Conditions:			

Description of Daily Activities and Events:

List Samples Collected:

Deviation from Plans:

Visitors on Site:	**Important Telephone Calls / Photos Taken:**	**Technician Signature:**
		Technician Name (print)**:**

QA/QC'd by: **QA/QC Date:**

ATTACHMENT 1 TO SOP AFW-01
DAILY PFC PROTOCOL CHECKLIST

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Project Name:	Phase 1 Regional Site Inspections for Per-Fluorinated Compounds at Multiple Air National Guard Installations	**Project Number:**	291330006
Contract:	W9133L-14-D-0002	**Task Order:**	0006
Installation:		**Weather (temp./precipitation):**	
Site Name:			
Field Manager:		**Date and Time:**	

Field Clothing and PPE (as applicable):

- ☐ Field crew in compliance with Tables 1 and 2, SOP AFW-01
- ☐ Field crew has not used fabric softener on clothing
- ☐ Field crew has not used cosmetics, moisturizers, hand cream, or other related products or exposed body parts this morning
- ☐ Field crew has not applied unacceptable sunscreen or insect repellant

Field Equipment:

- ☐ No Teflon® containing materials on-site
- ☐ All sample materials made from stainless steel, HDPE, acetate, silicon, or polypropylene
- ☐ No waterproof field books on-site other than Rite-in-the-Rain® Products
- ☐ No plastic clipboards, binders, or spiral hard cover notebooks on-site
- ☐ No adhesives (Post-it® Notes) on-site
- ☐ Coolers filled with regular ice only. No chemical (blue) ice packs in possession

Sample Containers:

- ☐ All sample containers made of HDPE or polypropylene. Samples are not stored in containers made of LDPE
- ☐ Caps are lined or unlined and made of HDPE or polypropylene

Wet Weather (as applicable):

- ☐ For personnel in direct contact with samples and/or sampling equipment, wet weather gear made of Vinyl, polyurethane, PVC, latex or rubber-coated materials only

Equipment Decontamination:

- ☐ "PFC-free" water on-site for decontamination of sample equipment
- ☐ Alconox and Liquinox to be used as decontamination materials

Food Considerations:

- ☐ No food or drink on-site with exception of bottled water and/or hydration drinks (i.e., Gatorade and Powerade) that is available for consumption only in the staging area

If any applicable boxes cannot be checked, the Field Manager shall describe the noncompliance issues below and work with field personnel to address noncompliance issues prior to commencement of that day's work. Corrective action shall include removal of noncompliance items from the investigation area or removal of worker offsite until in compliance. Repeated failure to comply with PFC sample protocols will result in the permanent removal of worker(s) from the investigation area.

Describe the noncompliance issues (include personnel not in compliance) and action/outcome of noncompliance:

Field Manager Signature:

Field Manager Name (print):

QA/QC'd by: **QA/QC Date:**

GRAB SAMPLE COLLECTION LOG

Project Name:	Phase 1 Regional Site Inspections for Per-Fluorinated Compounds at Multiple Air National Guard Installations	**Project Number:**	291330006
Contract:	W9133L-14-D-0002	**Task Order:**	0006
Installation:		**Date:**	
Technician(s):		**Location ID(s):**	
Field Parameters Collected?		**If No, Provide Explanation:**	

Time	Rate	Temp. (°C) ±0.5°C	pH (SU) ±0.1	Specific Electrical Conductance (mS/cm) ±3%	DO (mg/L) ±10%	ORP (mV) ±10%	Turbidity (NTU) ±10% and <10 NTU	Cum. Vol (gal)	Comments/Observations During Purging (color, sediment, odor, etc.)
Stability Reached (Y/N):				If No, Provide Explanation					
Final Values:									

Sample Information

Sample Type	Sample ID	Sample Date	Sample Time	Comments

Analysis/Method(s): **Sample Container Type(s):**

Preservative(s):

Instruments (Manufacturer, Model, and Serial No.):

Notes:

Technician Signature:

Technician Name (print)**:**

QA/QC'd by: **QA/QC Date:**

GROUNDWATER SAMPLING RECORD

Project Name:	Phase 1 Regional Site Inspections for Per-Fluorinated Compounds at Multiple Air National Guard Installations	**Project Number:**	291330006
Contract:	W9133L-14-D-0002	**Task Order:**	0006
Installation:		**Sample Technician:**	
Well ID:		**Date:**	
Initial Depth to Water (ft):		**Well Diameter (in):**	
Total Depth of Well (ft):		**1 Casing Volume (gal):**	
Method of Purging:		**3 Casing Volumes (gal):**	
Measuring Point (toc, tor, etc.):		**Pump Intake Depth (feet):**	

Time	Water Level (feet)	Flow Rate	Cum. Volume (gal.)	Temp. (°C)	pH (SU)	Specific Electrical Conductance (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Comments/Observations During Purging (color, sediment, odor, etc.)
		Stabilization Criteria		±0.5°C	±0.1	±3%	±10%	±10%	±10% and <10 NTU	
Final Values:										

Stability Reached (Y/N): If No, Provide Explanation

Sample ID:		**Method of Sampling:**	
QA/QC Samples (Yes/No):		**Sample Date:**	
Duplicate ID:		**Sample Collection Time:**	
Sample Container Type(s):		**Total Volume Purged (gal):**	
Preservative(s):		**Sample Depth (ft):**	
Analysis/Method(s):		**Depth to Water After Sampling (ft):**	

Instruments (Manufacturer, Model, and Serial No.):

Calculations:

Saturated well casing volume: V= • (R^2)H*7.48 gal/ft^3

V=Volume (gal/ft)
Π = 3.14
R = well radius (ft) = (well diameter (in)/12 (in/ft))/2)
H = height of water column (ft)

Technician Signature:

Notes:

Technician Name (print):

QA/QC'd by: **QA/QC Date:**

OPEN HOLE BEDROCK WELL CONSTRUCTION FORM

Project Name: Phase 1 Regional Site Inspections for Per-Fluorinated Compounds at Multiple Air National Guard Installations

Project Number: 291330006

Contract Number: W9133L-14-D-0002

Task Order: 0006

Installation:

Location ID:

Drilling Subcontractor:

Well ID:

Drilling Personnel:

Date:

Technician Name:

Drilling Method:

Other Amec Foster Wheeler Representatives:

Type of Well:

Measuring Point:

TOC/TOR Difference (in):

Approximate Diameter of Borehole (in):

Depth to Water (ft):

During Drilling:

Date:

Post Development:

Date:

Water added during drilling (gal):

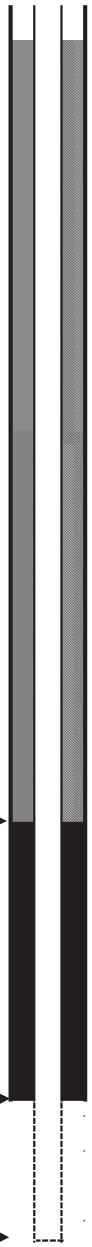
Water removed during development (gal):

Borehole Yield (gpm):

Bottom of Overburden / Top of Bedrock (ft):

Casing Depth (ft):

Bottom Depth (ft):



Surface Pad:

Type:

Length (ft):

Width (ft):

Thickness (in):

Well Casing:

Manufacturer:

Type/Material:

Diameter (in):

Annular Seal (above BRx):

Manufacturer:

Type:

Installation Method:

Annular Seal (below BRx):

Manufacturer:

Type:

Installation Method:

Notes:

Technician Signature:

Technician Name (print)**:**

Depths and heights are referenced to ground surface unless specified TOC.
All elevations are referenced to MSL (NAVD 88).

QA/QC'd by:

QA/QC Date:

PUMPING TEST LOG

Project Name:	Phase 1 Regional Site Inspections for Per-Fluorinated Compounds at Multiple Air National Guard Installations	**Project Number:**	291330006
Contract:	W9133L-14-D-0002	**Task Order:**	0006
Installation:		**Start Date:**	
Sample Technician:		**End Date:**	
Other Representatives:		**Test Type:**	
Well ID:		**Transducer Serial No:**	
Screened Interval (ft):		**Initial DTW (ft):**	
Surveyed TOC (ft. AMSL):		**Total Well Depth (ft):**	

Date/Time	DTW (ft. bTOC)	Water Elevation (ft. AMSL)	Comments	Date/Time	DTW (ft. bTOC)	Water Elevation (ft. AMSL)	Comments

Instruments (Manufacturer, Model, and Serial No.):	**Notes:**	**Technician Signature:**
		Technician Name (print)**:**
QA/QC'd by:		**QA/QC Date:**

SCREENED WELL CONSTRUCTION FORM

Project Name: Phase 1 Regional Site Inspections for Per-Fluorinated Compounds at Multiple Air National Guard Installations

Project Number: 291330006

Contract Number: W9133L-14-D-0002

Task Order: 0006

Installation:

Location ID:

Drilling Subcontractor:

Well ID:

Drilling Personnel:

Date:

Technician Name:

Drilling Method:

Other Amec Foster Wheeler Representatives:

Type of Well:

Measuring Point:

TOC/TOR Difference (in)

Approximate Diameter of Borehole (in):

Depth to Water (ft):

During Drilling:

Date:

Post Development:

Date:

Hydrologic Unit: (circle one):

Unknown	Unsaturated Zone
Aquifer	Water Table Aquifer
Bedrock Aquifer	Confining Layer/Aquiclude
Perched Aquifer	Lower/Confined Aquifer

Water added during drilling (gal):

Water removed during development (gal):

Top of Bentonite Seal (ft):

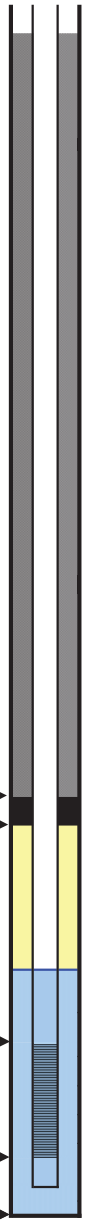
Top of Filter Pack (ft):

Top of Screen Interval (ft):

Bottom of Screened Interval (ft):

Bottom of Filter Pack (ft):

Bottom of Borehole (ft):



Protective Casing:

- **Type:**
- **Dimensions (in):**
- **Stickup (ft):**
- **Length (ft):**
- **Guard Post:**

Surface Pad:

- **Type:**
- **Length (ft):**
- **Width (ft):**
- **Thickness (in):**

Annular Seal (grout above well seal):

- **Material:**
- **Installation Method:**

Bentonite Seal:

- **Manufacturer:**
- **Material:**
- **Type:**
- **Installation Method:**
- **Hydration time (hrs):**

Filter Pack Material:

- **Manufacturer:**
- **Material:**
- **Size:**
- **Installation Method:**
- **Surging time:**

Well Casing (Riser):

- **Manufacturer:**
- **Type/Material:**
- **Length:**
- **Diameter (in):**

Well Screen:

- **Manufacturer:**
- **Type/Material:**
- **Diameter (in):**
- **Slot Size (in):**
- **Slot Type:**

Sump/End Cap:

Notes:

Technician Signature:

Depths and heights are referenced to ground surface unless specified TOC.
All elevations are referenced to MSL (NAVD 88).

Technician Name (print):

QA/QC'd by:

QA/QC Date:

SOIL SAMPLE COLLECTION LOG

Project Name:	Phase 1 Regional Site Inspections for Per-Fluorinated Compounds at Multiple Air National Guard Installations	**Project Number:**	291330006
Contract:	W9133L-14-D-0002	**Task Order:**	0006
Installation:		**Date:**	
Location ID:		**Technician:**	

Other Amec Foster Wheeler Representatives:

Sample ID	Sample Time	Sample Depth (ft)	USCS Symbol	Comments/Observations

Sample Collection Method:		**Analysis/Method(s):**	
Sample Container Type(s):		**Preservative(s):**	

Notes:

Technician Signature:

Technician Name (print)**:**

QA/QC'd by:

QA/QC Date:

SAMPLE COLLECTION LOG
SEDIMENT / SURFACE SOIL / SURFACE WATER

Project Name:	Phase 1 Regional Site Inspections for Per-Fluorinated Compounds at Multiple Air National Guard Installations	**Project Number:**	291330006
Contract:	W9133L-14-D-0002	**Task Order:**	0006
Installation:		**Date:**	
Location ID:		**Sample Technician:**	
Northing:		**Easting:**	

SEDIMENT SAMPLE

Description

NAME (USCS Symbol): color, moisture, % by wt, plasticity, dilatancy, toughness, dry strength,consistency

Sample Depth (ft):		**Sample ID:**	
MS/MSD Collected:		**Sample Date:**	
Duplicate ID:		**Sample Collection Time:**	
Sample Container Type(s):		**Sample Collection Methods:**	
Preservative(s):		**Analysis/Method(s):**	

SURFACE SOIL SAMPLE

Description

NAME (USCS Symbol): color, moisture, % by wt, plasticity, dilatancy, toughness, dry strength,consistency

Sample Depth (ft):		**Sample ID:**	
MS/MSD Collected:		**Sample Date:**	
Duplicate ID:		**Sample Collection Time:**	
Sample Container Type(s):		**Sample Collection Methods:**	
Preservative(s):		**Analysis/Method(s):**	

SURFACE WATER SAMPLE

Time	Intake Depth (feet)	Temp. (°C)	pH (units)	Specific Electrical Conductance (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Comments/Observations During Purging (color, sediment, etc.)

Sample Depth (ft):		**Sample Date:**	
Sample ID:		**Sample Collection Time:**	
MS/MSD Collected:		**Sample Collection Methods:**	
Duplicate ID:		**Surface Water Depth (ft):**	
Sample Container Type(s):		**Water Body and Water Quality Characteristics** (circle all that apply):	
Preservative(s):		River Stream Pond Flowing Stagnant	
Analysis/Method(s):		Clear Cloudy Turbid Other:	

Location Sketch:

Instruments (Manufacturer, Model, and Serial No.):

Notes:

Technician Signature:

Technician Name (print):

QA/QC'd by:

QA/QC Date:

TAILGATE SAFETY MEETING REPORT

amec foster wheeler

Project Name:	Phase 1 Regional Site Inspections for Per-Fluorinated Compounds at Multiple Air National Guard Installations	**Project Number:**	291330006
Contract:	W9133L-14-D-0002	**Task Order:**	0006
Installation:		**Date and Time:**	
Field Manager Name:		**Site Health and Safety Officer (HSO):**	

Safety Meeting Type (circle one): Initial Kickoff Safety Meeting Regular/Daily Tailgate Safety Meeting Unscheduled Tailgate Safety Meeting

Order of Business

Topics Discussed (check all that apply):

- ☐ Site History/Site Layout
- ☐ Scope of Work
- ☐ Personnel Responsibilities
- ☐ Medical Surveillance Requirements
- ☐ Training Requirements
- ☐ Safe Work Practices
- ☐ Logs, Reports, Recordkeeping
- ☐ Sanitation and Illumination
- ☐ Air Surveillance Type and Frequency
- ☐ Monitoring Instruments and Personal Monitoring
- ☐ Action Levels
- ☐ Accident Reporting Procedures
- ☐ Site Control (visitor access, buddy system, work zones, security, communications)
- ☐ Discussion of previous "near misses" including work crew suggestions to correct work practices to avoid similar occurrences
- ☐ Engineering Controls
- ☐ PPE Required/PPE Used
- ☐ Define PPE Levels, Donning, Doffing Procedures
- ☐ Physical Hazards and Controls (e.g., overhead utility lines)
- ☐ Decontamination Procedures for Personnel and Equipment
- ☐ General Emergency Procedures (e.g., locations of air horns and what 1 or 2 blasts indicate)
- ☐ Site/Regional Emergency Procedures (e.g. earthquake response, typhoon response, etc.)
- ☐ Medical Emergency Response Procedures (e.g., exposure control precautions, location of first aid kit, etc.)
- ☐ Hazardous Materials Spill Procedures
- ☐ Applicable SOPs (e.g., Hearing Conservation Program, Safe Driving, etc.)
- ☐ Injury/Illness Reporting Procedures
- ☐ Route to Hospital and Medical Care Provider Visit Guidelines
- ☐ Hazard Analysis of Work Tasks (chemical, physical, biological and energy health hazards and effects)

Safety suggestions by site workers:

Action taken on previous suggestions:

Injuries/accidents/personnel changes since previous meeting:

Observations of unsafe work practices/conditions that have developed since previous meeting:

Location of (or changes in the locations of) evacuation routes/safe refuge areas:

Other Safety Topics:

Additional comments:

Attendee signatures below indicate acknowledgment of the information and willingness to abide by the procedures discussed during this safety meeting.

Attendee Name (print)	Company	Signature	Attendee Name (print)	Company	Signature

Meeting Conducted By (print):	**Company and Title**	**Signature**

QA/QC'd by: **QA/QC Date:**

WATER QUALITY SAMPLING INSTRUMENT CALIBRATION FORM

amec foster wheeler

Project Name:	Phase 1 Regional Site Inspections for Per-Fluorinated Compounds at Multiple Air National Guard Installations	**Project Number:**	291330006
Contract:	W9133L-14-D-0002 **Task Order:** 0006	**Date:**	
Installation:		**Calibration Start Time:**	
Sample Technician:		**Calibration End Time:**	

Readings Before Calibration

Date	Time (24hr)	Temperature (°C)	pH (SU)	Turbidity (NTUs)	Specific Electrical Conductance (mS/cm)	D.O. (%, mg/L)	Salinity (%)	ORP/Eh (mV)	Barometric Pressure (mm Hg)	Comments

Readings After Calibration

Date	Time (24hr)	Temperature (°C)	pH (SU)	Turbidity (NTUs)	Specific Electrical Conductance (mS/cm)	D.O. (%, mg/L)	Salinity (%)	ORP/Eh (mV)	Barometric Pressure (mm Hg)	Comments

Calibration Materials Record:

pH Calibration Standards			Specific Electrical Conductance, Salinity, Dissolved Oxygen (DO) and Oxidation Reduction Potential (ORP) Calibration Standards			Turbidity Standards		
Standard	Cal. Standard Lot #	Expiration Date	Standard	Cal. Standard Lot #	Expiration Date	Standard	Cal. Standard Lot #	Expiration Date
pH (4)			Spec. Conductance			10		
pH (7)			Salinity			20		
pH (10)			D.O.			100		
			ORP			800		

Instruments (Manufacturer, Model, and Serial No.):

	Manufacturer/Model	Serial No
Water Quality Meter:		
Turbidity Meter:		

Calibrated Within Acceptance Criteria (Y/N):

If No, Provide Explanation:

Notes:

Technician Signature:

{Signature}

Technician Name (print)**:**

QA/QC'd by:

QA/QC Date:

WELL DEVELOPMENT LOG

Project Name:	Phase 1 Regional Site Inspections for Per-Fluorinated Compounds at Multiple Air National Guard Installations	**Project Number:**	291330006
Contract:	W9133L-14-D-0002	**Task Order:**	0006
Installation:		**Sample Technician:**	
Well ID:		**Date Started/Date Completed:**	
Measuring Point:		**Initial Depth to Water (ft):**	
Development Method:		**Total Depth of Well (ft):**	
Pump Start Date/Time:		**Depth to Water After Purging (ft):**	
Pump Start Rate:		**1 Casing Volume (gal):**	
Total Volume Purged (gal):		**3 Casing Volumes (gal):**	

Time	Intake Depth (feet)	Water Level (feet)	Rate	Temp. (°C)	pH (units)	Specific Electrical Conductance (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Cum. Volume (gal.)	Comments/Observations During Purging (color, sediment, etc.)

Instruments (Manufacturer, Model, and Serial No.):

Calculations:

Saturated well casing volume: V= • (R^2)H*7.48 gal/ft^3

V = Volume (gal/ft)
Π = 3.14
R = well radius (ft) = (well diameter (in)/12 (in/ft))/2)
H = height of water column (ft)

Technician Signature:

Notes:

Technician Name (print):

QA/QC'd by: **QA/QC Date:**

APPENDIX D

QUALITY ASSURANCE PROJECT PLAN

FINAL
QUALITY ASSURANCE PROJECT PLAN

FY16 PHASE 1 REGIONAL SITE INSPECTIONS FOR PER-FLUORINATED COMPOUNDS

MULTIPLE AIR NATIONAL GUARD INSTALLATIONS

Contract #: W9133L-14-D-0002

Delivery Order 0006

Amec Foster Wheeler Project #: 2-9133-0006

May 2017

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REVISION LOG

Revision No.	Date	Revision	Page(s)	Editor
01	May 24, 2017	Added SOP for use of electronic field tablets; updated Bangor ANGB schedule; changed A7OR to A4OR; removed Tyvek from list of acceptable items in SOP-AFW-01 (PFCs)	Wkshts 14 and 21, Wksht16, SOP-AFW-01	L. Baumgras

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Attachment C Laboratory Quality Assurance Manuals
Attachment D Laboratory Standard Operating Procedures
Attachment E Amec Foster Wheeler Standard Operating Procedures
Attachment F Amec Foster Wheeler Field Forms
Attachment G Health and Safety Plan

ACRONYMS

A	Analytical
A70R	Operations Restoration Branch
AFFF	Aqueous Film Forming Foam
AFI	Air Force Instruction
AGS	Air Guard Station
AFRC	Air Force Reserve Command
Amec Foster Wheeler	Amec Foster Wheeler Environment & Infrastructure, Inc.
amu	atomic mass unit
ANG	Air National Guard
ARW	Air Refueling Wing
AW	Airlift Wing
BRAC	Base Realignment and Closure
C	Concentration
°C	degrees Celsius
CAM	Compliance Assurance Monitoring
CAS	Chemical Abstract Service
CCC	Continuing Calibration Check
CCV	Continuing Calibration Verification
COC	chain of custody
COR	Contract Officer Representative
CTDEEP	Connecticut Department of Energy and Environmental Protection
DL	Detection Limits
DO	Delivery Order
DoD	Department of Defense
DNREC	Delaware Department of Natural Resources and Environmental Control
DQO	Data Quality Objective
EDD	electronic data deliverable
ELAP	Environmental Laboratory Accreditation Program
EWVRA	East West Virginia Regional Airport
FDOH	Florida Department of Health
Freq.	Frequency
FSP	Field Sampling Plan
FSP/SIWP	Field Sampling Plan/Site Inspection Work Plan
FW	Fighter Wing
HA	Health Advisory
HIA	Harrisburg International Airport
HDPE	high-density polyethylene
HPLC/MS/MS	High-Performance Liquid Chromatography with Tandem Mass Spectrometry
IAP	International Airport
ICAL	initial calibration
ICV	Initial Calibration Verification
ID	identification

IEPA	Illinois Environmental Protection Agency
IS	Internal Standards
ISO	International Organization for Standardization
KDHE	Kansas Department of Health & Environment
LC	Liquid Chromatography
LC/MS/MS	Liquid Chromatography and Tandem Mass Spectrometry
LCS	laboratory control sample
LOQ	limit of quantitation
MAP	Municipal Airport
MassDEP	Massachusetts Department of Environmental Protection
Maxxam	Maxxam Analytics International
MB	Method Blank
MDE	Maryland Department of the Environment
MDOH	Minnesota Department of Health
MECDC	Maine Center for Disease Control and Prevention
MEDEP	Maine Department of Environmental Protection
µg/kg	micrograms per kilogram
µg/L	micrograms per liter
mL	milliliters
MPCA	Minnesota Pollution Control Agency
MS	Matrix Spike
MSD	Matrix Spike Duplicate
MSPIA	Minneapolis/St. Paul International Airport
N	no
NA	Not Available
NaICs	Sodium iodide cesium solution
NCDEQ	North Carolina Department of Environmental Quality
NCCA	New Castle County Airport
NFA	No Further Action
NGB	National Guard Bureau
No.	Number
NYSDEC	New York State Department of Environmental Conservation
OPR	Ongoing Precision and Recovery
PADEP	Pennsylvania Department of Environmental Protection
%	Percent
%D	Percent Difference
PFBS	Perfluorobutanesulfonic Acid
PFC	Perfluorinated Compound
PFHpA	Perfluoroheptanoic Acid
PFHxA	Perfluorohexanoic Acid
PFOA	Perfluooctanoic Acid
PFOS	Perfluorooctanesulfonic Acid
PFNA	Perfluorononanoic Acid
PM	Project Manager
PRL	Potential Release Location
QA	quality assurance

QAPP	Quality Assurance Project Plan
QC	quality control
QSM	Quality Systems Manual
RDL	Reportable Detection Level
Rev.	Revision
RIDEM	Rhode Island Department of Environmental Management
RPD	Relative Percent Difference
RT	Retention Time
S	Sampling
SDDENR	South Dakota Department of Environment & Natural Resources
SGS Accutest	SGS Accutest Laboratory
SI	Site Inspection
S/N	Signal to noise
S&O	Support and Oversight
SOO	Statement of Objectives
SOP	Standard Operating Procedure
TBD	To Be Determined
TNI	The NELAC Institute
UCMR3	Unregulated Containment Monitoring Rule 3
UFP-QAPP	Uniform Federal Policy for Quality Assurance Project Plans
UHPLC	Ultra High Performance Liquid Chromatography
USAF	United States Air Force
USEPA	United States Environmental Protection Agency
VDEQ	Virginia Department of Environmental Quality
Vista	Vista Analytical Laboratories, LLC
WP	Work Plan
WVDEP	West Virginia Department of Environmental Protection
Y	yes

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1.0 INTRODUCTION

This Quality Assurance Project Plan (QAPP) was prepared by Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler) on behalf of the National Guard Bureau (NGB) to support Site Inspection (SI) activities that provide defensible data to determine No Further Action (NFA) or data quality objectives (DQO) for follow-on remedial investigation activities for multiple Air National Guard (ANG) Installations (Project No. ANGH20167150). SI activities will be conducted at a total of 20 ANG bases including:

1) Stewart International Airport (IAP), New Windsor, New York;
2) New Castle County Airport (NCCA), Wilmington, Delaware;
3) Joe Foss Field, South Dakota;
4) Harrisburg IAP (HIA), Harrisburg, Pennsylvania;
5) Stanly County Air Guard Station (AGS), Stanly County, North Carolina;
6) Pittsburgh IAP (Air Force Reserve Command [AFRC] and ANG), Pittsburgh, Pennsylvania;
7) Richmond IAP Byrd Field, Richmond, Virginia;
8) Martin State Airport, Maryland;
9) Eastern West Virginia Regional Airport Shepherd Field (EWVRA), Martinsburg, West Virginia;
10) Barnes Municipal Airport (MAP), Massachusetts;
11) Yeager Airport, Charleston, West Virginia;
12) Minneapolis-St. Paul MAP (MSPIA) (AFRC and ANG), Minnesota;
13) Bradley IAP, East Granby, Connecticut;
14) Bangor IAP, Bangor, Maine;
15) Quonset State Airport, Rhode Island;
16) Greater Peoria Airport, Peoria, Illinois;
17) General Mitchell IAP, Wisconsin;
18) Forbes Field, Topeka, Kansas;
19) Truax Field, Wisconsin; and
20) Capital MAP, Springfield, Illinois.

The QAPP is intended to be a living document and will be updated as necessary. This QAPP was completed in general accordance with the NGB Request for Proposal W9133L-16-R-0068 dated 16 June 2016 and corresponding Statement of Objectives (SOO) dated 18 April 2016. This QAPP has been prepared by Amec Foster Wheeler under ANG Delivery Order (DO) 0006, Contract W9133L-14-D-0002 and describes the procedures and activities to be conducted to execute field sampling during the performance of the DO.

1.1 Development of the QAPP

As described on the United States Environmental Protection Agency (USEPA) Quality System Website (http://www.epa.gov/QUALITY/qapps.html), the purpose of a QAPP is to document the planning, implementation and assessment procedures for a particular project, as well as any specific quality assurance and quality control (QA/QC) activities. It is to integrate all the technical and quality aspects of the project to provide a "blueprint" for obtaining the type and quality of environmental data and information needed for a specific decision or use.

In March 2005, the Intergovernmental Data Quality Task Force developed a policy and guidance document to fulfill the project-specific requirements of Part B of the American National Standards Institute, American Society for QC standard, Specifications and Guidelines for Environmental Data Collection and Environmental Technology Programs to ensure that federal departments and agencies will produce consistent QAPPs that reflect a systematic planning approach to the collection and use of environmental data. That guidance document, the Uniform Federal Policy for Quality Assurance Project Plans (UFP-QAPP) Manual V1, March 2005 (USEPA, 2005), was followed in the development of this QAPP.

This QAPP is intended to be used in conjunction with site-specific Work Plans (WPs) that will be prepared throughout the life of this project.

1.2 Project Setting

The project setting for the work encompassing the SI activities at multiple ANG Installations will be presented in the site-specific WPs identified in **Section 1.**

1.3 Applicability of the QAPP

This QAPP is intended primarily for use in collection of environmental data for the following purposes:

- SI soil sampling;
- SI groundwater sampling;
- SI surface water sampling; and,
- SI sediment sampling.

Specific requirements for the activities being performed at the multiple ANG Installations will be described in the site-specific WPs at the sites identified in **Section 1.**

1.4 Laboratory Analysis

Laboratory analysis of all environmental samples will be performed by a Department of Defense (DoD) Environmental Laboratory Accreditation Program accredited laboratory. Samples submitted for laboratory analysis will be placed into laboratory-provided containers, in accordance with the site-specific WPs that will be prepared. Sample containers will be labeled with the sample field identification (ID) number (no.), collection date, and requested analyses. The sample field IDs will be as described in the site-specific WPs but in general should include Installation-Matrix (Soil, Sediment, Groundwater, and Surface Water, etc.)-location #. Dates and depths may also be appended to the ID. The samples will be placed into a cooler with ice immediately following collection and transported to the laboratory by courier or shipped by express carrier.

The chain-of-custody (COC) protocol will be documented and strictly followed. Appropriate QA/QC samples will be collected in accordance with the site-specific WPs. Standard Level IV analytical reporting will be provided by the laboratory.

2.0 DOCUMENT OVERVIEW

The UFP-QAPP guidance (USEPA, 2005) includes a series of 37 worksheets that present the critical information required in a QAPP. Because the worksheets were designed to "ensure consistent content and presentation of information in a project-specific QAPP... and streamline the review of QAPPs by regulators and others," this QAPP has been developed using these worksheets, which provide information associated with four key topics:

- Project Management and Objectives
- Measurement and Data Acquisition
- Assessment and Oversight
- Data Review

A series of attachments is also included with this QAPP. These attachments include the following information:

- COC forms
- Laboratory certifications
- Laboratory QA Manual
- Standard Operating Procedures (SOPs)
- Health and Safety Plan

When elements required by the UFP-QAPP are present in other documents (e.g., SOPs), careful cross-referencing of these other documents can be used in lieu of repeating information. Following this guidance, this QAPP provides certain relevant information by referencing the site-specific WPs which will be prepared through the life of this project. All of these planning documents are companion documents to the QAPP.

3.0 REFERENCES

National Institute of Environmental Health Sciences, 2016. Perfluorinated Chemicals (PFCs), July 2016.

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USEPA, 2014. Peer Review of Health Effects Documents for Perfluoroctanic Acid and Perfluorooctane Sulfonate. February 2014.

USEPA, 2016a. Drinking Water Health Advisory for Perfluorooctanoic Acid (PFOA), May 2016.

USEPA, 2016b. Drinking Water Health Advisory for Perfluorooctane Sulfonate (PFOS), May 2016.

WORKSHEETS

QAPP Worksheet #1 Title and Approval Page

Site Name/Project Name:	FY 16 Phase 1 Regional Site Inspections for Per-Fluorinated Compounds, Multiple ANG Installations
Site Location:	Multiple ANG Installations, Stewart IAP, New Windsor, New York; NCCA, Wilmington, Delaware; Joe Foss Field, South Dakota; HIA, Harrisburg, Pennsylvania; Badin AGS, Stanly County, North Carolina; Pittsburgh IAP (AFRC) and ANG, Pittsburgh, Pennsylvania; Richmond IAP Byrd Field, Richmond, Virginia; Martin State Airport, Maryland; EWVRA Shepherd Field, Martinsburg, West Virginia; Barnes MAP, Massachusetts; Yeager Airport, Charleston, West Virginia; MSPIA (AFRC and ANG), Minnesota; Bradley IAP, East Granby, Connecticut; Bangor IAP, Bangor, Maine; Quonset State Airport, Rhode Island; Greater Peoria Airport, Peoria, Illinois; General Mitchell IAP, Wisconsin; Forbes Field, Topeka, Kansas; Truax Field, Wisconsin; and Capital MAP, Springfield, Illinois.
Document Title:	Final QAPP
Reference Documents:	Please see the site-specific WPs for a full list of reference documents.
Lead Organization and Approval Entity:	NGB
Preparer's Name and Organizational Affiliation:	Lynne Baumgras, Ph.D., PG, Amec Foster Wheeler, Environment & Infrastructure, Inc.
Preparer's Contact Information:	453 Route 146, Suite 201, Clifton Park, NY 12065; 518-372-0905 x 306; lynne.baumgras@amecfw.com
Preparation Date:	March 2017

QAPP Worksheet #1 Title and Approval Page

Lead Organization's Program Manager	
	Signature
	Dennis Pinigis, NGB/Contracting Officer's Representative/Project Manager (PM) (NGB/)
Investigative Organization's PM	
	Signature
	Kerry Tull, Amec Foster Wheeler
Investigative Organization's Project QA Manager:	
	Signature
	Ann Bernhardt, Amec Foster Wheeler

QAPP Worksheet #2 QAPP Identifying Information

Site Name/Project Name:	FY 16 Phase 1 Regional Site Inspections for Per-Fluorinated Compounds, Multiple ANG Installations
Site Location:	Multiple ANG Installations, Stewart IAP, New Windsor, New York; NCCA, Wilmington, Delaware; Joe Foss Field, South Dakota; HIA, Harrisburg, Pennsylvania; Badin Air Guard Station, Stanly County, North Carolina; Pittsburgh IAP (AFRC) and ANG), Pittsburgh, Pennsylvania; Richmond IAP Byrd Field, Richmond, Virginia; Martin State Airport, Maryland; EWVRA Shepherd Field, Martinsburg, West Virginia; Barnes MAP, Massachusetts; Yeager Airport, Charleston, West Virginia; MSPIA (AFRC and ANG), Minnesota; Bradley IAP, East Granby, Connecticut; Bangor IAP, Bangor, Maine; Quonset State Airport, Rhode Island; Greater Peoria Airport, Peoria, Illinois; General Mitchell IAP, Wisconsin; Forbes Field, Topeka, Kansas; Truax Field, Wisconsin; and Capital MAP, Springfield, Illinois. Potential release locations (PRLs) may be added or removed and will be presented in the Site-specific WPs.
Site No./Code:	NA
Operable Unit:	NA
Contractor Name:	Amec Foster Wheeler
Contract No.:	W9133L-14-D-0002
Contract Title:	National Guard Bureau Contract
DO No.:	0006
Identify guidance used to prepare QAPP:	UFP-QAPPs, Manual VI (2005)
Identify regulatory program:	Connecticut Department of Energy and Environmental Protection (CTDEEP) Site Characterization Guidance Document Delaware Department of Natural Resources and Environmental Control (DNREC) Illinois Environmental Protection Agency (IEPA) Site Remediation Program Kansas Department of Health & Environment (KDHE) Remedial Section

QAPP Worksheet #2 QAPP Identifying Information

	Maine Department of Environmental Protection (MEDEP) and Maine Center for Disease Control and Prevention (MECDC) Maryland Department of the Environment (MDE) Massachusetts Department of Environmental Protection (MassDEP) Minnesota Pollution Control Agency (MPCA)/Minnesota Department of Health (MDOH) New York State Department of Environmental Conservation (NYSDEC) North Carolina Department of Environmental Quality (NCDEQ) Federal Remediation Branch Pennsylvania Department of Environmental Protection (PADEP) Rhode Island Department of Environmental Management (RIDEM) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases South Dakota Department of Environment & Natural Resources (SDDENR) USEPA Office of Water Virginia Department of Environmental Quality (VDEQ) West Virginia Department of Environmental Protection (WVDEP) Wisconsin Department of Natural Resources (WDNR) 720 and Wisconsin Administrative Code 140
Identify approval entity	CTDEEP, DNREC, IEPA, KDHE, MEDEP/MECDC, MDE, MassDEP, MPCA/MDOH, NYSDEC, NCDEQ, PADEP, RIDEM, SDDENR, VDEQ, WDNR, WVDEP
Indicate whether the QAPP is a generic or a project-specific QAPP?	This QAPP is an overarching program. QAPP intended to serve the needs of the individual Installation inspection service activities, to be described in the Site-specific WPs.
List dates of scoping sessions that were held:	Program kickoff meeting was held on 18 October 2016 at Sheppard Hall, 3501 Fetchet Avenue, Joint Base Andrews, Maryland
List dates and titles of QAPP documents written for previous site work, if applicable:	
QAPP	NA

QAPP Worksheet #2 QAPP Identifying Information

List organizational partners (stakeholders) and connection with lead organization:	NGB/ – Technical Lead CTDEEP, DNREC, IEPA, KDHE, MEDEP/MECDC, MDE, MassDEP, MPCA/MDOH, NYSDEC, NCDEQ, PADEP, RIDEM, SDDENR, VDEQ, WDNR, WVDEP – Regulatory Entities ANGBs/Airports: 1. 105th Airlift Wing (AW) - Stewart IAP, New Windsor, New York; 2. 166th AW - NCCA, Wilmington, Delaware; 3. 114th Fighter Wing (FW) - Joe Foss Field, South Dakota; 4. 193rd Special Operations Wing - HIA, Harrisburg, Pennsylvania; 5. 145th AW – Stanly County Air Guard Station, Stanly County, North Carolina; 6. 171st Air Refueling Wing (ARW) - Pittsburgh IAP (AFRC and ANG), Pittsburgh, Pennsylvania; 7. 192nd FW – Former Site at Richmond IAP Byrd Field, Richmond, Virginia; 8. 175th Wing Martin State Airport, Maryland; 9. 167th AW - EWVRA Shepherd Field, Martinsburg, West Virginia; 10. 104th FW - Barnes MAP, Massachusetts; 11. 130th AW - Yeager Airport, Charleston, West Virginia; 12. 133rd AW – MSPIA (AFRC and ANG), Minnesota; 13. 103rd AW - Bradley IAP, East Granby, Connecticut; 14. 101st ARW - Bangor IAP, Bangor, Maine; 15. 143rd AW - Quonset State Airport, Rhode Island; 16. 182nd AW - Greater Peoria Airport, Peoria, Illinois; 17. 128th ARW - General Mitchell IAP, Wisconsin; 18. 190th ARW - Forbes Field, Topeka, Kansas; 19. 115th FW - Truax Field, Wisconsin; and 20. 183rd FW - Capital MAP, Springfield, Illinois
List data users:	NGB/ CTDEEP, DNREC, IEPA, KDHE, MEDEP/MECDC, MDE, MassDEP, MPCA/MDOH, NYSDEC, NCDEQ, PADEP, RIDEM, SDDENR, VDEQ, WDNR, WVDEP

QAPP Worksheet #2 QAPP Identifying Information

Lead Organization's Program Manager:	Dennis Pinigis, NGB/	
Required QAPP Element(s) and Corresponding QAPP Section(s) (per UFP QAPP 2005)	**Required Information**	**Crosswalk to Related Information and Documents**
Project Management and Objectives		
2.1 Title and Approval Page	- Title and Approval Page	– Worksheet #1 Title and Approval Page
2.2 Document Format and Table of Contents 2.2.1 Document Control Format 2.2.2 Document Control Numbering System 2.2.3 Table of Contents 2.2.4 QAPP Identifying Information	- Table of Contents - QAPP Identifying Information	– The Table of Contents is provided following the QAPP cover page. – Worksheet #2 QAPP Identifying Information
2.3 Distribution List and Project Personnel Sign-Off Sheet 2.3.1 Distribution List 2.3.2 Project Personnel Sign-Off Sheet	- Distribution List - Project Personnel Sign-Off Sheet	– Worksheet #3 Distribution List/ Personnel Sign-Off Note: Worksheet 3 and 4 combined
2.4 Project Organization 2.4.1 Project Organizational Chart 2.4.2 Communication Pathways 2.4.3 Personnel Responsibilities and Qualifications 2.4.4 Special Training Requirements and Certification	- Project Organizational Chart - Communication Pathways - Personnel Responsibilities and Qualifications Table - Special Personnel Training Requirements Table	Worksheet #5 Project Organization Chart Worksheet #6 Communication Pathways Worksheet #7 Personnel Responsibilities and Qualifications and – Worksheet #8 Special Personnel Training Requirements
2.5 Project Planning/Problem Definition 2.5.1 Project Planning (Scoping) 2.5.2 Problem Definition, Site History and Background	- Project Planning Session Documentation (including Data Needs tables) - Project Scoping Session Participants Sheet - Problem Definition, Site History and Background	– Worksheet #9 Project Team Planning Sessions Participants' Sheet and – Worksheet #10 Problem Definition for Project DQOs Site history and more detail contributing to the

QAPP Worksheet #2 QAPP Identifying Information

	- Site Maps (historical and present)	project DQOs can be found in the Site-specific WPs (Amec Foster Wheeler)
2.6 Project Quality Objectives and Measurement Performance Criteria 2.6.1 Development of Project Quality Objectives Using the Systematic Planning Process 2.6.2 Measurement Performance Criteria	- Site-Specific Project Quality Objectives - Measurement Performance Criteria Table	– Worksheet #11 Project Quality Objectives/Systematic Planning Process Statements and – Worksheet #12 Measurement Performance Criteria for project analytes
2.7 Secondary Data Evaluation	- Sources of Secondary Data and Information - Secondary Data Criteria and Limitations Table	– Worksheet #13 Secondary Data Criteria and Limitations
2.8 Project Overview and Schedule 2.8.1 Project Overview 2.8.2 Project Schedule	- Summary of Project Tasks - Reference Limits and Evaluation Table - Project Schedule/Timeline Table	– Worksheet #14 Summary of Project Tasks – Worksheet #15 Reference Limits and Evaluation for specific monitoring activities and – Worksheet #16 Project Schedule/Timeline
Measurement/Data Acquisition		
3.1 Sampling Tasks 3.1.1 Sampling Process Design and Rationale 3.1.2 Sampling Procedures and Requirements 3.1.2.1 Sampling Collection Procedures 3.1.2.2 Sample Containers, Volume and Preservation	- Sampling Design and Rationale - Sample Location Map - Sampling Locations and Methods/Standard Operating Procedure Requirements Table	- Worksheet #17 Sampling Design and Rationale – Worksheet #18 Sampling Locations and Methods/SOP Requirements for the project – Worksheet #18 Sampling Locations and

QAPP Worksheet #2 QAPP Identifying Information

3.1.2.3 Equipment/Sample Containers Cleaning and Decontamination Procedures 3.1.2.4 Field Equipment Calibration, Maintenance, Testing and Inspection Procedures 3.1.2.5 Supply Inspection and Acceptance Procedures 3.1.2.6 Field Documentation Procedures	- Analytical Methods/SOP Requirements Table - Field QC Sample Summary Table - Sampling SOPs - Field Equipment Calibration, Maintenance, Testing and Inspection Table	Methods/SOP Requirements for the project – Worksheet #19 Analytical SOP Requirements (Sample Containers Preservation and Holding Times) – Worksheet #20 Sample Quantities and Control Frequencies (Freq.) – Worksheet #21 Field Sampling SOP References – Worksheet #22 Field Equipment Calibration, Maintenance, Testing, and Inspection More details concerning the sampling design, rational and procedures can be found in the Site-specific WPs (Amec Foster Wheeler)
3.2 Analytical Tasks 3.2.1 Analytical SOPs 3.2.2 Analytical Instrument Calibration Procedures 3.2.3 Analytical Instrument and Equipment Maintenance, Testing and Inspection Procedures 3.2.4 Analytical Supply Inspection and Acceptance Procedures	- Analytical SOPs - Analytical SOP References Table - Analytical Instrument Calibration Table - Analytical Instrument and Equipment Maintenance, Testing and Inspection Table	– Worksheet #23 Analytical SOP References – Worksheet #24 Analytical Instrument Calibration – Worksheet #25 Analytical Instrument and Equipment Maintenance, Testing and Inspection The analytical SOPs can be found in **Attachment D**
3.3 Sample Collection Documentation, Handling, Tracking and Custody Procedures	- Sample Collection Documentation Handling, Tracking and Custody SOPs	– Worksheet #26 Sample Handling System – Worksheet #27 Sample Custody

QAPP Worksheet #2 QAPP Identifying Information

3.3.1 Sample Collection Documentation 3.3.2 Sample Handling and Tracking System 3.3.3 Sample Custody	- Sample Container ID - Sample Handling Flow Diagram - Example COC Form and Seal	Requirements – An example of the COC form can be found in **Attachment A** More details concerning the field sampling procedures can be found in the Site-specific WPs (Amec Foster Wheeler)
3.4 QC Samples 3.4.1 Sampling QC Samples 3.4.2 Analytical QC Samples	- QC Samples Table - Screening/Confirmatory Analysis Decision Tree	– Worksheet #28 presents QC sample information for project analytes
3.5 Data Management Tasks 3.5.1 Project Documentation and Records 3.5.2 Data Package Deliverables 3.5.3 Data Reporting Formats 3.5.4 Data Handling and Management 3.5.5 Data Tracking and Control	- Project Documents and Records Table - Analytical Services Table	– Worksheet #29 Project Documents and Records – Worksheet #30 Analytical Services
Assessment/Oversight		
4.1 Assessments and Response Actions 4.1.1 Planned Assessments 4.1.2 Assessment Findings and Corrective Action Responses	- Assessments and Response Actions - Planned Project Assessments Table - Audit Checklists - Assessment Findings and Corrective Action Responses Table	– Worksheet #31 Planned Project Assessments – Worksheet #32 Assessment Findings and Corrective Action Responses Laboratory Certifications can be found in **Attachment B**
4.2 QA Management Reports	- Conformance of project activities to QAPP requirements and procedures - Status of project and schedule delays - Deviations from the approved QAPP and approved amendments to the QAPP - Results of data review activities - Required corrective actions and	– Worksheet #33 QA Management Reports

QAPP Worksheet #2 QAPP Identifying Information

	effectiveness of corrective action implementation - Data usability assessments in terms of precision, accuracy, representativeness, completeness, comparability, and sensitivity	
4.3 Final Project Report	- All QA Management Reports attached - Additional data quality concerns and resolution documentation	– Worksheet #33 QA Management Reports
Data Review		
5.1 Overview		
5.2 Data Review Steps 5.2.1 Step I: Verification 5.2.2 Step II: Validation 5.2.2.1 Step IIa Validation Activities 5.2.2.2 Step IIb Validation Activities 5.2.3 Step III: Usability Assessment 5.2.3.1 Data Limitations and Actions from Usability Assessment 5.2.3.2 Activities	- Verification (Step I) Process Table - Validation (Steps IIa and IIb) Process Table - Validation (Steps IIa and IIb) Summary Table - Usability Assessment	– Worksheet #34 Verification (Step I) Process – Worksheet #35 Validation (Steps IIa and IIb) Process – Worksheet #36 Validation (Steps IIa and IIb) Summary – Worksheet #37 Usability Assessment
5.3 Streamlining Data Review 5.3.1 Data Review Steps To Be Streamlined 5.3.2 Criteria for Streamlining Data Review 5.3.3 Amounts and Types of Data Appropriate for Streamlining	None	NA

QAPP Worksheet #3 and #4 Distribution List Project Personnel Sign-Off

QAPP Recipients	Title	Organization	Telephone No.	Fax No.	E-mail Address	Signature/Date QAPP Read
Dennis Pinigis	Contracting Officer's Representative/ Project Manger	NGB/	240-612-8149		dennis.j.pinigis.civ@mail.mil	
Frances Saunders	Restoration Program Manager	NGB/	240-612-9511		frances.d.saunders.civ@mail.mil	
Gregory Wills	Restoration Program Manager	NGB/	240-612-8366		Gregory.k.wills.civ@mail.mil	
Brant Crumbling	Restoration Program Manager	NGB/	240-612-8144		Brant.m.crumbling.civ@mail.mil	
Keith Freihofer	Restoration Program Manager	NGB/	240-612-8762		Keith.e.freihofer.civ@mail.mil	
Jody Ann Murata	Restoration Program Manager	NGB/	240-612-8120		Jody.a.murata.civ@mail.mil	
Mark Dickerson	Restoration Program Manager	NGB/	240-612-8445		Mark.dickerson2.civ@mail.mil	
Winston Crow	Restoration Program Manager	NGB/	240-612-8155		Winston.k.crow.civ@mail.mil	
Stan Moore	Restoration Program Manager	NGB/	703-730-7215		Stanley.j.moore6.civ@mail.mil	

QAPP Worksheet #3 and #4 Distribution List Project Personnel Sign-Off

QAPP Recipients	Title	Organization	Telephone No.	Fax No.	E-mail Address	Signature/Date QAPP Read
Jay Mullett	Program Manager	Amec Foster Wheeler	248-313-3669	248-926-4009	jay.mullett@amecfw.com	
Rob Singer	PM	Amec Foster Wheeler	207-828-2643	207-772-4762	rob.singer@amecfw.com	
Kerry Tull	Co-PM	Amec Foster Wheeler	207-828-3514	207-772-4762	kerry.tull@amecfw.com	
Ann Bernhardt	QA/QC Manager	Amec Foster Wheeler	503-639-3400	503-620-7892	Ann.bernhardt@amecfw.com	
Denise King	Senior Chemist	Amec Foster Wheeler	978-392-5339	978-692-6633	denise.king@amecfw.com	
Steve Posten	Regional Base Lead	Amec Foster Wheeler	732-302-9500	709-896-9006	Stephen.Posten@amecfw.com	
Kerri Doyle	Assistant Regional Base Lead	Amec Foster Wheeler	732-302-9500	709-896-9006	kerri.doyle@amecfw.com	
Joe Renier	Regional Base Lead	Amec Foster Wheeler	320-963-5742	612-332-2423	Joe.Renier@amecfw.com	
Thomas Kaugher	Regional Base Lead	Amec Foster Wheeler	248-313-3694	248-926-4009	thomas.kaugher@amecfw.com	
Todd Coffin	Regional Base Lead	Amec Foster Wheeler	207-828-2624	207-772-4762	todd.coffin@amecfw.com	

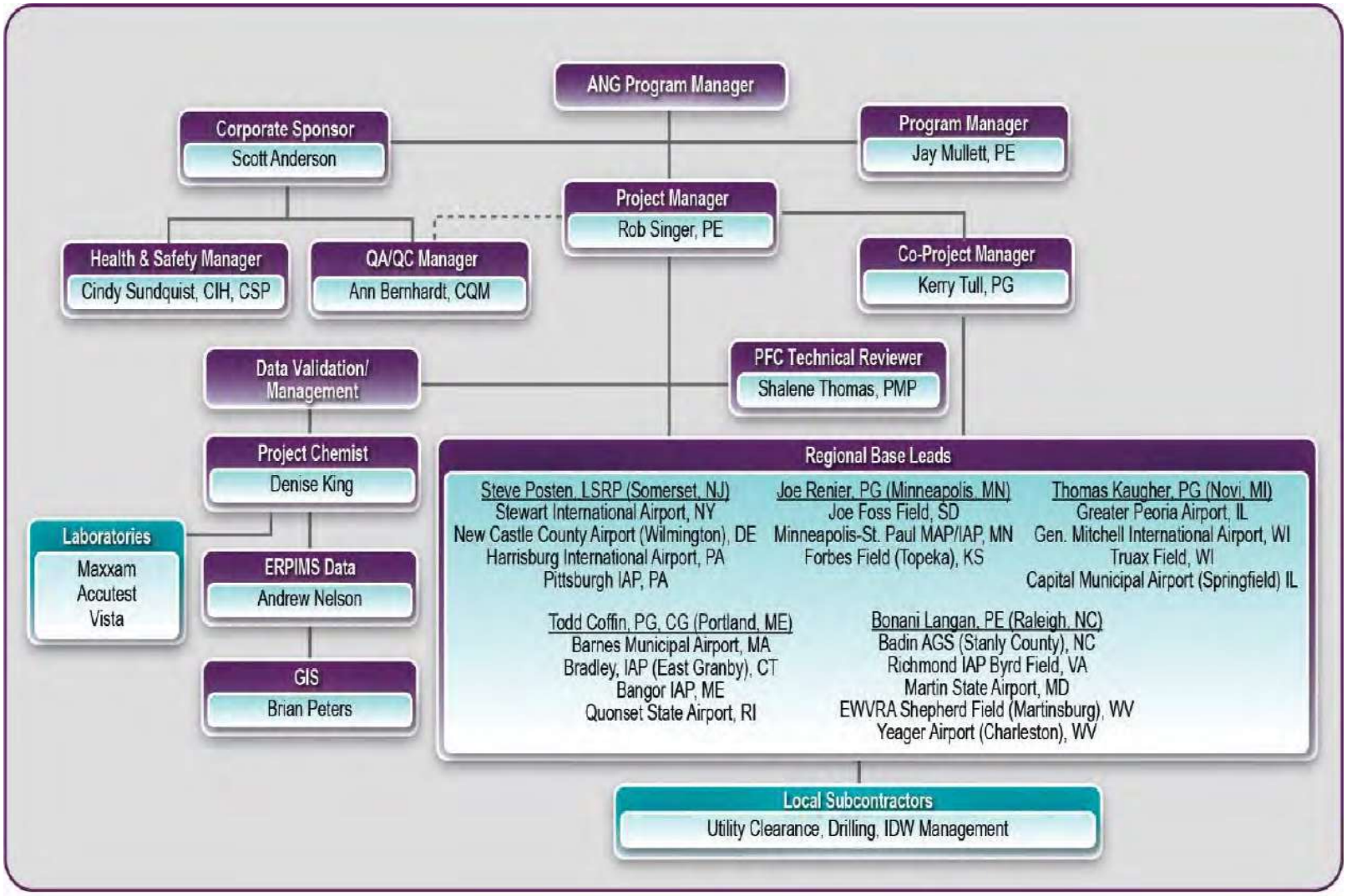
QAPP Worksheet #3 and #4 Distribution List Project Personnel Sign-Off

QAPP Recipients	Title	Organization	Telephone No.	Fax No.	E-mail Address	Signature/Date QAPP Read
Bonani Langan	Regional Base Lead	Amec Foster Wheeler	919-765-9977	919-381-9901	Bonani.Langan@amecfw.com	
Andrea Colby	SGS Accutest PM	SGS Accutest Laboratories (SGS Accutest)	407-425-6700	407-425-0707	Andrea.colby@sgs.com	
Svetlana Izosimova	SGS Accutest QA Manager	SGS Accutest s	407-425-6700	407-425-0707	Svetlana.Izosimova@sgs.com	
Melissa DiGrazia	PM	Maxxam Analytics International (Maxxam)	905 817-5784	905-817-5777	MDiGrazia@maxxam.ca	
Salima Haniff	QA Officer	Maxxam	800-563-6266	905-817-5777	shaniff@maxxam.ca	
Martha Maier	Laboratory Director	Vista Analytical Laboratory, Inc.	916-673-1520	916-673-0106	mmaier@vista-analytical.com	
Bahar Amiri	QA Manager	Vista	916-673-1520	916-673-0106	bamiri@vista-analytical.com	

Note: Copies of the QAPP will be distributed to the individuals above. The copies will consist of the following documents: QAPP and any subsequent QAPP revisions (rev.) and addendums.

Worksheets #3 and #4 have been combined. The project personnel sign-off table above documents key project personnel who have read the applicable sections of the QAPP and will perform the tasks as described in the QAPP.

QAPP Worksheet #5 Project Organization Chart



QAPP Worksheet #6 Communication Pathways

Communication Drivers	Responsible Entity	Name	Phone No.	Procedure (e.g., Timing, Pathways)
ANG Point of Contact	Program Manager and Contract Officer Representative (COR)	Dennis Pinigis	240-612-8149	Project planning documents will be provided to Dennis Pinigis, NGB/.
Amec Foster Wheeler Point of Contact	Program Manager	Jay Mullett	248-313-3669	Program Manager will be notified of field-related questions or problems by the PM.
Manage Site Activities	PM	Rob Singer	207-828-2643	PM will be notified of field-related questions or problems by phone, e-mail, or fax by close of business the next business day.
QAPP changes in the field	Field Manager	Varies	Varies	The Amec Foster Wheeler PM and Field Manager will be notified of any changes to the QAPP and reasons for the changes immediately. Any minor changes to the QAPP made in the field will be documented in an email from the ANG Program Manager within two business days of the change. Any major changes to the QAPP must be approved by the Amec Foster Wheeler QA/QC Manager, Senior Chemist, and PM, and will be communicated in writing to the ANG Program Manager prior to implementation.
Reporting Lab Data Quality Issues	Laboratory QA Managers	Salima Haniff (Maxxam)	800-563-6266	All QA/QC issues with project field samples will be reported by the Laboratory QA Officers to the QA/QC Manager within two business days. Any significant laboratory data quality issues (i.e., potentially rejected data) will be documented in an email from the Amec Foster Wheeler PM to the ANG Program Manager within two business days of identifying the issue during data review or validation.
		Svetlana Izosimova (SGS Accutest)	407-425-6700	
		Bahar Amiri (Vista)	916-673-1520	
Field and Analytical Corrective Actions	QA/QC Manager and Senior Chemist	Ann Bernhardt	503-639-3400	The need for corrective action for field and analytical issues will be determined by the QA/QC Manager and Senior Chemist in conjunction with the PM, the Field Manager or the Laboratory QA Manager, as appropriate.

QAPP Worksheet #6 Communication Pathways

Communication Drivers	Responsible Entity	Name	Phone No.	Procedure (e.g., Timing, Pathways)
Release of Analytical Data	Senior Chemist	Denise King	978-392-5339	No final analytical data can be released until verification or validation is completed and the QA/QC Manager has approved the release via the Senior Chemist.
QAPP Amendments	Senior Chemist	Denise King	978-392-5339	Any major changes to the QAPP must be approved by the QA/QC Manager, Senior Chemist, and PM, and communicated to the ANG Program Manager in writing before any change can be implemented.

QAPP Worksheet #7 Personnel Responsibilities and Qualifications

Name	Title	Organizational Affiliation	Education and Experience Qualifications
Dennis Pinigis	COR/Program Manager	NGB/	
Jay Mullett	Program Manager	Amec Foster Wheeler	M.S. Engineering Management; B.S. Civil Engineering; Professional Engineer; 21 years
Rob Singer	PM	Amec Foster Wheeler	B.S. Civil Engineering; Professional Engineer; 18 years
Kerry Tull	Co-PM	Amec Foster Wheeler	B.S. Geology; 25 years
Ann Bernhardt	QA/QC Manager	Amec Foster Wheeler	B.S. Environmental Science; Certified Manager of Quality/Organizational Excellence; 24 years
Denise King	Senior Chemist	Amec Foster Wheeler	B.A. Environmental Science; 16 years
Melissa Di Grazia	PM	Maxxam	B.S. Hons Forensic Biology; 7 years
Salima Haniff	QA Manager	Maxxam	B.S Chemistry; 13 years
Andrea Colby	PM	SGS Accutest	B.A. Biology; 26 years
Svetlana Izosimova	QA Manager	SGS Accutest	Ph.D. Colloid Chemistry, 23 years
Martha Maier	Laboratory Director	Vista	B.S. Chemistry; 30 years

QAPP Worksheet #7 Personnel Responsibilities and Qualifications

Name	Title	Organizational Affiliation	Education and Experience Qualifications
Bahar Amiri	QA Manager	Vista	B.S. Nutrition Science with emphasis in Biochemistry; 17 years

Notes:

The responsibilities of the various team members are summarized below by organization.

NGB/:

ANG Restoration Program Manager

Responsibilities and duties include the following:

- Provide the ANG's review, comment and concurrence with submitted documents.
- Coordinate with other stakeholders.
- Monitor progress of project activities.
- Review and comment on the QAPP.
- Review of the QA/QC portion of any submitted report.

Amec Foster Wheeler

Program Manager

Responsibilities and duties include the following:

- Communicate with ANG and other stakeholders.
- Direct Amec Foster Wheeler project team.

PM

Responsibilities and duties include the following:

- Oversee Amec Foster Wheeler work products.
- Provide Amec Foster Wheeler approval for major project deliverables.

Field Manager

Responsibilities and duties include the following:

- Coordinate field and laboratory schedules pertaining to relevant site activities.
- Request sample bottles from laboratory.
- Instruct personnel working on relevant site activities.
- Review field instrumentation, maintenance, and calibration to meet quality objectives.
- Review relevant field records and logs.
- Maintain field and laboratory files of notebooks/logs, data reductions and calculations; provide complete copies to the Project Coordinator.
- Develop, establish, and maintain files on relevant site activities.
- Perform data review of field data reductions and reports on relevant site activities.
- Verify that corrective actions are taken for deficiencies cited during audits of relevant site activities.
- Perform overall QA/QC of the relevant portions of the site activities.

QA/QC Manager/Chemist

Responsibilities and duties include the following:

- Review laboratory data packages.
- Oversee and interface with the analytical laboratory.
- Coordinate field QA/QC procedures with Task Managers (including audits of field activities), concentrating on field analytical measurements and practices to meet DQOs.
- Review field reports.
- Perform and review audit reports.
- Prepare interim QA/QC compliance reports.
- Prepare a QA/QC report in accordance with USEPA guidelines, including an evaluation of field and laboratory data and data usability reports.

Additional Support Staff

Responsibilities and duties include the following:

- Perform field procedures associated with the investigations as set forth in the Field Sampling Plan /Site Inspection Work Plan (FSP/SIWP).
- Perform field analyses and collect QA samples.
- Calibrate, operate, and maintain field equipment.
- Reduce field data.
- Maintain sample custody.
- Prepare field records and logs.

ANALYTICAL LABORATORY

General responsibilities and duties of the analytical laboratories include the following:

- Perform sample analyses and associated laboratory QA/QC procedures.
- Supply sampling containers and shipping cartons.
- Maintain laboratory custody of sample.
- Adhere to all protocols in the QAPP.

PM

Responsibilities and duties include the following:

- Serve as primary communication link between project coordinator and laboratory technical staff.
- Monitor workloads and maintain availability of resources.
- Oversee preparation of analytical reports.
- Supervise in-house COC.

Laboratory QA Manager

Responsibilities and duties include the following:

- Supervise personnel reviewing and inspecting all project-related laboratory activities.
- Conduct audits of all laboratory activities.

QAPP Worksheet #8 Special Personnel Training Requirements

Project Function	Specialized Training	Training Provider	Training Date	Personnel/Groups Receiving Training	Personnel Titles/ Organizational Affiliation	Location of Training Records/Certificates
Field Activities	40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER)	Certified Trained Professionals	Not Applicable	Field operations personnel	Consultant Field Staff and Subcontractors	Amec Foster Wheeler project offices and Site Safety and Health Plan

Note: Current HAZWOPER training certificates for consultant field staff and subcontractors will be maintained in the Amec Foster Wheeler, Portland, ME office location for each employee performing work at the Site where 40-hour training is required for the position assignment.

QAPP Worksheet #9 Project Team Planning Sessions Participants Sheet

Project Name: Phase I Regional Site Inspections for PFCs	Site Name: Multiple ANG Installations
Projected Date(s) of Sampling: Sampling to begin Spring of 2017. PM: Dennis Pinigis	Site Location: Multiple ANG Installations, Stewart IAP, New Windsor, New York; NCCA, Wilmington, Delaware; Joe Foss Field, South Dakota; HIA, Harrisburg, Pennsylvania; Stanly Count AGS Stanly County, North Carolina; Pittsburgh IAP (AFRC) and ANG), Pittsburgh, Pennsylvania; Richmond IAP Byrd Field, Richmond, Virginia; Martin State Airport, Maryland; EWVRA Shepherd Field, Martinsburg, West Virginia; Barnes MAP, Massachusetts; Yeager Airport, Charleston, West Virginia; MSPIA (AFRC and ANG), Minnesota; Bradley IAP, East Granby, Connecticut; Bangor IAP, Bangor, Maine; Quonset State Airport, Rhode Island; Greater Peoria Airport, Peoria, Illinois; General Mitchell IAP, Wisconsin; Forbes Field, Topeka, Kansas; Truax Field, Wisconsin; and Capital MAP, Springfield, Illinois
Date of Session: 18 October 2016 at Sheppard Hall, 3501 Fetchet Avenue, Joint Base Andrews, Maryland. Attendees are listed below.	
Scoping Session Purpose: Program Kickoff Meeting and review of project scope requirements.	

Name	Title	Affiliation	Phone	E-mail Address	Project Role
Richard McCoy	Branch Chief	NGB/	240-612-8541	Richard.p.mccoy4.civ@mail.mil	NGB/ Branch Chief
Dennis Pinigis	Contracting Officer's Representative	NGB/	240-612-8149	Dennis.j.pinigis.civ@mail.mil	Technical Advisor/COR
Stacy MacKay	Contracting Officer	NGB/AQ	703-607-1661	Stephanie.a.mackay.civ@mail.mil	Contracting Officer
Susan Klypchak	Contracting Specialist	NGB/AQ	703-607-1220	susan.l.klypchak.civ@mail.mil	Contracting Specialist
Fred Kimble	Restoration Program Manager	NGB/	240-612-8763	Frederick.a.kimble.civ@mail.mil	NGB/ Restoration Program Manager
Frances Saunders	Restoration Program Manager	NGB/	240-612-9511	Frances.d.saunders.civ@mail.mil	NGB/ Restoration Program Manager

QAPP Worksheet #9 Project Team Planning Sessions Participants Sheet

Name	Title	Affiliation	Phone	E-mail Address	Project Role
Gregory Wills	Restoration Program Manager	NGB/	240-612-8366	Gregory.k.wills.civ@mail.mil	NGB/ Restoration Program Manager
Brant Crumbling	Restoration Program Manager	NGB/	240-612-8144	Brant.m.crumbling.civ@mail.mil	NGB/ Restoration Program Manager
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QAPP Worksheet #9 Project Team Planning Sessions Participants Sheet

Name	Title	Affiliation	Phone	E-mail Address	Project Role
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Shalene Thomas (via phone)	PFC Technical Advisor	Amec Foster Wheeler	612-252-3697	Shalene.Thomas@amecfw.com	Amec Foster Wheeler PFC Technical Advisor
Tom Kaugher (via phone)	Regional Base Lead	Amec Foster Wheeler	248-313-3694	thomas.kaugher@amecfw.com	Amec Foster Wheeler Regional Base Lead
Bonani Langan (via phone)	Regional Base Lead	Amec Foster Wheeler	919-765-9977	Bonani.Langan@amecfw.com	Amec Foster Wheeler Regional Base Lead
Meeting Discussions/Comments: Discussions are summarized in the Final Kickoff Meeting Minutes, October 26, 2016.					

QAPP Worksheet #10 Conceptual Site Model

Facility Profile	Physical Profile	Release Profile	Land Use and Exposure Profile	Ecological Profile
Installation Description: • Years of operation • Total area occupied by base (acres) • Investigation area (acres) • Description of historical activities on base • Installation mission **Site History:** • Location(s) on base • Years of operation • Freq. of operation • Activities	**Site Characteristics:** • Total area (acres) **Topography:** • General topography across base • Topography in vicinity of site • Approximate elevation **Vegetation:** • General overview of vegetation at site • Stressed vegetation **Surface Water:** • Presence of streams, lakes, playas, oceans, etc. • Drainage pathways **Soils:** • Primary soil makeup (e.g. sand, silt, clay, etc.) **Geology:** • Formation information and name • Depth intervals **Hydrogeology:** • Aquifer formation name • Depth to groundwater • Saturated thickness • Confined, unconfined and/or perched aquifer • Groundwater flow direction • Hydraulic gradient, hydraulic conductivity and seepage velocity (if known) **Meteorology:** • Average annual precipitation • Wet and dry seasons • Average temperature / climate	**Contaminants of Potential Concern:** • Primary concern • As determined from previous reports • Note historical contaminants (e.g. chlorinated solvents, fuels, etc.) associated with the site **Media of Potential Concern:** • Soil, groundwater, and sediment **Confirmed Releases:** • Per records • Dates of release / use • Quantities used (if known) **Primary Releases from Site:** • Infiltration into groundwater (unconsolidated material, fracture flow, etc.) • Direct discharge into storm water sewer collection system • Direct discharge into drains, plumbing infrastructure and outfall locations • Adsorption to soil matrix near source **Secondary Releases:** • Soil excavations and disposal • Pump and treat systems discharges	**Current Landowners:** • Owner • Company name • Contact information **Current Land Use:** • Site specific information **Future Land Use:** • Potential development • Land use restrictions **Potential Receptors:** • Surface water bodies • Municipal groundwater wells • Private groundwater wells • Humans • Biota	**Potential Ecological Receptors:** • High quality rivers, streams, lakes, etc. • Inland and marine plant species, fish, birds, insects, soil invertebrates, and mammals that inhabit or migrate through the site • Associated threatened and endangered species **Threatened and Endangered Species:** • Listed threatened and endangered species

Note: Information contributing to the preliminary Conceptual Site Model for each site will be presented in appropriate sections of the Site-specific WPs. This information at a minimum will include the information presented above as applicable.

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QAPP Worksheet #11 Project Quality Objectives/Systematic Planning Process Statements

Step 1: State the Problems:
The problems to be addressed are: ▪ PFCs are a large group of synthetic fluorinated compounds that are widely used to make everyday products more resistant to heat, stains, grease, and water and as components in firefighting foams, such as Aqueous Film Forming Foam (AFFF) (National Institute of Environmental Health Sciences (NIEHS), 2016 and USAF, 2012). AFFF containing Perfluorooctanesulfonic acids (PFOS) and/or Perfluorooctanoic acids (PFOA) were used by the United States military, including the USAF, for firefighting and firefighting training; and PFCs may be present at USAF installations where AFFF was stored, disposed, intentionally discharged, or spilled (USAF, 2012). The chemical structures of PFCs make them very resistant to breakdown in the environment. Due to their persistence, bioaccumulation potential, and toxicity, PFCs may potentially impact human health and the environment (USEPA, 2014). According to DoD and subsequently under Air Force Instruction (AFI) 32-7020, PFCs (including PFOA/PFOS) are an emerging contaminant since they either do not have promulgated regulatory standards based on peer-reviewed science or they have promulgated standards but it is anticipated that such standards may change due to new science, detection capabilities, or pathways. Health Advisories (HAs) have been established for PFOA and PFOS to protect humans from potential exposure risk to these PFCs, which are not legally enforceable federal standards and are subject to change as new information becomes available. Based on AFI 32-7020, the ANG is required to investigate and mitigate human exposure to PFCs as an emerging contaminant since there is a potential for the presence of an unacceptable risk to human health or the environment.
Step 2: Identify the Goals of the Study:
▪ Conduct initial SIs at identified PRLs to determine the presence (detectable concentrations) or absence of PFCs in sampled media. Collect soil, groundwater, surface water, and/or sediment samples to assess for potential environmental impacts by PFCs at the previously identified PRLs at the following installations: Stewart IAP, New Windsor, New York; NCCA, Wilmington, Delaware; Joe Foss Field, South Dakota; HIA, Harrisburg, Pennsylvania; Stanly County AGS, Stanly County, North Carolina; Pittsburgh IAP (AFRC and ANG), Pittsburgh, Pennsylvania; Richmond IAP Byrd Field, Richmond, Virginia; Martin State Airport, Maryland; EWVRA Shepherd Field, Martinsburg, West Virginia; Barnes MAP, Massachusetts; Yeager Airport, Charleston, West Virginia; MSPIA(AFRC and ANG), Minnesota; Bradley IAP, East Granby, Connecticut; Bangor IAP, Bangor, Maine; Quonset State Airport, Rhode Island; Greater Peoria Airport, Peoria, Illinois; General Mitchell IAP, Wisconsin; Forbes Field, Topeka, Kansas; Truax Field, Wisconsin; and Capital MAP, Springfield, Illinois.

QAPP Worksheet #11 Project Quality Objectives/Systematic Planning Process Statements

Step 3: Identify Information Inputs:
Develop an approach to the SIs based on the understanding of Installation conditions obtained through document review and Installation visits and develop a consensus on the inspection approach. The following new data will be collected to achieve the goals of the study: ▪ **Stewart IAP** o Complete installation of approximately 32 soil borings and the collection of 64 soil samples; o Complete the installation of approximately 13 temporary monitoring wells; o Collection of groundwater samples from 6 existing monitoring wells and 13 temporary monitoring wells; o Collection of 5 surface water and 5 sediment samples; and o Completion of an SI Report that addresses each PRL addressed in the ANG SOO for this Task Order. ▪ **NCCA** o Complete installation of approximately 12 soil borings and the collection of 24 soil samples; o Complete the installation of approximately 5 temporary monitoring wells; o Collection of groundwater samples from 5 existing monitoring wells and 5 temporary monitoring wells; o Collection of 3 surface water and 6 sediment samples; and o Completion of an SI Report that addresses each PRL addressed in the SOO. ▪ **Joe Foss Field** o Complete installation of approximately 36 soil borings and the collection of 72 soil samples; o Complete the installation of approximately 17 temporary monitoring wells; o Collection of groundwater samples from 17 temporary monitoring wells; o Collection of 3 surface water and 3 sediment samples; and o Completion of an SI Report that addresses each PRL addressed in the SOO. ▪ **HIA** o Complete installation of approximately 8 soil borings and the collection of 16 soil samples; o Complete the installation of approximately 3 temporary monitoring wells; o Collection of groundwater samples from 3 temporary monitoring wells; and o Completion of an SI Report that addresses each PRL addressed in the SOO. ▪ **Badin AGS** o Complete installation of approximately 4 soil borings and the collection of 7 soil samples; o Complete the installation of approximately 3 temporary monitoring wells;

QAPP Worksheet #11 Project Quality Objectives/Systematic Planning Process Statements

- Collection of groundwater samples from 3 temporary monitoring wells;
- Collection of 1 surface water and 1 sediment sample; and
- Completion of an SI Report that addresses each PRL addressed in the SOO.

- **Pittsburgh IAP**
  - Complete installation of approximately 59 soil borings and the collection of 118 soil samples;
  - Complete the installation of approximately 36 temporary monitoring wells;
  - Collection of groundwater samples from 36 temporary monitoring wells;
  - Collection of 16 surface water and 16 sediment samples; and
  - Completion of an SI Report that addresses each PRL addressed in the SOO.
- **Richmond IAP**
  - Complete installation of approximately 20 soil borings and the collection of 40 soil samples;
  - Complete the installation of approximately 8 temporary monitoring wells;
  - Collection of groundwater samples from 8 temporary monitoring wells;
  - Collection of 5 surface water and 2 sediment samples; and
  - Completion of an SI Report that addresses each PRL addressed in the SOO.
- **Martin State Airport**
  - Complete installation of approximately 35 soil borings and the collection of 67 soil samples;
  - Complete the installation of approximately 15 temporary monitoring wells;
  - Collection of groundwater samples from 15 temporary monitoring wells;
  - Collection of 5 surface water and 5 sediment samples; and
  - Completion of an SI Report that addresses each PRL addressed in the SOO.
- **EWVRA Shepherd Field**
  - Complete installation of approximately 30 soil borings and the collection of 60 soil samples;
  - Complete the installation of approximately 16 temporary monitoring wells;
  - Collection of groundwater samples from 16 temporary monitoring wells;
  - Collection of 1 surface water and 1 sediment sample; and
  - Completion of an SI Report that addresses each PRL addressed in the SOO.
- **Barnes MAP**
  - Complete installation of approximately 12 soil borings and the collection of 24 soil samples;
  - Complete the installation of approximately 5 temporary monitoring wells;

QAPP Worksheet #11 Project Quality Objectives/Systematic Planning Process Statements

- Collection of groundwater samples from 5 temporary monitoring wells;
- Collection of 3 sediment samples; and
- Completion of an SI Report that addresses each PRL addressed in the SOO.

- **Yeager Airport**
  - Complete installation of approximately 21 soil borings and the collection of 42 soil samples;
  - Complete the installation of approximately 9 temporary monitoring wells;
  - Collection of groundwater samples from 9 temporary monitoring wells;
  - Collection of 2 surface water and 2 sediment samples; and
  - Completion of an SI Report that addresses each PRL addressed in the SOO.
- **MSPIA**
  - Complete installation of approximately 27 soil borings and the collection of 54 soil samples;
  - Complete the installation of approximately 19 temporary monitoring wells;
  - Collection of groundwater samples from 19 temporary monitoring wells;
  - Collection of 3 surface water and 3 sediment samples; and
  - Completion of an SI Report that addresses each PRL addressed in the SOO.
- **Bradley IAP**
  - Complete installation of approximately 15 soil borings and the collection of 30 soil samples;
  - Complete the installation of approximately 6 temporary monitoring wells;
  - Collection of groundwater samples from 6 temporary monitoring wells; and
  - Completion of an SI Report that addresses each PRL addressed in the SOO.
- **Bangor IAP**
  - Complete installation of approximately 26 soil borings and the collection of 52 soil samples;
  - Complete the installation of approximately 9 temporary monitoring wells;
  - Collection of groundwater samples from 9 temporary monitoring wells;
  - Collection of 2 surface water and 2 sediment samples; and
  - Completion of an SI Report that addresses each PRL addressed in the SOO.
- **Quonset State Airport**
  - Complete installation of approximately 6 soil borings and the collection of 14 soil samples;
  - Complete the installation of approximately 4 temporary monitoring wells;
  - Collection of groundwater samples from 4 temporary monitoring wells;

QAPP Worksheet #11 Project Quality Objectives/Systematic Planning Process Statements

- Collection of 1 surface water and 1 sediment sample; and
- Completion of an SI Report that addresses each PRL addressed in the SOO.

- **Greater Peoria Airport**
  - Complete installation of approximately 27 soil borings and the collection of 54 soil samples;
  - Complete the installation of approximately 15 temporary monitoring wells;
  - Collection of groundwater samples from 15 temporary monitoring wells;
  - Collection of 4 surface water and 4 sediment samples; and
  - Completion of an SI Report that addresses each PRL addressed in the SOO.
- **General Mitchell IAP**
  - Complete installation of approximately 47 soil borings and the collection of 94 soil samples;
  - Complete the installation of approximately 19 temporary monitoring wells;
  - Collection of groundwater samples from 3 existing permanent monitoring wells and 19 temporary monitoring wells;
  - Collection of 4 surface water and 4 sediment samples; and
  - Completion of an SI Report that addresses each PRL addressed in the SOO.
- **Forbes Field**
  - Complete installation of approximately 27 soil borings and the collection of 54 soil samples;
  - Complete the installation of approximately 12 temporary monitoring wells;
  - Collection of groundwater samples from 12 temporary monitoring wells;
  - Collection of 2 surface water and 2 sediment samples; and
  - Completion of an SI Report that addresses each PRL addressed in the SOO.
- **Truax Field**
  - Complete installation of approximately 27 soil borings and the collection of 54 soil samples;
  - Complete the installation of approximately 12 temporary monitoring wells;
  - Collection of groundwater samples from 12 temporary monitoring wells; and
  - Completion of an SI Report that addresses each PRL addressed in the SOO.
- **Capital MAP**
  - Complete installation of approximately 12 soil borings and the collection of 24 soil samples;
  - Complete the installation of approximately 7 temporary monitoring wells;
  - Collection of groundwater samples from 1 existing permanent monitoring well and 7 temporary monitoring wells;
  - Collection of 2 surface water and 2 sediment samples; and

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- Completion of an SI Report that addresses each PRL addressed in the SOO.

Step 4: Define the Boundaries of the Sampling:

As the activities in Step 3 progress, the data will be continually reviewed to determine if additional sampling locations are necessary to confirm presence or absence of PFCs. Proposed sampling locations are described in Site-specific WPs. Generally, the inspection will not extend beyond the accepted boundaries of the ANG Installations.

Step 5: Develop the Analytical Approach:

Soil, sediment, surface water, and groundwater samples will be collected to determine the presence or absence of PFCs in sampled media. For this SI program, PFC concentrations will be compared against USEPA HAs and/or state-specific regulations, as applicable. For all of the installations, it is expected that samples will be analyzed for the 6 PFCs (included in **Worksheet #15**) on the Unregulated Contaminant Monitoring Rule 3 (UCMR3) list by Method 537.1 Modified. Liquid Chromatography and Tandem Mass Spectrometry (LC/MS/MS) methods will be used to analyze the samples. If PFCs are detected at concentrations exceeding USEPA HAs and/or concentrations established by state regulations, then the PRL will require further investigation. In the absence of local standards and in accordance with the *Interim Air Force Guidance on Sampling and Response Actions for Perfluorinated Compounds at Active and BRAC Installations* dated 27 Aug 2012 (USAF, 2012), further evaluation will be performed if the following HA levels are exceeded in groundwater and or surface water samples collected as part of SI programs at the 20 installations:

- PFOS: 0.07 micrograms per liter (µg/L)
- PFOA: 0.07 µg/L
- PFOS + PFOA : 0.07 µg/L

Worksheet #15 identifies the laboratory reporting limits for the various media that will be sampled to determine the presence of PFCs. If concentrations of PFCs are above the method reporting limits, the PFC constituent will be considered to be present at the specific PRL.

Step 6: Specify Performance or Acceptance Criteria:

The following performance and acceptance criteria will be used during SI activities:

- Daily standardized PFC personal protective equipment and field equipment checklist (provided in the PFC protocol SOP AFW-01 included in **Attachment E**) will be completed by the Amec Foster Wheeler Field Manager for each installation. The QA Manager will review and accept the final checklist.
- The Amec Foster Wheeler Field Manager will verify that field procedures described in the QPP and WP are followed on a daily basis during field work. Deviations from QPP procedures will be promptly addressed and documented by the Amec Foster Wheeler Field Manager.
- Laboratories analyzing SI samples will be accredited under the DoD Environmental Laboratory Accreditation Program (ELAP) for PFC analysis and will adhere to analytical method performance/acceptance criteria as specified in the DoD Quality Systems Manual (QSM) V5.0 (or latest version) and defined on **Worksheets #12**.

QAPP Worksheet #11 Project Quality Objectives/Systematic Planning Process Statements

- The LC/MS/MS method will provide acceptable detection limits (DLs) to confirm the exceedance of the USEPA HAs, or state-specific criteria at concentrations defined in Step 2 and **Worksheet #15**.
- USEPA Stage 2B data verification will be conducted on 100 percent (%) of the data, and USEPA Stage IV data validation will be conducted on 10 % of the analytical data by an experienced chemist to assess data usability. The data usability will then be evaluated by NGB for final approval. Data completeness of 90 % usable data will be required for this SI program.
- All documents, including WPs and SI Reports will be reviewed and accepted by NGB.

Sampling and laboratory analysis of PFOA and PFOS using the LC/MS/MS methodology will be used to verify that mitigation systems are reducing PFOA and PFOS concentrations to below USEPA HAs, and/or state-specific standards in drinking water.

Step 7: Develop the Plan for Obtaining Data:

The overall QA objective is to develop and implement procedures for field sampling — COC, laboratory analysis and reporting — that will provide results to support the evaluation of site data consistent with requirements. Specific procedures for sampling, COC, laboratory instrument calibration, laboratory analysis, data reporting, internal QC, audits, preventive maintenance of field equipment and corrective action are described in other sections of this QAPP.

The Site-specific WPs will involve a phased approach to sampling and analysis, including field evaluation of the soil, groundwater, sediment, and surface samples as well as the collection of samples for laboratory analysis. This will provide the opportunity to evaluate and focus each data collection step to optimize the sampling process and maximize the amount of information gained from this inspection.

Who will use the data?

Project team, their subcontractors, and overseeing agencies will use the data to assess the efficacy of the project activities and to confirm adherence to the performance standards.

What will the data be used for?

The data will be used to produce defensible data for use in determining if NFA is appropriate at each installation and, if not, to develop DQOs for follow-on remedial investigation activities.

What type of data are needed?

Data include investigative soil, groundwater, surface water, and sediment samples.

Standard protocols for sample collection and handling, sample preparation, and analytical methods will be followed. SOPs are included in this document (**Appendix E)** and in the Site-specific WPs.

How "good" does the data need to be in order to support the environmental decision?

The data obtained must be of sufficient quality to support decision making processes for the future of the sites. Definitive data (Level IV) will be required for this project. Data completeness of 90 % usable data will be required for this SI program.

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How much data is needed? (No. of samples for each analytical group, matrix and concentration)
The estimated no. of samples and analyses for each media are summarized in **Worksheet #20** and will be described in the Site-specific WPs.
Where, when, and how should the data be collected/generated?
In general, soil sampling activities will consist of collecting samples for laboratory analysis using direct-push methods and groundwater sampling activities will consist of collecting samples for laboratory analysis using low-flow methods. The specific sampling programs will be described in the Site-specific WPs. Standard protocols for sample collection and handling, sample preparation, and analytical methods will be followed. SOPs for field sampling are referenced in this document (**Attachment E**) and will be provided in the Site-specific WPs. Field forms are to be completed by the field team either manually or digitally and have been included in **Attachment F**.
Who will collect and generate the data?
Samples will be collected by Amec Foster Wheeler and submitted to Vista as the primary lab. Both SGS Accutest and Maxxam are backup laboratories.
How will the data be reported?
The analytical data will be provided by the laboratories in PDF. The PDFs will be Level IV data packages which include all necessary information for the recalculation of analytical results. The laboratories will also provide an Environmental Resources Program Information Management System (ERPIMS) compliant electronic data deliverable (EDD).The results of the Installation-specific sampling activities will be provided in the Installation-specific SI Reports.
How will the data be archived?
All data will be archived by NGB in their Joint Base Andrews, Prince George's County, Maryland office. Data will also be retained and stored by Amec Foster Wheeler for a minimum of 7 years.

QAPP Worksheet #12-1 Measurement Performance Criteria – PFCs at Vista

Matrix	**Water and Soil**
Analytical Group	**PFCs – 537.1 Modified**
Concentration Level	**Low**

Sampling Procedure[1]	**Analytical Method/ SOPs[2]**	**Data Quality Indicators**	**Measurement Performance Criteria**	**QC Sample and/or Activity Used to Assess Measurement Performance**	**QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)**
WP (Amec Foster Wheeler, To Be Determined [TBD])	537.1 Modified/ SOP 49, Rev 8	Precision — Overall	Relative Percent Difference (RPD) < 30 %	Field duplicate	S&A
		Accuracy/Bias Contamination	No analytes detected > 1/2 the limit of quantitation (LOQ) or 1/3 the regulatory limit, whichever is greater.	Blanks (field, equipment, method)	S&A
		Accuracy/Bias	More conservative of laboratory-specified limits or areas within 50-150% of the average areas measured during initial calibration (ICAL)	Internal standards	A
		Accuracy/Bias/ Precision	Perfluorobutanesulfonic Acid (PFBS) = 60-130% Perfluoroheptanoic acid (PFHpA), Perfluorohexanoic acid (PFHxA), PFOA, and PFOS = 70-130% Perfluorononanoic Acid (PFNA) = 50-130%, RPD ≤30%	(Matrix Spike [MS]/Matrix Spike Duplicate [MSD])	A
		Accuracy	PFBS = 60-130% PFHpA, PFHxA, PFOA, and PFOS = 70-130% PFNA = 50-130%	Ongoing Precision & Recovery (OPR) Sample	A

Notes:
1. Reference no. from QAPP Worksheet #21.
2. Reference no. from QAPP Worksheet #23.

QAPP Worksheet #12-2 Measurement Performance Criteria – SGS Accutest

Matrix	**Water and Soil**
Analytical Group	**PFCs – 537.1 Modified**
Concentration Level	**Low**

Sampling Procedure[1]	**Analytical Method/ SOP[2]**	**Data Quality Indicators**	**Measurement Performance Criteria**	**QC Sample and/or Activity Used to Assess Measurement Performance**	**QC Sample Assesses Error for S, A or S&A**
WP (Amec Foster Wheeler, TBD)	MS014.2, OP058.4, and OP063.1	Precision — Overall	RPD < 30%	Field duplicate	S&A
		Accuracy/Bias Contamination	< ½ LOQ, <1/10 the concentration detected in an associated sample, or <1/10 the regulatory limit, whichever is highest	Blanks (field, equipment, method)	S&A
		Accuracy/Bias	More conservative of laboratory-specified limits or areas within 50-150% of the average areas measured during ICAL	Internal standards	A
		Accuracy/Bias/Precision	70-130%, RPD ≤30%	MS/MSD	A
		Accuracy/Bias	70-130%	Laboratory Control Sample (LCS)	A
		Accuracy/Bias	Perfluoro-n-[1,2-13C2] hexanoic acid (13C2-PFHxA) and Perfluoro-n-[1,213C2] decanoic acid (13C2-PFDA) 70-130% recovery	Surrogates	A

Notes:
1. Reference no. from QAPP Worksheet #21.
2. Reference no. from QAPP Worksheet #23.

QAPP Worksheet #12-3 Measurement Performance Criteria – PFCs at Maxxam

Matrix	**Water and Soil**
Analytical Group	**PFCs – 537.1 Modified**
Concentration Level	**Low**

Sampling Procedure[1]	Analytical Method/ SOPs[2]	Data Quality Indicators	Measurement Performance Criteria	QC Sample and/or Activity Used to Assess Measurement Performance	QC Sample Assesses Error for S, A or S&A
WP (Amec Foster Wheeler, TBD)	537.1 Modified/ Compliance Assurance Monitoring (CAM) SOP-00894/10	Precision — Overall	RPD < 30%	Field duplicate	S&A
		Accuracy/Bias Contamination	No analytes detected > 1/2 the LOQ or the regulatory limit, whichever is greater.	Blanks (field, equipment, method)	S&A
		Accuracy/Bias	50-150% of the average areas measured during ICAL	Internal standards	A
		Accuracy/Bias/Precision	70-130% recovery, RPD ≤30%	MS/MSD	A
		Accuracy/Bias	70-130% recovery	LCS	A
		Accuracy/Bias	Water - 70-130% recovery Soil - 50-130% recovery	Surrogates	A

Notes:
1. Reference no. from QAPP Worksheet #21.
2. Reference no. from QAPP Worksheet #23.

QAPP Worksheet #13 Secondary Data Criteria and Limitations

Data Type	Data Source (Report Title and Date)	Data Generator(s) (Originating Organization, Data Types, Data Generation/Collection Dates)	How Data Will Be Used?	Limitations on Data Use
Stewart IAP				
Preliminary Assessments	Final Perfluorinated Compounds Preliminary Assessment Site Visit Report, New York Air National Guard, Stewart Air National Guard Base	BB&E, 2016.	ID of potential PFC release areas as well as historical use and dates of operation.	Assessments were developed based upon reporting of others and/or interviews of former Base personnel.
NCCA				
Preliminary Assessments	Final Perfluorinated Compounds Preliminary Assessment Site Visit Report, Delaware Air National Guard Base, New Castle, Delaware	BB&E, 2016.	ID of potential PFC release areas as well as historical use and dates of operation.	Assessments were developed based upon reporting of others and/or interviews of former Base personnel.
Joe Foss Field				
Preliminary Assessment	Final Perfluorinated Compounds Preliminary Assessment Site Visit Report, South Dakota Air National Guard, 114th Fighter Wing, Sioux Falls, South Dakota	BB&E, 2016.	ID of potential PFC release areas as well as historical use and dates of operation.	Assessments were developed based upon reporting of others and/or interviews of former Base personnel.

QAPP Worksheet #13 Secondary Data Criteria and Limitations

Data Type	Data Source (Report Title and Date)	Data Generator(s) (Originating Organization, Data Types, Data Generation/Collection Dates)	How Data Will Be Used?	Limitations on Data Use
HIA				
Preliminary Assessment	Final Perfluorinated Compounds Preliminary Assessment Site Visit Report, Harrisburg Air National Guard Base, Harrisburg International Airport, Middletown, Pennsylvania.	BB&E, 2016.	ID of potential PFC release areas as well as historical use and dates of operation.	Assessments were developed based upon reporting of others and/or interviews of former Base personnel.
Stanly County AGS				
Preliminary Assessment	Final Perfluorinated Compounds Preliminary Assessment Site Visit Report, Stanly County Air National Guard Base, New London, North Carolina.	BB&E, 2016.	ID of potential PFC release areas as well as historical use and dates of operation.	Assessments were developed based upon reporting of others and/or interviews of former Base personnel.
Pittsburgh IAP				
Preliminary Assessment	Final Perfluorinated Compounds Preliminary Assessment Site Visit Report, Pittsburgh Air National Guard Base, Coraopolis, Pennsylvania	BB&E, 2015.	ID of potential PFC release areas as well as historical use and dates of operation.	Assessments were developed based upon reporting of others and/or interviews of former Base personnel.

QAPP Worksheet #13 Secondary Data Criteria and Limitations

Data Type	Data Source (Report Title and Date)	Data Generator(s) (Originating Organization, Data Types, Data Generation/Collection Dates)	How Data Will Be Used?	Limitations on Data Use
Richmond IAP				
Preliminary Assessment	Final Perfluorinated Compounds Preliminary Assessment Site Visit Report, Former Richmond Air National Guard Base, Richmond, Virginia.	BB&E, 2016.	ID of potential PFC release areas as well as historical use and dates of operation.	Assessments were developed based upon reporting of others and/or interviews of former Base personnel.
Martin State Airport				
Preliminary Assessment	Final Perfluorinated Compounds Preliminary Assessment Site Visit Report, Martin State Air National Guard Base, Baltimore, Maryland.	BB&E, 2016.	ID of potential PFC release areas as well as historical use and dates of operation.	Assessments were developed based upon reporting of others and/or interviews of former Base personnel.
EWVRA				
Preliminary Assessment	Final Perfluorinated Compounds Preliminary Assessment Site Visit Report, West Virginia Air National Guard Base, Martinsburg, West Virginia	BB&E, 2015.	ID of potential PFC release areas as well as historical use and dates of operation.	Assessments were developed based upon reporting of others and/or interviews of former Base personnel.

QAPP Worksheet #13 Secondary Data Criteria and Limitations

Data Type	Data Source (Report Title and Date)	Data Generator(s) (Originating Organization, Data Types, Data Generation/Collection Dates)	How Data Will Be Used?	Limitations on Data Use
Barnes MAP				
Preliminary Assessment	Final Perfluorinated Compounds Preliminary Assessment Site Visit Report, Barnes Air National Guard Base, Westfield, Massachusetts.	BB&E, 2016	ID of potential PFC release areas as well as historical use and dates of operation.	Assessments were developed based upon reporting of others and/or interviews of former Base personnel.
Yeager Airport				
Preliminary Assessment	Final Perfluorinated Compounds Preliminary Assessment Site Visit Report, McLaughlin Air National Guard Base, Charleston, West Virginia.	BB&E, 2015	ID of potential PFC release areas as well as historical use and dates of operation.	Assessments were developed based upon reporting of others and/or interviews of former Base personnel.
MSPIA				
Preliminary Assessment	Final Perfluorinated Compounds Preliminary Assessment Site Visit Report, Minnesota Air National Guard Base, Minneapolis, Minnesota.	BB&E, 2016	ID of potential PFC release areas as well as historical use and dates of operation.	Assessments were developed based upon reporting of others and/or interviews of former Base personnel.

QAPP Worksheet #13 Secondary Data Criteria and Limitations

Data Type	Data Source (Report Title and Date)	Data Generator(s) (Originating Organization, Data Types, Data Generation/Collection Dates)	How Data Will Be Used?	Limitations on Data Use
Bradley IAP				
Preliminary Assessment	Final Perfluorinated Compounds Preliminary Assessment Site Visit Report, Bradley Air National Guard Base, East Granby, Connecticut.	BB&E, 2016	ID of potential PFC release areas as well as historical use and dates of operation.	Assessments were developed based upon reporting of others and/or interviews of former Base personnel.
Bangor IAP				
Preliminary Assessment	Final Perfluorinated Compounds Preliminary Assessment Site Visit Report, Bangor Air National Guard Site, Bangor, Maine.	BB&E, 2015.	ID of potential PFC release areas as well as historical use and dates of operation.	Assessments were developed based upon reporting of others and/or interviews of former Base personnel.
Quonset State Airport				
Preliminary Assessment	Final Perfluorinated Compounds Preliminary Assessment Site Visit Report, Quonset Air National Guard Base, North Kingstown, Rhode Island.	BB&E, 2016.	ID of potential PFC release areas as well as historical use and dates of operation.	Assessments were developed based upon reporting of others and/or interviews of former Base personnel.

QAPP Worksheet #13 Secondary Data Criteria and Limitations

Data Type	Data Source (Report Title and Date)	Data Generator(s) (Originating Organization, Data Types, Data Generation/Collection Dates)	How Data Will Be Used?	Limitations on Data Use
Greater Peoria Airport				
Preliminary Assessment	Final Perfluorinated Compounds Preliminary Assessment Site Visit Report, Peoria Air National Guard Base, Peoria, Illinois.	BB&E, 2015.	ID of potential PFC release areas as well as historical use and dates of operation.	Assessments were developed based upon reporting of others and/or interviews of former Base personnel.
General Mitchell IAP				
Preliminary Assessment	Final Perfluorinated Compounds Preliminary Assessment Site Visit Report, Wisconsin Air National Guard Base, General Mitchell International Airport, Milwaukee, Wisconsin.	BB&E, 2015.	ID of potential PFC release areas as well as historical use and dates of operation.	Assessments were developed based upon reporting of others and/or interviews of former Base personnel.
Forbes Field				
Preliminary Assessment	Final Perfluorinated Compounds Preliminary Assessment Site Visit Report, Forbes Field Air National Guard Base, Topeka, Kansas.	BB&E, 2016.	ID of potential PFC release areas as well as historical use and dates of operation.	Assessments were developed based upon reporting of others and/or interviews of former Base personnel.

QAPP Worksheet #13 Secondary Data Criteria and Limitations

Data Type	Data Source (Report Title and Date)	Data Generator(s) (Originating Organization, Data Types, Data Generation/Collection Dates)	How Data Will Be Used?	Limitations on Data Use
Truax Field				
Preliminary Assessment	Final Perfluorinated Compounds Preliminary Assessment Site Visit Report, Wisconsin Air National Guard Base, Truax Field, Dane County Regional Airport, Madison, Wisconsin	BB&E, 2015.	ID of potential PFC release areas as well as historical use and dates of operation.	Assessments were developed based upon reporting of others and/or interviews of former Base personnel.
Capital MAP				
Preliminary Assessment	Final Perfluorinated Compounds Preliminary Assessment Site Visit Report, Illinois Air National Guard, Abraham Lincoln Capital Airport, Springfield, Illinois.	BB&E, 2015.	ID of potential PFC release areas as well as historical use and dates of operation.	Assessments were developed based upon reporting of others and/or interviews of former Base personnel.

QAPP Worksheet #14 Summary of Project Tasks

Sampling Tasks
To meet the project goals defined in **Worksheet #11**, SIs will be initiated at 20 installations. The SIs will include site reconnaissance (as needed to refine the scope of sampling activities) as well as collection of soil, sediment, surface water, and groundwater samples to determine the presence of PFCs at identified AFFF areas. The specific sampling and analytical procedures for implementing the SIs will be described in 20 WPs. Based on the scope of work the SIs will include the activities identified in **Worksheet #14/16** and described below. It is expected the scope of work identified in **Worksheet #14/16** of this QPP will be modified based on the scoping visits and review of pertinent background documentation for each installation. The final SI scope will be described in detail in WPs that will be reviewed by ANG and the appropriate regulatory agency, as applicable, for review and approval prior to the commencement of field activities. Fieldwork will be conducted in accordance with the SOPs provided in **Attachment E**. SOPs (**Attachment E**) applicable to each installation/PRL will be reviewed prior to implementation of field activities; the SOPs consist of: • SOP AFW-01: *Field Sampling Protocols to Avoid Cross-Contamination of PFCs;* • SOP AFW-02: *Soil Sampling*; • SOP AFW-03: *Groundwater Sampling*; • SOP AFW-04: *Monitoring Well Installation*; • SOP AFW-05: *Monitoring Well Development*; • SOP AFW-06: *Borehole Abandonment;* • SOP AFW-07: *Sediment Sampling*; • SOP AFW-08: *Surface Water Sampling*; • SOP AFW-09: *Influent and Effluent Water Sampling*; • SOP AFW-10: *Drilling, Development, and Heavy Equipment Decontamination*; • SOP AFW-11: *Sampling Handling and Custody;* • SOP AFW-12: *Protocol to Provide Water Free of Perfluorinated Compounds for Collection of Field Blanks and Equipment Blanks*; • SOP AFW-13: *Electronic Field Forms*. Field sampling forms which will be completed manually or digitally are included in **Attachment F**. ***PFC Sampling Considerations*** Given the low DLs associated with PFC analysis and the many potential sources of trace levels of PFCs, field personnel are advised to strictly follow protocols to help mitigate the potential for false detections of PFCs. A list of prohibited and acceptable clothing/equipment for sampling at PFC sites is

QAPP Worksheet #14 Summary of Project Tasks

provided in **SOP AFW-01 Table 1**. In addition, a *Protocol to Provide Water Free of Perfluorinated Compounds for Collection of Field Blanks and Equipment Blanks* has also been included as **SOP AFW-12**.

QC Samples

One duplicate sample will be collected at a rate of 10 % (one for each 10 samples) for each media sampled. In addition, duplicate sample volume will be collected at a rate of 5 % (one for each 20 samples) for MS/MSD analysis. In addition, one rinsate sample will be collected for each day that samples are collected unless dedicated equipment is used. One field blank per lot of laboratory-provided "PFC-free" deionized water will be collected and analyzed for PFCs.

Analysis Tasks

Samples will be processed, prepared, and analyzed by Maxxam, SGS Accutest, or Vista as described in this QAPP (Amec Foster Wheeler, 2016).

QC Tasks

The samples will be collected and processed and the waste disposed as documented in field SOPs to be provided in Site-specific WPs. The QC samples are described in **Worksheet #28**.

Secondary Data

See **Worksheet #13**.

Data Management Tasks

The purpose of data management is to ensure that all of the necessary data are accurate and readily accessible to meet the analytical and reporting objectives of the project. The analytical results will be provided by the laboratory in the ERPIMS lab submittal EDD format. Laboratory EDDs will be loaded to the ERPToolsX software where it will be checked and supplemented with field-derived data. Final ERPIMS submittal will be complete after all data in ERPToolsX have been loaded, checked, and final review performed by Amec Foster Wheeler ERPIMS staff.

Documentation and Records

Field sample ID — to be described in the site-specific WPs

- **Field documentation** — Field personnel will provide comprehensive documentation covering various aspects of field sampling, field analysis, and sample COC. This documentation consists of a record that allows reconstruction of field events and sample handling to aid in the data review and interpretation process. Documents, records, and information relating to the performance of the field work will be retained in the project file for a minimum of seven years.
- **Laboratory project files** — The laboratory will establish a file for pertinent data. The file will include correspondence, faxed information, phone logs, and COC forms. The laboratory will retain project files and data packages for a period not less than 5 years. The NGB and/or its designated representative will retain copies of the analytical data reports.

QAPP Worksheet #14 Summary of Project Tasks

- **Laboratory logbooks** — Workbooks, bench sheets, instrument logbooks, and instrument printouts will be used to trace the history of samples through the analytical process and to document important aspects of the work, including the associated QCs. As such, logbooks, bench sheets, instrument logs, and instrument printouts will be part of the permanent record of the laboratory. Each page or entry will be dated and initialed by the analyst at the time of entry. Errors in entry will be crossed out in indelible ink with one stroke, corrected without the use of white-out or by obliterating or writing directly over the erroneous entry, and initialed and dated by the individual making the correction. Pages of logbooks that are not used will be completed by lining out unused portions. Information regarding the sample, analytical procedures performed, and results of the testing will be recorded on laboratory forms or personal notebook pages by the analyst. These notes will be dated and will also identify the analyst; instrument used, and instrument conditions. Laboratory notebooks will be periodically reviewed by the laboratory group leaders for accuracy, completeness, and compliance with this QAPP. All entries and calculations will be verified by the laboratory group leader. If all entries on the pages are correct, the laboratory group leader will initial and date the pages. Corrective action will be taken for incorrect entries before the laboratory group leader signs.
- **Computer and hard copy storage** — All electronic files and deliverables will be retained by the laboratory for not less than 5 years; hard copy data packages (or electronic copies) will also be retained for not less than 5 years. The NGB and/or its designated representative will retain copies of the analytical data reports.
- **Field data reporting** — Information collected in the field through visual observation, manual measurement, and/or field instrumentation will be recorded in field notebooks or data sheets and/or on forms. Such data will be reviewed by the appropriate Field Manager for adherence to the Installation-specific FSP and for consistency. Concerns identified as a result of this review will be discussed with the field personnel, corrected if possible, and (as necessary) incorporated into the data evaluation process. If applicable, field data forms and calculations will be processed and included in appendices to the appropriate reports (when generated). The original field logs, documents, and data reductions will be kept in the project file at the Amec Foster Wheeler office in Portland, Maine.
- **Laboratory data reporting** — Data reports for all parameters will include, at a minimum, the following items:

  Narrative: Summary of activities that took place during sample analysis, including the following information:
  - Laboratory name and address
  - Date of sample receipt
  - Cross reference of laboratory ID no. to contractor sample ID
  - Analytical methods used
  - Deviations from specified protocol
  - Corrective actions taken

QAPP Worksheet #14 Summary of Project Tasks

Included with the narrative will be any sample handling documents, including field and internal COC forms, air bills, and shipping tags.

***Analytical Results*:** These will be reported according to analysis type and include the following information, as applicable:

- Sample ID
- Laboratory ID
- Date of collection
- Date of receipt
- Date of extraction
- Date of analysis
- DL

Sample results on the report forms will be corrected for dilutions. Soil data will be reported on a dry-weight basis. Unless otherwise specified, all results will be reported uncorrected for blank contamination.

The data associated with Contract Laboratory Program-equivalent reporting will be expanded to include supporting documentation necessary to provide a Contract Laboratory Program-equivalent package. This additional documentation will include, but not be limited to, raw data required to recalculate any result, including instrument printouts and quantitation reports. The report also will include standards used in calibration and calculation of analytical results; sample extraction, digestion, and other preparation logs; standard preparation logs; instrument run logs; and moisture content calculations.

- **Data reporting levels are as follows**:
  - **Level 4 — Full Reporting**: Full Contract Laboratory Program or Contract Laboratory Program-type reporting is used for those analyses that, based on the intended data use, require full documentation. Laboratory analysis of all SI samples will be performed with full Level IV reporting, including raw data.

Assessment/Audit Tasks

Performance and systems audits will be completed in the field and laboratory during the SIs, as described below and in **Worksheets #31 and #32**.

1. **Field Audits** — The following field performance and systems audits will be completed during this project.

   The Field Manager will monitor field performance. Field performance audit summaries will contain an evaluation of field activities to verify that the activities are performed according to established procedures. Field performance audits may be performed by the PM (or his designee). The auditor(s) will review field reports and communicate concerns to the PM and/or Field Manager, as appropriate.

   The no. and freq. of field performance audits conducted will be determined independently by the PM or Field Manager. The PM (or his/her designee) will conduct field performance audits at a freq. of approximately one per month during field activities. The observations made during

QAPP Worksheet #14 Summary of Project Tasks

field performance audits and any recommended changes/deviations to the field procedures will be recorded and documented.

2. **Laboratory Audits**

Periodic internal laboratory audits are conducted by the Laboratory QA Manager. As part of the audit, the overall performance of the laboratory staff is evaluated and compared to the performance criteria outlined in the laboratory QA manual and SOPs. Results of the audits are summarized and issued to each department supervisor, Laboratory Manager, and Laboratory Director. A systems audit of each laboratory may also be performed by the QA/QC Manager to determine whether the procedures implemented by each laboratory comply with the QA manual and SOPs. As a participant in state and federal certification programs, the laboratory is audited by representatives of the regulatory agency issuing certification, in addition to the laboratory's internal audits. Audits are usually conducted every one or two years and focus on laboratory conformance to the specific program protocols for which the laboratory is seeking certification. The auditor reviews sample handling and tracking documentation, analytical methodologies, analytical supportive documentation, and final reports. The audit findings are formally documented and submitted to the laboratory for corrective action, if necessary.

The NGB reserves the right to conduct an on-site audit of the laboratory prior to the start of analyses for the project; however none are scoped at this time. Additional audits may be performed during the course of the project, as deemed necessary.

3. **Corrective Action**

Corrective actions are required when field or analytical data are not within the objectives specified in this QAPP. Corrective actions include procedures to promptly investigate, document, evaluate, and correct data collection and/or analytical procedures. Field and laboratory corrective action procedures for the actions are described below.

a. **Field Procedures**

If, during fieldwork, a condition is noted by the field crew that would have an adverse effect on data quality, corrective action will be taken so as not to repeat this condition. Condition ID, cause, and corrective action implemented by the Field Program Coordinator or a designee will be documented on a Corrective Action Form and reported to the appropriate Field Manager, QA/QC Manager, and PM.

Examples of situations that would require corrective actions are provided below:

- Protocols as defined by the QAPP and/or site-specific FSPs have not been followed.
- Equipment is not in proper working order or is not properly calibrated.
- QC requirements have not been met.
- Issues resulting from performance or systems audits have not been resolved.

Project personnel will continuously monitor ongoing work performance as part of daily responsibilities.

b. **Laboratory Procedures**

In the laboratory, when a condition is noted to have an adverse effect on data quality, corrective action will be taken so as not to repeat this

QAPP Worksheet #14 Summary of Project Tasks

condition. Condition ID, cause, and corrective action taken will be documented and reported to the PM and QA/QC Manager. Corrective action may be initiated, at a minimum, under the following conditions:

- Protocols as defined by this QAPP have not been followed.
- Predetermined data acceptance standards are not obtained.
- Equipment is not in proper working order or calibrated.
- Sample and test results are not completely traceable.
- QC requirements have not been met.
- Issues resulting from performance or systems audits have not been resolved.

Laboratory personnel will continuously monitor ongoing work performance as part of daily responsibilities. Corrective action is initiated at the point where the problem has been identified. At whatever level this occurs (analyst, supervisor, data review, or QC); it is brought to the attention of the Laboratory QA Manager and, ultimately, the Laboratory Director. Final approval of any action deemed necessary is subject to the approval of the Laboratory Director.

Any corrective action deemed necessary based on system or performance audits, the analytical results of split samples, or the results of data review will be implemented. The corrective action may include sample re-extraction, re-preparation, reanalysis, cleanup, dilution, matrix modification, or other activities.

Data Review Tasks

See **Worksheets #34 through #37**. Data validation will be conducted in accordance with QAPP **Worksheet #36**: Data Validation Procedures. The results of data validation will be presented in a Data Validation Report that will be included as an appendix in the SI Report.

QAPP Worksheet #15-1 Action Limits and Laboratory-Specific Detection/Quantitation Limits - Vista

Matrix: Aqueous

Analytical Method: USEPA Method 537.1 Modified (PFCs by LC/MS/MS)

Analyte[1]	Acronym	Chemical Abstract Service (CAS) No.	Project Action Limit[2] (µg/L)	Project Quantitation Limit Goal (µg/L)	Achievable Laboratory Limits		
					LOQ (µg/L)	Limit of Detection (LOD) (µg/L)	DL (µg/L)
Perfluorobutanesulfonic acid	PFBS	375-73-5	NA	NA	0.00800	0.00500	0.00218
Perfluoroheptanoic acid	PFHpA	375-85-9	NA	NA	0.00800	0.00500	0.00218
Perfluorohexane sulfonic acid	PFHxS	355-46-4	NA	NA	0.00800	0.00500	0.00218
Perfluorononanoic acid	PFNA	375-95-1	NA	NA	0.00800	0.00500	0.00218
Perfluorooctanoic acid	PFOA	335-67-1	0.07	0.007	0.00800	0.00500	0.00218
Perfluorooctanesulfonic acid	PFOS	1763-23-1	0.07	0.007	0.00800	0.00500	0.00218
Perfluorooctanesulfonic acid *and* Perfluorooctanoic acid	PFOS *and* PFOA	1763-23-1 335-67-1	0.07	0.007	0.00800	0.00500	0.00218

Notes:
[1] This analyte list represents the PFCs that are included on UCMR3 which will be used at each Installation.
[2] USEPA Drinking Water HAs for PFOA (USEPA, May 2016b) and PFOS (USEPA, May 2016a). The HAs will be used as the action criteria unless state-specific regulations are applicable.
DL - The smallest analyte concentration that can be demonstrated to be different from zero or a blank concentration at the 99% level of confidence. At the detection limit, the false positive rate (Type I error) is 1 %.
LOD - The smallest amount or concentration of a substance that must be present in a sample in order to be detected at a high level of confidence (99%). At the LOD, the false negative rate (Type II error) is 1 %.
LOQ - The lowest concentration that produces a quantitative result within specified limits of precision and bias. For DoD projects, the LOQ shall be set at or above the concentration of the lowest ICAL standard.
LODs and DLs are subject to change based on the results of the most current DL and LOD studies.
HA – Concentration of a contaminant in drinking water at which adverse health effects are not anticipated to occur over specific exposure durations. Potential for human health and environmental risk will be evaluated.
Project Quantitation Limit Goal - The lowest concentration of a target analyte the laboratory must be able to achieve, as determined by the project DQO.

QAPP Worksheet #15-2 Action Limits and Laboratory-Specific Detection/Quantitation Limits - Vista

Matrix: Soil

Analytical Method: USEPA Method 537.1 Modified (PFCs by LC/MS/MS)

Analyte[1]	Acronym	CAS No.	Project Action Limit[2] micrograms per kilogram (µg/kg)	Project Quantitation Limit Goal (µg/kg)	Achievable Laboratory Limits		
					LOQ (µg/kg)	LOD (µg/kg)	DL (µg/kg)
Perfluorobutanesulfonic acid	PFBS	375-73-5	NA	NA	2.00	1.00	0.285
Perfluorobutanoic acid	PFBA	375-22-4	NA	NA	2.00	1.00	0.285
Perfluoroheptanoic acid	PFHpA	375-85-9	NA	NA	2.00	1.00	0.285
Perfluorohexane sulfonic acid	PFHxS	355-46-4	NA	NA	2.00	1.00	0.285
Perfluorononanoic acid	PFNA	375-95-1	NA	NA	2.00	1.00	0.285
Perfluorooctanoic acid	PFOA	335-67-1	12,000	1,200	2.00	1.00	0.285
Perfluorooctanesulfonic acid	PFOS	1763-23-1	5,000	500	2.00	1.00	0.285

Notes:

[1] This analyte list represents the PFCs) that are included on UCMR3 which will be used at each Installation.

[2] Interim Air Force Guidance on Sampling and Response Actions for Perfluorinated Compounds at Active and Base Realignment and Closure (BRAC) Installations (USAF, 2012).

DL – The smallest analyte concentration that can be demonstrated to be different from zero or a blank concentration at the 99% level of confidence. At the detection limit, the false positive rate (Type I error) is 1 %.

LOD - The smallest amount or concentration of a substance that must be present in a sample in order to be detected at a high level of confidence (99%). At the LOD, the false negative rate (Type II error) is 1 %.

LOQ - The lowest concentration that produces a quantitative result within specified limits of precision and bias. For DoD projects, the LOQ shall be set at or above the concentration of the lowest ICAL standard.

LODs and DLs are subject to change based on the results of the most current DL and LOD studies.

Project Quantitation Limit Goal - The lowest concentration of a target analyte the laboratory must be able to achieve, as determined by the project DQO.

QAPP Worksheet #15-3 Action Limits and Laboratory-Specific Detection/Quantitation Limits – SGS Accutest

Matrix: Aqueous

Analytical Method: USEPA Method 537.1 Modified (PFCs by LC/MS/MS)

Analyte[1]	Acronym	CAS No.	Project Action Limit[2] (µg/L)	Project Quantitation Limit Goal (µg/L)	Achievable Laboratory Limits		
					LOQ (µg/L)	LOD (µg/L)	DL (µg/L)
Perfluorobutanesulfonic acid	PFBS	375-73-5	NA	NA	0.020	0.0128	0.008
Perfluoroheptanoic acid	PFHpA	375-85-9	NA	NA	0.020	0.0128	0.008
Perfluorohexane sulfonic acid	PFHxS	355-46-4	NA	NA	0.020	0.0128	0.008
Perfluorononanoic acid	PFNA	375-95-1	NA	NA	0.020	0.0064	0.004
Perfluorooctanoic acid	PFOA	335-67-1	0.07	0.007	0.020	0.0064	0.004
Perfluorooctanesulfonic acid	PFOS	1763-23-1	0.07	0.007	0.020	0.0064	0.004
Perfluorooctanesulfonic acid *and* Perfluorooctanoic acid	PFOS *and* PFOA	1763-23-1 335-67-1	0.07	0.007	0.04	0.0128	0.008

Notes:

[1] This analyte list represents the PFCs that are included on UCMR3 which will be used at each Installation.

[2] USEPA Drinking Water HAs for PFOA (USEPA, May 2016b) and PFOS (USEPA, May 2016a). The HAs will be used as the action criteria unless state-specific regulations are applicable.

DL - The smallest analyte concentration that can be demonstrated to be different from zero or a blank concentration at the 99% level of confidence. At the detection limit, the false positive rate (Type I error) is 1 %.

LOD - The smallest amount or concentration of a substance that must be present in a sample in order to be detected at a high level of confidence (99%). At the limit of detection, the false negative rate (Type II error) is 1 %.

LOQ - The lowest concentration that produces a quantitative result within specified limits of precision and bias. For DoD projects, the LOQ shall be set at or above the concentration of the lowest ICAL standard.

LODs and DLs are subject to change based on the results of the most current DL and LOD studies.

HA – Concentration of a contaminant in drinking water at which adverse health effects are not anticipated to occur over specific exposure durations. Potential for human health and environmental risk will be evaluated.

Project Quantitation Limit Goal - The lowest concentration of a target analyte the laboratory must be able to achieve, as determined by the project DQO.

QAPP Worksheet #15-4 Action Limits and Laboratory-Specific Detection/Quantitation Limits – SGS Accutest

Matrix: Soil

Analytical Method: USEPA Method 537.1 Modified (PFCs by LC/MS/MS)

Analyte[1]	Acronym	CAS No.	Project Action Limit[2] (µg/kg)	Project Quantitation Limit Goal (µg/kg)	Achievable Laboratory Limits		
					LOQ (µg/kg)	LOD (µg/kg)	DL (µg/kg)
Perfluorobutanesulfonic acid	PFBS	375-73-5	NA	NA	12.5	10	5.0
Perfluoroheptanoic acid	PFHpA	375-85-9	NA	NA	12.5	10	5.0
Perfluorohexane sulfonic acid	PFHxS	355-46-4	NA	NA	12.5	10	5.0
Perfluorononanoic acid	PFNA	375-95-1	NA	NA	12.5	10	5.0
Perfluorooctanoic acid	PFOA	335-67-1	12,000	1,200	12.5	10	5.0
Perfluorooctanesulfonic acid	PFOS	1763-23-1	5,000	500	12.5	10	5.0

Notes:
[1] This analyte list represents the PFCs that are included on UCMR3 which will be used at each Installation.
[2] Interim Air Force Guidance on Sampling and Response Actions for Perfluorinated Compounds at Active and Base Realignment and Closure (BRAC) Installations (USAF, 2012).
DL - The smallest analyte concentration that can be demonstrated to be different from zero or a blank concentration at the 99% level of confidence. At the detection limit, the false positive rate (Type I error) is 1 %.
LOD - The smallest amount or concentration of a substance that must be present in a sample in order to be detected at a high level of confidence (99%). At the limit of detection, the false negative rate (Type II error) is 1 %.
LOQ - The lowest concentration that produces a quantitative result within specified limits of precision and bias. For DoD projects, the LOQ shall be set at or above the concentration of the lowest initial calibration standard.
LODs and DLs are subject to change based on the results of the most current DL and LOD studies.
Project Quantitation Limit Goal - The lowest concentration of a target analyte the laboratory must be able to achieve, as determined by the project DQO.

QAPP Worksheet #15-5 Action Limits and Laboratory-Specific Detection/Quantitation Limits – Maxxam

Matrix: Aqueous

Analytical Method: USEPA Method 537.1 Modified (PFCs by LC/MS/MS)

Analyte[1]	Acronym	CAS No.	Project Action Limit[2] (µg/L)	Project Quantitation Limit Goal (µg/L)	Achievable Laboratory Limits		
					LOQ (µg/L)	LOD (µg/L)	DL (µg/L)
Perfluoroheptanoic acid	PFHpA	375-85-9	NA	NA	0.02	0.010	0.0047
Perfluorooctanoic acid	PFOA	335-67-1	0.07	0.007	0.02	0.014	0.0053
Perfluorononanoic acid	PFNA	375-95-1	NA	NA	0.02	0.010	0.0046
Perfluorobutanesulfonic acid	PFBS	375-73-5	NA	NA	0.02	0.007	0.0019
Perfluorohexane sulfonic acid	PFHxS	355-46-4	NA	NA	0.02	0.010	0.0040
Perfluorooctanesulfonic acid	PFOS	1763-23-1	0.07	0.007	0.02	0.010	0.0033
Perfluorooctanesulfonic acid *and* Perfluorooctanoic acid	PFOS *and* PFOA	1763-23-1 335-67-1	0.07	0.007	0.02	0.014	0.0053

Notes:

[1] This analyte list represents the PFCs that are included on UCMR3 which will be used at each Installation.

[2] USEPA Drinking Water HAs for PFOA (USEPA, May 2016b) and PFOS (USEPA, May 2016a). The HAs will be used as the action criteria unless state-specific regulations are applicable.

Maxxam is unable to report DLs, LODs, and LOQs due to limits with its data system. Maxxam's LOQ is listed as a reportable detection level (RDL) on the analytical report. Instead of reporting nondetected results to the LOD per QSM 5.0 reporting conventions, nondetected results are reported at the DL and for the purposes of data validation the LOD is considered to be the same no. as the DL.

DL - The smallest analyte concentration that can be demonstrated to be different from zero or a blank concentration at the 99% level of confidence. At the detection limit, the false positive rate (Type I error) is 1 %.

LOD - The smallest amount or concentration of a substance that must be present in a sample in order to be detected at a high level of confidence (99%). At the limit of detection, the false negative rate (Type II error) is 1 %.

LOQ - The lowest concentration that produces a quantitative result within specified limits of precision and bias. For DoD projects, the LOQ shall be set at or above the concentration of the lowest ICAL standard.

LODs and DLs are subject to change based on the results of the most current DL and LOD studies.

HA – Concentration of a contaminant in drinking water at which adverse health effects are not anticipated to occur over specific exposure durations. Potential for human health and environmental risk will be evaluated.

Project Quantitation Limit Goal - The lowest concentration of a target analyte the laboratory must be able to achieve, as determined by the project DQO.

QAPP Worksheet #15-6 Action Limits and Laboratory-Specific Detection/Quantitation Limits - Maxxam

Matrix: Soil							
Analytical Method: USEPA Method 537.1 Modified (PFCs by LC/MS/MS)							
Analyte[1]	**Acronym**	**CAS No.**	**Project Action Limit[2] (µg/kg)**	**Project Quantitation Limit Goal (µg/kg)**	**Achievable Laboratory Limits**		
					LOQ (µg/kg)	**LOD (µg/kg)**	**DL (µg/kg)**
Perfluoroheptanoic acid	PFHpA	375-85-9	NA	NA	1.0	0.4	0.14
Perfluorooctanoic acid	PFOA	335-67-1	12,000	1,200	1.0	0.2	0.060
Perfluorononanoic acid	PFNA	375-95-1	NA	NA	1.0	0.2	0.084
Perfluorobutanesulfonic acid	PFBS	375-73-5	NA	NA	1.0	0.4	0.17
Perfluorohexane sulfonic acid	PFHxS	355-46-4	NA	NA	1.0	0.4	0.13
Perfluorooctanesulfonic acid	PFOS	1763-23-1	5,000	500	1.0	0.4	0.12

Notes:
[1] This analyte list represents the PFCs that are included on UCMR3 which will be used at each Installation.
[2] Interim Air Force Guidance on Sampling and Response Actions for Perfluorinated Compounds at Active and Base Realignment and Closure (BRAC) Installations (USAF, 2012).
Maxxam is unable to report DLs, LODs, and LOQs due to limits with its data system. Maxxam's LOQ is listed as a RDL on the analytical report. Instead of reporting nondetected results to the LOD per QSM 5.0 reporting conventions, nondetected results are reported at the DL and for the purposes of data validation the LOD is considered to be the same no. as the DL.
DL - The smallest analyte concentration that can be demonstrated to be different from zero or a blank concentration at the 99% level of confidence. At the detection limit, the false positive rate (Type I error) is 1 %.
LOD - The smallest amount or concentration of a substance that must be present in a sample in order to be detected at a high level of confidence (99%). At the limit of detection, the false negative rate (Type II error) is 1 %.
LOQ - The lowest concentration that produces a quantitative result within specified limits of precision and bias. For DoD projects, the LOQ shall be set at or above the concentration of the lowest ICAL standard.
LODs and DLs are subject to change based on the results of the most current DL and LOD studies.
Project Quantitation Limit Goal - The lowest concentration of a target analyte the laboratory must be able to achieve, as determined by the project DQO.

QAPP Worksheet #16 Project Schedule/Timeline

Activities	Organization	Anticipated Date(s) of Initiation	Anticipated Date of Completion	Deliverable	Deliverable Due Date (or Anticipated Delivery)
Stewart IAP, New Windsor, New York					
Kickoff Meeting	Amec Foster Wheeler	December 1, 2016	December 1, 2016	Meeting Minutes	December 15, 2016
WP	Amec Foster Wheeler	November 17, 2016	April 28, 2017	SI WP	April 28, 2017
Field Work	Amec Foster Wheeler	May 5, 2017	May 25, 2017	None	
SI Report	Amec Foster Wheeler	June 2, 2017	December 1, 2017	SI Report	December 1, 2017
NCCA, Wilmington, Delaware					
Kickoff Meeting	Amec Foster Wheeler	March 23, 2017	March 23, 2017	Meeting Minutes	April 6, 2017
WP	Amec Foster Wheeler	March 10, 2017	August 18, 2017	SI WP	August 18, 2017
Field Work	Amec Foster Wheeler	August 24, 2017	August 31, 2017	None	
SI Report	Amec Foster Wheeler	September 8, 2017	March 9, 2018	SI Report	March 9, 2018

QAPP Worksheet #16 Project Schedule/Timeline

Activities	Organization	Anticipated Date(s) of Initiation	Anticipated Date of Completion	Deliverable	Deliverable Due Date (or Anticipated Delivery)
Joe Foss Field, Sioux Falls, South Dakota					
Kickoff Meeting	Amec Foster Wheeler	March 15, 2017	March 15, 2017	Meeting Minutes	March 29, 2017
WP	Amec Foster Wheeler	March 2, 2017	August 8, 2017	SI WP	August 8, 2017
Field Work	Amec Foster Wheeler	August 14, 2017	August 30, 2017	None	
SI Report	Amec Foster Wheeler	September 7, 2017	March 6, 2018	SI Report	March 6, 2018
HIA, Harrisburg, Pennsylvania					
Kickoff Meeting	Amec Foster Wheeler	December 22, 2016	December 22, 2016	Meeting Minutes	January 6, 2017
WP	Amec Foster Wheeler	December 9, 2016	May 19, 2017	SI WP	May 19, 2017
Field Work	Amec Foster Wheeler	May 26, 2017	May 30, 2017	None	
SI Report	Amec Foster Wheeler	June 7, 2017	December 5, 2017	SI Report	December 5, 2017

QAPP Worksheet #16 Project Schedule/Timeline

Activities	Organization	Anticipated Date(s) of Initiation	Anticipated Date of Completion	Deliverable	Deliverable Due Date (or Anticipated Delivery)
Stanly County AGS, Stanly County, North Carolina					
Kickoff Meeting	Amec Foster Wheeler	March 29, 2017	March 29, 2017	Meeting Minutes	April 12, 2017
WP	Amec Foster Wheeler	March 16, 2017	August 22, 2017	SI WP	August 22, 2017
Field Work	Amec Foster Wheeler	August 28, 2017	August 30, 2017	None	
SI Report	Amec Foster Wheeler	September 7, 2017	March 6, 2018	SI Report	March 6, 2018
Pittsburgh IAP, Pittsburgh, Pennsylvania					
Kickoff Meeting	Amec Foster Wheeler	December 22, 2016	December 22, 2016	Meeting Minutes	January 6, 2017
WP	Amec Foster Wheeler	December 9, 2016	May 19, 2017	SI WP	May 19, 2017
Field Work	Amec Foster Wheeler	May 26, 2017	July 7, 2017	None	
SI Report	Amec Foster Wheeler	July 17, 2017	January 16, 2018	SI Report	January 16, 2018

QAPP Worksheet #16 Project Schedule/Timeline

Activities	Organization	Anticipated Date(s) of Initiation	Anticipated Date of Completion	Deliverable	Deliverable Due Date (or Anticipated Delivery)
Richmond IAP Byrd Field, Richmond, Virginia					
Kickoff Meeting	Amec Foster Wheeler	January 23, 2017	January 23, 2017	Meeting Minutes	February 6, 2017
WP	Amec Foster Wheeler	January 10, 2017	June 20, 2017	SI WP	June 20, 2017
Field Work	Amec Foster Wheeler	June 26, 2017	July 13, 2017	None	
SI Report	Amec Foster Wheeler	July 20, 2017	January 19, 2018	SI Report	January 19, 2018
Martin State Airport, Middle River, Maryland					
Kickoff Meeting	Amec Foster Wheeler	January 23, 2017	January 23, 2017	Meeting Minutes	February 6, 2017
WP	Amec Foster Wheeler	January 10, 2017	June 20, 2017	SI WP	June 20, 2017
Field Work	Amec Foster Wheeler	June 26, 2017	July 18, 2017	None	
SI Report	Amec Foster Wheeler	July 25, 2017	January 23, 2018	SI Report	January 23, 2018

QAPP Worksheet #16 Project Schedule/Timeline

Activities	Organization	Anticipated Date(s) of Initiation	Anticipated Date of Completion	Deliverable	Deliverable Due Date (or Anticipated Delivery)
EWVRA Shepherd Field, Martinsburg, West Virginia					
Kickoff Meeting	Amec Foster Wheeler	December 13, 2016	December 13, 2016	Meeting Minutes	December 28, 2016
WP	Amec Foster Wheeler	November 30, 2016	May 9, 2017	SI WP	May 9, 2017
Field Work	Amec Foster Wheeler	May 15, 2017	June 27, 2017	None	
SI Report	Amec Foster Wheeler	July 5, 2017	January 2, 2018	SI Report	January 2, 2018
Barnes MAP, Westfield, Massachusetts					
Kickoff Meeting	Amec Foster Wheeler	November 15, 2016	November 15, 2016	Meeting Minutes	November 30, 2016
WP	Amec Foster Wheeler	November 2, 2016	April 11, 2017	SI WP	April 11, 2017
Field Work	Amec Foster Wheeler	April 17, 2017	April 21, 2017	None	
SI Report	Amec Foster Wheeler	April 28, 2017	October 27, 2017	SI Report	October 27, 2017

QAPP Worksheet #16 Project Schedule/Timeline

Activities	Organization	Anticipated Date(s) of Initiation	Anticipated Date of Completion	Deliverable	Deliverable Due Date (or Anticipated Delivery)
Yeager Airport, Charleston, West Virginia					
Kickoff Meeting	Amec Foster Wheeler	December 12, 2016	December 12, 2016	Meeting Minutes	December 27, 2016
WP	Amec Foster Wheeler	November 29, 2016	May 9, 2017	SI WP	May 9, 2017
Field Work	Amec Foster Wheeler	May 15, 2017	June 5, 2017	None	
SI Report	Amec Foster Wheeler	June 12, 2017	December 12, 2017	SI Report	December 12, 2017
MSPIA (AFRC and ANG), Hennepin County, Minnesota					
Kickoff Meeting	Amec Foster Wheeler	March 15, 2017	March 15, 2017	Meeting Minutes	May 29, 2017
WP	Amec Foster Wheeler	March 2, 2017	August 8, 2017	SI WP	August 8, 2017
Field Work	Amec Foster Wheeler	August 14, 2017	August 31, 2017	None	
SI Report	Amec Foster Wheeler	September 8, 2017	March 9, 2018	SI Report	March 9, 2018

QAPP Worksheet #16 Project Schedule/Timeline

Activities	Organization	Anticipated Date(s) of Initiation	Anticipated Date of Completion	Deliverable	Deliverable Due Date (or Anticipated Delivery)
Bradley IAP, East Granby, Connecticut					
Kickoff Meeting	Amec Foster Wheeler	February 20, 2017	February 20, 2017	Meeting Minutes	March 6, 2017
WP	Amec Foster Wheeler	February 7, 2017	July 27, 2017	SI WP	July 27, 2017
Field Work	Amec Foster Wheeler	August 3, 2017	August 23, 2017	None	
SI Report	Amec Foster Wheeler	August 31, 2017	March 9, 2018	SI Report	March 9, 2018
Bangor IAP, Bangor, Maine					
Kickoff Meeting	Amec Foster Wheeler	November 14, 2016	November 14, 2016	Meeting Minutes	November 29, 2016
WP	Amec Foster Wheeler	November 1, 2016	April 20, 2017	SI WP	April 20, 2017
Field Work	Amec Foster Wheeler	July 24, 2017	August 25, 2017	None	
SI Report	Amec Foster Wheeler	August 28, 2017	December 13, 2017	SI Report	December 13, 2017

QAPP Worksheet #16 Project Schedule/Timeline

Activities	Organization	Anticipated Date(s) of Initiation	Anticipated Date of Completion	Deliverable	Deliverable Due Date (or Anticipated Delivery)
Quonset State Airport, North Kingstown, Rhode Island					
Kickoff Meeting	Amec Foster Wheeler	November 16, 2016	November 16, 2016	Meeting Minutes	December 1, 2016
WP	Amec Foster Wheeler	November 3, 2016	April 21, 2017	SI WP	April 21, 2017
Field Work	Amec Foster Wheeler	April 28, 2017	April 28, 2017	None	
SI Report	Amec Foster Wheeler	May 8, 2017	November 10, 2017	SI Report	November 10, 2017
Greater Peoria Airport, Peoria, Illinois					
Kickoff Meeting	Amec Foster Wheeler	February 1, 2017	February 1, 2017	Meeting Minutes	February 15, 2017
WP	Amec Foster Wheeler	January 19, 2017	July 10, 2017	SI WP	July 10, 2017
Field Work	Amec Foster Wheeler	July 17, 2017	July 26, 2017	None	
SI Report	Amec Foster Wheeler	August 3, 2017	February 9, 2018	SI Report	February 9, 2018

QAPP Worksheet #16 Project Schedule/Timeline

Activities	Organization	Anticipated Date(s) of Initiation	Anticipated Date of Completion	Deliverable	Deliverable Due Date (or Anticipated Delivery)
General Mitchell IAP, Milwaukee, Wisconsin					
Kickoff Meeting	Amec Foster Wheeler	February 1, 2017	February 1, 2017	Meeting Minutes	February 15, 2017
WP	Amec Foster Wheeler	January 19, 2017	July 10, 2017	SI WP	July 10, 2017
Field Work	Amec Foster Wheeler	July 13, 2017	August 17, 2017	None	
SI Report	Amec Foster Wheeler	August 25, 2017	March 2, 2018	SI Report	March 2, 2018
Forbes Field, Topeka, Kansas					
Kickoff Meeting	Amec Foster Wheeler	February 22, 2017	February 22, 2017	Meeting Minutes	March 8, 2017
WP	Amec Foster Wheeler	February 9, 2017	July 31, 2017	SI WP	July 31, 2017
Field Work	Amec Foster Wheeler	August 3, 2017	August 21, 2017	None	
SI Report	Amec Foster Wheeler	August 29, 2017	March 9, 2018	SI Report	March 9, 2018

QAPP Worksheet #16 Project Schedule/Timeline

Activities	Organization	Anticipated Date(s) of Initiation	Anticipated Date of Completion	Deliverable	Deliverable Due Date (or Anticipated Delivery)
Truax Field, Madison, Wisconsin					
Kickoff Meeting	Amec Foster Wheeler	February 1, 2017	February 1, 2017	Meeting Minutes	February 15, 2017
WP	Amec Foster Wheeler	January 19, 2017	July 10, 2017	SI WP	July 10, 2017
Field Work	Amec Foster Wheeler	July 17, 2017	August 11, 2017	None	
SI Report	Amec Foster Wheeler	August 2, 2017	March 1, 2018	SI Report	March 1, 2018
Capital MAP, Springfield, Illinois					
Kickoff Meeting	Amec Foster Wheeler	January 24, 2017	January 24, 2017	Meeting Minutes	February 7, 2017
WP	Amec Foster Wheeler	January 11, 2017	June 29, 2017	SI WP	June 29, 2017
Field Work	Amec Foster Wheeler	July 7, 2017	July 18, 2017	None	
SI Report	Amec Foster Wheeler	July 26, 2017	February 2, 2018	SI Report	February 2, 2018

QAPP Worksheet #17 Sampling Design and Rationale

Describe and provide a rationale for choosing the sampling approach (e.g., grid system, biased statistical approach):
Details of the PRL sampling programs are provided in the Site-specific WPs.
Describe the sampling design and rationale in terms of what matrices will be sampled, what analytical groups will be analyzed and at what concentration levels, the sampling locations (including QC, critical, and background samples), the no. of samples to be taken, and the sampling freq. (including seasonal considerations) [May refer to map or Worksheet #18 for details]:
PFCs in soil and groundwater will be sampled at all installations. Sediment and surface water samples will be collected at selected installations. The objectives of the soil, groundwater, surface water, and sediment sampling are explained in **Worksheet #10**. The estimated no. of samples, including type and freq. of QC samples, is provided in **Worksheet #18** and will be provided in the Site-specific WPs where additional details of the sampling program are described. Seasonal considerations are not expected to affect site evaluation sampling.

QAPP Worksheet #18 Sampling Locations and Methods/SOP Requirements

Soil, sediment, surface water, and groundwater samples will be collected, as applicable, at identified PRLs at each of the 20 installations to determine the presence or absence of PFCs in environmental media. The sampling approach, no. of samples to be collected, and freq. of sampling will be determined during each installation-specific scoping session and will be described in the Site-specific WP. As discussed on **Worksheet #14** sample methodologies will strictly follow the protocols in SOP AMEC-01 (**Appendix E**) to help mitigate the potential for false detections of PFCs. The anticipated sampling is summarized below.

ANGBs	Exploration Type					Analytical Samples by Media			
	No. of Sites	Soil Borings	Downgradient Wells	Existing Wells	[1]Base Boundary Wells	Soil Samples	Groundwater Samples	Sediment Samples	Surface Water Samples
Stewart	13	32	11	6	10	64	19	5	5
New Castle	8	12	5	5	8	24	10	6	3
Joe Foss	12	36	12	0	5	72	17	3	3
Harrisburg	3	8	3	0	2	16	3	0	0
Stanly County	2	4	2	0	1	7	2	1	1
Pittsburgh	28	59	36	0	6	118	36	16	16
Richmond	5	20	8	0	3	40	8	2	5
Martin	11	35	11	0	4	67	15	5	5
Martinsburg	10	30	10	0	6	60	16	1	1
Barnes	5	12	5	0	5	24	5	3	0
Yeager	8	21	7	0	2	42	9	2	2
Minneapolis	11	27	13	0	9	54	21	3	3
Bradley	5	15	5	0	2	30	6	0	0
Bangor	9	26	9	0	5	52	9	2	2
Quonset	4	6	3	0	2	14	4	1	1
Peoria	10	27	10	0	7	54	15	4	4
General Mitchell	14	47	18	3	12	94	23	4	4
Forbes	9	27	9	0	5	54	12	2	2
Truax	9	27	9	0	8	54	12	0	0

QAPP Worksheet #18 Sampling Locations and Methods/SOP Requirements

Soil, sediment, surface water, and groundwater samples will be collected, as applicable, at identified PRLs at each of the 20 installations to determine the presence or absence of PFCs in environmental media. The sampling approach, no. of samples to be collected, and freq. of sampling will be determined during each installation-specific scoping session and will be described in the Site-specific WP. As discussed on **Worksheet #14** sample methodologies will strictly follow the protocols in SOP AMEC-01 (**Appendix E**) to help mitigate the potential for false detections of PFCs. The anticipated sampling is summarized below.

ANGBs	Exploration Type					Analytical Samples by Media			
	No. of Sites	Soil Borings	Downgradient Wells	Existing Wells	[1]Base Boundary Wells	Soil Samples	Groundwater Samples	Sediment Samples	Surface Water Samples
Capital	5	12	5	1	5	24	8	2	2
Contingency	0	0	0	0	20	0	20	0	0
SUBTOTAL	**181**	**490**	**190**	**15**	**108**	**978**	**265**	**54**	**57**
QC									
Duplicates						**97**	**26**	**6**	**6**
Equipment Rinsates*						**30**	**10**	**6**	**6**
MS/MSD						**49**	**13**	**3**	**3**
Field Blanks**						**0**	**20**	**0**	**0**
IDW									
Investigation Derived Wastes – RCRA Characteristics						**20**	**20**		
TOTAL						**1,174**	**354**	**69**	**72**

Notes:
1 – Base Boundary Wells include existing wells, base boundary only wells and dual purpose wells (serve as both PRL downgradient and base boundary well)
*Using dedicated sampling equipment for soil and groundwater to minimize rinsates

QAPP Worksheets #19-1 and #30-1 Sample Containers, Preservation, and Hold Times - Vista

Laboratory for PFC Analysis: Vista, 1104 Windfield Way, El Dorado Hills, CA 95762, Martha Maier, mmaier@vista-analytical.com, (916) 673-1520
List any required accreditations/certifications: DoD ELAP; International Organization for Standardization (ISO) 17025; Florida Department of Health (FDOH) The NELAC Institute (TNI)
Back-up Laboratory for PFC Analysis: SGS Accutest, Maxxam
Sample Delivery Method: EDDs (analytical data packages, electronic data)

Analyte/ Analyte Group	Matrix	Method/ SOP	Accreditation Expiration Date	Container(s) (no., size & type per sample)	Preservation	Extraction Holding Time	Analytical Holding Time	Data Package Turnaround
PFCs	Solid (Soil, Sediment)	PFC by LC/MS/MS, SOP 49, rev8[1]	30 Sept. 2017	125 milliliter (mL) HDPE (high-density polyethylene) bottles and jars	≤10°C for up to 48 hours after sampling, then ≤6 degrees Celsius (°C)	60 days[2]	30 days[2] from extraction	15 business days
PFCs	Aqueous (Groundwater, Surface Water)	PFC by LC/MS/MS, SOP 49, rev8[1]	30 Sept. 2017	2 x 125 mL HDPE bottles and jars	≤10°C for up to 48 hours after sampling, then ≤6°C	14 days	28 days from extraction	15 business days

Notes:
[1] SOP 49 is titled *Preparation and Analysis for the Determination of Per and Poly-fluorinated Compounds*.
[2] Holding time taken from *Draft Procedure for Analysis of Perfluorinated Carboxylic Acids and Sulfonic Acids in Sewage Sludge and Biosolids by HPLC/MS/MS* (December 2011).

QAPP Worksheets #19-2 and #30-2 Sample Containers, Preservation, and Hold Times – SGS Accutest

Laboratory for PFC Analysis: SGS Accutest, 4405 Vineland Rd, Ste C-15, Orlando, FL 32811, 407-425-6700
List any required accreditations/certifications: DoD ELAP; ISO 17025; FDOH (TNI)
Back-up Laboratory for PFC Analysis: Vista, Maxxam
Sample Delivery Method: EDDs (analytical data packages, electronic data)

Analyte/ Analyte Group	Matrix	Method/ SOP	Accreditation Expiration Date	Container(s) (no., size & type per sample)	Preservation	Preparation Holding Time	Analytical Holding Time	Data Package Turnaround
Perfluorinated Alkyl Acids	Soil	PFC by LC/MS/MS, SOP# MS014.2[1]; OP063.1[3]	15 December 2018	125 mL polyethylene wide mouth bottle with unlined cap	<10°C during the first 48 hours after collection. <6°C from the time of receipt until extraction	60 days[4]	30 days[4]	15 days
Perfluorinated Alkyl Acids	Water	PFC by LC/MS/MS, SOP# MS014.2[1]; OP058.4[2]	15 December 2018	2- 125 mL polyethylene bottles with polyethylene screw top.	<10°C during the first 48 hours after collection. <6°C from the time of receipt until extraction	14 days	28 days	15 days

Notes:
[1] SOPs# MS014.2 is titled *Analysis of Perfluorinated Alkyl Acids by LC/MS/MS.*
[2] SOP# OP058.4 is titled *Extraction of Perfluorinated Alkyl Acids from Water Samples for LC/MS/MS Analysis*.
[3] SOP# OP063.1 is titled *Extraction of Perfluorinated Alkyl Acids from Soil Samples for LC/MS/MS Analysis*.
[4] Holding time taken from *Draft Procedure for Analysis of Perfluorinated Carboxylic Acids and Sulfonic Acids in Sewage Sludge and Biosolids by HPLC/MS/MS* (December 2011).

QAPP Worksheets #19-3 and #30-3 Sample Containers, Preservation, and Hold Times – Maxxam

Laboratory for PFC Analysis: Maxxam, 6740 Campobello Road, Mississauga, ON L5N 2L8, Canada, 905-817-5712
List any required accreditations/certifications: DoD ELAP, ISO 17025; Louisiana Department of Environmental Quality (TNI)
Back-up Laboratory for PFC Analysis: Vista, SGS Accutest
Sample Delivery Method: EDDs (analytical data packages, electronic data)

Analyte/ Analyte Group	Matrix	Method/ SOP	Accreditation Expiration Date	Container(s) (no., size & type per sample)	Preservation	Preparation Holding Time	Analytical Holding Time	Data Package Turnaround
Perfluorinated Alkyl Acids	Solid (Soil, Sediment)	CAM SOP-00894 [1]	31 May 2017	(1) 250 mL polyethylene bottle unlined plastic cap[2]	≤10°C for up to 48 hours after sampling, then ≤6°C	60 days[3]	30 days[3]	15 days
Perfluorinated Alkyl Acids	Aqueous (Groundwater, Surface Water)	CAM SOP-00894 [1]	31 May 2017	(1) 250 mL polyethylene bottle unlined plastic cap[2]	≤10°C for up to 48 hours after sampling, then ≤6°C	14 days	28 days	15 days

Notes:
[1] CAM SOP-00894 is titled Determination of Perfluorinated Compounds in Water and Soil by LC/MS/MS.
[2] Size and no. of sample containers may change at the discretion of the laboratory. However, Amec Foster Wheeler approval is needed to implement a change to the container size.
[2] Holding time taken from *Draft Procedure for Analysis of Perfluorinated Carboxylic Acids and Sulfonic Acids in Sewage Sludge and Biosolids by HPLC/MS/MS* (December 2011).

QAPP Worksheet #20 Sample Quantities and Control Frequencies

	Laboratory[4]	Analytical and Preparation SOP[1]	Estimated Environmental Sample Quality[2]	Field QC Analyses						Laboratory QC Sample						Total
				Field Blank		Rinsate Blank[3]		Field Duplicate		MS		MSD		Laboratory Duplicate		
				Freq.	No.	Freq.	No.	Freq.	No.	Freq.	No.	Freq.	No.	Freq.	No.	
Soil																
PFCs	Vista	PFC by LC/MS/MS - SOP 49, rev8	964	NA	--	1/day	30	1/10	96	1/20	48	1/20	48	NA	--	1156
Groundwater																
PFCs	Vista	PFC by LC/MS/MS - SOP 49, rev8	270	NA	20	1/day	10	1/10	27	1/20	14	1/20	14	NA	--	355
Sediments																
PFCs	Vista	PFC by LC/MS/MS - SOP 49, rev8	62	NA	--	1/day	6	1/10	6	1/20	3	1/20	3	NA	--	80
Surface Water																
PFCs	Vista	PFC by LC/MS/MS - SOP 49, rev8	59	NA	--	1/day	6	1/10	6	1/20	3	1/20	3	NA	--	77

Notes:
1. See Worksheet #23 for SOP title, Rev no., date details.
2. No. of samples is estimated. No. of Field Duplicates and MS/MSDs may vary, as a result.
3. Rinsate blanks not required when dedicated sampling equipment is used.
4. Vista is the primary lab for all project samples. SGS Accutest and Maxxam are included as backup options.

QAPP Worksheet #21 Field Sampling SOP References

SOP # or reference[1]	Title, Rev, Date, and Website Address (if available)	Originating Organization	SOP option or Equipment Type (if SOP provides different options)	Modified for Project Work? Yes (Y)/No (N)	Comments
AFW-01	Field Sampling Protocols to Avoid Cross-Contamination of PFCs	Amec Foster Wheeler	n/a	N	NA
AFW-02	Soil Sampling	Amec Foster Wheeler	Core sampler, split-spoon sampler, Shelby Tube sampler	Y	Incorporates PFC protocols
AFW-03	Groundwater Sampling	Amec Foster Wheeler	Bladder Pump, Peristaltic Pump, Electric Submersible Pump, Bailer	Y	Incorporates PFC protocols
AFW-04	Monitoring Well Installation	Amec Foster Wheeler	Direct push technology, Hollow stem auger, rotary, dual-tube percussion	Y	Incorporates PFC protocols
AFW-05	Monitoring Well Development	Amec Foster Wheeler	NA	Y	Incorporates PFC protocols
AFW-06	Borehole Abandonment	Amec Foster Wheeler	NA	Y	Incorporates PFC protocols
AFW-07	Sediment Sampling	Amec Foster Wheeler	NA	Y	Incorporates PFC protocols
AFW-08	Surface Water Sampling	Amec Foster Wheeler	NA	Y	Incorporates PFC protocols
AFW-09	Influent and Effluent Sampling	Amec Foster Wheeler	NA	Y	Incorporates PFC protocols
AFW-10	Drilling, Development, and Heavy Equipment Decontamination	Amec Foster Wheeler	NA	Y	Incorporates PFC protocols

QAPP Worksheet #21 Field Sampling SOP References

SOP # or reference[1]	Title, Rev, Date, and Website Address (if available)	Originating Organization	SOP option or Equipment Type (if SOP provides different options)	Modified for Project Work? Yes (Y)/No (N)	Comments
AFW-11	Sample Handling and Custody	Amec Foster Wheeler	NA	Y	Incorporates PFC protocols
AFW-12	Protocol to Provide Water Free of Perfluorinated Compounds for Collection of Field Blanks and Equipment Blanks	Amec Foster Wheeler	NA	Y	Incorporates PFC protocols
AFW-13	Electronic Field Forms	Amec Foster Wheeler	NA	N	

Notes:
[1] Amec Foster Wheeler SOPs included as Appendix E.

QAPP Worksheet #22 Field Equipment Calibration, Maintenance, Testing, and Inspection

Field Equipment	Calibration Activity/ Freq.	Maintenance Activity	Testing Activity	Inspection Activity	Acceptance Criteria	Corrective Action	Responsible Person	SOP Reference[1]
Water Quality Meter	Daily	As required by manufacturer specification	Groundwater and surface water sampling	Battery charge, various meter calibrations	Manufacturer Specifications	Manufacturer Specifications	Field Team	Site-specific WPs (to be prepared)
Water Level Meter	Not calibrated	As required by manufacturer specification	Groundwater and surface water sampling	Mechanical components	Manufacturer Specifications	Manufacturer Specifications	Field Operations Support (FOS)	Not applicable
Sampling Pump	Not calibrated	As required by manufacturer specification	Groundwater and surface water sampling	Mechanical components	Manufacturer Specifications	Manufacturer Specifications	FOS	Not applicable
Photoionization Detector	Daily	As required by manufacturer specification	Soil, groundwater, surface water, and sediment sampling	Isobutylene standard reading	Manufacturer Specifications	Manufacturer Specifications	Field Team	Site-specific WPs (to be prepared)

Notes:
1 SOPs will be found in the Site-specific WPs.

QAPP Worksheet #23-1 Analytical SOP References - Vista

SOP Reference No.	Title, Rev Date, and/or No.	Definitive or Screening Data	Matrix/Analytical Group	Instrument	Organization Performing Analysis	Modified for Project Work? (Y/N)
SOP 49	Preparation and Analysis for the Determination of Per and PFCs, July 27, 2016, Rev 8	Definitive	Aqueous/Solid/ PFCs	LC/MS/MS	Vista	N

QAPP Worksheet #23-2 Analytical SOP References – SGS Accutest

SOP Reference No.	Title, Rev Date, and/or No.	Definitive or Screening Data	Matrix/Analytical Group	Instrument	Organization Performing Analysis	Modified for Project Work? (Y/N)
MS014.2	Analysis of Perfluorinated Alkyl Acids by LC/MS/MS, Rev. Date: 09/2015	Definitive	Aqueous/Solid/ PFCs	LC/MS/MS	SGS Accutest	N
OP058.4	Extraction of Perfluorinated Alkyl Acids from Water Samples for LC/MS/MS Analysis, Rev. Date: 01/2016	Definitive	Aqueous/PFCs	Solid-Phase Extraction Cartridges	SGS Accutest	N
OP063.1	Extraction of Perfluorinated Alkyl Acids for analysis from Soil Samples by LC/MS/MS Analysis, Rev. Date: 09/2016	Definitive	Solid/ PFCs	Vortexer/Centrifuge	SGS Accutest	N

QAPP Worksheet #23-3 Analytical SOP References - Maxxam

SOP Reference No.	Title, Rev Date, and/or No.	Definitive or Screening Data	Matrix/Analytical Group	Instrument	Organization Performing Analysis	Modified for Project Work? (Y/N)
CAM SOP-00894/10	Determination of PFCs in Water and Soil by LC/MS/MS, October 20, 2016	Definitive	Aqueous/Solid/ PFCs	LC/MS/MS	Maxxam	N

QAPP Worksheet #24-1 Analytical Instrument Calibration - Vista

Instrument	Calibration Procedure	Calibration Range	Freq.	Acceptance Criteria	Corrective Action	Title/position responsible for Corrective Action	SOP Reference
Quattro Premier XE	Sodium iodide cesium solution (NaICs) Calibration	22 – 1,500 atomic mass unit (amu)	Annually or after major repairs	Internal (instrument) software acceptance	Clean sample/gas cones and repeat	Technical Director	SOP 49, rev8
	Compound tuning	Within 22 – 1,500 amu	Before analysis of ICAL	+/- 0.3 amu from theoretical	Recalibrate with NaICs	Analyst	SOP 49, rev8
	ICAL	NA	After prep. of standards	Quadratic; must contain at least 6 points;	Clean sample/gas cones and repeat	Analyst	SOP 49, rev8
				Coefficient of Determination ≥0.96 for native compounds;			
				Relative Standard Deviation ≤35% for internal standards;			
				Each calibration point for each analyte must calculate 75-125%, except lowest cal. point which must be 70-130%			
	Continuing Calibration Check (CCC)	NA	Before and after analytical sequence and every 10 samples	Liquid chromatography (LC) peak representing each native and labeled compound must be present with a S/N ≥ 10;	Clean sample/gas cones and repeat	Analyst	SOP 49, rev8
				70 to 130% for target analytes;			

QAPP Worksheet #24-1 Analytical Instrument Calibration - Vista

Instrument	Calibration Procedure	Calibration Range	Freq.	Acceptance Criteria	Corrective Action	Title/position responsible for Corrective Action	SOP Reference
				Retention Time (RT) for internal compounds must be within ± 15 seconds of the respective RTs in the most recent CCC.			

Notes:
Data will be evaluated using the more stringent of QSM 5.0 (or latest version) or laboratory-specified criteria.

QAPP Worksheet #24-2 Analytical Instrument Calibration – SGS Accutest

Instrument	Calibration Procedure	Calibration Range	Freq.	Acceptance Criteria	Corrective Action	Title/position responsible for Corrective Action	SOP Reference
Agilent 1200 series LC/MS/MS (Electrospray detector)	Instrument Tuning	NA	Before analysis of ICAL	+/- 0.5 mass to charge from theoretical	Recalibrate	Analyst	MS014
	5 points minimum, 6 points preferred to maximize calibration range	1 – 25 Parts per billion on-column	Major maintenance (per method) or second consecutive failure of opening CCV warrants recalibration	Correlation coefficient ≥0.995. Individual calibration points drift <25%, low standard <30%.	Instrument maintenance, standard inspection, recalibration		
	Initial Calibration Verification (ICV)	Mid-Range	After ICAL	≤25 percent difference (%D)	Rerun once if still a failure then recalibrate		
	Continuing Calibration Verification (CCV)	Mid-Range	Beginning and end of each run and after every 10 samples	≤25%D	Rerun once if still a failure then recalibrate		

QAPP Worksheet #24-3 Analytical Instrument Calibration - Maxxam

Instrument	Calibration Procedure	Calibration Range	Freq.	Acceptance Criteria	Corrective Action	Title/position responsible for Corrective Action	SOP Reference
LC/MS/MS	5 points minimum	low	5 pt. daily	Unlabeled analytes <25% from target (lowest standard ≤30%) Analyte RT is ≤2% from internal Signal to noise 5	Instrument Maintenance Instrument parameters adjusted (re-optimization) Standards reanalyzed	Instrument Operator	CAM SOP-00894
	ICV	Mid-Range	After ICAL	≤25%D	Rerun once if still a failure then recalibrate		
	CCV	Mid-Range	Beginning and end of each run and after every 10 samples	≤25%D	Rerun once if still a failure then recalibrate		

Notes:
Data will be evaluated using the more stringent of QSM 5.0 (or latest version) or laboratory-specified criteria.

QAPP Worksheet #25-1 Analytical Instrument and Equipment Maintenance, Testing, and Inspection – Vista

Instrument/ Equipment	Maintenance Activity	Testing Activity	Inspection Activity	Freq.	Acceptance Criteria	Corrective Action	Title/position responsible for corrective action	SOP Reference
Quattro Premier XE	Source cleaning	Sample/gas cone cleaning	Visual	As needed	NA	NA	Analyst	SOP 49, rev 8
Aquity Ultra Performance Liquid Chromatography (UPLC) System	Needle replacement	Contamination Bent needle	Visual	As needed	Leak test in software	Repeat if leak test fails	Analyst	SOP 54, rev 8
Quattro Premier XE	Source heater	Source not at 150 degrees	Low readback	As needed	Source maintains 150 degrees	Repeat with new heater if source does not heat	Analyst	SOP 54, rev 8

QAPP Worksheet #25-2 Analytical Instrument and Equipment Maintenance, Testing, and Inspection – SGS Accutest

Instrument/ Equipment	Maintenance Activity	Testing Activity	Inspection Activity	Freq.	Acceptance Criteria	Corrective Action	Title/position responsible for corrective action	SOP Reference
Agilent 1200 series LC/MS/MS	Spray chamber, Clean capillary	Perfluorinated Alkyl Acids and Sulfonates	Check Tune Leak checks Pressure check Mobile phase filters Needle inspection	Need for maintenance determined by passing calibration– see MS014	Passing calibration	Check LC column Run Autotune Check calculations Re-run affected samples	Laboratory Analyst	MS014

QAPP Worksheet #25-3 Analytical Instrument and Equipment Maintenance, Testing, and Inspection – Maxxam

Instrument / Equipment	Maintenance Activity	Testing Activity	Inspection Activity	Freq.	Acceptance Criteria	Corrective Action	Title/position responsible for corrective action	SOP Reference
LC/MS/MS	Ion source Injector Column UHPLC (Ultra High Performance Liquid Chromatography) Pump	USEPA 537.1 (modified)	Leaks LC column performance Mass spectrum Sensitivity / Selectivity	Daily	Passing ICAL	Recalibrate Re-inject affected samples Reanalyze affected samples	Laboratory Analyst	CAM SOP-00894
	Planned Maintenance (PM)		Tuning Mass Calibration/ Resolution Replace Consumables	Mass Spectrometer (Bi-annually) UHPLC Pump (Annually)	Meets original manufacturers performance specifications	NA	Contracted third party service provider	

QAPP Worksheets #26-1 and 27-1 Sample Handling, Custody, and Disposal – Vista

Sampling Organization: Amec Foster Wheeler
Method of sample delivery (shipper/carrier): FedEx
No. of days from reporting until sample disposal: 60 days from receipt

Activity	Organization and title or position of person responsible for the activity	SOP reference
Sample labeling	Amec Foster Wheeler – Field Manager	AFW-11
COC form completion	Amec Foster Wheeler – Field Manager	AFW-11
Packaging	Amec Foster Wheeler – Field Manager	AFW-11
Shipping coordination	Amec Foster Wheeler – Field Manager	AFW-11
Shipping coordination	Vista/Sample Custodian	SOP 12, rev 12
Sample receipt, inspection, & log-in	Vista/Sample Custodian	SOP 12, rev 12
Sample custody and storage	Vista/Sample Custodian	SOP 12, rev 12
Sample disposal	Vista/Sample Custodian	SOP 12, rev 12

QAPP Worksheets #26-2 and 27-2 Sample Handling, Custody, and Disposal – SGS Accutest

Sampling Organization: Amec Foster Wheeler
Method of sample delivery (shipper/carrier): FedEx
No. of days from reporting until sample disposal: 60 days from receipt

Activity	Organization and title or position of person responsible for the activity	SOP reference
Sample labeling	Amec Foster Wheeler – Field Manager	AFW-11
COC form completion	Amec Foster Wheeler – Field Manager	AFW-11
Packaging	Amec Foster Wheeler – Field Manager	AFW-11
Shipping coordination	Amec Foster Wheeler – Field Manager	AFW-11
Shipping coordination	SGS Accutest PM and Amec Foster Wheeler Field Manager	SAM102.09
Sample receipt, inspection, & log-in	SGS Accutest Sample Management	SAM101.18
Sample custody and storage	SGS Accutest Sample Management	SAM101.18, QA048.02
Sample disposal	SGS Accutest Sample Management	SAM101.18

QAPP Worksheets #26-3 and 27-3 Sample Handling, Custody, and Disposal – Maxxam

Sampling Organization: Amec Foster Wheeler
Method of sample delivery (shipper/carrier): FedEx
No. of days from reporting until sample disposal: 60 days from receipt

Activity	Organization and title or position of person responsible for the activity	SOP reference
Sample labeling	Amec Foster Wheeler – Field Manager	AFW-11
COC form completion	Amec Foster Wheeler – Field Manager	AFW-11
Packaging	Amec Foster Wheeler – Field Manager	AFW-11
Shipping coordination	Amec Foster Wheeler – Field Manager	AFW-11
Shipping coordination	Maxxam PM and Amec Foster Wheeler Field Manager	None
Sample receipt, inspection, & log-in	Maxxam Sample Management	CAM-WI-00405/17
Sample custody and storage	Maxxam Sample Management	CAM-WI-00405/17
Sample disposal	Maxxam Sample Management	CAM SOP-00105/9

QAPP Worksheet #28-1 - Analytical QC and Corrective Action – Vista

Matrix: Soil/Aqueous
Analytical Group: PFCs
Analytical Method/SOP: PFC by LC/MS/MS

QC Sample	No./ Freq.	Method/SOP Acceptance Criteria	Corrective Action	Title/position of person responsible for corrective action	Project-Specific Measurement Performance Criteria
Method Blank (MB)	1 per prep. batch of up to 20 samples.	No analytes detected > 1/2 the LOQ or 1/3 the regulatory limit, whichever is greater.	Reprep and reanalyze the MB and all samples processed with the contaminated blank. If problem persists, call PM (PM).	Analyst / Laboratory QA Officer	All analytes in the MB must be less than ½ the LOQ or 1/5 of the HA's on **Worksheet #15**, whichever is greater
OPR Sample containing all analytes	One per preparatory batch of up to 20 samples.	PFBS = 60-130% PFHpA, PFHxA, PFOA, and PFOS = 70-130% PFNA = 50-130%	Correct problem, reprep and reanalyze LCS and all samples in associated batch for failed analytes. If problem persists, call PM.	Analyst / Laboratory QA Officer	If PFOA and/or PFOS are detected in the associated samples at concentrations within 20% of the HAs, PFOA and PFOS must pass method/SOP criteria.
MS	One per preparatory batch of up to 20 samples.	Use OPR control limits	Evaluate the data to determine if the failed criteria are due to sample matrix or laboratory error. When appropriate, re-prep if sufficient sample is available.	Bench Analyst	Use OPR control limits
MSD	One per preparatory batch of up to 20 samples.	Use OPR control limits; Relative Percent RPD ≤30%	Evaluate the data to determine if the failed criteria are due to sample matrix or laboratory error. When appropriate, re-prep if sufficient sample is available.	Bench Analyst	Use OPR control limits; RPD ≤30%
Internal	Every	More conservative of	Evaluate the data to determine if the	Bench Analyst	More conservative of

QAPP Worksheet #28-1 - Analytical QC and Corrective Action – Vista

Matrix: Soil/Aqueous
Analytical Group: PFCs
Analytical Method/SOP: PFC by LC/MS/MS

QC Sample	No./ Freq.	Method/SOP Acceptance Criteria	Corrective Action	Title/position of person responsible for corrective action	Project-Specific Measurement Performance Criteria
Standards (IS)	standard and sample	laboratory-specified limits or areas within 50-150% of the average areas measured during ICAL	failed criteria are due to sample matrix or laboratory error. Failed QC samples must be reanalyzed with all associated failed field samples		laboratory-specified limits or areas within 50-150% of the average areas measured during ICAL
Surrogate Spike	NA	NA	NA	NA	NA

QAPP Worksheet #28-2 - Analytical QC and Corrective Action – SGS Accutest

Matrix: Soil/Aqueous
Analytical Group: PFCs
Analytical Method/SOP: PFC by 537.1 LC/MS/MS

QC Sample	No./ Freq.	Method/SOP Acceptance Criteria	Corrective Action	Title/position of person responsible for corrective action	Project-Specific Measurement Performance Criteria
MB	1 per prep. batch of up to 20 samples.	< ½ LOQ, <1/10 the concentration detected in an associated sample, or <1/10 the regulatory limit, whichever is highest	Reprep and reanalyze the MB and all samples processed with the contaminated blank. If problem persists, call PM.	Bench Analyst	All analytes in the MB must be less than ½ the LOQ or 1/5 of the HAs on WS#15, whichever is greater
LCS containing all analytes	One per preparatory batch of up to 20 samples.	70% to 130% for mid- to high-concentration spikes or 50% to 150% for low-level spikes	Correct problem, reprep and reanalyze LCS and all samples in associated batch for failed analytes. If problem persists, call PM.	Bench Analyst	If PFOA and/or PFOS are detected in the associated samples at concentrations within 20% of the HAs, PFOA and PFOS must pass method/SOP criteria.
MS	One per preparatory batch of up to 20 samples.	70% to 130%	Evaluate the data to determine if the failed criteria are due to sample matrix or laboratory error. When appropriate, re-prep if sufficient sample is available.	Bench Analyst	70% to 130%
MSD	One per preparatory batch of up to 20 samples.	70% to 130%; RPD<30	Evaluate the data to determine if the failed criteria are due to sample matrix or laboratory error. When appropriate, re-prep if sufficient sample is available.	Bench Analyst	70% to 130%; %RPD <30

QAPP Worksheet #28-2 - Analytical QC and Corrective Action – SGS Accutest

Matrix: Soil/Aqueous
Analytical Group: PFCs
Analytical Method/SOP: PFC by 537.1 LC/MS/MS

QC Sample	No./ Freq.	Method/SOP Acceptance Criteria	Corrective Action	Title/position of person responsible for corrective action	Project-Specific Measurement Performance Criteria
IS	Every standard and sample	70% to 130% and area must be within 50% of the average areas measured during ICAL	Evaluate the data to determine if the failed criteria are due to sample matrix or laboratory error. Failed QC samples must be reanalyzed with all associated failed field samples.	Bench Analyst	70% to 130% and area must be within 50% of the average areas measured during ICAL
Surrogate Spike	Every sample	13C2-PFHxA and 13C2-PFDA 70-130% recovery	Evaluate the data to determine if the failed criteria are due to sample matrix or laboratory error. Failed QC sample – correct analytical problem and reanalyze all failed samples.	Bench Analyst	70% to 130%

QAPP Worksheet #28-3 - Analytical QC and Corrective Action – Maxxam

Matrix: Soil/Aqueous
Analytical Group: PFCs
Analytical Method/SOP: PFC by 537.1 - LC/MS/MS

QC Sample	No./ Freq.	Method/SOP Acceptance Criteria	Corrective Action	Title/position of person responsible for corrective action	Project-Specific Measurement Performance Criteria
MB	1 per prep. batch of up to 20 samples.	No analytes detected > 1/2 the LOQ or the regulatory limit, whichever is greater.	The source of the contamination is investigated and eliminated before proceeding with further analysis. If required, re-prep and re-analyze MB and all samples processed with contaminated blank.	Analyst/Prep Analyst	All analytes in the MB must be less than ½ the LOQ or 1/5 of the HA's on **Worksheet #15**, whichever is greater
LCS containing all analytes	One per preparatory batch of up to 20 samples.	Native analyte recoveries 70-130%	Source of poor recovery is investigated and eliminated before proceeding with further analysis. If necessary, re-prep and re-analyze the LCS and all samples in the associated preparatory batch for failed analytes.	Analyst/Prep Analyst	If PFOA and/or PFOS are detected in the associated samples at concentrations within 20% of the HAs, PFOA and PFOS must pass method/SOP criteria.

QAPP Worksheet #28-3 - Analytical QC and Corrective Action – Maxxam

Matrix: Soil/Aqueous
Analytical Group: PFCs
Analytical Method/SOP: PFC by 537.1 - LC/MS/MS

QC Sample	No./ Freq.	Method/SOP Acceptance Criteria	Corrective Action	Title/position of person responsible for corrective action	Project-Specific Measurement Performance Criteria
MS	One per preparatory batch of up to 20 samples.	70-130% recovery	If the recoveries indicate that the problem is procedure related, re-extraction and re-analysis is required. If the recoveries indicate that the failures are matrix-related, refer to Blank Spike as measure of method performance in clean matrix. The project Chemist will be contacted and a decision will be made to either report the data as is with a notation in the analytical narrative or if the samples should be re-extract and re-analyzed.	Analyst/Prep Analyst	70-130% recovery
MSD	One per preparatory batch of up to 20 samples.	70-130% recovery; %RPD <30	Source of poor RPD is investigated and eliminated before proceeding with further analysis. Check for heterogeneity in samples.	Bench Analyst	70-130% recovery; RPD <30
IS	Every standard and sample	50-150% of the average areas measured during ICAL	Evaluate the data to determine if the failed criteria are due to sample matrix or laboratory error. Failed QC samples must be reanalyzed with all associated failed field samples	Bench Analyst	50-150% of the average areas measured during ICAL

QAPP Worksheet #28-3 - Analytical QC and Corrective Action – Maxxam

Matrix: Soil/Aqueous
Analytical Group: PFCs
Analytical Method/SOP: PFC by 537.1 - LC/MS/MS

QC Sample	No./ Freq.	Method/SOP Acceptance Criteria	Corrective Action	Title/position of person responsible for corrective action	Project-Specific Measurement Performance Criteria
Surrogate Spike	Every standard and sample	Aqueous - 70-130% recovery Soil - 50-130% recovery	Evaluate the data to determine if the failed criteria are due to sample matrix or laboratory error. Failed QC samples must be reanalyzed with all associated failed field samples	Bench Analyst	Aqueous - 70-130% recovery Soil - 50-130% recovery

QAPP Worksheet #29 Project Documents and Records

Sample Collection Documents and Records	On-site Analysis Documents and Records	Off-site Analysis Documents and Records	Data Assessment Documents and Records	Other
- Field Notes - Sampling Logs - COC Records - Air Bills - Custody Seals	- Equipment Calibration Logs - Field Data Records - Field Instrument Maintenance Logs	- Sample Receipt, Custody and Tracking Records - Standard Traceability Logs - Equipment Calibration Logs - Sample Prep Logs - Run Logs - Equipment Maintenance, Testing, and Inspection Logs - Corrective Action Forms - Reported Field Sample Results - Reported Results for Standards, QC Checks and QC Samples - Instrument Printouts (raw data) for Field Samples, Standards, QC Checks and QC Samples - Data Package Completeness Checklists - Sample Disposal Records - Extraction/Cleanup Records - Raw Data (stored on disk or CD-R) - Analytical Reports	- Data Validation Checklists - Data Quality Assessments	- Site Safety and Health Plan - QAPP - WP

QAPP Worksheet #31 Planned Project Assessments

Assessment Type	Freq.	Internal or External	Organization Performing Assessment	Person(s) Responsible for Performing Assessment (Title and Organizational Affiliation)	Person(s) Responsible for Responding to Assessment Findings (title and organizational affiliation)	Person(s) Responsible for Identifying and Implementing Corrective Actions (title and organizational affiliation)	Person(s) Responsible for Monitoring Effectiveness of Corrective Actions (title and organizational affiliation)
Field Audit	One time per field event	Internal	Amec Foster Wheeler	Field Team Leader, Amec Foster Wheeler	Field Manager, Amec Foster Wheeler	Field Manager, Amec Foster Wheeler	PM, Amec Foster Wheeler
Laboratory Audit	Per Laboratory QA Program	External	DoD ELAP Accreditation Body	Laboratory QA Manager(s), DoD ELAP Accreditation.	Laboratory QA Manager(s), Vista/Maxxam/ SGS Accutest	Laboratory PM(s), Vista/Maxxam/ SGS Accutest	QA/QC Manager, Amec Foster Wheeler
Field Inspections	One time per field event	Internal	Amec Foster Wheeler	Field Team Leader, Amec Foster Wheeler	Field Manager, Amec Foster Wheeler	Field Manager, Amec Foster Wheeler	PM, Amec Foster Wheeler
Safety Audits	One time per field event	Internal	Amec Foster Wheeler	Field Team Leader, Amec Foster Wheeler	Field Manager, Amec Foster Wheeler	Field Manager, Amec Foster Wheeler	PM, Amec Foster Wheeler

QAPP Worksheet #32 Assessment Findings and Corrective Action Responses

Assessment Type	Nature of Deficiencies Documentation	Individual(s) Notified of Findings (name, title, organization)	Time Frame of Notification	Nature of Corrective Action Response Documentation	Individual(s) Receiving Corrective Action Response (name, title, organization)	Time Frame for Response
Field Sampling Technical Systems Audit	Written Audit Report	PM, Amec Foster Wheeler	72 hours after audit	Letter	Field Manager, Amec Foster Wheeler	48 hours after notification
Field Inspection	Memorandum	PM, Amec Foster Wheeler	Two days	Memorandum	Field Manager, Amec Foster Wheeler	48 hours after notification
Contract Laboratory Technical Audit (internal)	Memorandum	Laboratory PM, Vista/Maxxam/ SGS Accutest	Two days	Memorandum	Laboratory QA Manager(s), Vista/Maxxam/ SGS Accutest	48 hours after notification

QAPP Worksheet #33 QA Management Reports

Type of Report	Freq. (e.g., daily, weekly monthly, quarterly, annually)	Projected Delivery Date(s)	Person(s) Responsible for Report Preparation (title and organizational affiliation)	Report Recipient(s) (title and organizational affiliation)
Field Sampling Technical Systems Audit Report	Once per year	NA	Field Manager, Amec Foster Wheeler	PM, Amec Foster Wheeler
Contract Laboratory Technical Audit Report	As necessary during project	NA	Senior Chemist, Amec Foster Wheeler	PM, Amec Foster Wheeler
Data Validation Reports	As specified in the Data Assessment section based on intended use of the data and required percentage to meet project DQOs. Data Validation Reports will be documented in various project reports, as appropriate.	As generated throughout project	Senior Chemist, Amec Foster Wheeler	PM, Amec Foster Wheeler

QAPP Worksheet #34 Verification (Step I) Process

Verification Input	Description	Internal/ External	Responsible for Verification (name, organization)
COC and Shipping Forms	COC forms and shipping documentation will be reviewed by laboratory upon receipt of samples for verification against the sample coolers they represent. The COC form will be signed by all parties that had custody of samples, with the exception of commercial carriers.	External	Martha Maier, Vista; Andrea Colby, SGS Accutest; Melissa Di Grazia, Maxxam
Field Notes and Sampling Logs	All field notes and sampling logs will be reviewed internally and placed in the project file.	Internal	Field Manager, Amec Foster Wheeler
Laboratory Data	All laboratory data packages will be verified internally by the laboratory performing the work for completeness and technical accuracy prior to submittal.	External	Martha Maier, Vista; Andrea Colby, SGS Accutest; Melissa Di Grazia, Maxxam
Laboratory Data	All final data packages will be verified for content upon receipt.	Internal	Denise King, or designee, Amec Foster Wheeler

QAPP Worksheet #35 Validation (Steps IIa and IIb) Process

Step IIa/IIb	Validation Input	Description	Responsible for Validation (Name, Organization)
Step IIa	Sampling methods and procedures	Establish that required sampling methods were used and that any deviations were noted. Provide that the sampling procedures and field measurements met performance criteria and that any deviations were documented.	Field Manager, Amec Foster Wheeler
Step IIa	Analytical method and procedures	Establish that required analytical methods were used and that any deviations were noted. The laboratory will provide that QC samples met performance criteria and that any deviations were documented in the report narrative.	Martha Maier, Vista; Andrea Colby, SGS Accutest; Melissa Di Grazia, Maxxam; and Denise King, or designee, Amec Foster Wheeler
Step IIa Modified	Analytical method and procedures	Review of associated blanks for potential contamination and verify that all preparations and analyses have been performed within applicable holding times.	Denise King, or designee, Amec Foster Wheeler
Step IIb	Documentation of QAPP QC sample results	Establish that all QAPP-required QC samples were collected and analyzed.	Denise King, or designee, Amec Foster Wheeler

QAPP Worksheet #35 Validation (Steps IIa and IIb) Process

Step IIa/IIb	Validation Input	Description	Responsible for Validation (Name, Organization)
Step IIb	Project quantitation limits	Determine that the project quantitation limits were achieved, as outlined in the QAPP.	Denise King, or designee, Amec Foster Wheeler
Step IIb	Performance criteria	Evaluate QC data for all samples against project-specific performance criteria in the QAPP, laboratory QA manual, and control criteria.	Denise King, or designee Amec Foster Wheeler
Step IIb	Validation Report	Summarize data verification and validation components included in the Performance Review. Include qualified data and explanation of all qualifiers. Note: Data will be validated 90% Stage 2B and 10% Stage 4	Denise King, or designee, Amec Foster Wheeler

QAPP Worksheet #36 Validation (Steps IIa and IIb) Summary

Step IIa/IIb	Matrix	Analytical Group	Data Purpose	Concentration Level	Validation Criteria	Data Validator (title and organizational affiliation)
Steps IIa and IIb	All	All	Contaminant delineation	All	Department of Defense *Quality Systems Manual for Environmental laboratories, Version 5.0*, July 2013; laboratory control limits; method criteria; QAPP criteria; and professional judgment	Denise King, or designee, Amec Foster Wheeler

Amec Foster Wheeler chemists will perform validation. With the exception of investigation-derived waste samples, data will be validated 90% Stage 2B, and 10% Stage 4. Data validation will be performed in accordance with the DoD QSM and QC criteria specified in this document.

Stage 2B and Stage 4 data validation follow Amec Foster Wheeler data validation protocols. These protocols apply to full data packages that include raw data (e.g., instrument spectra and chromatograms), backup documentation for calibration standards, analysis run logs, and dilution factors. Data and QC summary forms are reviewed for compliance with method-specified QC criteria. For data that undergo Stage 4 validation, analyte ID and reported concentrations are also checked. To assure that DL and data values meet project requirements; instrument performance, methods of calibration, and calibration standards are evaluated.

Analytical data may be qualified based on findings from data validation review. Qualifiers will provide data users with an estimate of the level of uncertainty associated with the qualified results.

Data validation results will be evaluated with respect to the qualifiers listed below to assess the usability of the data:

B – analyte was detected in the associated blank at a concentrations greater than 1/10 the concentration detected in the sample
J – estimated concentration
Q – analyte was both B and J qualified
UJ – not detected and sample detection limit is estimated
R – rejected

The following data validation guidelines will be followed for sample reporting and blank detections:

- The general reporting convention will be to report non-detected results at the LOD, with detections reported down to the DL. All detections less than the LOQ will be reported by the laboratory with J qualifiers.
- If the sample concentration is between the DL and LOQ and less than ten times the concentration detected in the blank or rinsate sample, then the qualifier will be changed from the laboratory's J qualifier to B during data validation.
- If the sample concentration is greater than the LOQ and less than five times the concentration detected in the blank or rinsate sample, then the sample concentration will be B-flagged during data validation.

The data validation criteria will be based on method-specific criteria for preservation, holding times, instrument tuning, calibration, instrument performance checks, internal standard responses, serial dilutions, and target compound ID; laboratory-specified criteria for surrogate, LCSs, laboratory duplicates, and MSs; and the validator's professional judgment.

QAPP Worksheet #37 Usability Assessment

The Data Usability Assessment will be performed by Amec Foster Wheeler for data associated with determination of NFA or for follow-on remedial investigations. Documentation generated during the usability assessment will consist of data validation checklists with a brief summary of overall data usability.

The Data Usability Assessment process involves data verification and data validation. Data verification is the process by which laboratory results are checked to provide that the proper QC steps were performed, and key items have met QC objectives (both analytical and contractual). The key items checked in a data verification include the following:

- Sample collection, handling, and analysis procedures;
- Field sampling, handling, and analysis activities documented (e.g., QC signatures in field logs, QC checklist);
- Sampling, handling, on-site analytical and off-site laboratory data verified internally at the data generator level;
- Laboratory data (e.g., laboratory-qualified data);
- Sampling, on-site analytical, and off-site laboratory data;
- Data package deliverable completeness;
- Review of case narrative;
- All analytical results presented;
- QC sample data summaries;
- Applicable raw data;

All required data deliverables must be present in the data package in order to proceed to the next step of data validation.

Data validation entails a review of the sample collection, handling, field analysis, and QC data, and the raw data to verify that the laboratory was operating within required limits; analytical results were correctly transcribed from the instrument readouts; and which (if any) environmental samples were related to out-of-control QC samples. The objective of data validation is to identify any questionable or invalid laboratory measurements.

The data quality indicators used to evaluate conformance with the project DQOs are presented below.

Data quality indicators are generally defined in terms of six parameters:

1. Representativeness
2. Comparability

QAPP Worksheet #37 Usability Assessment

3. Completeness
4. Precision
5. Accuracy
6. Sensitivity

Each parameter is defined below. Specific objectives for the Site actions are presented in other sections of this QAPP, as referenced below.

Representativeness
Representativeness is the degree to which sampling data accurately and precisely represent site conditions and depends on sampling and analytical variability and the variability of environmental media at the site. Actions have been designed to assess the presence of chemical constituents at the time of sampling. The QAPP presents the rationale for sample quantities and location. This QAPP presents field sampling and laboratory analytical methodologies. Use of the prescribed field and laboratory analytical methods with associated holding times and preservation requirements is intended to provide representative data.

Comparability
Comparability is the degree of confidence with which one data set can be compared to another. Comparability among phases of the actions (if additional phases are required) will be maintained through consistent use of the sampling and analytical methodologies set forth in this QAPP, established QA/QC procedures, and use of appropriately trained personnel.

Completeness
Completeness is defined as a measure of the amount of valid data obtained from an event and/or investigation compared to the total amount that was obtained. This will be determined upon final assessment of the analytical results. Completeness of a field or laboratory data set will be calculated by comparing the no. of valid sample results generated to the total no. of results generated.

$$\text{Completeness} = \frac{\text{No. valid results}}{\text{Total no. of anticipated results}} \times 100$$

As a general guideline, overall project completeness is expected to be at least 90 %. The assessment of completeness will require professional judgment to determine data usability for intended purposes.

QAPP Worksheet #37 Usability Assessment

Precision

Precision is a measure of the reproducibility of sample results. The goal is to maintain a level of analytical precision consistent with the objectives of the action. To maximize precision, sampling and analytical procedures will be followed. All work for the site actions will adhere to established protocols presented in the QAPP. Checks for analytical precision will include the analysis of MS/MSD, laboratory duplicates, and field duplicates. Checks for field measurement precision will include duplicate field measurements.

The precision of data will be measured by calculating the RPD by the following equation:

$$RPD = \frac{|(A-B)|}{|(A+B)|/2} \times 100$$

Where:

A = Analytical result from one of two duplicate measurements

B = Analytical result from the second measurement

Accuracy

Accuracy is a measure of how close a measured result is to the true value. Both field and analytical accuracy will be monitored through initial and continuing calibration of instruments. In addition, reference standards, MSs, blank spikes, and surrogate standards will be used to assess the accuracy of the analytical data.

Accuracy will be calculated in terms of % recovery as follows:

$$\% \text{ Recovery} = \frac{A-X}{B} \times 100$$

Where:

A = Value measured in spiked sample or standard

X = Value measured in original sample

B = True value of amount added to sample or true value of standard

Sensitivity

Sensitivity is a quantitative measurement to determine if the analytical laboratory's procedures/methodologies and their associated method DL can

QAPP Worksheet #37 Usability Assessment

satisfy the project requirements as they relate to the project action limits. Method DL are updated annually by the laboratory. The current method DL for the analytical laboratories are presented in **Worksheet #15**.

Data Validation and Usability

Validation will be performed on all data generated for SI purposes referencing the most recent versions of the Department of Defense Quality Systems Manual Version 5.0 (DOD 2013), and this QAPP. These procedures and criteria may be modified, as necessary, to address project-specific and method-specific criteria, control limits, and procedures. Data validation will consist of data screening, checking, reviewing, editing, and interpretation to document analytical data quality and to determine whether the quality is sufficient to meet the DQOs. USEPA Stage 2b data validation will be performed on 90% of the data and Stage 4 on the remaining 10%.

The data validator will verify that reduction of laboratory measurements and laboratory reporting of analytical parameters is in accordance with the procedures specified for each analytical method and/or as specified in this QAPP. Any deviations from the analytical method or any special reporting requirements apart from those specified in this QAPP will be detailed on COC forms.

Upon receipt of laboratory data, the following procedures will be executed by the data validator:

- Evaluate completeness of data package.
- Verify that field COC forms were completed and that samples were handled properly.
- Verify that holding times were met for each parameter. Holding time exceedances, should they occur, will be documented. Data for all samples exceeding holding time requirements will be flagged as either estimated or rejected. The decision as to which qualifier is more appropriate will be made on a case-by-case basis.
- Verify that parameters were analyzed according to the methods specified.
- Review QA/QC data (i.e., confirm that duplicates, blanks, and spikes were analyzed on the required no. of samples, as specified in the method and verify that duplicate and MS recoveries are acceptable).
- Investigate anomalies identified during review. When anomalies are identified, they will be discussed with the PM and/or Laboratory Manager, as appropriate.
- If data appear suspect, investigate the specific data of concern. Calculations will be traced back to raw data. If calculations do not agree, the cause will be determined and corrected.

Deficiencies discovered as a result of the data review, as well as the corrective actions implemented in response, will be documented and submitted in the form of a written report addressing the following topics, as applicable to each method:

QAPP Worksheet #37 Usability Assessment

- Assessment of the data package
- Description of any protocol deviations
- Failures to reconcile reported and/or raw data
- Assessment of any compromised data
- Overall appraisal of the analytical data
- Table of site name, sample quantities, matrix, and fractions analyzed

It should be noted that qualified results do not necessarily invalidate data. The goal to produce the best possible data does not necessarily mean that data must be produced without QC qualifiers. Qualified data can provide useful information.

During the review process, laboratory-qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results will be qualified with the following codes:

Concentration (C) qualifiers:

U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

Validation qualifiers:

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
B The analyte was positively identified in an associated blank sample.
Q The result was both B qualified because of a detection in an associated blank and J qualified because of another QC exceedance.
UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual LOQ necessary to accurately and precisely measure the analyte in the sample.
R The sample result is rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.

The "R" flag means that the associated value is unusable. In other words, due to significant QC problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values cannot be relied upon.

QAPP Worksheet #37 Usability Assessment

No compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error.

Resolution of any issues regarding laboratory performance or deliverables will be handled between the laboratory and the data validator. Suggestions for reanalysis may be made by the QA/QC Manager.

Validation Reports

The data validation reports will identify all deficiencies and the potential impact on the results. The Validation and Data Management Team will apply qualifiers generated during the validation process to the analytical data tables, with an explanation of how and why the data were qualified. The validation reports and the data tables will be the primary location of all applicable data qualifiers. Qualifiers will not be applied to the original hard copy analytical reports.

Field Data Review

Field data are generated from in-field measurement, which may include global positioning system or physical survey data, x-ray fluorescence measurement data, groundwater quality field parameters, and qualitative soil characterization or site description results. The quality objective for the in-field measurement activities is to obtain accurate measurements using appropriate equipment. Data are recorded in field logbooks or on field sampling sheets and calibration logs. Calibration logs will be reviewed with other field documentation to identify any potential impacts to data quality and usability. Field logbooks are reviewed as part of the QC inspections.

Reconciliation with Data Usability Requirements

The data results will be examined to determine the performance that was achieved for each data usability criterion. The performance will then be compared with the project objectives and DQOs. Deviations from objectives will be noted. Additional action may be warranted when performance does not meet performance objectives for critical data. Options for corrective action relating to incomplete information, questionable results, or inconsistent data may include any or all of the following:

- Retrieval of missing information
- Request for additional explanation or clarification
- Reanalysis of sample from extract (when appropriate)
- Recalculation or reinterpretation of results by the laboratory

QAPP Worksheet #37 Usability Assessment

These actions may improve the data quality, reduce uncertainty and eliminate the need to qualify or reject data. If these actions do not improve the data quality to an acceptable level, the following additional actions may be taken: • Extrapolation of missing data from existing data points • Use of historical data • Evaluation of the critical/noncritical nature of the sample If the data gap cannot be resolved by these actions, the data bias and potential for false negatives and positives can be evaluated. If the resultant uncertainty level is unacceptable, the following action must be taken: • Additional sample collection and analysis

FINAL REPORT
FY16 PHASE 1 REGIONAL SITE INSPECTIONS FOR PERFLUORINATED COMPOUNDS

CONNECTICUT AIR NATIONAL GUARD
103RD AIRLIFT WING
BRADLEY AIR NATIONAL GUARD BASE
EAST GRANBY, CONNECTICUT

Contract #: W9133L-14-D-0002
Delivery Order 0006

Amec Foster Wheeler Project #: 2-9133-0006

February 5, 2018

FINAL
FY16 Phase 1 Regional Site Inspections For Perfluorinated Compounds

Connecticut Air National Guard – 103rd Airlift Wing
Bradley Air National Guard Base
East Granby, Connecticut

Prepared for:
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Operations Division, Restoration Branch
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ACRONYMS & ABBREVIATIONS

103rd AW	103rd Airlift Wing
A4OR	Operations Restoration Branch
AFFF	Aqueous Film Forming Foam
Amec Foster Wheeler	Amec Foster Wheeler Environment & Infrastructure, Inc.
amsl	above mean sea level
ANG	Air National Guard
BANGB	Bradley Air National Guard Base
BB&E	BB&E, Inc
bgs	below ground surface
BRAC	Base Realignment and Closure
CBYD	Call Before You Dig
CED	Civil Engineering Department
CorBuilt	CorBuilt LLC
CTDEEP	Connecticut Department of Energy and Environmental Protection
°C	Degrees Celsius
DO	Delivery Order
DoD	Department of Defense
DPT	Direct Push Technology
DQO	Data Quality Objective
Drilex	Drilex Environmental
ELAP	Environmental Laboratory Accreditation Program
ERP	Environmental Restoration Program
FAA	Federal Aviation Administration
FSP	Field Sampling Plan
Ft.	Feet/foot
FTA	Fire Training Area
HA	Health Advisory
HDPE	High Density Polyethylene
IDW	Investigation Derived Waste
IRP	Installation Restoration Program
mL/min	Milliliter per Minute
MS	Matrix Spike
MSD	Matrix Spike Duplicate
mV	Millivolts
NELAP	National Environmental Laboratory Accreditation Program
NFA	No Further Action
NGB	National Guard Bureau
NRCS	National Resources Conservation Service
ntu	Nephelometric Turbidity Units
ORP	Oxidation Reduction Potential
PA	Preliminary Assessment
PFBS	Perfluorobutanesulfonic Acid
PFC	Perfluorinated Compound
PFOA	Perfluorooctanoic Acid
PFOS	Perfluorooctanesulfonic Acid
POC	Point of Contact

POL	Petroleum, Oil and Lubricant
PRL	Potential Release Location
QAPP	Quality Assurance Project Plan
QC	Quality Control
RSL	Regional Screening Level
RSR	Remediation Standard Regulation
SB	Soil Boring (designation)
SHSP	Site Health and Safety Plan
SI	Site Inspection
SOP	Standard Operating Procedure
Test America	Test America Laboratories Inc.
TOR	Top of Riser
TW	Temporary Well
µg/kg	Micrograms per Kilogram
µg/L	Micrograms per Liter
USAF	United States Air Force
USCS	Unified Soil Classification System
USEPA	United States Environmental Protection Agency
Vista	Vista Analytical Laboratories, Inc.

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EXECUTIVE SUMMARY

Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler) was contracted by the National Guard Bureau Operations Restoration Branch under Contract # W9133L-14-D-0002, Delivery Order 0006 to conduct Phase 1 Regional Site Inspections (SIs) for Perfluorinated Compounds (PFCs) at multiple Air National Guard (ANG) Installations. This report has been prepared for SIs conducted at on-Base Potential Release Locations (PRLs) identified on the 103rd Airlift Wing, Connecticut Air National Guard, Bradley Air National Guard Base (BANGB), in the City of East Granby, Connecticut. This Report presents the results and recommendations from the 2017 SI field activities conducted in September and October 2017 at BANGB. The objectives of the SI were to determine the presence or absence of PFCs at each PRL and the Base boundary, and based on the findings:

1) Determine if PRL is eligible for a decision of No Further Action (NFA);
2) Assess if PFCs are migrating off-site; and
3) Provide data for developing Data Quality Objectives if further investigations are recommended.

To meet the objectives, Amec Foster Wheeler performed SIs at the following five PRLs:

- PRL 1: Building 15- Warehouse Supply;
- PRL 2:Building 11- Aqueous Film Forming Foam Storage;
- PRL 3 Building 19- Fire Station;
- PRL 4: Stormwater Drainage Basin (Installation Restoration Program Site 2);
- PRL 5: Fire Department Equipment Test Area

Based on recommendations from the Preliminary Assessment conducted by BB&E, Inc. in August 2015, soil and groundwater samples were collected and analyzed for the PFCs listed on the United States Environmental Protection Agency's Third Unregulated Contaminant Monitoring Rule list (USEPA, 2012); The detected PFCs concentrations were compared against screening criteria for perfluorooctanoic acid (PFOA), perfluorooctanesulfonic acid (PFOS), and perfluorobutane sulfonate (PFBS) including: the USEPA lifetime drinking water Health Advisory (HA) for PFOS (USEPA, May 2016a) and HA for PFOA (USEPA, May 2016b); the USEPA Regional Screening Level (RSL) table for PFBS in residential soil (USEPA, 2017); the USEPA RSL for PFBS in tap water; and based on United States Air Force Guidance (USAF, 2012),

calculated screening levels using the USEPA screening level calculator for PFOA and PFBS in soil. These screening criteria are presented in Table ES-1 below.

Table ES-1: **USEPA and USAF SI Screening Criteria**

Parameter	Chemical Abstract Number	EPA Regional Screening Level Table (June 2017)[a]		Air Force Guidance for Soils and Sediments[b] (µg/kg)	EPA Health Advisory Drinking Water (Surface Water or Groundwater) (µg/L)[c]
		Residential Soil (µg/kg)	Tap Water (µg/L)		
Perfluorobutane sulfonate (PFBS)	375-73-5	1,300,000[d]	400[e]	NL	NL
Perfluorooctanoic acid (PFOA)	335-67-1	NL	NL	1,260	0.07[f]
Perfluorooctane sulfonate (PFOS)	1763-23-1	NL	NL	1,260	

Notes:

[a] EPA Regional Screening Levels (USEPA, 2017).

[b] Screening levels calculated using the EPA Regional Screening Level calculator [https://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search]. The toxicity value input for the calculator is the Tier 3 value reference dose of 0.00002 mg/kg/day derived by USEPA in their Drinking Water Health Advisories for both PFOS (USEPA, 2016a) and PFOA (USEPA, 2016b).

[c] USEPA, 2016b. *Drinking Water Health Advisory for Perfluorooctanoic Acid (PFOA)* and USEPA, 2016a. *Drinking Water Health Advisory for Perfluorooctane Sulfonate (PFOS).*

[d] PFBS RSL for Residential Soil concentration presented in WP was 1,600,000 µg/kg based on the May 2016 RSL values. This table has been updated to include the more recent RSL values published in June 2017.

[e] PFBS for Tap Water presented in the SI Work Plan (Amec Foster Wheeler, 2017) was 380 ug/L based on the May 2016 RSL values. This table has been updated to include the more recent RSL value published in June 2017.

[f] When PFOA and PFOS are both present, the combined detected concentrations of the compounds are compared with the 0.07 µg/L health advisory value.

EPA = U.S. Environmental Protection Agency

NL = not listed

This study determined that there were no exceedances of soil screening criteria at any of the PRLs and no groundwater screening criteria exceedances at PRLs 1, 2, or 5, or at the base boundary well. Based on comparison of analytical data to the screening criteria in the table above, Amec Foster Wheeler recommends NFA for three PRLs (PRL 1, PRL 2 and 5) as well as Base Boundary Well - Temporary Well (TW)-106, and further investigations at two PRLs (PRL 3 and PRL 4), which includes soil and groundwater investigation to determine the nature and extent of the confirmed PFC release. An overview of conclusions from SI activities and recommendations

for future investigations, is included in Table ES-2

Table ES-2: Screening Criteria Exceedances and Recommendations

PRL	Screening Criteria Exceedance		Recommendation
	Soil	GW	
1			NFA
2			NFA
3		X	Soil and GW investigation to determine the nature and extent of the confirmed PFC release in GW.
4		X	Soil and GW investigation to determine the nature and extent of the confirmed PFC release in GW.
5			NFA
Base Boundary			NFA

Notes:

X – Screening criteria exceedance
PFC - Perfluorinated Compound
PRL- Potential Release Location
NFA- No Further Action
GW - Groundwater

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1.0 INTRODUCTION

Amec Foster Wheeler Environment & Infrastructure Inc. (Amec Foster Wheeler) was contracted by the National Guard Base (NGB) Operations Restoration Branch (A4OR) under Contract # W9133L-14-D-0002, Delivery Order (DO) 0006 to conduct Phase 1 Regional Site Inspections (SIs) for Perfluorinated Compounds (PFCs) at multiple Air National Guard (ANG) Installations. The scope of the Contract includes performance of an SI at on-Base Potential Release Locations (PRLs) identified at the 103rd Airlift Wing (103rd AW), Connecticut Air National Guard, Bradley Air National Guard Base (BANGB), in the City of East Granby, Connecticut. This SI Report describes the objectives, procedures, and activities which were completed in September and October 2017, and presents Amec Foster Wheeler's findings and recommendations. The Base location is shown in **Figure 1**, and the Base and area features are shown on **Figure 2**.

The SI was conducted in general accordance with the standards and practices prescribed by the Connecticut Department of Energy and Environmental Protection (CTDEEP). Remediation Standard Regulations (RSRs, Connecticut General Statutes 22a-133k, 1, 2, 3.)

1.1 Background

The Department of Defense (DoD) began investigations at military bases under the Installation Restoration Program (IRP) with the goal of identifying, evaluating, and remediating areas of contamination (the program is now referred to as the Environmental Restoration Program or ERP). Under this program, investigations began at the BANGB in 1993. These investigations included Preliminary Assessments (PAs), SIs, removal action investigations, and a Remedial Investigation which were performed pursuant to the CTDEEP RSRs. Prior to the PFC PA (BB&E, 2016), potential releases of PFCs from use and storage of Aqueous Film Forming Foam (AFFF) had not been evaluated at BANGB.

Based on the 2016 PA investigation conducted by BB&E Inc (BB&E), there is no evidence that a Fire Training Area (FTA) is or was located within the current footprint of the BANGB site boundary. In addition, the Base did not have a fire department until approximately 1981 when the current fire station (Building 19) was completed consistent with establishment of the current ANG location at BANGB circa 1980. Non-FTA Areas of Concern are sites where AFFF has been stored or released and may include crash sites, hangars, fuel spill areas, hazardous waste storage facilities, firefighting, equipment testing areas, etc.

Based on locations where AFFF was potentially used or stored, five PRLs were identified at the site in the PA Site Visit Report (Table 1). Further investigation of soil and groundwater was recommended for all five PRLs. In addition to these five PRLs, groundwater quality at the Base boundary was assessed during the SI to evaluate the potential for off-site migration of PFCs. The PRLs are illustrated on **Figure 3**, and the SI summary is presented as **Table 2**.

1.2 Purpose and Scope

The purpose of the SI was to determine the presence/absence of PFCs in soil and groundwater where applicable at each of the PRLs, and in the groundwater at or near the Base boundary. This data has been used to develop recommendations for appropriate paths forward to either provide a No Further Action (NFA) conclusion or recommendations for developing Data Quality Objectives (DQOs) for further investigations. SI investigative tasks included:

- Advancing direct-push technology (DPT) soil borings at the PRLs (15 borings) up to a maximum depth of 15 feet (ft.) below ground surface (bgs) and collect two soil sample(s) from each boring;
- Installing six temporary monitoring wells; and
- Collecting six groundwater samples.

Field activities were conducted in accordance with the Final SI Work Plan, Quality Assurance Project Plan (QAPP), Field Sampling Plan (FSP), and Site Health and Safety Plan (SHSP) (Amec Foster Wheeler, 2017). The scope of the SI is outlined in the following sections.

2.0 INSTALLATION DESCRIPTION

Section 2.1 describes the location and environs of BANGB. A brief history of BANGB is provided in **Section 2.2**.

2.1 Location

The BANGB is located in East Granby, Connecticut, approximately 15 miles north of Hartford, Connecticut, on a portion of the Bradley International Airport. ANG leases the 144 acres in the southwest corner of the airport (**Figure 1**). BANGB is the home of the 103rd Airlift Wing. The area surrounding the site consists of commercial airport businesses to the north, east, and west, and residential properties and undeveloped land to the south. The site is located approximately 2 miles west of Windsor Locks and 15 miles north of Hartford, Connecticut. The Windsor Locks Town Line runs north-south through the Bradley International Airport immediately east of the Bradley Air National Guard property. The PRLs are illustrated on **Figure 3**.

2.2 Organization and History

Bradley International Airport was built on farmland and woods starting in 1939. The Army Air Corps used the facilities during World War II, while the area of the current Air National Guard Base was used as a German prisoner of war camp. After World War II, the prisoner of war camp was dismantled, and the State of Connecticut took over the land to expand Bradley International Airport. The BANGB facility layout is depicted on **Figure 2**.

Activities at the site have been typical of those at most airports and military air bases, including fueling and maintenance operations. These activities include the usage, handling, storage, and disposal of various products, including potentially hazardous materials.

3.0 ENVIRONMENTAL SETTING

The following sections provide information on the environmental setting at BANGB. This information is summarized from reports prepared during previous environmental evaluations at BANGB, as referenced in the following subsections.

3.1 Climate

The climate in East Granby, Connecticut is characterized by cold winters and moderate summers with occasional hot spells. Temperatures range between 25 and 73 degrees Fahrenheit. Annual precipitation averages approximately 44 inches (USGS, 1981).

3.2 Topography

Surface elevations at the BANGB range from approximately 164 feet above mean sea level (amsl) to 173 feet amsl. Elevations of approximately 173 feet amsl were noted west of the Aircraft Apron and appear to represent the topographic high for the site. The topographic low of approximately 164 feet amsl is located within the Detention Basin located in the southern portion of the site (Aneptek, 2002).

3.3 Geology

Bedrock underlying the site consists of reddish-brown, upper Triassic age arkosic siltstone which is geologically categorized as Portland Arkose. The depth to bedrock map of the Windsor Locks Quadrangle (USGS, 1973) depicts bedrock underlying the site ranging in depth from 50 to 100 feet (ft.) bgs in the western areas and 100 to 150 ft. bgs in the eastern areas. Boring logs for wells drilled near the site indicate that the top of the Portland Arkose lies at depths between 50 and 120 ft. bgs, and that this geologic unit extends to depths of greater than 400 ft. bgs in the vicinity of the site.

3.4 Soils

According to the National Resources Conservation Service Web Soil Survey (NRCS, 2017), soils in the vicinity the Fire Department Equipment Test Area (PRL 5) are mapped as Windsor loamy sand (0 to 3 % slopes). Windsor loamy sands are derived from sandy and gravelly glaciofluvial deposits originating from gneiss, granite, and/or schist parent material. Soils at the other four

PRLs are mapped as Urban Land.

Soils observed during the SI activities generally consisted of fill material over alternating layers of poorly graded and well-graded sand strata. Occasional layers of finer material (silty sand) and coarser material (gravelly sand) were encountered. Native material appeared to be of glaciofluvial origin, which agrees with regionally mapped NRCS soil classifications. Soil boring logs are included in **Appendix A**.

3.5 Surface Water Hydrology

According to the BB&E PA, surface water is not present onsite; therefore, an evaluation of PFCs in surface water was not recommended (BB&E, 2016). With the exception of the Stormwater Drainage Basin (PRL 4), which is currently regulated under a National Pollutant Discharge Elimination System Stormwater Permit for the discharge of storm water to surface water (DeGrayes Brook) the other PRLs are not located proximal to stormwater discharge points mapped in the PA. Generally, there is no standing water within the Stormwater Drainage Basin (PRL 4), which has a grass covered, mowed surface. Surface releases on site are expected to predominately infiltrate into the sandy, permeable surface soils. Releases to paved surfaces could enter the storm drains which ultimately discharge to the drainage features described in detail in the PA.

3.6 Hydrogeology

The shallow overburden groundwater bearing unit is the Pleistocene deltaic silts and sands. Information presented in the PA/SI (Aneptek, 1996) indicates that the depth to the water table beneath the site has historically ranged from between 8 and 18 feet below ground surface, with recent water table depths of between approximately 10 and 12 feet bgs. Groundwater flow in the shallow overburden is generally from the west to the east-southeast.

As depicted on the Water Resources Bulletin No. 24, Plate B from the Water Resource Inventory of Connecticut (USGS, 1981) coarse-grained stratified drift overlies fine-grained stratified drift at the site. The bedrock aquifer in the area is the Triassic Portland Arkose. Drilling logs indicate the top of bedrock lies at depths of between 50 and 120 feet bgs in the vicinity of the Base. The CTDEEP has classified the groundwater in the Base vicinity as “GA”, which presumes that the water is suitable for potable uses without prior treatment.

Groundwater in the vicinity of the site generally flows in an east or southeasterly direction (**Figure 2**). Groundwater flow directions illustrated on **Figure 2** were obtained from Appendix C of the PA, which includes relevant information from previous environmental investigations at the site. Depth to groundwater at the Base has been reported to be in the range of 8 to 18 ft. bgs during previous investigations. During SI field activities, groundwater was observed at various depths ranging from approximately 14 ft. bgs at TW-105 to approximately 20 ft. bgs at TW-106.

3.7 Critical Habitat and Threatened/Endangered Species

The CTDEEP Diversity Data Base Areas mapping for East Granby, CT, dated December 2016, depicts that State and/or Federal Listed Species and Significant Natural Communities may exist on or in the vicinity of the Base. The PA references mapped sensitive receptors near the site, but does not describe them further.

3.8 Town of East Granby Water Supply

There are currently no potable water wells on site, which receives its potable water from the Connecticut Water Company. The Connecticut Water Company serves East Granby and Windsor Locks in addition to numerous other Connecticut towns and cities. A July 21, 2015 Environmental Data Resources Radius Map™ Report with Geocheck® shows seventeen water wells within a 1 mile radius of the Base (BB&E, 2016). Two of these wells were reportedly listed in the state database, but it is unclear if they are private water wells. The PA also states that information from prior reports indicates there are 26 water wells within a one-mile radius of the Base (Aneptek, 2002).

4.0 PRELIMINARY ASSESSMENT

BB&E conducted a PA site visit for Connecticut Air National Guard at BANGB on August 19 - 21, 2015 to identify potential locations of historic environmental releases of PFCs (PRLs), specifically from AFFF usage and storage. The PA site visit process included a review of documented Fire Training Areas (FTAs) in operation since 1970, and any other use or release of AFFF, and the completion of a site reconnaissance.

Based on past use and storage of AFFF at BANGB, the PA identified five PRLs where releases of PFCs might have occurred, including warehouse supply and AFFF storage areas, a stormwater drainage basin, a fire station, and a firefighting equipment testing area. Each of the five PRLs were recommended for further inspection. The findings of AFFF use and storage at each of the PRLs included in the SI, as documented in the PA Site Visit Report, are summarized below.

The following sections summarize the operational history at each PRL as described in the PA. The PRLs and pertinent site features described below are depicted on **Figure 3**.

A summary of recommendations is presented in **Table 1**.

4.1 PRL 1: Building 15 – Warehouse Supply

Building 15 is the former fuel cell maintenance (east bay) and corrosion control (west bay) facility used historically to service aircraft. The facility is now used as a logistics storage facility. The building was constructed in 1980, is approximately 18,000 square feet in size, is constructed with a concrete floor and masonry block walls, and is metal-sided. The building had an AFFF-based fire suppression system, installed in approximately 1993, that was deactivated in approximately 2005 when the facility was no longer needed as a fuel cell maintenance facility. The system was comprised of four AFFF floor-mounted deck guns. The guns were activated via manual connection to a fire truck through a fire hose connection on the southern exterior of the building. Per ANG personnel, there has never been an AFFF fire suppression system release in this building. Trench floor drains are located in both the east and west bays of the building. The east and west bay floor drains discharge to a 12,000 gallon underground concrete holding tank (also called the AFFF release tank) on the northern side of the building which discharge to the sanitary sewer system via an oil-water separator. Because the potential for historic AFFF releases associated with this concrete holding tank system exists, testing was proposed in this PRL.

4.2 PRL 2: Building 11 – AFFF Storage

Building 11 is used as a logistics warehouse and staging area. The building is approximately 9,900 square feet in size; metal framed and sided, with a concrete floor. The Fire Department uses Building 11 to store excess AFFF. There are no reported spills or releases of AFFF within this facility. AFFF, when needed, is transferred to the fire station where it is loaded into crash trucks and fire vehicles on an as needed basis. Based on the handling and potential for release of AFFF, testing was proposed in this PRL.

4.3 PRL 3: Building 19 – Fire Station

AFFF is stored by the Fire Department at the current Fire Station which was built and occupied since 1981. The Fire Station is approximately 5,000 square feet in size, constructed with brick and masonry walls, and a concrete floor. Floor drains are routed to an oil water separator prior to discharge to the sanitary sewer. There are two fire department crash trucks that hold 3% AFFF, a total of approximately 250 gallons of AFFF. AFFF transfers occur manually, typically by pouring the 5-gallon AFFF totes into the crash trucks. Spills or releases within the building would have gone to the floor drains which discharge to the Oil/Water Separator and sanitary sewer. No releases of AFFF have been reported in the Fire Station. Based on the handling and potential for release of AFFF, testing was proposed in this PRL.

4.4 PRL 4: Stormwater Drainage Basin (IRP Site 2)

A stormwater drainage/retention basin is located to the southeast of the petroleum, oil, and lubricant (POL) facility, which was previously investigated as part of IRP Site 2. The drainage basin is grass-covered, is surrounded by trees and typically does not have standing water except after large rain events. Remedial actions are pending for 2016 to address shallow soils/sediments due to low levels of polynuclear aromatic hydrocarbons and pesticides. Fire Department personnel reported the periodic annual testing of fire equipment in the grassy and wooded areas surrounding the drainage basin. Small amounts of AFFF would likely have been used for these test events (less than approximately one pint per incident).

4.5 PRL 5: Fire Department Equipment Test Area

Fire Department personnel reported that this grassy area behind the current Hush House was once used for nozzle testing. It is assumed that AFFF was used during these exercises; however the quantities used and dates of use are unknown. Based on the handling and potential for release of AFFF, testing was proposed in this PRL.

5.0 FIELD PROGRAM METHODS

The following subsections summarize utility clearance and permitting activities; soil boring installation, sampling, and abandonment; temporary groundwater monitoring well construction, development, sampling, and abandonment. SI activities were conducted in accordance with the Work Plan and the *ANG Investigation Guidance* (ANG, 2009). The SI field activities were conducted September 26th through October 3rd 2017.

5.1 Utility Location and Clearance

Prior to commencement of SI activities, drilling locations were pre-marked, and details of the proposed borehole locations were provided to the Connecticut one call utility notification center, "Call Before you Dig (CBYD)" CBYD assigned ticket No. 20173800659 on September 18 2017.

The 103rd Airlift Wing civil engineering department (CED) accompanied Amec Foster Wheeler during the pre-marking to verify the placement of each drilling location. AF-103 tickets were submitted to the Base CED for approval in September 2017 prior to commencing the work.

On September 8th 2017, CorBuilt, LLC of Canterbury, CT (CorBuilt) cleared site utilities at each of the 21 proposed soil boring and temporary well locations using geophysical techniques. Equipment employed by CorBuilt included ground-penetrating radar and electro-magnetic induction locating equipment.

September 26th through October 3rd 2017, Drilex Environmental of Auburn, Massachusetts (Drilex) used vacuum excavation techniques to pre-clear each of the drilling locations to an approximate depth of ten ft. bgs.

Utility clearance activities were performed at the direction and oversight of Amec Foster Wheeler, with the BANGB Point of Contact (POC) accompanying as an escort.

5.2 Permits

Construction or alteration at an airport, including an airport that is operated by an armed force of the United States, requires notification of the Federal Aviation Administration (FAA) pursuant to 14 CFR 77.9. As necessary through consultation with BANGB personnel, Amec Foster Wheeler submitted Form 7460-1 to the FAA on April 14, 2017. The form was approved by the FAA on May 31, 2017. No other permits were required or obtained.

5.3 Soil Boring Installation

Soil boring locations were selected based on PRL use and physical characteristics to target the most probable AFFF release areas. The boring locations were air cleared with open vacuum excavation to 10 ft bgs, then advanced with DPT tools. Twenty-one soil borings were advanced to investigate potential PFCs impacts in soil and groundwater in and around the five PRLs and at a base boundary well using vacuum extraction and DPT drilling methods (15 borings for soil sampling only and six borings for temporary well installation only). Soil samples were collected in accordance with Amec Foster Wheeler's Soil Sampling Standard Operating Procedure (AFW-02) developed specifically for collecting soil samples for analysis of PFCs. Soil cores were collected continuously for field screening at 4 to 5-ft. intervals in new, dedicated acetate liners. Drilling rods/tools were decontaminated between borings in accordance with protocol described in the Work Plan. Individual borehole depths are provided in the soil boring logs included in **Appendix A**.

5.4 Soil Sampling

Shallow samples were generally collected from the upper two feet of soil in each boring using a stainless steel hand auger, directly beneath asphalt or pavement, if present. Deep soil samples were collected from 13 to 15 ft. bgs or where groundwater was encountered at each location from the acetate sleeves from within the DPT core barrel. Each sleeve was opened lengthwise and the soil was examined. Soil characteristics were logged in accordance with the Unified Soil Classification System (USCS). Soil was visually inspected for potential impacts.

5.5 Soil Boring Abandonment

Following the completion of drilling activities, each boring was backfilled with its drilling cuttings. Surface completions were patched with like materials (topsoil/seed, asphalt, or concrete) in accordance with ANG specifications.

5.6 Temporary Monitoring Well Installation and Development

Six temporary wells were installed to investigate potential groundwater impacts at the five BANGB PRLs and at the Base boundary. The primary purpose of installing the temporary monitoring wells was to assess groundwater quality downgradient of the PRLs. Although well elevation surveys were not part of this project scope, temporary well locations were determined based on historical groundwater data and topographic contours, historical indications of possible impact, and site

features such as buildings and the Base boundary. In general, temporary wells were installed at locations with the greatest potential to intercept PFCs dissolved in groundwater based on available data, and might not represent the highest concentrations at each PRL.

Temporary well soil cores were collected continuously to verify soil lithology, then inspected, logged, and field screened in accordance with the FSP. Temporary monitoring wells were installed in accordance with Amec Foster Wheeler's PFCs-specific Standard Operating Procedure (SOP) for installation of monitoring wells (AFW-04).

The temporary well boring locations were air cleared with open vacuum excavation to 10 ft bgs, then advanced with DPT tools. Temporary wells were constructed within borings using a one-inch diameter, schedule 40 polyvinyl chloride riser with a 10-ft., 0.010-inch slot screened interval with the water table bisecting the well screen. New dedicated well materials were used at each temporary well location. The annulus surrounding each well screen and riser was backfilled with No.1 filter sand, which was placed from the bottom of the borehole to the ground surface. No annular seals were installed.

The temporary monitoring wells were developed using a peristaltic pump and High Density Polyethylene (HDPE) tubing to purge the screened interval and remove fine particles that had accumulated. Water quality parameters were monitored and recorded at periodic intervals. Monitoring wells were considered adequately developed when water quality parameters had stabilized and turbidity was low (i.e., <50 Nephelometric Turbidity Units [ntu]). Well development water was containerized into an Investigation Derived Waste (IDW) storage drum. Temporary well development logs are included in **Appendix B**.

5.7 Groundwater Sampling

Groundwater samples were collected in accordance with Amec Foster Wheeler's Groundwater Sampling SOP (AFW-03), developed specifically for collecting groundwater samples for analysis of PFCs. Six groundwater samples were collected. Groundwater sampling was conducted using low-flow groundwater sampling methodologies in general accordance with the United States Environmental Protection Agency guidance document, "United States Environmental Protection Agency (USEPA)-Region 1-New England Low Stress (Low Flow) Purging and Sampling Procedures for the Collection of Ground Water Samples from Monitoring Wells, Revision Number 3", dated July 30, 1996, revised January 19, 2010. The initial water level was recorded using an electronic water level meter prior to purging and sampling activities. The tubing was inserted into

the monitoring well to the depth recorded in the sampling logs which was above the bottom of the well to prevent disturbances and re-suspension of sediment present in the bottom of the well. In general, the pump intake was placed in the middle of the saturated interval. The pump discharge tubing was connected to a flow-through cell containing a multi-parameter YSI Instrument to record water parameters. The pump rate during purging was maintained between 100 and 200 milliliters per minute (mL/min) with a steady flow rate maintained, such that drawdown of the water level within the well did not exceed a maximum allowable drawdown of 0.3 ft. The following parameters were monitored during purging: temperature, pH, oxidation-reduction potential (ORP), dissolved oxygen, turbidity, temperature, and specific conductivity on approximately five-minute intervals. The water level was monitored during this same time interval.

The well was considered stabilized after three consecutive readings as follows:

- +/-0.1 for pH,
- +/-3% for temperature in degrees Celsius (°C)
- +/-3% for specific conductance (conductivity),
- +/-10 millivolts (mV) for ORP,
- +/-10% for dissolved oxygen, and
- +/-10% for turbidity.

Groundwater sampling logs and water quality instrument calibration logs are included in **Appendix C** and **Appendix D** respectively.

5.8 Temporary Monitoring Well Abandonment

Following the completion of sampling activities, each temporary well was pulled from the ground allowing the formation to collapse into the borehole. Surface completions were patched with like materials (topsoil/seed, asphalt, or concrete) in accordance with ANG specifications.

5.9 Decontamination

Field sampling equipment (e.g. water level indicators, pumps, bowls, trowels, shovels, and other downhole equipment) was decontaminated prior to initial use, and between samples. Liquinox® soap diluted with PFC-free bottled water was used to wash sampling equipment with a clean HDPE brush used to remove debris and particulates. PFC-free bottled water was used to rinse soapy water from the sampling equipment. The PFC-free water was distilled water obtained from a local water bottling company. Prior to use, a sample of the water was submitted to Vista

Analytical Laboratories Inc. (Vista) for analysis of the six PFC compounds on the Third Unregulated Contaminant Monitoring Rule list (USEPA, 2016c). Concentrations were reviewed to ensure Amec Foster Wheeler's internal PFC-free criteria were met.

5.10 Investigation Derived Waste (IDW) Management

IDW (excess soil cuttings, purge water, development water, and decontamination fluids) was collected and contained in labeled, secured, steel 55-gallon drums. Drums have remained on-site in an area designated by the BANGB POC, pending the results of laboratory testing. Waste characterization samples were submitted to Test America Laboratories Inc. (Test America) according to the FSP. IDW Disposal by Clean Harbors is being arraigned at this time for the one drum of soil and one drum of aqueous IDW generated during the Bradley work. Drum disposal will be completed in a timely manner and in accordance with ANG policy for IDW. Disposable sampling equipment (i.e. gloves, tubing, etc.) was disposed of into local municipal receptacles.

5.11 Laboratory

PFCs samples were submitted to Vista in El Dorado Hills, California. IDW samples were sent to Test America in Nashville, Tennessee.

Vista and Test America are accredited under the Department of Defense Environmental Laboratory Accreditation Program (ELAP) and both labs maintain a National Environmental Laboratory Accreditation Program (NELAP) certification via reciprocity in the State of Connecticut.

5.12 Field Quality Assurance/Quality Control Sample Results

Quality Assurance and Quality Control samples, including field duplicates matrix spike/matrix spike duplicates (MS/MSD), equipment rinseate samples, and field blanks were analyzed for the same PFC parameters as the associated project samples. The analytical results for the field duplicates are presented in **Table 3** and **Table 4**.

5.13 Data Validation and Usability

Amec Foster Wheeler performed a data quality review of samples collected during field activities which were submitted to Vista for analysis of PFCs, consisting of: 32 soil samples (including two field duplicates); nine aqueous samples (including six primary groundwater samples, one field duplicate, one equipment rinsate blank, and two decontamination source water samples).

The laboratory analytical data generated during the SI were reviewed by a qualified analytical chemist for conformance with the project DQOs specified in the QAPP (Amec Foster Wheeler, 2017). Amec Foster Wheeler performed USEPA Stage 4 validation on 10 % of the field samples and USEPA Stage 2B validation on the remaining field samples associated with this sampling event. The Stage 4 validation includes review of the quality control (QC) results in the laboratory's analytical report and reported on QC summary forms as well as recalculation checks and review of the instrument raw data outputs. The Stage 2B validation includes review of the QC results in the laboratory's analytical report and reported on QC summary forms with no review of the associated raw data. Data from equipment and field blanks did not undergo validation because results from these samples are only used to assess data usability for field samples. The validation was performed in general accordance with: Amec Foster Wheeler Final QAPP (Amec 2017); Department of Defense (DoD) Quality Systems Manual for Environmental Laboratories (DOD, 2017); and USEPA Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (USEPA, 2009).

Amec Foster Wheeler evaluated 240 data records from field samples during the validation. Amec Foster Wheeler J qualified 42 records (18%) as estimated values because of low MS/MSD recoveries, field duplicate imprecision, and/or analyte concentrations outside the instrument's calibration range. The Data Validation Report, including qualified data, is included as **Appendix E**. Laboratory analytical reports and chains of custody forms are provided in **Appendix F.**

6.0 SITE INVESTIGATIONS

This SI field program was designed to collect data needed to evaluate the presence/absence of PFCs at each of the five PRLs and the down-gradient stand-alone well. The scope of the SI was designed using recommendations presented in the PA prepared by BB&E (BB&E, 2016). The following sections describe the investigation approach that was used to fulfill the objectives of the SI. The work was conducted in accordance with the QAPP, SHSP, and FSP presented in the approved Work Plan.

6.1 Field Activities Summary

The following SI field activities were completed:

PRL Name	Analyzed Parameters	Soil Borings	Soil Samples	Groundwater Samples Temporary Wells
1. Building 15 – Warehouse Supply	PFCs	3	6	1
2. Building 11 – AFFF Storage	PFCs	3	6	1
3. Building 19 – Fire Station	PFCs	3	6	1
4. Stormwater Drainage Basin (Installation Restoration Program Site 2)	PFCs	3	6	1
5. Fire Department Equipment Test Area	PFCs	3	6	1
Base Boundary Well (TW-106)	PFCs	0	0	1

Individual sampling locations are shown on **Figure 4** through **Figure 9.** Soil boring and monitoring well construction, well development, and groundwater sampling logs are included in **Appendices A**, **B,** and **C**, respectively.

6.2 General Work Plan Deviations

Deviations from the general work plan included one or more of the following conditions:

- Down-hole equipment and sampling devices were decontaminated utilizing PFC-free bottled water rather than an on-site water supply.

Work Plan deviations specific to an individual PRL are discussed in the following sub sections.

6.3 PRL 1: Building 15 – Warehouse Supply

6.3.1 Site Deviations

No deviations, apart from the general Work Plan deviations (see **Section 6.2**), occurred at this PRL.

6.3.2 Soil Sampling

Three soil borings (01SB01 through 01SB03) were advanced at PRL 1, and both shallow soil samples (0-2 ft. bgs) and deep samples (12-14 ft. bgs, 12-14 ft. bgs and 11-13 ft. bgs, respectively) were collected from each boring. Borings were completed using DPT drilling techniques, and deep samples (varied depths) were collected from the bottom two feet of each boring. Six soil samples were collected at this PRL.

6.3.3 Groundwater Sampling

Temporary monitoring well TW-101 was drilled to a depth of 20 ft. bgs, and a well screen was installed from 9.8 - 19.8 ft. bgs. The temporary monitoring well was immediately developed after installation. Groundwater was measured at a depth of 14.94 ft. below top of riser (TOR) in TW-101 prior to purging and sampling. One groundwater sample was collected as per the Work Plan.

Soil boring and temporary monitoring well locations are illustrated on **Figure 4.**

6.4 PRL 2: Building 11 – AFFF Storage

6.4.1 Site Deviations

No deviations, other than general Work Plan deviations occurred at this PRL.

6.4.2 Soil Sampling

Three soil samples (02SB01 through 02SB03) were collected at PRL 2 and both shallow soil samples (0-2 ft. bgs) and deep samples (12-14 ft. bgs, 13-15 ft. bgs and 12-14 ft. bgs, respectively) were collected from each boring. The 8-inch thick concrete was removed using a concrete corer prior to collecting the shallow (0-2 ft. bgs) sample. Borings were completed using DPT drilling techniques, and deep samples (varied depths) were collected from the bottom two

feet of each boring. Six soil samples were collected at this PRL.

6.4.3 Groundwater Sampling

Temporary monitoring well TW-102 was drilled to a depth of 20 ft. bgs, and a well screen was installed from 9.8 - 19.8 ft. bgs. The temporary monitoring well was immediately developed after installation. Groundwater was measured at a depth of 15.41 ft. below TOR in TW-102 prior to purging and sampling. One groundwater sample was collected as per the Work Plan.

Soil boring and temporary monitoring well locations are illustrated on **Figure 5.**

6.5 PRL 3: Building 19 – Fire Station

6.5.1 Site Deviations

A deviation from the Work Plan occurred at this PRL; Soil Boring 03SB03 was relocated to the southwest because new pavement had recently been installed at the planned location. The Bradley POC confirmed the acceptability of the relocation onto the grass approximately 20 feet south of the initial proposed location. CorBuilt returned to the site to clear the new soil boring location before drilling.

No other deviations, other than general Work Plan deviations occurred at this PRL.

6.5.2 Soil Sampling

Three soil borings (03SB01 through 03SB03) were advanced at the PRL, and both shallow soil samples (0-2 ft. bgs) and deep samples (13-15 ft. bgs, 13-15 ft. bgs, and 11-13 ft. bgs, respectively) were collected from each boring. Borings were completed using DPT drilling techniques, and deep samples (varied depths) were collected from the bottom two feet of each boring. Six soil samples were collected at this PRL.

6.5.3 Groundwater Sampling

Temporary monitoring well TW-103 was drilled to a depth of 20 ft. bgs, and a well screen was installed from 9.8 ft. bgs to 19.8 ft. bgs. The temporary monitoring well was immediately developed after installation. Groundwater was measured at a depth of 16.23 ft. below top TOR in TW-103 prior to purging and sampling. One groundwater sample was collected as per the Work Plan.

Soil boring and temporary monitoring well locations are illustrated on **Figure 6.**

6.6 PRL 4: Stormwater Drainage Basin (IRP Site 2)

6.6.1 Site Deviations

No other deviations, other than general Work Plan deviations occurred at this PRL.

6.6.2 Soil Sampling

Three soil borings (04SB01 through 04SB03) were advanced at the PRL, and both shallow soil samples (0-2 ft. bgs) and deep samples (3-5 ft. bgs, 5-7 ft. bgs and 6-8 ft. bgs, respectively) were collected from each boring. All samples were collected using a hand auger. Six soil samples were collected at this PRL.

6.6.3 Groundwater Sampling

Temporary monitoring well TW-104 was drilled to a depth of 20 ft. bgs, and a well screen was installed from 9.8 ft. bgs to 19.8 ft. bgs. The temporary monitoring well was immediately developed after installation. Groundwater was measured at a depth of 14.91 ft. below TOR in TW-104 prior to purging and sampling. One groundwater sample was collected as per the Work Plan.

Soil boring and temporary monitoring well locations are illustrated on **Figure 7.**

6.7 PRL 5: Fire Department Equipment Test Area

6.7.1 Site Deviations

No deviations, apart from the general Work Plan deviations occurred at this PRL.

6.7.2 Soil Sampling

Three soil borings (05SB01 through 05SB03) were advanced at the PRL, and both shallow soil samples (0-2 ft. bgs) and deep samples (9-11 ft. bgs) were collected from each boring. Samples were collected using a hand auger. Six soil samples were collected at this PRL.

6.7.3 Groundwater Sampling

Temporary monitoring well TW-105 was drilled to a depth of 20 ft. bgs, and a well screen was installed from 9.8 ft. bgs to 19.8 ft. bgs. The temporary monitoring well was immediately developed after installation. Groundwater was measured at a depth of 14.02 ft. below TOR in TW-105 prior to purging and sampling. One groundwater sample was collected as per the Work Plan.

Soil boring and temporary monitoring well locations are illustrated on **Figure 8.**

6.8 Base Boundary Well

6.8.1 Site Deviations

No deviations, other than general Work Plan deviations occurred at this PRL.

6.8.2 Soil Sampling

No soil samples were collected at this location.

6.8.3 Groundwater Sampling

Temporary monitoring well TW-106 was drilled to a depth of 23 ft. bgs, and a well screen was installed from 12.8 ft. bgs to 22.8 ft. bgs. The temporary monitoring well was immediately developed after installation. Groundwater was measured at a depth of 19.99 ft. TOR in TW-106 prior to purging and sampling. One groundwater sample was collected as per the Work Plan.

The temporary monitoring well location is illustrated on **Figure 9.**

7.0 SOIL AND GROUNDWATER STANDARDS

A soil or groundwater standard is an environmental and/or public health statute or rule used in identifying site contamination that may pose a risk to human health or the environment. Soil and groundwater standards are federal and state human health and environment-based regulations used to:

- Determine the appropriate levels of site clean-up;
- Define and formulate remedial action alternatives; and,
- Govern implementation and operation of the selected remedial action.

Currently no promulgated Standards exist for these compounds.

In accordance with *Interim Air Force Guidance on Sampling and Response Actions for Perfluorinated Compounds at Active and Base Realignment and Closure (BRAC) Installations* [United States Air Force (USAF), August 2012] and USEPA lifetime drinking water HAs for PFOS (USEPA, May 2016a) and PFOA (USEPA, May 2016b), a release is considered confirmed if the following concentrations are exceeded:

PFOS:

- 0.07 micrograms per liter (µg/L) in groundwater/surface water that is used as or contributes to a drinking water source (combined with PFOA value).
- 1,260 micrograms per kilogram (µg/kg) in soil (calculated in the absence of Regional Screening Level (RSL) values[1]).

PFOA:

- 0.07 µg/L in groundwater/surface water (combined with PFOS value).
- 1,260 µg/kg in soil (calculated in the absence of RSL values).

USEPA has also derived RSL values for PFBS, for which there is a Tier 2 toxicity value (USEPA, June 2017). The USAF will also consider a release to be confirmed if the following concentrations

[1] Air Force Guidance screening levels calculated using the EPA Regional Screening Level calculator [https://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search]. The toxicity value input for the calculator is the Tier 3 value reference dose of 0.00002 mg/kg/day derived by USEPA in their Drinking Water Health Advisories for both PFOS (USEPA, 2016a) and PFOA (USEPA, 2016b).

are exceeded:

PFBS:

- 400* µg/L in groundwater/surface water.
- 1,300,000 µg/kg in soil/sediment.

*Note: PFBS for Tap Water presented in the SI Work Plan (Amec Foster Wheeler, 2017) was 380 ug/L based on the May 2016 RSL values. This value has been updated to include the more recent RSL value published in June 2017.

The HA, RSLs and Air Force (AF) Guidance values are collectively referred to as screening criteria in this Report. **Table 5** presents the screening criteria for comparing the analytical results for PFBS, PFOA, and PFOS.

8.0 SITE INVESTIGATION RESULTS

This section presents the soil and groundwater data collected during the SI activities and a comparison of detections. Detections of PFBS, PFOA and PFOS are compared to the screening criteria as defined in the Work Plan, and presented in **Table 5**. Locations of detected analytes are shown on **Figure 4** through **Figure 9**.

8.1 PRL Building 15 – Warehouse Supply

8.1.1 PRL 1 Soil Analytical Results

Six soil samples were collected and analyzed as described in **Section 6.3.2**: 01SB01 from 0-2 ft. bgs and 12-14 ft. bgs; 01SB02 from 0-2 ft. bgs and 12-14 ft. bgs; and 01SB03 from 0-2 ft. bgs and 11-13 ft. bgs. Analytical results from soil samples indicate PFCs were detected above the laboratory reporting limit; however, no compounds exceeded the screening criteria in the samples collected from PRL 1.

Comparisons of analytical results to applicable screening criteria are presented on **Table 3**. The soil boring locations showing detected compounds are depicted on **Figure 4**.

8.1.2 PRL 1 Groundwater Analytical Results

One groundwater sample was collected from TW-101 and analyzed as described in **Section 6.3.3**. Analytical results from the groundwater sample indicates that three of the six analyzed PFC compounds were detected at concentrations above the laboratory detection limit, however no compounds exceeded the groundwater screening criteria.

Comparisons of analytical results to applicable screening criteria are presented on **Table 4**. The temporary monitoring well location showing detected compounds is illustrated on **Figure 4.**

8.2 PRL 2: Building 11 – AFFF Storage

8.2.1 PRL 2 Soil Analytical Results

Six soil samples were collected and analyzed as described in **Section 6.4.2:** 02SB01 from 0-2 ft. bgs and 13-15 ft. bgs; 02SB02 from 0-2 ft. bgs and 13-15 ft. bgs; and 02SB03 from 0-2 ft. bgs and 13-15 ft. bgs. Analytical results from soil samples indicate PFCs were detected above the laboratory reporting limit; however, no compounds exceeded the screening criteria in any of the samples collected from PRL 2.

Comparisons of analytical results, including field duplicate results, to applicable criteria are presented on **Table 3**. Soil sample locations showing detected compounds are depicted on **Figure 5.**

8.2.2 PRL 2 Groundwater Analytical Results

One groundwater sample was collected from TW-102 and analyzed as described in **Section 6.4.3**. Analytical results from the groundwater sample indicates that four of the six analyzed PFCs were detected at concentrations above the laboratory detection limit; however, no compounds exceeded the groundwater screening criteria.

Comparisons of analytical results to applicable groundwater screening criteria are presented on **Table 4**. The monitoring well location showing detected compounds is illustrated on **Figure 5.**

8.3 PRL 3: Building 19 – Fire Station

8.3.1 PRL 3 Soil Analytical Results

Six soil samples were collected and analyzed from three soil borings as described in **Section 6.5.2**: 03SB01 from 0-2 ft. bgs and 13-15 ft. bgs; 03SB02 from 0-2 ft. bgs and 13-15 ft. bgs; and 03SB03 from 0-2 ft. bgs and 11-13 ft. bgs. Analytical results from soil samples indicate PFCs were detected above the laboratory reporting limit; however, no compounds exceeded the screening criteria in any of the samples collected from PRL 3.

Comparisons of analytical results to applicable screening criteria are presented on **Table 3**. The soil boring locations showing detected compounds are depicted on **Figure 6**.

8.3.2 PRL 3 Groundwater Analytical Results

One groundwater sample was collected from TW-103 and analyzed as described in **Section 6.5.3**. Analytical results from the groundwater sample indicates that the five of the six analyzed PFCs were detected at concentrations above the laboratory detection limit, with one compound exceeding the USEPA Drinking Water HA of 0.07 µg/L. PFOS was detected at a concentration of 0.137 µg/L, while the combined PFOS and PFOA concentration is 0.1486 µg/L at this location. PRL 3 is not located along or near a base boundary.

Comparisons of analytical results to applicable criteria, including duplicate samples, are presented on **Table 4**. The temporary monitoring well location showing detected compounds is illustrated on **Figure 6.**

8.4 PRL 4: Stormwater Drainage Basin (IRP Site 2)

8.4.1 PRL 4 Soil Analytical Results

Six soil samples were collected and analyzed from three soil borings as described in **Section 6.5.2**: 04SB01 from 0-2 ft. bgs and 3-5 ft. bgs; 04SB02 from 0-2 ft. bgs and 5-7 ft. bgs; and 04SB03 from 0-2 ft. bgs and 6-8 ft. bgs. Analytical results from soil samples indicate PFOA and PFOS compounds were detected above the laboratory reporting limit; however, no compounds exceeded the screening criteria in any of the six samples collected from PRL 4.

Comparisons of analytical results to applicable screening criteria are presented on **Table 3**. The soil boring locations showing detected compounds are depicted on **Figure 7**.

8.4.2 PRL 4 Groundwater Analytical Results

One groundwater sample was collected from TW-104 and analyzed as described in **Section 6.5.3**. A field duplicate was collected at this location. Analytical results from the groundwater sample indicates that the six analyzed PFCs were all detected at concentrations above the laboratory detection limit, with one compound exceeding the USEPA Drinking Water HA of 0.07 µg/L. PFOS was detected at a concentration of 0.355 µg/L and the combined PFOS and PFOA concentration is 0.3738 µg/L at this location. PRL 4 is not located along or near a base boundary.

Comparisons of analytical results to applicable criteria are presented on **Table 4**. The temporary monitoring well location showing detected compounds is illustrated on **Figure 7.**

8.5 PRL 5: Fire Department Equipment Test Area

8.5.1 PRL 5 Soil Analytical Results

Six soil samples from three soil borings were collected and analyzed as described in **Section 6.7.2**: 05SB01 from 0-2 ft. bgs and 9-11 ft. bgs; 05SB02 from 0-2 ft. bgs and 9-11 ft. bgs; and 05SB03 from 0-2 ft. bgs and 9-11 ft. bgs. Analytical results from soil samples indicate no PFCs were detected above the laboratory reporting limit.

Comparisons of analytical results to applicable screening criteria are presented on **Table 3**. The soil boring locations showing detected compounds are depicted on **Figure 8**.

8.5.2 PRL 5 Groundwater Analytical Results

One groundwater sample was collected from TW-105 and analyzed as described in **Section 6.7.3**. Analytical results from the groundwater sample indicates that four of the six analyzed PFCs were detected at concentrations above the laboratory detection limit, however, no compounds exceeded the groundwater screening criteria.

Comparisons of analytical results to applicable criteria are presented on **Table 4**. The temporary monitoring well location showing detected compounds is illustrated on **Figure 8.**

8.6 Base Boundary Well

8.6.1 Base Boundary Well Groundwater Analytical Results

One groundwater sample was collected from TW-106 and analyzed as described in **Section 6.8.3**. The purpose of this temporary monitoring well was to determine if groundwater contamination may be leaving the site. Analytical results from the groundwater sample indicates that two of the six analyzed PFCs were detected at concentrations above the laboratory detection limit, however, no compounds exceeded the groundwater screening criteria.

Comparisons of analytical results to applicable screening criteria are presented on **Table 4**. The temporary monitoring well location showing detected compounds is illustrated on **Figure 9.**

9.0 CONCLUSIONS/RECOMMENDATIONS

This section presents the SI conclusions and recommendations at each PRL. The recommended DQOs are based upon data collected by Amec Foster Wheeler during this SI, and an evaluation of results compared to applicable screening criteria. The purposes for completion of this SI were:

1) Determine if a PRL is eligible for a NFA designation
    a. PRLs with no soil or groundwater screening criteria exceedances are eligible for NFA. No soil or groundwater screening criteria exceedances were identified at 3 of the 5 PRLs, and are therefore PRL-1, PRL-2, and PRL-5 are designated NFA.
2) Assess if PFCs are migrating off-site
    a. Base-boundary Well TW-106 contains no screening criteria exceedances and therefore PFCs migrating off-site have not been identified.
3) Provide data for developing DQOs if further investigations are recommended
    a. DQOs based on the SI data are recommended for 2 of the 5 PRLs **(Table 6).**

Review of soil analytical data compared to soil screening criteria indicates there are no USEPA RSL exceedances for PFBS, and no USAF Guidance screening level exceedances for PFOS or PFOA at on-Base locations near the five PRLs. However, soil may be an ongoing source of contaminants to groundwater.

Review of groundwater data compared to screening criteria indicates exceedances of the USEPA Drinking Water HA existing at two of the six temporary monitoring wells for PFOS. A review of groundwater data compared to screening criteria indicates no exceedances of the USEPA Drinking Water HA for PFOA or PFBS at any of the PRLs.

Based on the SI results, the following DQOs are recommended for PRL 3 and PRL 4:

- Although concentrations of PFCs in soil did not exceed the screening criteria, they may be a source of PFCs to the groundwater. Additional soil investigation is recommended at PRLs with PFCs in groundwater exceeding the HA.
- Additional investigation to further evaluate concentrations of PFCs in groundwater should include a source evaluation and delineation to determine the nature and extent of the release at each PRL.

9.1 PRL Sites Summary

In summary, additional investigations are recommended for two of the five PRLs.

These recommendations are summarized in Table 6 and below:

PRL	Screening Criteria Exceedance		Recommendations
	Soil	GW	
1			NFA
2			NFA
3		X	Soil and GW investigation to determine the nature and extent of the confirmed PFC release in GW.
4		X	Soil and GW investigation to determine the nature and extent of the confirmed PFC release in GW.
5			NFA
Base Boundary			NFA

Notes:
GW = Groundwater
X – Screening criteria exceedance

10.0 REFERENCES

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TABLES

Table 1

Preliminary Assessment Recommendations

FY16 Phase I Regional Site Inspections for Perfluorinated Compounds

103rd Airlift Wing, Connecticut Air National Guard

Bradley Air National Guard Base, East Granby, Connecticut

List of PRLs		
PRL	**Use**	**Recommendation**
1. Building 15 – Warehouse Supply	Building has a deactivated AFFF-based fire suppression system	Soil and Groundwater Inspection
2. Building 11 – AFFF Storage	AFFF Storage	Soil and Groundwater Inspection
3. Building 19 – Fire Station	Fire Station	Soil and Groundwater Inspection
4. Stormwater Drainage Basin (IRP Site 2)	Stormwater Drainage Basin, Historic Periodic Testing of Fire Equipment	Soil and Groundwater Inspection
5. Fire Department Equipment Test Area	Fire Department Equipment Test Area	Soil and Groundwater Inspection

Notes:
Recommendations provided by BB&E, Inc. in the Final Perfluorinated Compounds Preliminary Assessment Site Visit Report (BB&E, 2016)
PRL – Potential Release Location
IRP – Installation Restoration Program
AFFF – Aqueous Film Forming Foam

Table 2

Summary of Site Inspection Activities

FY16 Phase I Regional Site Inspections for Perfluorinated Compounds

103rd Airlift Wing, Connecticut Air National Guard

Bradley Air National Guard Base, East Granby, Connecticut

PRL Name	Analyzed Parameters	Soil Borings	Soil Samples	Groundwater Samples Temporary Wells
1. Building 15 – Warehouse Supply	PFCs	3	6	1
2. Building 11 – AFFF Storage	PFCs	3	6	1
3. Building 19 – Fire Station	PFCs	3	6	1
4. Stormwater Drainage Basin (IRP Site 2)	PFCs	3	6	1
5. Fire Department Equipment Test Area	PFCs	3	6	1
Base Boundary Well (TW-106)	PFCs	0	0	1

Notes:

[1] Soil and groundwater samples were collected and analyzed for the PFAS listed on the USEPA's Third Unregulated Contaminant Monitoring Rule (UCMR3) list

PRL – Potential Release Location

IRP – Installation Restoration Program

PFCs – Perfluorinated Compounds

Table 3
Summary of Soil Analytical Testing Results
FY16 Phase I Regional Site Inspections for Perfluorinated Compounds
103rd Airlift Wing, Connecticut Air National Guard
Bradley Air National Guard Base, East Granby, Connecticut

					Analyte:	Perfluorooctanesulfonic acid (PFOS)	Perfluorooctanoic acid (PFOA)	Perfluorobutanesulfonic acid (PFBS)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorononanoic acid (PFNA)
					Screening Level:	1.26[1]	1.26[1]	1300[2]	NA	NA	NA
PRL	**Location**	**Sample ID**	**Sample Date**	**Sample Depth (ft.)**	**Sample Type**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
1	BRDLY-01-SB01	BRDLY-01-SB01-0-2	27-Sep-17	0.0-2.0	N	0.000875 J	0.000459 J	0.000961 U	0.000961 U	0.000961 U	0.000961 U
		BRDLY-01-SB01-12-14	27-Sep-17	12.0-14.0	N	0.000945 J	0.000362 J	0.00098 U	0.00098 U	0.00098 U	0.00098 U
	BRDLY-01-SB02	BRDLY-01-SB02-0-2	27-Sep-17	0.0-2.0	N	0.0212	0.000326 J	0.000948 U	0.000948 U	0.00424	0.000948 U
		BRDLY-01-SB02-12-14	27-Sep-17	12.0-14.0	N	0.000324 J	0.00039 J	0.000963 U	0.000963 U	0.00182 J	0.000963 U
	BRDLY-01-SB03	BRDLY-01-SB03-0-2	27-Sep-17	0.0-2.0	N	0.00118 J	0.000361 J	0.001 U	0.001 U	0.001 U	0.001 U
		BRDLY-01-SB03-11-13	27-Sep-17	11.0-13.0	N	0.000994 U	0.000368 J	0.000994 U	0.000994 U	0.000994 U	0.000994 U
		BRDLY-01-SO-DUP01-092717	27-Sep-17	11.0-13.0	FD	0.000952 U	0.000305 J	0.000952 U	0.000952 U	0.000952 U	0.000952 U
2	BRDLY-02-SB01	BRDLY-02-SB01-0-2	28-Sep-17	0.0-2.0	N	0.000968 U	0.000968 U	0.000968 U	0.000968 U	0.000968 U	0.000968 U
		BRDLY-02-SB01-13-15	28-Sep-17	13.0-15.0	N	0.0116	0.000982 U	0.000982 U	0.000982 U	0.000331 J	0.000982 U
	BRDLY-02-SB02	BRDLY-02-SB02-0-2	28-Sep-17	0.0-2.0	N	0.000985 U	0.000985 U	0.000985 U	0.000985 U	0.000985 U	0.000985 U
		BRDLY-02-SB02-13-15	28-Sep-17	13.0-15.0	N	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
	BRDLY-02-SB03	BRDLY-02-SB03-0-2	28-Sep-17	0.0-2.0	N	0.00197	0.000962 U	0.000962 U	0.000962 U	0.000962 U	0.000962 U
		BRDLY-02-SB03-13-15	28-Sep-17	13.0-15.0	N	0.00439	0.000997 U	0.000997 U	0.000997 U	0.00034 J	0.000997 U
3	BRDLY-03-SB01	BRDLY-03-SB01-0-2	26-Sep-17	0.0-2.0	N	0.00786	0.000951 U	0.000951 U	0.000951 U	0.000321 J	0.000951 U
		BRDLY-03-SO-DUP02-092617	26-Sep-17	0.0-2.0	FD	0.00895	0.000992 U	0.000992 U	0.000992 U	0.000992 U	0.000992 U
		BRDLY-03-SB01-13-15	26-Sep-17	13.0-15.0	N	0.000355 J	0.000953 U	0.000953 U	0.000953 U	0.000953 U	0.000953 U
	BRDLY-03-SB02	BRDLY-03-SB02-0-2	26-Sep-17	0.0-2.0	N	0.0719	0.00135 J	0.000982 U	0.000613 J	0.00264	0.000982 U
		BRDLY-03-SB02-13-15	26-Sep-17	13.0-15.0	N	0.449	0.00116 J	0.000975 U	0.000523 J	0.00254	0.000317 J
	BRDLY-03-SB03	BRDLY-03-SB03-0-2	29-Sep-17	0.0-2.0	N	0.00557	0.000973 U	0.000973 U	0.000973 U	0.000318 J	0.000973 U
		BRDLY-03-SB03-11-13	03-Oct-17	11.0-13.0	N	0.00442	0.000995 U	0.000995 U	0.000995 U	0.000995 U	0.000995 U
4	BRDLY-04-SB01	BRDLY-04-SB01-0-2	26-Sep-17	0.0-2.0	N	0.000997 U	0.000997 U	0.000997 U	0.000997 U	0.000997 U	0.000997 U

Report Date: 12/12/2017

Table 3
Summary of Soil Analytical Testing Results
FY16 Phase I Regional Site Inspections for Perfluorinated Compounds
103rd Airlift Wing, Connecticut Air National Guard
Bradley Air National Guard Base, East Granby, Connecticut

					Analyte:	Perfluorooctanesulfonic acid (PFOS)	Perfluorooctanoic acid (PFOA)	Perfluorobutanesulfonic acid (PFBS)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorononanoic acid (PFNA)
					Screening Level:	1.26[1]	1.26[1]	1300[2]	NA	NA	NA
PRL	**Location**	**Sample ID**	**Sample Date**	**Sample Depth (ft.)**	**Sample Type**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
4	BRDLY-04-SB01	BRDLY-04-SB01-3-5	26-Sep-17	3.0-5.0	N	0.000958 U	0.000274 J	0.000958 U	0.000958 U	0.000958 U	0.000958 U
	BRDLY-04-SB02	BRDLY-04-SB02-0-2	26-Sep-17	0.0-2.0	N	0.000967 U	0.000967 U	0.000967 U	0.000967 U	0.000967 U	0.000967 U
		BRDLY-04-SB02-5-7	26-Sep-17	5.0-7.0	N	0.000735 J	0.000306 J	0.000993 U	0.000993 U	0.000993 U	0.000993 U
		BRDLY-04-SO-DUP03-092617	26-Sep-17	5.0-7.0	FD	0.000626 J	0.000314 J	0.000974 U	0.000974 U	0.000348 J	0.000974 U
	BRDLY-04-SB03	BRDLY-04-SB03-0-2	26-Sep-17	0.0-2.0	N	0.000994 U	0.000994 U	0.000994 U	0.000994 U	0.000994 U	0.000994 U
		BRDLY-04-SB03-6-8	26-Sep-17	6.0-8.0	N	0.000461 J	0.000977 U	0.000977 U	0.000977 U	0.000977 U	0.000977 U
5	BRDLY-05-SB01	BRDLY-05-SB01-0-2	29-Sep-17	0.0-2.0	N	0.000983 U	0.000983 U	0.000983 U	0.000983 U	0.000983 U	0.000983 U
		BRDLY-05-SB01-9-11	29-Sep-17	9.0-11.0	N	0.00096 U	0.00096 U	0.00096 U	0.00096 U	0.00096 U	0.00096 U
	BRDLY-05-SB02	BRDLY-05-SB02-0-2	29-Sep-17	0.0-2.0	N	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
		BRDLY-05-SB02-9-11	29-Sep-17	9.0-11.0	N	0.000994 U	0.000994 U	0.000994 U	0.000994 U	0.000994 U	0.000994 U
	BRDLY-05-SB03	BRDLY-05-SB03-0-2	29-Sep-17	0.0-2.0	N	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
		BRDLY-05-SB03-9-11	29-Sep-17	9.0-11.0	N	0.000961 U	0.000961 U	0.000961 U	0.000961 U	0.000961 U	0.000961 U

Notes:
Light Blue Shaded = Exceeds Screening Level
FD = Field Duplicate Sample
ft = Feet
ID = Identification
J = The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
N = Normal Field Sample
NA = Not applicable
PRL - Potential Release Location
U = The analyte was analyzed for, but was not detected above the reported limit of detection (LOD).
mg/kg = milligrams per kilogram
PFAS analysis by Modified USEPA Method 537 using Liquid Chromatography and Tandem Mass Spectrometry
[1]Screening levels calculated using the EPA Regional Screening Level calculator [https://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search]
[2]EPA Residential Screening Levels (June 2017) [https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables-june-2017]

Table 4
Summary of Groundwater Analytical Testing Results
FY16 Phase I Regional Site Inspections for Perfluorinated Compounds
103rd Airlift Wing, Connecticut Air National Guard
Bradley Air National Guard Base, East Granby, Connecticut

					Analyte:	Perfluorooctanesulfonic acid (PFOS)	Perfluorooctanoic acid (PFOA)	PFOS+PFOA	Perfluorobutanesulfonic acid (PFBS)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorononanoic acid (PFNA)
					Health Advisory:	0.07	0.07	0.07	NA	NA	NA	NA
					EPA RSL Tapwater[1]:	NA	NA	NA	400	NA	NA	NA
PRL	**Location**	**Sample ID**	**Sample Date**	**Sample Depth (ft.)**	**Sample Type**	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
1	TW-101	TW-101-092717	27-Sep-17	17.0-17.0	N	0.00457 J	0.00534 U	NA	0.00534 U	0.00346 J	0.0101	0.00534 U
2	TW-102	TW-102-092817	28-Sep-17	17.0-17.0	N	0.00791 J	0.00521 U	NA	0.0348	0.0147	0.0467	0.00521 U
3	TW-103	TW-103-092717	27-Sep-17	17.0-17.0	N	0.137	0.0116	0.1486	0.00263 J	0.00645 J	0.0203	0.0053 U
		BRDLY-03-GW-DUP01-092717	27-Sep-17	17.0-17.0	FD	0.158	0.0134	0.1714	0.00543 U	0.00629 J	0.0169	0.00279 J
4	TW-104	TW-104-092717	26-Sep-17	17.0-17.0	N	0.355	0.0188	0.3738	0.00625 J	0.0101	0.122	0.00608 J
5	TW-105	TW-105-100317	03-Oct-17	16.0-16.0	N	0.0414 J	0.00391 J	0.04531	0.00338 J	0.00539 U	0.0038 J	0.00539 U
BBW	TW-106	TW106-100317	03-Oct-17	21.0-21.0	N	0.00553 U	0.00553 U	ND	0.0125	0.00553 U	0.0392	0.00553 U

Notes:
Light Blue Shaded = Exceeds Health Advisory
Underlined results exceed the EPA RSL standard.
FD = Field Duplicate Sample
ft = Feet
ID = Identification
J = The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
N = Normal Field Sample
NA = Not applicable
PRL = Potential Release Location
U = The analyte was analyzed for, but was not detected above the reported limit of detection (LOD).
µg/L = micrograms per liter

PFOS+PFOA = Co-occurrence of PFOA and PFOS (PFOA + PFOS) in aqueous samples is reported using the following guidelines.
1. If both PFOA and PFOS are detected at or above the detection limit (DL), then the sum of PFOA+ PFOS is reported.
2. If either PFOA or PFOS is detected at or above the DL and the other is below the DL, then PFOA + PFOS is reported as "NA" representing Not Applicable.
3. If neither PFOA nor PFOS is detected at or above the DL, then PFOA + PFOS is reported as "ND" representing Not Detected.

PFAS analysis by Modified USEPA Method 537 using Liquid Chromatography and Tandem Mass Spectrometry
Health Advisory from USEPA Office of Water, 2016a and 2016b, Health Advisories (HAs) for drinking water.
[1]EPA Regional Screening Levels (June 2017) [https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables-june-2017]

Report Date: 12/12/2017

Table 5

SI Screening Criteria

FY16 Phase I Regional Site Inspections for Perfluorinated Compounds

103rd Airlift Wing, Connecticut Air National Guard

Bradley Air National Guard Base, East Granby, Connecticut

Parameter	Chemical Abstract Number	EPA Regional Screening Level Table (June 2017)[a]		Air Force Guidance for Soils and Sediments[b] (µg/kg)	EPA Health Advisory Drinking Water (Surface Water or Groundwater) (µg/L)[c]
		Residential Soil (µg/kg)	Tap Water (µg/L)		
Perfluorobutane sulfonate (PFBS)	375-73-5	1,300,000[d]	400[e]	NL	NL
Perfluorooctanoic acid (PFOA)	335-67-1	NL	NL	1,260	0.07[f]
Perfluorooctane sulfonate (PFOS)	1763-23-1	NL	NL	1,260	

[a] EPA Regional Screening Levels (USEPA, 2017).

[b] Screening levels calculated using the EPA Regional Screening Level calculator [https://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search]. The toxicity value input for the calculator is the Tier 3 value reference dose of 0.00002 mg/kg/day derived by USEPA in their Drinking Water Health Advisories for both PFOS (USEPA, 2016a) and PFOA (USEPA, 2016b).

[c] USEPA, 2016b. *Drinking Water Health Advisory for Perfluorooctanoic Acid (PFOA)* and USEPA, 2016a. *Drinking Water Health Advisory for Perfluorooctane Sulfonate (PFOS).*

[d] PFBS RSL for Residential Soil concentration presented in WP was 1,600,000 µg/kg based on the May 2016 RSL values. This table has been updated to include the more recent RSL values published in June 2017.

[e] PFBS for Tap Water presented in the SI Work Plan (Amec Foster Wheeler, 2017) was 380 ug/L based on the May 2016 RSL values. This table has been updated to include the more recent RSL value published in June 2017.

[f] When PFOA and PFOS are both present, the combined detected concentrations of the compounds are compared with the 0.07 µg/L health advisory value.

EPA = U.S. Environmental Protection Agency

NL = not listed

Table 6

Screening Criteria Exceedances and Recommendations

FY16 Phase I Regional Site Inspections for Perfluorinated Compounds

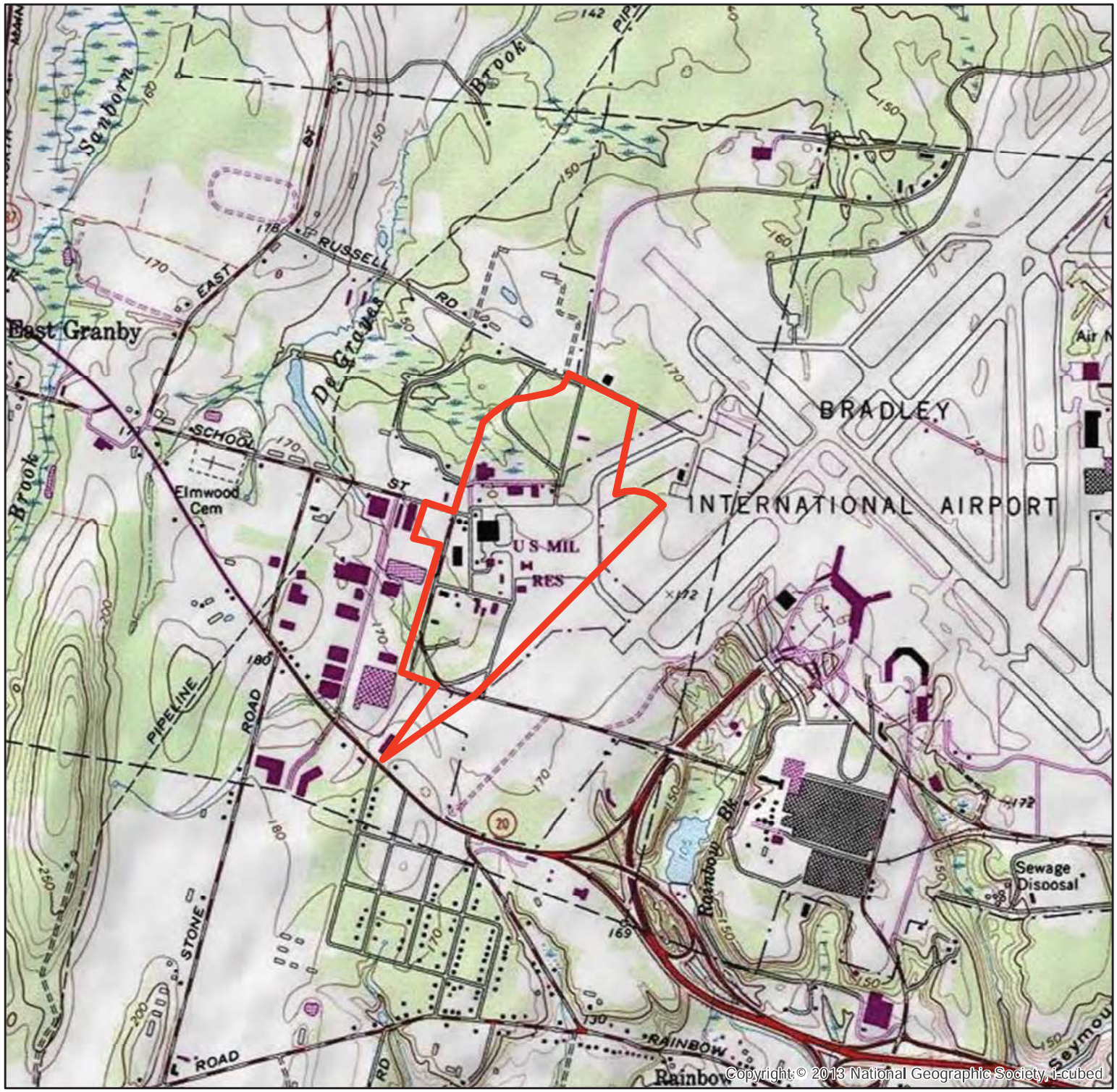
103rd Airlift Wing, Connecticut Air National Guard

Bradley Air National Guard Base, East Granby, Connecticut

PRL	Screening Criteria Exceedance		Recommendations
	Soil	GW	
1			NFA
2			NFA
3		X	Soil and GW investigation to determine the nature and extent of the confirmed PFC release in GW.
4		X	Soil and GW investigation to determine the nature and extent of the confirmed PFC release in GW.
5			NFA
Base Boundary			NFA

Notes:
GW - Groundwater
X – Screening criteria exceedance
PRL-Potential Release Location
NFA- No Further Action

FIGURES



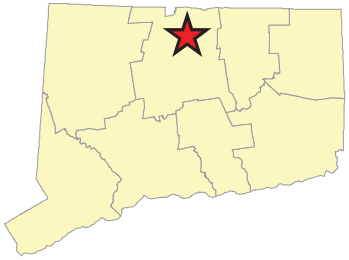
SITE LOCATION MAP

Bradley Air National Guard Base
East Granby, Connecticut

Legend

Installation Area (approximate)

Location of Site



Notes & Sources

Notes: Installation Area datalayers obtained from Figure 2 (Site Features and Potential AOCs) of the Final Perfluorinated Compounds Preliminary Assessment Site Visit Report prepared by BB&E and dated January 2016.

0 3,000 Feet

N

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FIGURE
1

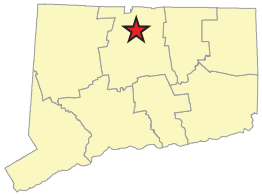
SITE AND AREA FEATURES

Bradley Air National Guard Base
East Granby, Connecticut

Legend

- Groundwater Flow Direction
- Installation Area (approximate)
- Rivers and Streams

Location of Site



Notes & Sources

Notes: AFFF - aqueous film forming foam. PFC - perfluorinated compounds.
Sources:Installation Area datalayer obtained from Figure 2 of the Final Perfluorinated Compounds Preliminary Assessment Site Visit Report prepared by BB&E and dated January 2016. Rivers and Streams and Farmington River (USGS National Hydrography Dataset) datalayers obtained from the CT DEEPDownload website, accessed 01/18/2016.

0 2,000 Feet

N

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FIGURE
2

P:\ANG - Air National Guard\1-SITE INSPECTION REPORT\Figures\GIS\SI_Fig2-SiteArea.mxd January 17, 2018 DWN: amberlee.n.clark CHKD: MSC

PRL SAMPLING LOCATIONS

Bradley Air National Guard Base
East Granby, Connecticut

Legend

- Soil Sample
- Temporary Monitoring Well
- Groundwater Flow Direction
- Potential AFFF PFC PRLs (approximate)
- Farmington River
- Rivers and Streams

Location of Site

Notes & Sources

Notes: AFFF - aqueous film forming foam. PFC - perfluorinated compounds.
Sources: Installation Area datalayer obtained from Figure 2 of the Final Perfluorinated Compounds Preliminary Assessment Site Visit Report prepared by BB&E and dated January 2016.

0 620 Feet

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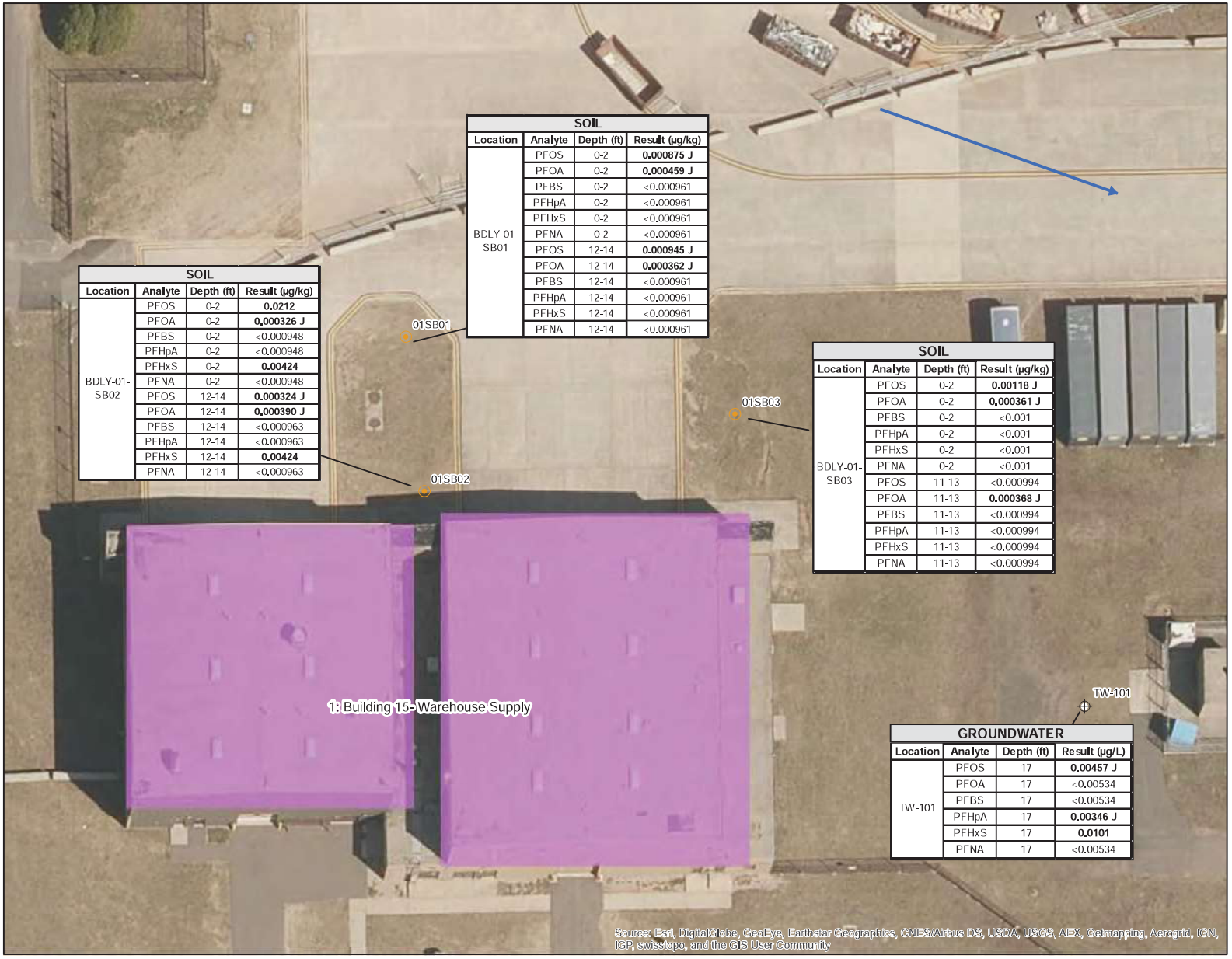
FIGURE
3

P:\ANG - Air National Guard\1-SITE INSPECTION REPORT\Figures\GIS\SI_Fig3- SampLoc.mxd January 19, 2018 DWN: lindsey.belliveau CHKD: MSC



SOIL			
Location	Analyte	Depth (ft)	Result (µg/kg)
BDLY-01-SB01	PFOS	0-2	**0.000875 J**
	PFOA	0-2	**0.000459 J**
	PFBS	0-2	<0.000961
	PFHpA	0-2	<0.000961
	PFHxS	0-2	<0.000961
	PFNA	0-2	<0.000961
	PFOS	12-14	**0.000945 J**
	PFOA	12-14	**0.000362 J**
	PFBS	12-14	<0.000961
	PFHpA	12-14	<0.000961
	PFHxS	12-14	<0.000961
	PFNA	12-14	<0.000961

SOIL			
Location	Analyte	Depth (ft)	Result (µg/kg)
BDLY-01-SB02	PFOS	0-2	**0.0212**
	PFOA	0-2	**0.000326 J**
	PFBS	0-2	<0.000948
	PFHpA	0-2	<0.000948
	PFHxS	0-2	**0.00424**
	PFNA	0-2	<0.000948
	PFOS	12-14	**0.000324 J**
	PFOA	12-14	**0.000390 J**
	PFBS	12-14	<0.000963
	PFHpA	12-14	<0.000963
	PFHxS	12-14	**0.00424**
	PFNA	12-14	<0.000963

SOIL			
Location	Analyte	Depth (ft)	Result (µg/kg)
BDLY-01-SB03	PFOS	0-2	**0.00118 J**
	PFOA	0-2	**0.000361 J**
	PFBS	0-2	<0.001
	PFHpA	0-2	<0.001
	PFHxS	0-2	<0.001
	PFNA	0-2	<0.001
	PFOS	11-13	<0.000994
	PFOA	11-13	**0.000368 J**
	PFBS	11-13	<0.000994
	PFHpA	11-13	<0.000994
	PFHxS	11-13	<0.000994
	PFNA	11-13	<0.000994

GROUNDWATER			
Location	Analyte	Depth (ft)	Result (µg/L)
TW-101	PFOS	17	**0.00457 J**
	PFOA	17	<0.00534
	PFBS	17	<0.00534
	PFHpA	17	**0.00346 J**
	PFHxS	17	**0.0101**
	PFNA	17	<0.00534

SAMPLE LOCATION RESULTS- PRL 1

Bradley Air National Guard Base
East Granby, Connecticut

Legend

- Temporary Monitoring Well
- Soil Sample
- Installation Area (approximate)
- Groundwater Flow Direction
- Potential AFFF PFC PRLs (approximate)

Notes & Sources

Notes:
AFFF - aqueous film forming foam
PRL - potential release location
PFC - perfluorinated compounds
PFOS - Perfluorooctanesulfonic acid
PFOA - Perfluorooctanoic acid
PFBS - Perfluorobutanesulfonic acid
PFHpA - Perfluoroheptanoic acid
PFHxS - Perfluorohexanesulfonic acid
PFNA - Perfluorononanoic acid

BOLD text indicated a detection

YELLOW highlighted cells indicate 0.07 µg/L Health Advisory Exceedance

* Field Duplicate Value exceeded primary sample.

Sources: Installation Area datalayer obtained from Figure2 of the Final Perfluorinated Compounds Preliminary Assessment Site Visit Report prepared by BB&E and dated January 2016.

0 20 Feet

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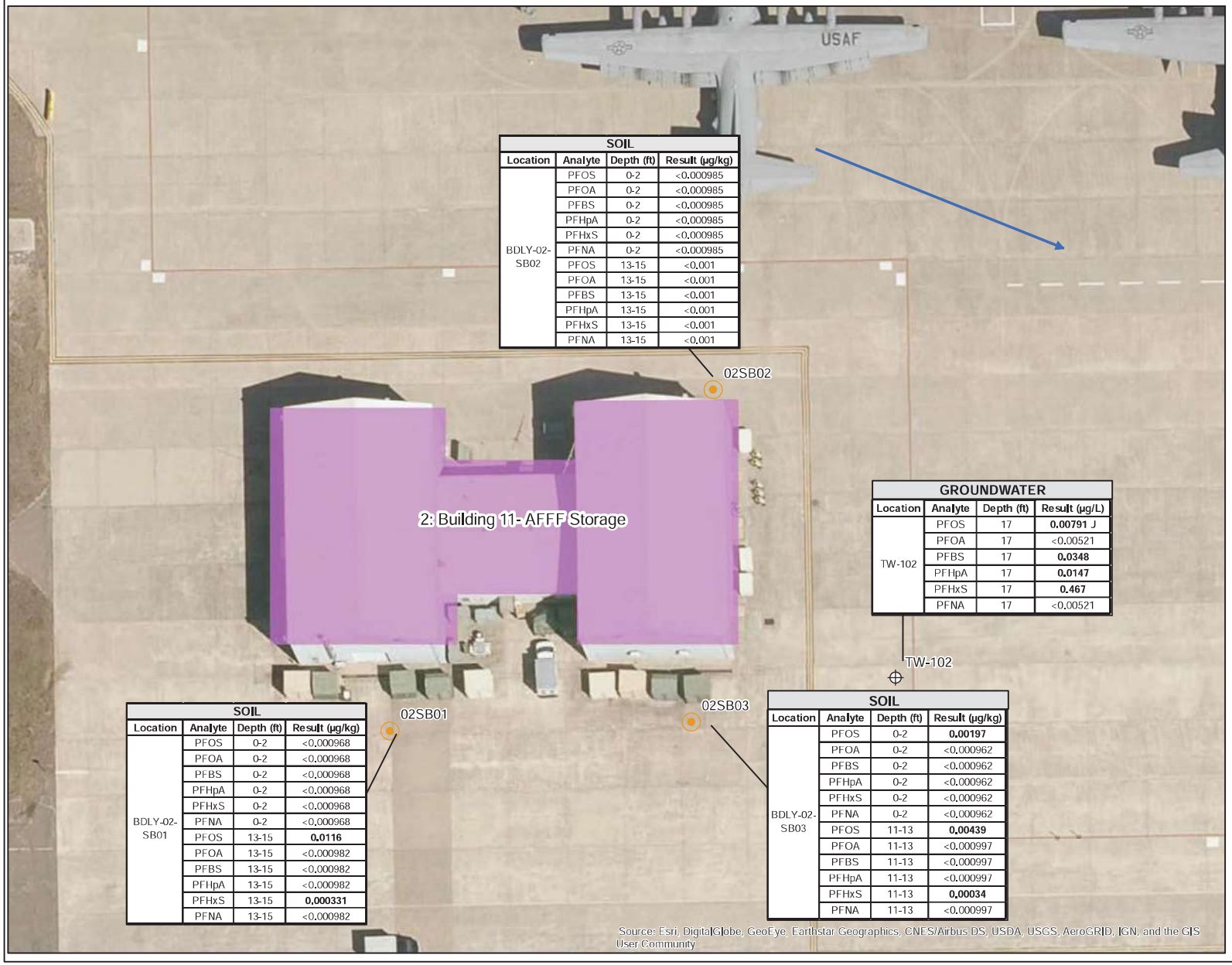
FIGURE 4



SOIL			
Location	Analyte	Depth (ft)	Result (µg/kg)
BDLY-02-SB02	PFOS	0-2	<0.000985
	PFOA	0-2	<0.000985
	PFBS	0-2	<0.000985
	PFHpA	0-2	<0.000985
	PFHxS	0-2	<0.000985
	PFNA	0-2	<0.000985
	PFOS	13-15	<0.001
	PFOA	13-15	<0.001
	PFBS	13-15	<0.001
	PFHpA	13-15	<0.001
	PFHxS	13-15	<0.001
	PFNA	13-15	<0.001

GROUNDWATER			
Location	Analyte	Depth (ft)	Result (µg/L)
TW-102	PFOS	17	**0.00791 J**
	PFOA	17	<0.00521
	PFBS	17	**0.0348**
	PFHpA	17	**0.0147**
	PFHxS	17	**0.467**
	PFNA	17	<0.00521

SOIL			
Location	Analyte	Depth (ft)	Result (µg/kg)
BDLY-02-SB01	PFOS	0-2	<0.000968
	PFOA	0-2	<0.000968
	PFBS	0-2	<0.000968
	PFHpA	0-2	<0.000968
	PFHxS	0-2	<0.000968
	PFNA	0-2	<0.000968
	PFOS	13-15	**0.0116**
	PFOA	13-15	<0.000982
	PFBS	13-15	<0.000982
	PFHpA	13-15	<0.000982
	PFHxS	13-15	**0.000331**
	PFNA	13-15	<0.000982

SOIL			
Location	Analyte	Depth (ft)	Result (µg/kg)
BDLY-02-SB03	PFOS	0-2	**0.00197**
	PFOA	0-2	<0.000962
	PFBS	0-2	<0.000962
	PFHpA	0-2	<0.000962
	PFHxS	0-2	<0.000962
	PFNA	0-2	<0.000962
	PFOS	11-13	**0.00439**
	PFOA	11-13	<0.000997
	PFBS	11-13	<0.000997
	PFHpA	11-13	<0.000997
	PFHxS	11-13	**0.00034**
	PFNA	11-13	<0.000997

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

SAMPLE LOCATION RESULTS- PRL 2

Bradley Air National Guard Base
East Granby, Connecticut

Legend

- Temporary Monitoring Well
- Soil Sample
- Approximate Groundwater Flow Direction
- Potential AFFF PFC PRLs (approximate)
- Installation Area (approximate)

Notes & Sources

Notes:
AFFF - aqueous film forming foam
PRL - potential release location
PFC - perfluorinated compounds
PFOS - Perfluorooctanesulfonic acid
PFOA - Perfluorooctanoic acid
PFBS - Perfluorobutanesulfonic acid
PFHpA - Perfluoroheptanoic acid
PFHxS - Perfluorohexanesulfonic acid
PFNA - Perfluorononanoic acid

BOLD text indicated a detection

YELLOW highlighted cells indicate 0.07 µg/L Health Advisory Exceedance

* Field Duplicate Value exceeded primary sample.

Sources: Installation Area datalayer obtained from Figure2 of the Final Perfluorinated Compounds Preliminary Assessment Site Visit Report prepared by BB&E and dated January 2016.

0 20 40 Feet

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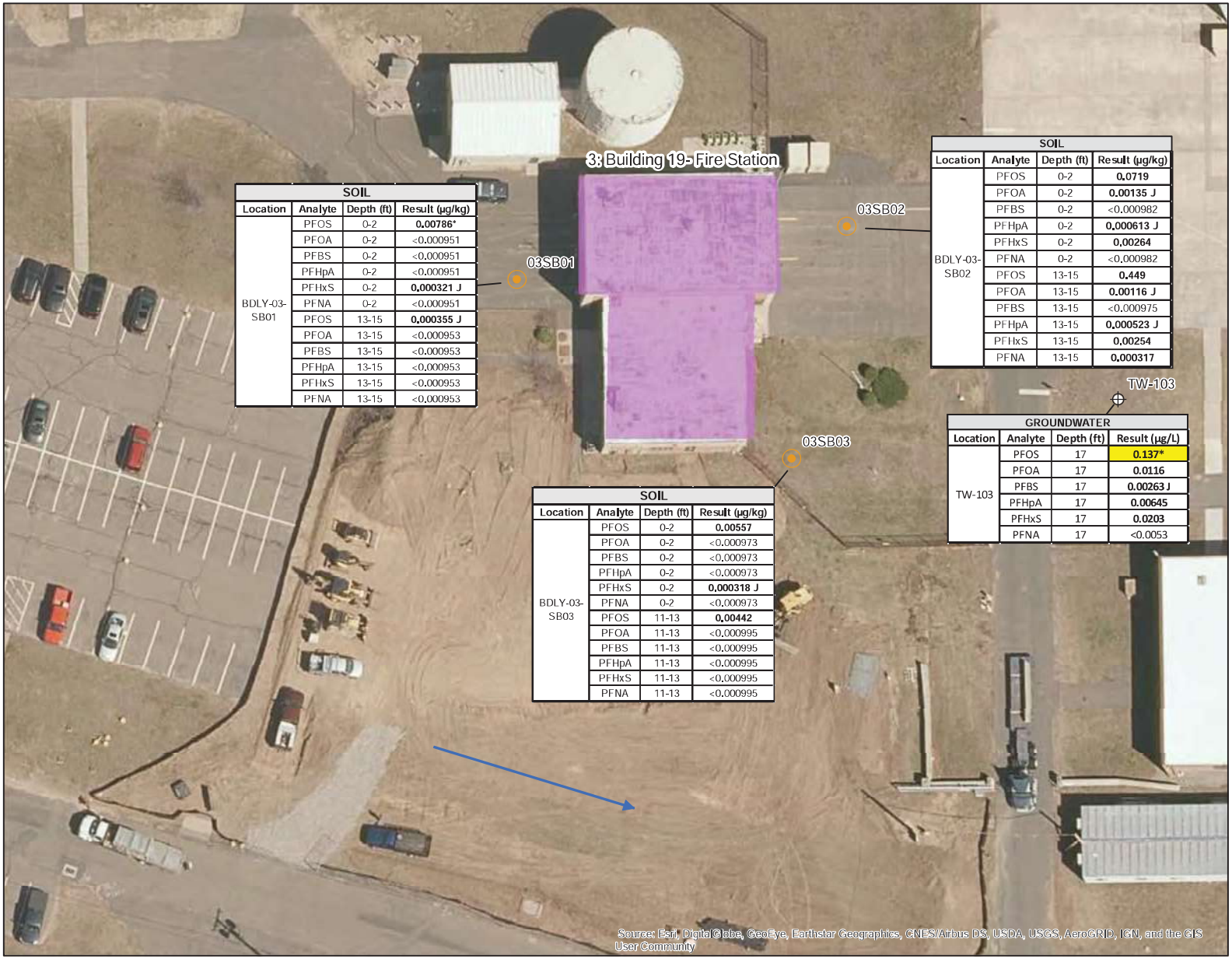
FIGURE 5



SOIL			
Location	Analyte	Depth (ft)	Result (µg/kg)
BDLY-03-SB01	PFOS	0-2	**0.00786***
	PFOA	0-2	<0.000951
	PFBS	0-2	<0.000951
	PFHpA	0-2	<0.000951
	PFHxS	0-2	**0.000321 J**
	PFNA	0-2	<0.000951
	PFOS	13-15	**0.000355 J**
	PFOA	13-15	<0.000953
	PFBS	13-15	<0.000953
	PFHpA	13-15	<0.000953
	PFHxS	13-15	<0.000953
	PFNA	13-15	<0.000953

SOIL			
Location	Analyte	Depth (ft)	Result (µg/kg)
BDLY-03-SB02	PFOS	0-2	**0.0719**
	PFOA	0-2	**0.00135 J**
	PFBS	0-2	<0.000982
	PFHpA	0-2	**0.000613 J**
	PFHxS	0-2	**0.00264**
	PFNA	0-2	<0.000982
	PFOS	13-15	**0.449**
	PFOA	13-15	**0.00116 J**
	PFBS	13-15	<0.000975
	PFHpA	13-15	**0.000523 J**
	PFHxS	13-15	**0.00254**
	PFNA	13-15	**0.000317**

GROUNDWATER			
Location	Analyte	Depth (ft)	Result (µg/L)
TW-103	PFOS	17	**0.137***
	PFOA	17	**0.0116**
	PFBS	17	**0.00263 J**
	PFHpA	17	**0.00645**
	PFHxS	17	**0.0203**
	PFNA	17	<0.0053

SOIL			
Location	Analyte	Depth (ft)	Result (µg/kg)
BDLY-03-SB03	PFOS	0-2	**0.00557**
	PFOA	0-2	<0.000973
	PFBS	0-2	<0.000973
	PFHpA	0-2	<0.000973
	PFHxS	0-2	**0.000318 J**
	PFNA	0-2	<0.000973
	PFOS	11-13	**0.00442**
	PFOA	11-13	<0.000995
	PFBS	11-13	<0.000995
	PFHpA	11-13	<0.000995
	PFHxS	11-13	<0.000995
	PFNA	11-13	<0.000995

SAMPLE LOCATION RESULTS - PRL 3

Bradley Air National Guard Base
East Granby, Connecticut

Legend

- Temporary Monitoring Well
- Soil Sample
- Approximate Groundwater Flow Direction
- Potential AFFF PFC PRLs (approximate)

Notes & Sources

Notes:
AFFF - aqueous film forming foam
PRL - potential release location
PFC - perfluorinated compounds
PFOS - Perfluorooctanesulfonic acid
PFOA - Perfluorooctanoic acid
PFBS - Perfluorobutanesulfonic acid
PFHpA - Perfluoroheptanoic acid
PFHxS - Perfluorohexanesulfonic acid
PFNA - Perfluorononanoic acid

BOLD text indicated a detection

YELLOW highlighted cells indicate 0.07 µg/L Health Advisory Exceedance

* Field Duplicate Value exceeded primary sample.

Sources: Installation Area datalayer obtained from Figure2 of the Final Perfluorinated Compounds Preliminary Assessment Site Visit Report prepared by BB&E and dated January 2016.

0 20 40 Feet

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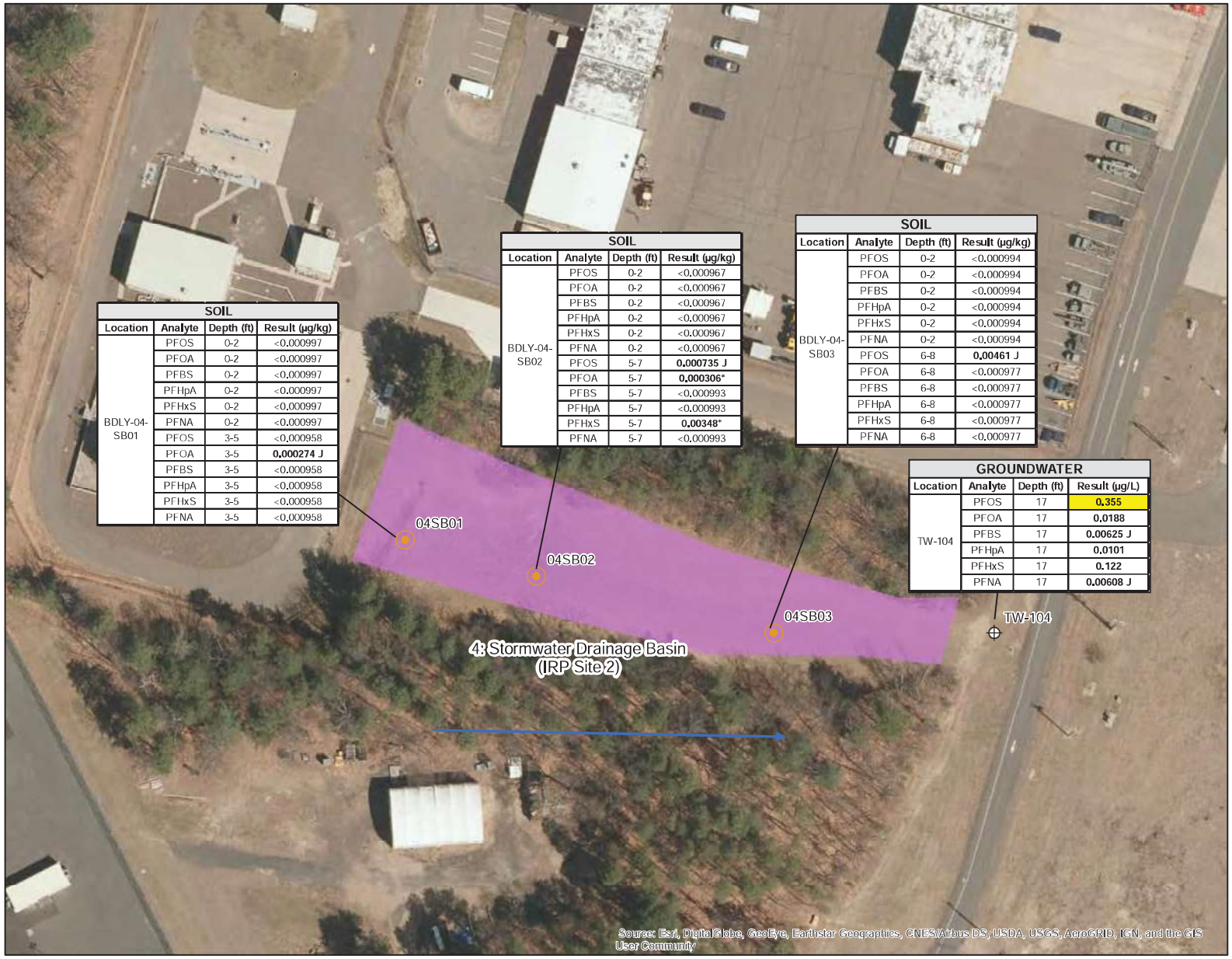
FIGURE 6



SOIL

Location	Analyte	Depth (ft)	Result (µg/kg)
BDLY-04-SB01	PFOS	0-2	<0.000997
	PFOA	0-2	<0.000997
	PFBS	0-2	<0.000997
	PFHpA	0-2	<0.000997
	PFHxS	0-2	<0.000997
	PFNA	0-2	<0.000997
	PFOS	3-5	<0.000958
	PFOA	3-5	**0.000274 J**
	PFBS	3-5	<0.000958
	PFHpA	3-5	<0.000958
	PFHxS	3-5	<0.000958
	PFNA	3-5	<0.000958

SOIL

Location	Analyte	Depth (ft)	Result (µg/kg)
BDLY-04-SB02	PFOS	0-2	<0.000967
	PFOA	0-2	<0.000967
	PFBS	0-2	<0.000967
	PFHpA	0-2	<0.000967
	PFHxS	0-2	<0.000967
	PFNA	0-2	<0.000967
	PFOS	5-7	**0.000735 J**
	PFOA	5-7	**0.000306***
	PFBS	5-7	<0.000993
	PFHpA	5-7	<0.000993
	PFHxS	5-7	**0.00348***
	PFNA	5-7	<0.000993

SOIL

Location	Analyte	Depth (ft)	Result (µg/kg)
BDLY-04-SB03	PFOS	0-2	<0.000994
	PFOA	0-2	<0.000994
	PFBS	0-2	<0.000994
	PFHpA	0-2	<0.000994
	PFHxS	0-2	<0.000994
	PFNA	0-2	<0.000994
	PFOS	6-8	**0.00461 J**
	PFOA	6-8	<0.000977
	PFBS	6-8	<0.000977
	PFHpA	6-8	<0.000977
	PFHxS	6-8	<0.000977
	PFNA	6-8	<0.000977

GROUNDWATER

Location	Analyte	Depth (ft)	Result (µg/L)
TW-104	PFOS	17	**0.355**
	PFOA	17	**0.0188**
	PFBS	17	**0.00625 J**
	PFHpA	17	**0.0101**
	PFHxS	17	**0.122**
	PFNA	17	**0.00608 J**

SAMPLE LOCATION Results - PRL 4

Bradley Air National Guard Base
East Granby, Connecticut

Legend

- Temporary Monitoring Well
- Soil Sample
- Approximate Groundwater Flow Direction
- Potential AFFF PFC PRLs (approximate)
- Installation Area (approximate)

Notes & Sources

Notes:
AFFF - aqueous film forming foam
PRL - potential release location
PFC - perfluorinated compounds
PFOS - Perfluorooctanesulfonic acid
PFOA - Perfluorooctanoic acid
PFBS - Perfluorobutanesulfonic acid
PFHpA - Perfluoroheptanoic acid
PFHxS - Perfluorohexanesulfonic acid
PFNA - Perfluorononanoic acid

BOLD text indicated a detection

YELLOW highlighted cells indicate 0.07 µg/L Health Advisory Exceedance

* Field Duplicate Value exceeded primary sample.

Sources: Installation Area datalayer obtained from Figure2 of the Final Perfluorinated Compounds Preliminary Assessment Site Visit Report prepared by BB&E and dated January 2016.

0 40 80 Feet

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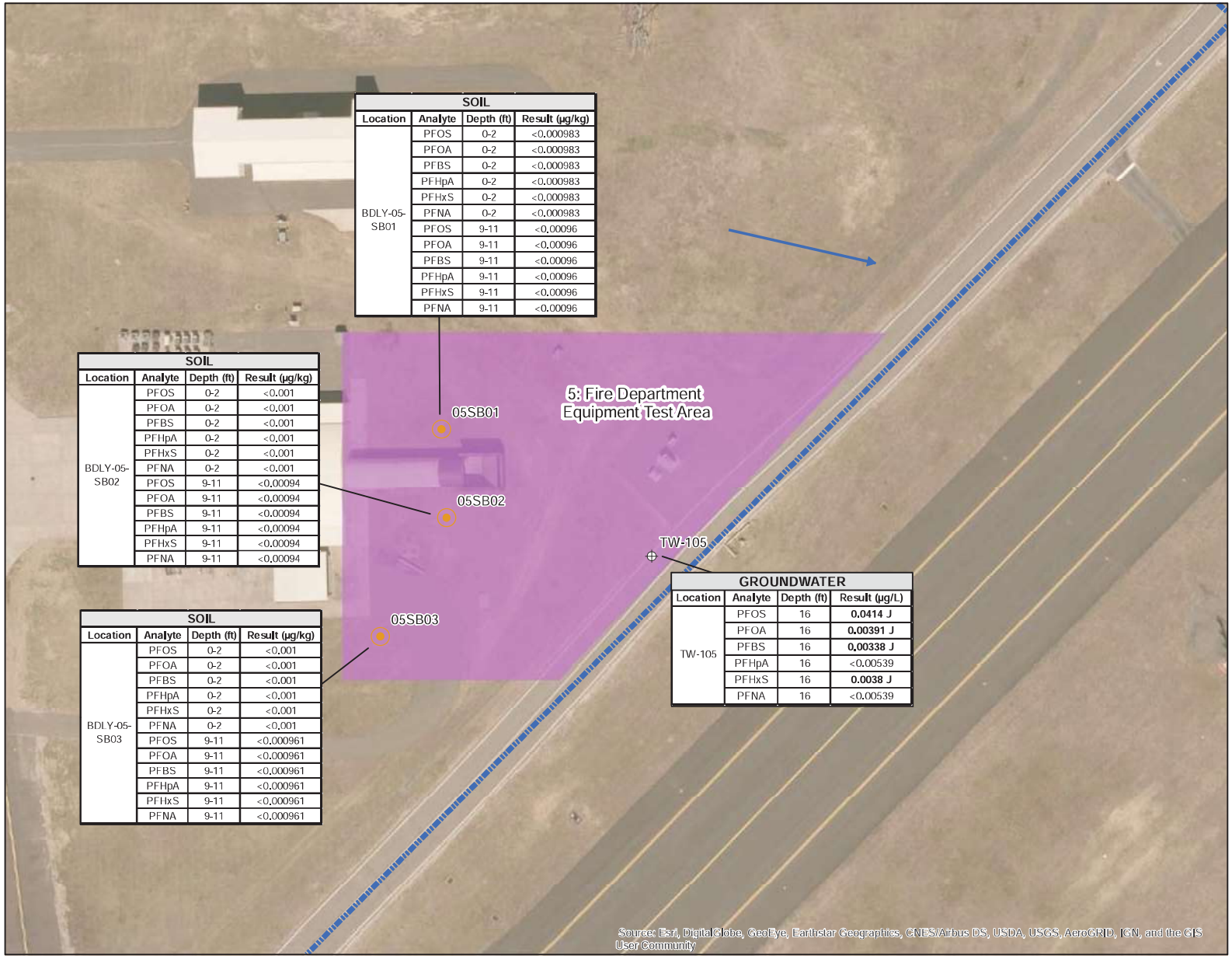
FIGURE 7



SOIL			
Location	Analyte	Depth (ft)	Result (µg/kg)
BDLY-05-SB01	PFOS	0-2	<0.000983
	PFOA	0-2	<0.000983
	PFBS	0-2	<0.000983
	PFHpA	0-2	<0.000983
	PFHxS	0-2	<0.000983
	PFNA	0-2	<0.000983
	PFOS	9-11	<0.00096
	PFOA	9-11	<0.00096
	PFBS	9-11	<0.00096
	PFHpA	9-11	<0.00096
	PFHxS	9-11	<0.00096
	PFNA	9-11	<0.00096

SOIL			
Location	Analyte	Depth (ft)	Result (µg/kg)
BDLY-05-SB02	PFOS	0-2	<0.001
	PFOA	0-2	<0.001
	PFBS	0-2	<0.001
	PFHpA	0-2	<0.001
	PFHxS	0-2	<0.001
	PFNA	0-2	<0.001
	PFOS	9-11	<0.00094
	PFOA	9-11	<0.00094
	PFBS	9-11	<0.00094
	PFHpA	9-11	<0.00094
	PFHxS	9-11	<0.00094
	PFNA	9-11	<0.00094

SOIL			
Location	Analyte	Depth (ft)	Result (µg/kg)
BDLY-05-SB03	PFOS	0-2	<0.001
	PFOA	0-2	<0.001
	PFBS	0-2	<0.001
	PFHpA	0-2	<0.001
	PFHxS	0-2	<0.001
	PFNA	0-2	<0.001
	PFOS	9-11	<0.000961
	PFOA	9-11	<0.000961
	PFBS	9-11	<0.000961
	PFHpA	9-11	<0.000961
	PFHxS	9-11	<0.000961
	PFNA	9-11	<0.000961

GROUNDWATER			
Location	Analyte	Depth (ft)	Result (µg/L)
TW-105	PFOS	16	**0.0414 J**
	PFOA	16	**0.00391 J**
	PFBS	16	**0.00338 J**
	PFHpA	16	<0.00539
	PFHxS	16	**0.0038 J**
	PFNA	16	<0.00539

SAMPLE LOCATION Results - PRL 5

Bradley Air National Guard Base
East Granby, Connecticut

Legend

- Temporary Monitoring Well
- Soil Sample
- Approximate Groundwater Flow Direction
- Potential AFFF PFC PRLs (approximate)
- Installation Area (approximate)

Notes & Sources

Notes:
AFFF - aqueous film forming foam
PRL - potential release location
PFC - perfluorinated compounds
PFOS - Perfluorooctanesulfonic acid
PFOA - Perfluorooctanoic acid
PFBS - Perfluorobutanesulfonic acid
PFHpA - Perfluoroheptanoic acid
PFHxS - Perfluorohexanesulfonic acid
PFNA - Perfluorononanoic acid

BOLD text indicated a detection

YELLOW highlighted cells indicate 0.07 µg/L Health Advisory Exceedance

* Field Duplicate Value exceeded primary sample.

Sources: Installation Area datalayer obtained from Figure2 of the Final Perfluorinated Compounds Preliminary Assessment Site Visit Report prepared by BB&E and dated January 2016.

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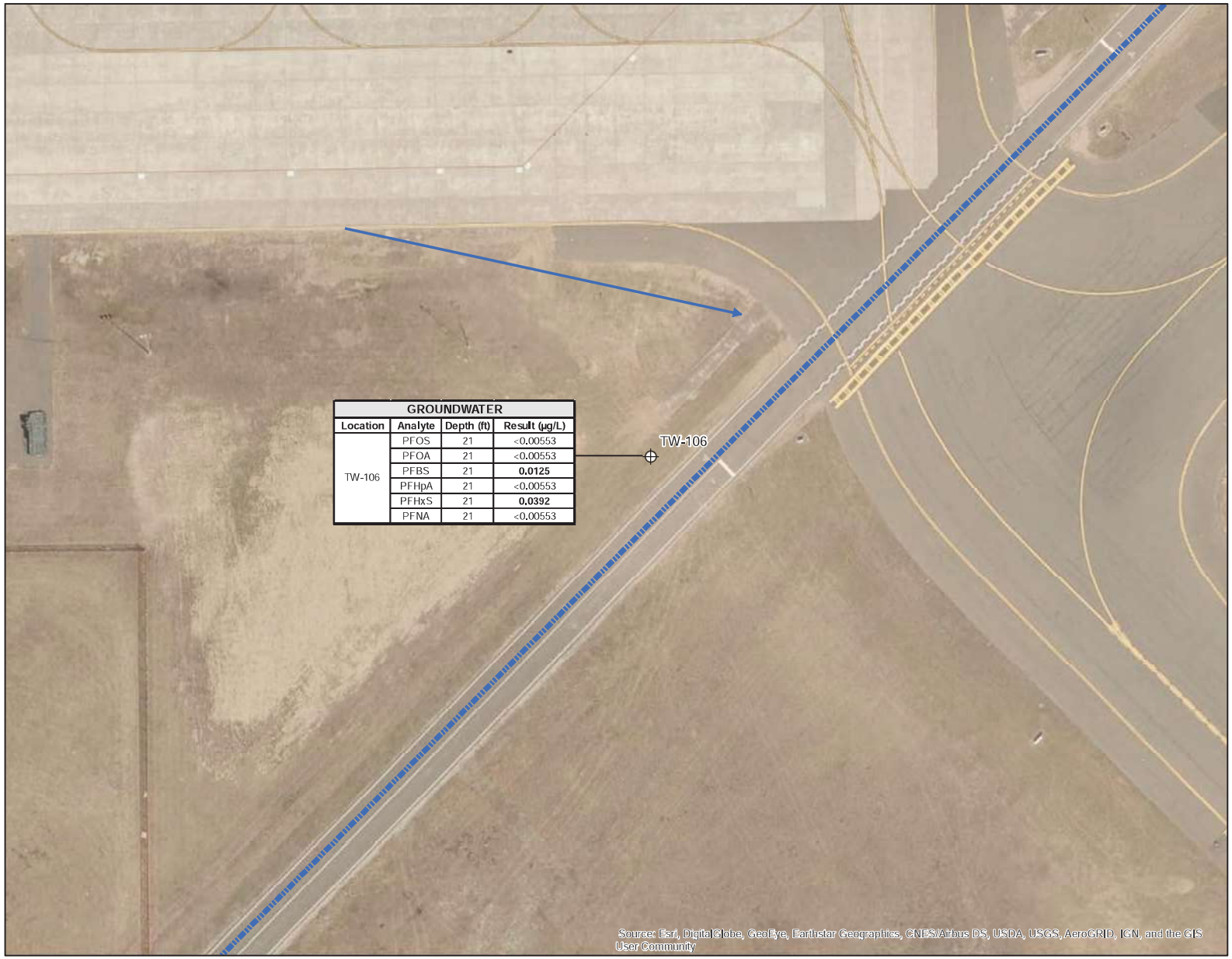
FIGURE 8



GROUNDWATER			
Location	Analyte	Depth (ft)	Result (µg/L)
TW-106	PFOS	21	<0.00553
	PFOA	21	<0.00553
	PFBS	21	**0.0125**
	PFHpA	21	<0.00553
	PFHxS	21	**0.0392**
	PFNA	21	<0.00553

SAMPLE LOCATION Results - TW-106

Bradley Air National Guard Base
East Granby, Connecticut

Legend

- Temporary Monitoring Well
- Soil Sample
- Approximate Groundwater Flow Direction
- Potential AFFF PFC PRLs (approximate)
- Installation Area (approximate)

Notes & Sources

Notes:
AFFF - aqueous film forming foam
PRL - potential release location
PFC - perfluorinated compounds
PFOS - Perfluorooctanesulfonic acid
PFOA - Perfluorooctanoic acid
PFBS - Perfluorobutanesulfonic acid
PFHpA - Perfluoroheptanoic acid
PFHxS - Perfluorohexanesulfonic acid
PFNA - Perfluorononanoic acid

BOLD text indicated a detection

YELLOW highlighted cells indicate 0.07 µg/L Health Advisory Exceedance

* Field Duplicate Value exceeded primary sample.

Sources: Installation Area datalayer obtained from Figure2 of the Final Perfluorinated Compounds Preliminary Assessment Site Visit Report prepared by BB&E and dated January 2016.

0 40 80 Feet

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Environment & Infrastructure, Inc.
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FIGURE
9

APPENDIX A

SOIL BORING AND
MONITORING WELL CONSTRUCTION LOGS

DEPTH (ft)	SOIL CLASSIFICATION AND REMARKS SEE KEY SYMBOL SHEET FOR EXPLANATION OF SYMBOLS AND ABBREVIATIONS USED BELOW.	LEGEND	ELEV (ft)	SAMPLES: BLOWCT PER 6 IN	SAMPLE ID	TYPE	PID (ppm)	RECOVERY (inch)	MONITORING WELL CONSTRUCTION DETAILS AND REMARKS	DEPTH
0	Poorly-graded Sand with Gravel (SP), dark brown, medium to coarse grained, gravel subrounded, dry [FILL]				0-6 BRDLY-01-SB01-0-2			6.0		0
5	Silty Sand (SM), brown, medium grained, uniform, dry				6-15			15.0		5
10					BRDLY-01-SB01-12-14					10
15										15
20										20
25										25

START DATE: 9/27/2017
END DATE: 9/27/2017
DRILLER: Drilex
EQUIPMENT: Geoprobe6620DT
METHOD: Direct Push
HOLE DIA.: 2.5" ID
SITE: 103rd Airlift Wing, CT National Guard
LOGGED BY: Amberlee Clark

GROUND ELEVATION: ft.
VERTICAL DATUM: NAVD88
NORTHING: ft.
EASTING: ft.
HORIZONTAL DATUM: NAD 83

Note: Air Knife & Hand Auger to 10 ft bgs

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL BORING / MONITORING WELL RECORD

Project: Bradley ANG
Project No: 291330006
Checked By: A. Clark

Boring No. 01SB01

amec foster wheeler

271 Mill Road
Chelmsford, MA 01824

BARNES ANG BORING LOG TEMPLATE BRADLEY BORING LOGS.GPJ PFC TEMPLATE.GDT 13/11/17

DEPTH (ft)	SOIL CLASSIFICATION AND REMARKS SEE KEY SYMBOL SHEET FOR EXPLANATION OF SYMBOLS AND ABBREVIATIONS USED BELOW.	LEGEND	ELEV (ft)	SAMPLES: BLOWCT PER 6 IN	SAMPLE ID	TYPE	PID (ppm)	RECOVERY (inch)	MONITORING WELL CONSTRUCTION DETAILS AND REMARKS	DEPTH
0	Poorly-graded Sand with Gravel (SP), dark brown, medium to coarse grained, gravel subrounded, dry [FILL]				0-6 BRDLY-01-SB02-0-2,			6.0		0
5	Silty Sand (SM), brown, medium grained, uniform, dry				6-15			15.0		5
10					BRDLY-01-SB02-12-14					10
15										15
20										20
25										25

START DATE: 9/27/2017
END DATE: 9/27/2017
DRILLER: Drilex
EQUIPMENT: Geoprobe6620DT
METHOD: Direct Push
HOLE DIA.: 2.5" ID
SITE: 103rd Airlift Wing, CT National Guard
LOGGED BY: Amberlee Clark

GROUND ELEVATION: ft.
VERTICAL DATUM: NAVD88
NORTHING: ft.
EASTING: ft.
HORIZONTAL DATUM: NAD 83

Note: Air Knife & Hand Auger to 10 ft bgs

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL BORING / MONITORING WELL RECORD

Project: Bradley ANG
Project No: 291330006
Checked By: A. Clark

Boring No. 01SB02

amec foster wheeler

271 Mill Road
Chelmsford, MA 01824

BARNES ANG BORING LOG TEMPLATE BRADLEY BORING LOGS.GPJ PFC TEMPLATE.GDT 13/11/17

DEPTH (ft)	SOIL CLASSIFICATION AND REMARKS SEE KEY SYMBOL SHEET FOR EXPLANATION OF SYMBOLS AND ABBREVIATIONS USED BELOW.	LEGEND	ELEV (ft)	SAMPLES: BLOW CT PER 6 IN	SAMPLE ID	TYPE	PID (ppm)	RECOVERY (inch)	MONITORING WELL CONSTRUCTION DETAILS AND REMARKS	DEPTH (ft)
0	Poorly-graded Gravel with Sand (GP), dark brown, coarse grained, dry [FILL]				0-5 BRDLY-01-SB03-0-2			60.0		0
5	Well-graded Sand (SW), brown, medium grained, no odor, uniform, dry				5-15					5
10					BRDLY-01-SB03-11-13			10.0	▼	10
15										15
20										20
25										25

START DATE: 9/27/2017
END DATE: 9/27/2017
DRILLER: Drilex
EQUIPMENT: Geoprobe6620DT
METHOD: Direct Push
HOLE DIA.: 2.5" ID
SITE: 103rd Airlift Wing, CT National Guard
LOGGED BY: Amberlee Clark

GROUND ELEVATION: ft.
VERTICAL DATUM: NAVD88
NORTHING: ft.
EASTING: ft.
HORIZONTAL DATUM: NAD 83

Note: Air Knife & Hand Auger to 10 ft bgs

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL BORING / MONITORING WELL RECORD

Project: Bradley ANG
Project No: 291330006
Checked By: A. Clark

Boring No. 01SB03

amec foster wheeler

271 Mill Road
Chelmsford, MA 01824

BARNES ANG BORING LOG TEMPLATE BRADLEY BORING LOGS.GPJ PFC TEMPLATE.GDT 13/11/17

DEPTH (ft)	SOIL CLASSIFICATION AND REMARKS SEE KEY SYMBOL SHEET FOR EXPLANATION OF SYMBOLS AND ABBREVIATIONS USED BELOW.	LEGEND	ELEV (ft)	SAMPLES: BLOW CT PER 6 IN	SAMPLE ID	TYPE	PID (ppm)	RECOVERY (inch)	MONITORING WELL CONSTRUCTION DETAILS AND REMARKS	DEPTH
0	Poorly-graded Sand with Gravel (SP), dark brown, medium to coarse grained, subrounded gravel, dry [FILL]				0-5 BRDLY-02-SB01-0-2			5.0		0
5	Well-graded Sand (SW), brown, medium grained, uniform, dry				5-15 BRDLY-02-SB01-13-15			15.0		5
10										10
15										15
20										20
25										25

START DATE: 9/28/2017
END DATE: 10/2/2017
DRILLER: Drilex
EQUIPMENT: Geoprobe6620DT
METHOD: Direct Push
HOLE DIA.: 2.5" ID
SITE: 103rd Airlift Wing, CT National Guard
LOGGED BY: Amberlee Clark

GROUND ELEVATION: ft.
VERTICAL DATUM: NAVD88
NORTHING: ft.
EASTING: ft.
HORIZONTAL DATUM: NAD 83

Note: Air Knife & Hand Auger to 10 ft bgs

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL BORING / MONITORING WELL RECORD

Project: Bradley ANG
Project No: 291330006
Checked By: A. Clark

Boring No. 02SB01

amec foster wheeler

271 Mill Road
Chelmsford, MA 01824

BARNES ANG BORING LOG TEMPLATE BRADLEY BORING LOGS.GPJ PFC TEMPLATE.GDT 13/11/17

DEPTH (ft)	SOIL CLASSIFICATION AND REMARKS SEE KEY SYMBOL SHEET FOR EXPLANATION OF SYMBOLS AND ABBREVIATIONS USED BELOW.	LEGEND	ELEV (ft)	SAMPLES: BLOW CT PER 6 IN	SAMPLE ID	TYPE	PID (ppm)	RECOVERY (inch)	MONITORING WELL CONSTRUCTION DETAILS AND REMARKS	DEPTH
0	Poorly-graded Sand with Gravel (SP), dark brown, medium to coarse grained, subrounded gravel, dry [FILL]				0-5 BRDLY-02-SB02-0-2			5.0		0
5	Well-graded Sand (SW), brown, medium grained, uniform, dry				5-15 BRDLY-02-SB02-13-15			15.0		5
10										10
15										15
20										20
25										25

START DATE: 9/28/2017
END DATE: 10/2/2017
DRILLER: Drilex
EQUIPMENT: Geoprobe6620DT
METHOD: Direct Push
HOLE DIA.: 2.5" ID
SITE: 103rd Airlift Wing, CT National Guard
LOGGED BY: Amberlee Clark

GROUND ELEVATION: ft.
VERTICAL DATUM: NAVD88
NORTHING: ft.
EASTING: ft.
HORIZONTAL DATUM: NAD 83

Note: Air Knife & Hand Auger to 10 ft bgs

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL BORING / MONITORING WELL RECORD

Project: Bradley ANG
Project No: 291330006
Checked By: A. Clark

Boring No. 02SB02

amec foster wheeler

271 Mill Road
Chelmsford, MA 01824

BARNES ANG BORING LOG TEMPLATE BRADLEY BORING LOGS.GPJ PFC TEMPLATE.GDT 13/11/17

DEPTH (ft)	SOIL CLASSIFICATION AND REMARKS SEE KEY SYMBOL SHEET FOR EXPLANATION OF SYMBOLS AND ABBREVIATIONS USED BELOW.	LEGEND	ELEV (ft)	SAMPLES: BLOW CT PER 6 IN	SAMPLE ID	TYPE	PID (ppm)	RECOVERY (inch)	MONITORING WELL CONSTRUCTION DETAILS AND REMARKS	DEPTH
0	Poorly-graded Sand with Gravel (SP), dark brown, medium to coarse grained, subrounded gravel, dry [FILL]				0-5 BRDLY-02-SB03-0-2			5.0		0
5	Well-graded Sand (SW), brown, medium grained, uniform, dry				5-15 BRDLY-02-SB03-13-15			15.0		5
10										10
15										15
20										20
25										25

START DATE: 9/28/2017
END DATE: 9/28/2017
DRILLER: Drilex
EQUIPMENT: Geoprobe6620DT
METHOD: Direct Push
HOLE DIA.: 2.5" ID
SITE: 103rd Airlift Wing, CT National Guard
LOGGED BY: Amberlee Clark

GROUND ELEVATION: ft.
VERTICAL DATUM: NAVD88
NORTHING: ft.
EASTING: ft.
HORIZONTAL DATUM: NAD 83

Note: Air Knife & Hand Auger to 10 ft bgs

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL BORING / MONITORING WELL RECORD

Project: Bradley ANG
Project No: 291330006
Checked By: A. Clark

Boring No. 02SB03

amec foster wheeler

271 Mill Road
Chelmsford, MA 01824

BARNES ANG BORING LOG TEMPLATE BRADLEY BORING LOGS.GPJ PFC TEMPLATE.GDT 13/11/17

DEPTH (ft)	SOIL CLASSIFICATION AND REMARKS SEE KEY SYMBOL SHEET FOR EXPLANATION OF SYMBOLS AND ABBREVIATIONS USED BELOW.	LEGEND	ELEV (ft)	SAMPLES: BLOW CT PER 6 IN	SAMPLE ID	TYPE	PID (ppm)	RECOVERY (inch)	MONITORING WELL CONSTRUCTION DETAILS AND REMARKS	DEPTH (ft)
0	Poorly-graded Sand with Gravel (SP), dark brownish red, medium to coarse grained, subrounded gravel, no odor, sand with large stones, dry [FILL]				0-10 BRDLY-03-SB01-0-2			2.0		0
5										5
10	Well-graded Sand (SW), brown, medium grained, tight uniform sands, moist				10-15 BRDLY-03-SB01-13-15			60.0		10
15										15
20										20
25										25

START DATE: 9/26/2017
END DATE: 9/26/2017
DRILLER: Drilex
EQUIPMENT: Geoprobe6620DT
METHOD: Direct Push
HOLE DIA.: 2.5" ID
SITE: 103rd Airlift Wing, CT National Guard
LOGGED BY: Amberlee Clark

GROUND ELEVATION: ft.
VERTICAL DATUM: NAVD88
NORTHING: ft.
EASTING: ft.
HORIZONTAL DATUM: NAD 83

Note: Air Knife & Hand Auger to 10 ft bgs

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL BORING / MONITORING WELL RECORD

Project: Bradley ANG
Project No: 291330006
Checked By: A. Clark

Boring No. 03SB01

amec foster wheeler

271 Mill Road
Chelmsford, MA 01824

BARNES ANG BORING LOG TEMPLATE BRADLEY BORING LOGS.GPJ PFC TEMPLATE.GDT 13/11/17

DEPTH (ft)	SOIL CLASSIFICATION AND REMARKS SEE KEY SYMBOL SHEET FOR EXPLANATION OF SYMBOLS AND ABBREVIATIONS USED BELOW.	LEGEND	ELEV (ft)	SAMPLES: BLOW CT PER 6 IN	SAMPLE ID	TYPE	PID (ppm)	RECOVERY (inch)	MONITORING WELL CONSTRUCTION DETAILS AND REMARKS	DEPTH
0	Poorly-graded Sand with Gravel (SP), dark brown, medium grained, subrounded gravel, no odor, with coarse sand at 7 ft bgs, dry				0-10 BRDLY-03-SB02-0-2			10.0		0
5										5
10	Well-graded Sand (SW), brown, medium grained, uniform, dry				BRDLY-03-SB02-13-15					10
15										15
20										20
25										25

START DATE: 9/26/2017
END DATE: 9/26/2017
DRILLER: Drilex
EQUIPMENT: Geoprobe6620DT
METHOD: Direct Push
HOLE DIA.: 2.5" ID
SITE: 103rd Airlift Wing, CT National Guard
LOGGED BY: Amberlee Clark

GROUND ELEVATION: ft.
VERTICAL DATUM: NAVD88
NORTHING: ft.
EASTING: ft.
HORIZONTAL DATUM: NAD 83

Note: Air Knife & Hand Auger to 10 ft bgs

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL BORING / MONITORING WELL RECORD

Project: Bradley ANG
Project No: 291330006
Checked By: A. Clark

Boring No. 03SB02

amec foster wheeler

271 Mill Road
Chelmsford, MA 01824

BARNES ANG BORING LOG TEMPLATE BRADLEY BORING LOGS.GPJ PFC TEMPLATE.GDT 13/11/17

DEPTH (ft)	SOIL CLASSIFICATION AND REMARKS SEE KEY SYMBOL SHEET FOR EXPLANATION OF SYMBOLS AND ABBREVIATIONS USED BELOW.	LEGEND	ELEV (ft)	SAMPLES: BLOW CT PER 6 IN	SAMPLE ID	TYPE	PID (ppm)	RECOVERY (inch)	MONITORING WELL CONSTRUCTION DETAILS AND REMARKS	DEPTH
0	Poorly-graded Gravel with Sand (GP), dark brown, medium grained, subangular gravel, no odor, many large rocks, dry [FILL]				BRDLY-03-SB03-0-2			3.0		0
	Well-graded Sand (SW), brown, medium grained, uniform, dry									
5										5
10					BRDLY-03-SB03-11-13				▼	10
15										15
20										20
25										25

START DATE: 10/3/2017
END DATE: 10/3/2017
DRILLER: Drilex
EQUIPMENT: Geoprobe6620DT
METHOD: Direct Push
HOLE DIA.: 2.5" ID
SITE: 103rd Airlift Wing, CT National Guard
LOGGED BY: Amberlee Clark

GROUND ELEVATION: ft.
VERTICAL DATUM: NAVD88
NORTHING: ft.
EASTING: ft.
HORIZONTAL DATUM: NAD 83

Note: Air Knife & Hand Auger to 10 ft bgs

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL BORING / MONITORING WELL RECORD

Project: Bradley ANG
Project No: 291330006
Checked By: A. Clark

Boring No. 03SB03

amec foster wheeler

271 Mill Road
Chelmsford, MA 01824

BARNES ANG BORING LOG TEMPLATE BRADLEY BORING LOGS.GPJ PFC TEMPLATE.GDT 13/11/17

DEPTH (ft)	SOIL CLASSIFICATION AND REMARKS SEE KEY SYMBOL SHEET FOR EXPLANATION OF SYMBOLS AND ABBREVIATIONS USED BELOW.	LEGEND	ELEV (ft)	SAMPLES: BLOW CT PER 6 IN	SAMPLE ID	TYPE	PID (ppm)	RECOVERY (inch)	MONITORING WELL CONSTRUCTION DETAILS AND REMARKS	DEPTH
0	Well-graded Sand (SW), brown, medium grained, no odor, uniform, loose, dry				0-5 BRDLY-04-SB01-0-2 BRDLY-04-SB01-3-5			5.0	Two samples collected	0
5									Bottom at 5', no refusal	5
10										10
15										15
20										20
25										25

START DATE: 9/26/2017
END DATE: 9/26/2017
DRILLER: Drilex
EQUIPMENT: Geoprobe6620DT
METHOD: Air Hammer/Vac
HOLE DIA.: 2.5" ID
SITE: 103rd Airlift Wing, CT National Guard
LOGGED BY: Amberlee Clark

GROUND ELEVATION: ft.
VERTICAL DATUM: NAVD88
NORTHING: ft.
EASTING: ft.
HORIZONTAL DATUM: NAD 83

Note: Air Knife & Hand Auger to 10 ft bgs

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL BORING / MONITORING WELL RECORD

Project: Bradley ANG
Project No: 291330006
Checked By: A. Clark

Boring No. 04SB01

amec foster wheeler

271 Mill Road
Chelmsford, MA 01824

BARNES ANG BORING LOG TEMPLATE BRADLEY BORING LOGS.GPJ PFC TEMPLATE.GDT 13/11/17

DEPTH (ft)	SOIL CLASSIFICATION AND REMARKS SEE KEY SYMBOL SHEET FOR EXPLANATION OF SYMBOLS AND ABBREVIATIONS USED BELOW.	LEGEND	ELEV (ft)	SAMPLES: BLOW CT PER 6 IN	SAMPLE ID	TYPE	PID (ppm)	RECOVERY (inch)	MONITORING WELL CONSTRUCTION DETAILS AND REMARKS	DEPTH
0	Well-graded Sand (SW), brown, medium to coarse grained, no odor, uniform, dry				0-7 BRDLY-04-SB02-0-2			84	Two samples collected	0
5					BRDLY-04-SB02-5-7					5
									Bottom of boring at 7' not refusal.	
10										10
15										15
20										20
25										25

START DATE: 9/26/2017
END DATE: 9/26/2017
DRILLER: Drilex
EQUIPMENT: Geoprobe6620DT
METHOD: Air Hammer/Vac
HOLE DIA.: 2.5" ID
SITE: 103rd Airlift Wing, CT National Guard
LOGGED BY: Amberlee Clark

GROUND ELEVATION: ft.
VERTICAL DATUM: NAVD88
NORTHING: ft.
EASTING: ft.
HORIZONTAL DATUM: NAD 83

Note: Air Knife & Hand Auger to 7 ft bgs

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL BORING / MONITORING WELL RECORD

Project: Bradley ANG
Project No: 291330006
Checked By: A. Clark

Boring No. 04SB02

amec foster wheeler

271 Mill Road
Chelmsford, MA 01824

BARNES ANG BORING LOG TEMPLATE BRADLEY BORING LOGS.GPJ PFC TEMPLATE.GDT 13/11/17

DEPTH (ft)	SOIL CLASSIFICATION AND REMARKS SEE KEY SYMBOL SHEET FOR EXPLANATION OF SYMBOLS AND ABBREVIATIONS USED BELOW.	LEGEND	ELEV (ft)	SAMPLES: BLOW CT PER 6 IN	SAMPLE ID	TYPE	PID (ppm)	RECOVERY (inch)	MONITORING WELL CONSTRUCTION DETAILS AND REMARKS	DEPTH
0	Well-graded Sand (SW), brown, medium to coarse grained, some subrounded stones, no odor, dry				0-8 BRDLY-04-SB03-0-2			8.0		0
5					BRDLY-04-SB03-6-8					5
									Bottom at 8' not refusal	
10										10
15										15
20										20
25										25

START DATE: 9/26/2017
END DATE: 9/26/2017
DRILLER: Drilex
EQUIPMENT: Geoprobe6620DT
METHOD: Air Hammer/Vac
HOLE DIA.: 2.5" ID
SITE: 103rd Airlift Wing, CT National Guard
LOGGED BY: Amberlee Clark

GROUND ELEVATION: ft.
VERTICAL DATUM: NAVD88
NORTHING: ft.
EASTING: ft.
HORIZONTAL DATUM: NAD 83

Note: Air Knife & Hand Auger to 8.0 ft bgs

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL BORING / MONITORING WELL RECORD

Project: Bradley ANG
Project No: 291330006
Checked By: A. Clark

Boring No. 04SB03

amec foster wheeler

271 Mill Road
Chelmsford, MA 01824

BARNES ANG BORING LOG TEMPLATE BRADLEY BORING LOGS.GPJ PFC TEMPLATE.GDT 13/11/17

DEPTH (ft)	SOIL CLASSIFICATION AND REMARKS SEE KEY SYMBOL SHEET FOR EXPLANATION OF SYMBOLS AND ABBREVIATIONS USED BELOW.	LEGEND	ELEV (ft)	SAMPLES: BLOWCT PER 6 IN	SAMPLE ID	TYPE	PID (ppm)	RECOVERY (inch)	MONITORING WELL CONSTRUCTION DETAILS AND REMARKS	DEPTH
0	Well-graded Sand (SW), brown, medium grained, uniform, dry				0-11 BRDLY-05-SB01-0-2					0
5								132		5
					BRDLY-05-SB01-9-11					
10										10
15										15
20										20
25										25

START DATE: 9/29/2017
END DATE: 9/27/2017
DRILLER: Drilex
EQUIPMENT: Air Knife
METHOD: Air Hammer/Vac
HOLE DIA.: 2.5" ID
SITE: 103rd Airlift Wing, CT National Guard
LOGGED BY: Amberlee Clark

GROUND ELEVATION: ft.
VERTICAL DATUM: NAVD88
NORTHING: ft.
EASTING: ft.
HORIZONTAL DATUM: NAD 83

Note: Air Knife & Hand Auger to 11 ft bgs

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL BORING / MONITORING WELL RECORD

Project: Bradley ANG
Project No: 291330006
Checked By: A. Clark

Boring No. 05SB01

amec foster wheeler

271 Mill Road
Chelmsford, MA 01824

BARNES ANG BORING LOG TEMPLATE BRADLEY BORING LOGS.GPJ PFC TEMPLATE.GDT 13/11/17

DEPTH (ft)	SOIL CLASSIFICATION AND REMARKS SEE KEY SYMBOL SHEET FOR EXPLANATION OF SYMBOLS AND ABBREVIATIONS USED BELOW.	LEGEND	ELEV (ft)	SAMPLES: BLOW CT PER 6 IN	SAMPLE ID	TYPE	PID (ppm)	RECOVERY (inch)	MONITORING WELL CONSTRUCTION DETAILS AND REMARKS	DEPTH
0	Well-graded Sand (SW), brown, medium grained, uniform, dry				0-11 BRDLY-05-SB02-0-2					0
5								11.0		5
					BRDLY-05-SB02-9-11					
10										10
15										15
20										20
25										25

START DATE: 9/29/2017
END DATE: 9/27/2017
DRILLER: Drilex
EQUIPMENT: Air Knife
METHOD: Air Hammer/Vac
HOLE DIA.: 2.5" ID
SITE: 103rd Airlift Wing, CT National Guard
LOGGED BY: Amberlee Clark

GROUND ELEVATION: ft.
VERTICAL DATUM: NAVD88
NORTHING: ft.
EASTING: ft.
HORIZONTAL DATUM: NAD 83

Note: Air Knife & Hand Auger to 11 ft bgs

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL BORING / MONITORING WELL RECORD

Project: Bradley ANG
Project No: 291330006
Checked By: A. Clark

Boring No. 05SB02

amec foster wheeler

271 Mill Road
Chelmsford, MA 01824

BARNES ANG BORING LOG TEMPLATE BRADLEY BORING LOGS.GPJ PFC TEMPLATE.GDT 13/11/17

DEPTH (ft)	SOIL CLASSIFICATION AND REMARKS SEE KEY SYMBOL SHEET FOR EXPLANATION OF SYMBOLS AND ABBREVIATIONS USED BELOW.	LEGEND	ELEV (ft)	SAMPLES: BLOWCT PER 6 IN	SAMPLE ID	TYPE	PID (ppm)	RECOVERY (inch)	MONITORING WELL CONSTRUCTION DETAILS AND REMARKS	DEPTH
0	Well-graded Sand (SW), brown, medium grained, uniform, dry				0-11 BRDLY-05-SB03-0-2					0
5								11.0		5
					BRDLY-05-SB03-9-11					
10									▼	10
15										15
20										20
25										25

START DATE: 9/29/2017
END DATE: 9/27/2017
DRILLER: Drilex
EQUIPMENT: Air Knife
METHOD: Air Hammer/Vac
HOLE DIA.: 2.5" ID
SITE: 103rd Airlift Wing, CT National Guard
LOGGED BY: Amberlee Clark

GROUND ELEVATION: ft.
VERTICAL DATUM: NAVD88
NORTHING: ft.
EASTING: ft.
HORIZONTAL DATUM: NAD 83

Note: Air Knife & Hand Auger to 11 ft bgs

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL BORING / MONITORING WELL RECORD

Project: Bradley ANG
Project No: 291330006
Checked By: A. Clark

Boring No. 05SB03

amec foster wheeler

271 Mill Road
Chelmsford, MA 01824

BARNES ANG BORING LOG TEMPLATE BRADLEY BORING LOGS.GPJ PFC TEMPLATE.GDT 13/11/17

DEPTH (ft)	SOIL CLASSIFICATION AND REMARKS SEE KEY SYMBOL SHEET FOR EXPLANATION OF SYMBOLS AND ABBREVIATIONS USED BELOW.	LEGEND	ELEV (ft)	SAMPLES: BLOWCT PER 6 IN	SAMPLE ID	TYPE	PID (ppm)	RECOVERY (inch)	MONITORING WELL CONSTRUCTION DETAILS AND REMARKS	DEPTH
0	Poorly-graded Sand with Gravel (SP), brown, medium to coarse grained, dry [FILL]				0-20					0
	Well-graded Sand (SW), brown, medium to coarse grained, no odor, uniform, dry [NATIVE MATERIAL]							20.0	Temporary well screen 9.8-19.8 ft bgs	
5										5
10										10
15										15
20										20
25										25

START DATE: 9/26/2017
END DATE: 9/29/2017
DRILLER: Drilex
EQUIPMENT: Geoprobe6620DT
METHOD: Direct Push
HOLE DIA.: 2.5" ID
SITE: 103rd Airlift Wing, CT National Guard
LOGGED BY: Amberlee Clark

GROUND ELEVATION: ft.
VERTICAL DATUM: NAVD88
NORTHING: ft.
EASTING: ft.
HORIZONTAL DATUM: NAD 83

Note: Air Knife & Hand Auger to 10 ft bgs

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL BORING / MONITORING WELL RECORD

Project: Bradley ANG
Project No: 291330006
Checked By: A. Clark

Well No. TW-101

amec foster wheeler

271 Mill Road
Chelmsford, MA 01824

BARNES ANG BORING LOG TEMPLATE BRADLEY BORING LOGS.GPJ PFC TEMPLATE.GDT 13/11/17

DEPTH (ft)	SOIL CLASSIFICATION AND REMARKS SEE KEY SYMBOL SHEET FOR EXPLANATION OF SYMBOLS AND ABBREVIATIONS USED BELOW.	LEGEND	ELEV (ft)	SAMPLES: BLOWCT PER 6 IN	SAMPLE ID	TYPE	PID (ppm)	RECOVERY (inch)	MONITORING WELL CONSTRUCTION DETAILS AND REMARKS	DEPTH
0	Poorly-graded Sand with Gravel (SP), dark brown, medium to coarse grained, subrounded gravel, dry [FILL]							60		0
5	Well-graded Sand (SW), brown, medium grained, uniform, dry									5
10								60	Temporary well screen 9.8-19.8 ft bgs	10
15								60		15
20										20
25										25

START DATE: 9/28/2017
END DATE: 9/28/2017
DRILLER: Drilex
EQUIPMENT: Geoprobe6620DT
METHOD: Direct Push
HOLE DIA.: 2.5" ID
SITE: 103rd Airlift Wing, CT National Guard
LOGGED BY: Amberlee Clark

GROUND ELEVATION: ft.
VERTICAL DATUM: NAVD88
NORTHING: ft.
EASTING: ft.
HORIZONTAL DATUM: NAD 83

Note: Air Knife & Hand Auger to 10 ft bgs

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL BORING / MONITORING WELL RECORD

Project: Bradley ANG
Project No: 291330006
Checked By: A. Clark

Well No. TW-102

amec foster wheeler

271 Mill Road
Chelmsford, MA 01824

BARNES ANG BORING LOG TEMPLATE BRADLEY BORING LOGS.GPJ PFC TEMPLATE.GDT 13/11/17

DEPTH (ft)	SOIL CLASSIFICATION AND REMARKS SEE KEY SYMBOL SHEET FOR EXPLANATION OF SYMBOLS AND ABBREVIATIONS USED BELOW.	LEGEND	ELEV (ft)	SAMPLES: BLOWCT PER 6 IN	SAMPLE ID	TYPE	PID (ppm)	RECOVERY (inch)	MONITORING WELL CONSTRUCTION DETAILS AND REMARKS	DEPTH
0	Poorly-graded Sand with Gravel (SP), brown, Medium, no odor, dry [FILL]				0-20					0
	Well-graded Sand (SW), brown, Medium, no odor, uniform, dry									
5										5
10								20.0	Temporary well screen 9.8-19.8 ft bgs	10
15										15
20										20
25										25

START DATE: 9/26/2017
END DATE: 9/26/2017
DRILLER: Drilex
EQUIPMENT: Geoprobe6620DT
METHOD: Direct Push
HOLE DIA.: 2.5" ID
SITE: 103rd Airlift Wing, CT National Guard
LOGGED BY: Amberlee Clark

GROUND ELEVATION: ft.
VERTICAL DATUM: NAVD88
NORTHING: ft.
EASTING: ft.
HORIZONTAL DATUM: NAD 83

Note: Air Knife & Hand Auger to 10 ft bgs

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL BORING / MONITORING WELL RECORD

Project: Bradley ANG
Project No: 291330006
Checked By: A. Clark

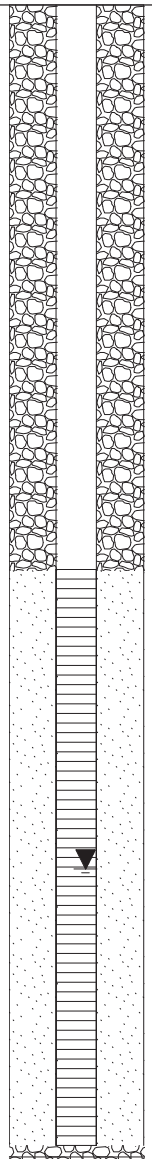
Well No. TW-103

amec foster wheeler

271 Mill Road
Chelmsford, MA 01824

BARNES ANG BORING LOG TEMPLATE BRADLEY BORING LOGS.GPJ PFC TEMPLATE.GDT 13/11/17

DEPTH (ft)	SOIL CLASSIFICATION AND REMARKS SEE KEY SYMBOL SHEET FOR EXPLANATION OF SYMBOLS AND ABBREVIATIONS USED BELOW.	LEGEND	ELEV (ft)	SAMPLES: BLOWCT PER 6 IN	SAMPLE ID	TYPE	PID (ppm)	RECOVERY (inch)	MONITORING WELL CONSTRUCTION DETAILS AND REMARKS	DEPTH
0	Well-graded Sand (SW), light brown, medium grained, no odor, uniform, roots at 1.5 ft bgs, dry				N/A					0
5										5
10								20.0	Temporary well screen 9.8-19.8 ft bgs	10
15										15
20									Bottom at 20', no refusal	20
25										25



START DATE: 9/26/2017
END DATE: 9/26/2017
DRILLER: Drilex
EQUIPMENT: Geoprobe6620DT
METHOD: Direct Push
HOLE DIA.: 2.5" ID
SITE: 103rd Airlift Wing, CT National Guard
LOGGED BY: Amberlee Clark

GROUND ELEVATION: ft.
VERTICAL DATUM: NAVD88
NORTHING: ft.
EASTING: ft.
HORIZONTAL DATUM: NAD 83

Note: Air Knife & Hand Auger to 10 ft bgs

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL BORING / MONITORING WELL RECORD

Project: Bradley ANG
Project No: 291330006
Checked By: A. Clark

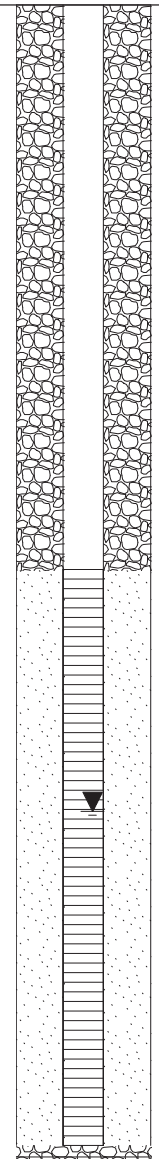
Well No. TW-104

amec foster wheeler

271 Mill Road
Chelmsford, MA 01824

BARNES ANG BORING LOG TEMPLATE BRADLEY BORING LOGS.GPJ PFC TEMPLATE.GDT 13/11/17

DEPTH (ft)	SOIL CLASSIFICATION AND REMARKS SEE KEY SYMBOL SHEET FOR EXPLANATION OF SYMBOLS AND ABBREVIATIONS USED BELOW.	LEGEND	ELEV (ft)	SAMPLES: BLOW CT PER 6 IN	SAMPLE ID	TYPE	PID (ppm)	RECOVERY (inch)	MONITORING WELL CONSTRUCTION DETAILS AND REMARKS	DEPTH
0	Poorly-graded Sand with Gravel (SP), brown, medium to coarse grained, with silt, dry				0-5			60		0
5	Well-graded Sand (SW), brown, medium grained, uniform, dry							60		5
10								60	Temporary well screen 9.8-19.8 ft bgs	10
15								36		15
20										20
25										25



START DATE:	9/29/2017	GROUND ELEVATION:	ft.
END DATE:	10/3/2017	VERTICAL DATUM:	NAVD88
DRILLER:	Drilex	NORTHING:	ft.
EQUIPMENT:	Geoprobe6620DT	EASTING:	ft.
METHOD:	Direct Push	HORIZONTAL DATUM:	NAD 83
HOLE DIA.:	2.5" ID		
SITE:	103rd Airlift Wing, CT National Guard	Note:	Air Knife & Hand Auger to 18 ft bgs
LOGGED BY:	Amberlee Clark		

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL BORING / MONITORING WELL RECORD

Project: Bradley ANG
Project No: 291330006
Checked By: A. Clark

Well No. TW-105

amec foster wheeler

271 Mill Road
Chelmsford, MA 01824

BARNES ANG BORING LOG TEMPLATE BRADLEY BORING LOGS.GPJ PFC TEMPLATE.GDT 13/11/17

DEPTH (ft)	SOIL CLASSIFICATION AND REMARKS SEE KEY SYMBOL SHEET FOR EXPLANATION OF SYMBOLS AND ABBREVIATIONS USED BELOW.	LEGEND	ELEV (ft)	SAMPLES: BLOW CT PER 6 IN	SAMPLE ID	TYPE	PID (ppm)	RECOVERY (inch)	MONITORING WELL CONSTRUCTION DETAILS AND REMARKS	DEPTH
0	Poorly-graded Sand with Gravel (SP), brown, medium to coarse grained, with silt, dry				0-5			5.0		0
5	Well-graded Sand (SW), brown, medium grained, uniform, dry				5-20			23.0	Temporary well screen 12.8-22.8 ft bgs	5
10										10
15										15
20										20
25										25

START DATE: 9/29/2017
END DATE: 10/3/2017
DRILLER: Drilex
EQUIPMENT: Geoprobe6620DT
METHOD: Direct Push
HOLE DIA.: 2.5" ID
SITE: 103rd Airlift Wing, CT National Guard
LOGGED BY: Amberlee Clark

GROUND ELEVATION: ft.
VERTICAL DATUM: NAVD88
NORTHING: ft.
EASTING: ft.
HORIZONTAL DATUM: NAD 83

Note: Air Knife & Hand Auger to 23 ft bgs

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL BORING / MONITORING WELL RECORD

Project: Bradley ANG
Project No: 291330006
Checked By: A. Clark

Well No. TW-106

amec foster wheeler

271 Mill Road
Chelmsford, MA 01824

BARNES ANG BORING LOG TEMPLATE BRADLEY BORING LOGS.GPJ PFC TEMPLATE.GDT 13/11/17

APPENDIX B

WELL DEVELOPMENT LOGS

WELL DEVELOPMENT LOG

Project Name:	Phase 1 Regional Site Inspections for Per-Fluorinated Compounds at Multiple Air National Guard Installations	**Project Number:**	291330006
Contract:	W9133L-14-D-0002	**Task Order:**	0006
Installation:	BRDLY	**Date Started/Date Completed:**	09/27/17/09/27/17
Well ID:	TW-101	**Initial Depth to Water (ft):**	14.92
Measuring Point:	Top of Riser	**Total Depth of Well (ft):**	19.91
Development Method:	PUMPED	**Depth to Water After Purging (ft):**	15.53
Total Volume Purged (gal):	3.12	**1 Casing Volume (gal):**	0.2
Technician(s):	Amberlee Clark	**3 Casing Volumes (gal):**	0.6

Date/Time	Intake Depth (feet)	Water Level (feet)	Rate (mg/L)	Temp. (°C)	pH (units)	Specific Electrical Conductance (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Cum. Volume (gal.)	Comments/Observations During Purging (color, sediment, etc.)
09/27/17 12:35			200								Pumping Started
09/27/17 13:20	17	15.43	200	19.82	6.35	0.100	7.51	-83.0	36.4		
09/27/17 13:25	17	15.50	200	19.77	6.65	0.093	6.75	-79.8	33.3		
09/27/17 13:30	17	15.52	200	19.69	6.66	0.103	6.78	-79.8	20.0		
09/27/17 13:35	17	15.53	200	19.73	6.66	0.104	6.79	-80.3	15.4		

Instruments (Manufacturer, Model, and Serial No.):

Equipment Calibrated (Y/N): Yes Calibrated Within Criteria (Y/N): Yes

Turbidity Meter, Water Quality Meter, Water Level Meter, Peristaltic Pump
Hach 2100Q 3,
YSI 556 MPS 12904

Calculations:

Saturated well casing volume: V= Π(R^2)H*7.48 gal/ft^3

V = Volume (gal/ft)
Π = 3.14
R = well radius (ft) = (well diameter (in)/12 (in/ft))/2)
H = height of water column (ft)

V= Π(R^2)H*7.48 gal/ft^3
=Π * (1.0 (in)/12 (in/ft))/2)^2 * 4.99 * 7.48 gal/ft^3
= 0.2 gal.

Signature:

Notes:

Turb below 50 NTU, Riser height 1.5'

Name (print)**:** Amberlee Clark

QA/QC'd by: **Alex Howe** **QA/QC Date:** **10/5/2017**

WELL DEVELOPMENT LOG

Project Name:	Phase 1 Regional Site Inspections for Per-Fluorinated Compounds at Multiple Air National Guard Installations	**Project Number:**	291330006
Contract:	W9133L-14-D-0002	**Task Order:**	0006
Installation:	BRDLY	**Date Started/Date Completed:**	09/28/17/09/28/17
Well ID:	TW-102	**Initial Depth to Water (ft):**	15.41
Measuring Point:	Top of Riser	**Total Depth of Well (ft):**	19.8
Development Method:	PUMPED	**Depth to Water After Purging (ft):**	15.43
Total Volume Purged (gal):	3.4	**1 Casing Volume (gal):**	0.2
Technician(s):	Amberlee Clark	**3 Casing Volumes (gal):**	0.5

Date/Time	Intake Depth (feet)	Water Level (feet)	Rate (mg/L)	Temp. (°C)	pH (units)	Specific Electrical Conductance (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Cum. Volume (gal.)	Comments/Observations During Purging (color, sediment, etc.)
09/28/17 13:25			220								Pumping Started
09/28/17 14:00	17	15.41	220	19.91	6.64	0.125	6.25	1.9	42.7		
09/28/17 14:05	17	15.41	220	19.92	5.58	0.117	6.67	-11.1	17.1		
09/28/17 14:10	17	15.41	220	19.98	5.53	0.108	6.38	-15.8	6.91		
09/28/17 14:15	17	15.42	220	19.97	5.51	0.112	6.67	-13.7	8.57		
09/28/17 14:20	17	15.43	220	19.96	5.49	0.114	6.69	-9.7	6.39		
09/28/17 14:25	17	15.43	220	19.96	5.47	0.116	6.71	-9.0	6.38		

Instruments (Manufacturer, Model, and Serial No.):

Equipment Calibrated (Y/N): Yes Calibrated Within Criteria (Y/N): Yes

Turbidity Meter, Water Quality Meter, Water Level Meter, Peristaltic Pump
Hach 2100Q 3,
YSI 556 MPS 12904

Calculations:

Saturated well casing volume: V= Π(R^2)H*7.48 gal/ft^3

V = Volume (gal/ft)
Π = 3.14
R = well radius (ft) = (well diameter (in)/12 (in/ft))/2)
H = height of water column (ft)

V= Π(R^2)H*7.48 gal/ft^3
=Π * (1.0 (in)/12 (in/ft))/2)^2 * 4.39 * 7.48 gal/ft^3
= 0.2 gal.

Signature:

Notes:

Turb under 50 NTU, Riser = 1.6'

Name (print):

Amberlee Clark

QA/QC'd by: **Alex Howe** **QA/QC Date:** **10/5/2017**

WELL DEVELOPMENT LOG

Project Name:	Phase 1 Regional Site Inspections for Per-Fluorinated Compounds at Multiple Air National Guard Installations	**Project Number:**	291330006
Contract:	W9133L-14-D-0002	**Task Order:**	0006
Installation:	BRDLY	**Date Started/Date Completed:**	09/27/17/09/27/17
Well ID:	TW-103	**Initial Depth to Water (ft):**	16.21
Measuring Point:	Top of Riser	**Total Depth of Well (ft):**	19.8
Development Method:	PUMPED	**Depth to Water After Purging (ft):**	18.82
Total Volume Purged (gal):	3.93	**1 Casing Volume (gal):**	0.1
Technician(s):	Amberlee Clark	**3 Casing Volumes (gal):**	0.4

Date/Time	Intake Depth (feet)	Water Level (feet)	Rate (mg/L)	Temp. (°C)	pH (units)	Specific Electrical Conductance (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Cum. Volume (gal.)	Comments/Observations During Purging (color, sediment, etc.)
09/27/17 10:13			210								Pumping Started
09/27/17 11:05	17	18.82	210	18.41	7.06	0.275	3.63	-136.2	13.4		
09/27/17 11:10	17	18.82	210	18.43	7.05	0.271	3.97	-126.1	19.7		
09/27/17 11:17	17	18.82	210	18.46	7.06	0.270	4.02	-122.3	12.5		
09/27/17 11:20	17	18.82	210	18.42	7.07	0.270	4.06	-120.5	11.3		
09/27/17 11:25	17	18.82	210	18.45	7.08	0.271	4.07	-126.4	10.1		

Instruments (Manufacturer, Model, and Serial No.):

Equipment Calibrated (Y/N): Yes Calibrated Within Criteria (Y/N): Yes

Turbidity Meter, Water Quality Meter, Water Level Meter, Peristaltic Pump
Hach 2100Q 3,
YSI 556 MPS 12904

Calculations:

Saturated well casing volume: V= Π(R^2)H*7.48 gal/ft^3

V = Volume (gal/ft)
Π = 3.14
R = well radius (ft) = (well diameter (in)/12 (in/ft))/2)
H = height of water column (ft)

V= Π(R^2)H*7.48 gal/ft^3
=Π * (1.0 (in)/12 (in/ft))/2)^2 * 3.59 * 7.48 gal/ft^3
= 0.1 gal.

Signature:

Notes:

Turb < 50 NTU, Riser = 2'

Name (print)**:** Amberlee Clark

QA/QC'd by: **Alex Howe** **QA/QC Date:** **10/5/2017**

WELL DEVELOPMENT LOG

Project Name:	Phase 1 Regional Site Inspections for Per-Fluorinated Compounds at Multiple Air National Guard Installations	**Project Number:**	291330006
Contract:	W9133L-14-D-0002	**Task Order:**	0006
Installation:	BRDLY	**Date Started/Date Completed:**	09/27/17/09/27/17
Well ID:	TW-104	**Initial Depth to Water (ft):**	14.91
Measuring Point:	Top of Riser	**Total Depth of Well (ft):**	19.75
Development Method:	PUMPED	**Depth to Water After Purging (ft):**	15.0
Total Volume Purged (gal):	3.38	**1 Casing Volume (gal):**	0.2
Technician(s):	Amberlee Clark	**3 Casing Volumes (gal):**	0.6

Date/Time	Intake Depth (feet)	Water Level (feet)	Rate (mg/L)	Temp. (°C)	pH (units)	Specific Electrical Conductance (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Cum. Volume (gal.)	Comments/Observations During Purging (color, sediment, etc.)
09/27/17 07:45			200								Pumping Started
09/27/17 08:40	17	15.0	200	14.71	3.96	0.43	6.27	72.6	8.08		
09/27/17 08:45	17	15.0	200	14.71	4.02	0.45	6.18	70.5	5.13		
09/27/17 08:50	17	15.0	200	14.73	4.03	0.43	6.19	68.6	4.32		

Instruments (Manufacturer, Model, and Serial No.):

Equipment Calibrated (Y/N): Yes Calibrated Within Criteria (Y/N): Yes

Turbidity Meter, Water Quality Meter, Water Level Meter, Peristaltic Pump
Hach 2100Q 3,
YSI 556 MPS 12904

Calculations:

Saturated well casing volume: V= Π(R^2)H*7.48 gal/ft^3

V = Volume (gal/ft)
Π = 3.14
R = well radius (ft) = (well diameter (in)/12 (in/ft))/2)
H = height of water column (ft)

V= Π(R^2)H*7.48 gal/ft^3
=Π * (1.0 (in)/12 (in/ft))/2)^2 * 4.84 * 7.48 gal/ft^3
= 0.2 gal.

Signature:

Notes:

Turb < 50 NTU, Riser = 1.5'

Name (print)**:** Amberlee Clark

QA/QC'd by: **Alex Howe** **QA/QC Date:** **10/5/2017**

WELL DEVELOPMENT LOG

Project Name:	Phase 1 Regional Site Inspections for Per-Fluorinated Compounds at Multiple Air National Guard Installations	**Project Number:**	291330006
Contract:	W9133L-14-D-0002	**Task Order:**	0006
Installation:	BRDLY	**Date Started/Date Completed:**	10/03/17/10/03/17
Well ID:	TW-105	**Initial Depth to Water (ft):**	14.02
Measuring Point:	Top of Riser	**Total Depth of Well (ft):**	19.8
Development Method:	PUMPED	**Depth to Water After Purging (ft):**	14.03
Total Volume Purged (gal):	3.64	**1 Casing Volume (gal):**	0.2
Technician(s):	Amberlee Clark	**3 Casing Volumes (gal):**	0.7

Date/Time	Intake Depth (feet)	Water Level (feet)	Rate (mg/L)	Temp. (°C)	pH (units)	Specific Electrical Conductance (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Cum. Volume (gal.)	Comments/Observations During Purging (color, sediment, etc.)
10/03/17 08:40			200								Pumping Started
10/03/17 09:15	16	14.02	200	16.40	5.91	0.120	6.90	-34.6	12.5		
10/03/17 09:20	16	14.02	200	16.48	5.74	0.121	6.77	21.7	14.8		
10/03/17 09:25	16	14.02	200	16.48	5.71	0.060	7.06	-95.6	14.3		
10/03/17 09:30	16	14.03	200	16.45	5.65	0.037	7.02	-3.3	15.4		
10/03/17 09:35	16	14.03	200	16.54	5.62	0.012	6.73	-142.4	16.9		
10/03/17 09:40	16	14.03	200	16.59	5.60	0.019	7.03	-144.2	15.3		
10/03/17 09:45	16	14.03	200	16.60	5.59	0.016	6.98	-141.1	12.4		
10/03/17 09:50	16	14.03	200	16.62	5.57	0.018	7.02	-140.4	14.4		

Instruments (Manufacturer, Model, and Serial No.):

Equipment Calibrated (Y/N): Yes Calibrated Within Criteria (Y/N): -

Turbidity Meter, Water Quality Meter, Water Level Meter, Peristaltic Pump
Hach 2100Q 3,
YSI 556 MPS 12904

Calculations:

Saturated well casing volume: V= Π(R^2)H*7.48 gal/ft^3

V = Volume (gal/ft)
Π = 3.14
R = well radius (ft) = (well diameter (in)/12 (in/ft))/2)
H = height of water column (ft)

V= Π(R^2)H*7.48 gal/ft^3
=Π * (1.0 (in)/12 (in/ft))/2)^2 * 5.78 * 7.48 gal/ft^3
= 0.2 gal.

Signature:

Notes:

Turn < 50 NTU, Riser = 2.2'

Name (print)**:** Amberlee Clark

QA/QC'd by: **Alex Howe** **QA/QC Date:** **10/5/2017**

WELL DEVELOPMENT LOG

Project Name:	Phase 1 Regional Site Inspections for Per-Fluorinated Compounds at Multiple Air National Guard Installations	**Project Number:**	291330006
Contract:	W9133L-14-D-0002	**Task Order:**	0006
Installation:	BRDLY	**Date Started/Date Completed:**	10/03/17/10/03/17
Well ID:	TW-106	**Initial Depth to Water (ft):**	19.89
Measuring Point:	Top of Riser	**Total Depth of Well (ft):**	24.78
Development Method:	PUMPED	**Depth to Water After Purging (ft):**	19.99
Total Volume Purged (gal):	2.34	**1 Casing Volume (gal):**	0.2
Technician(s):	Amberlee Clark	**3 Casing Volumes (gal):**	0.6

Date/Time	Intake Depth (feet)	Water Level (feet)	Rate (mg/L)	Temp. (°C)	pH (units)	Specific Electrical Conductance (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Cum. Volume (gal.)	Comments/Observations During Purging (color, sediment, etc.)
10/03/17 12:05			200								Pumping Started
10/03/17 12:25	21	19.99	200	16.52	5.73	0.051	4.75	-204.5	26.7		
10/03/17 12:30	21	19.99	200	16.74	5.73	0.052	4.96	-204.3	14.3		
10/03/17 12:35	21	19.99	200	16.78	5.73	0.051	4.92	-212.5	9.45		
10/03/17 12:40	21	19.99	200	16.79	5.73	0.052	5.04	-203.4	8.45		
10/03/17 12:45	21	19.99	200	16.80	5.70	0.053	5.06	-202.5	7.54		
10/03/17 12:50	21	19.99	200	16.82	5.68	0.052	5.10	-200.5	6.65		

Instruments (Manufacturer, Model, and Serial No.):

Equipment Calibrated (Y/N): Yes Calibrated Within Criteria (Y/N): Yes

Turbidity Meter, Water Quality Meter, Water Level Meter, Peristaltic Pump
Hach 2100Q 3,
YSI 556 MPS 12904

Calculations:

Saturated well casing volume: V= Π(R^2)H*7.48 gal/ft^3

V = Volume (gal/ft)
Π = 3.14
R = well radius (ft) = (well diameter (in)/12 (in/ft))/2)
H = height of water column (ft)

V= Π(R^2)H*7.48 gal/ft^3
=Π * (1.0 (in)/12 (in/ft))/2)^2 * 4.89 * 7.48 gal/ft^3
= 0.2 gal.

Signature:

Notes:

Turb < 50 NTU, Riser is 2.4'

Name (print)**:** Amberlee Clark

QA/QC'd by: **Alex Howe** **QA/QC Date:** **10/5/2017**

APPENDIX C

GROUNDWATER SAMPLING LOGS

GROUNDWATER SAMPLING RECORD

Project Name:	Phase 1 Regional Site Inspections for Per-Fluorinated Compounds at Multiple Air National Guard Installations	**Project Number:**	291330006
Contract:	W9133L-14-D-0002	**Task Order:**	0006
Installation:	BRDLY	**Technician(s):**	Amberlee Clark
Well ID:	TW-101	**Date:**	09/27/17
Initial Depth to Water (ft):	14.94	**Well Diameter (in):**	1.0
Total Depth of Well (ft):	19.91	**1 Casing Volume (gal):**	0.2
Method of Purging:	Peristaltic	**3 Casing Volumes (gal):**	0.6
Measuring Point (toc, tor, etc.):	Top of Riser	**Pump Intake Depth (feet):**	17

Time	Water Level (feet)	Flow Rate (mL/min)	Cum. Volume (gal.)	Temp. (°C)	pH (SU)	Specific Electrical Conductance (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Comments/Observations During Purging (color, sediment, odor, etc.)
		Stabilization Criteria		±0.5°C	±0.1	±3%	±10%	±10%	±10% and <10 NTU	
13:50		120								Pumping/Purging Started
14:00	15.62	120		19.07	5.76	0.091	6.13	-71.4	20.2	
14:05	15.63	120		19.04	5.72	0.090	6.17	-71.2	15.3	
14:10	15.64	120		19.01	5.70	0.089	6.20	-61.0	12.9	
14:15	15.67	120		19.02	5.70	0.092	6.21	-57.4	7.59	
14:20	15.67	120		19.03	5.71	0.093	6.22	-52.4	6.55	
14:25	15.67	120		19.05	5.70	0.091	6.22	-49.5	5.43	
Final Values:				**19.05**	**5.70**	**0.091**	**6.22**	**-49.5**	**5.43**	

Stability Reached (Y/N): Yes If No, Provide Explanation NA

Sample ID:	TW-101	**Method of Sampling:**	Low-flow
QA/QC Samples (Yes/No):	No	**Sample Date:**	09/27/17
Duplicate ID:	NA	**Sample Collection Time:**	14:26
Sample Container Type(s):	2 x 250 HDPE	**Total Volume Purged (gal):**	1.1
Preservative(s):	Ice (4 °C)	**Sample Depth (ft):**	17
Analysis/Method(s):	PFAS (EPA 537-modified)	**Depth to Water After Sampling (ft):**	15.67

Instruments (Manufacturer, Model, and Serial No.):

Equipment Calibrated (Y/N): Yes Calibrated Within Criteria (Y/N): Yes

Turbidity Meter, Water Quality Meter, Water Level Meter, Peristaltic Pump
Hach 2100Q 3, YSI 556 MPS 12904

Calculations:

Saturated well casing volume: V= Π(R^2)H*7.48 gal/ft^3

V=Volume (gal/ft)
Π = 3.14
R = well radius (ft) = (well diameter (in)/12 (in/ft))/2)
H = height of water column (ft)

V= Π(R^2)H*7.48 gal/ft^3
= Π * (1.0 (in)/12 (in/ft))/2)^2 * 4.97 * 7.48 gal/ft^3
= 0.2 gal.

Signature:

Notes:

None

Name (print):

Amberlee Clark

QA/QC'd by: **Alex Howe** **QA/QC Date:** **10/5/2017**

GROUNDWATER SAMPLING RECORD

Project Name:	Phase 1 Regional Site Inspections for Per-Fluorinated Compounds at Multiple Air National Guard Installations	**Project Number:**	291330006
Contract:	W9133L-14-D-0002	**Task Order:**	0006
Installation:	BRDLY	**Technician(s):**	Amberlee Clark
Well ID:	TW-102	**Date:**	09/28/17
Initial Depth to Water (ft):	15.41	**Well Diameter (in):**	1.0
Total Depth of Well (ft):	19.8	**1 Casing Volume (gal):**	0.2
Method of Purging:	Peristaltic	**3 Casing Volumes (gal):**	0.5
Measuring Point (toc, tor, etc.):	Top of Riser	**Pump Intake Depth (feet):**	17

Time	Water Level (feet)	Flow Rate (mL/min)	Cum. Volume (gal.)	Temp. (°C)	pH (SU)	Specific Electrical Conductance (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Comments/Observations During Purging (color, sediment, odor, etc.)
		Stabilization Criteria		±0.5°C	±0.1	±3%	±10%	±10%	±10% and <10 NTU	
14:25		120								Pumping/Purging Started
14:30	15.41	120		20.13	5.52	0.113	7.41	-15.1	15.1	
14:35	15.41	120		20.16	5.47	0.118	7.26	-10.4	1.07	
14:40	15.41	120		20.17	5.49	0.120	7.16	-9.5	5.28	
14:45	15.41	120		20.19	5.50	0.117	7.18	-11.3	5.07	
14:50	15.41	120		20.21	5.52	0.116	7.19	-14.0	5.02	
Final Values:				**20.21**	**5.52**	**0.116**	**7.19**	**-14.0**	**5.02**	

Stability Reached (Y/N): Yes If No, Provide Explanation NA

Sample ID:	TW-102-092817	**Method of Sampling:**	Low-flow
QA/QC Samples (Yes/No):	No	**Sample Date:**	09/28/17
Duplicate ID:	NA	**Sample Collection Time:**	14:51
Sample Container Type(s):	2 x 250 HDPE	**Total Volume Purged (gal):**	0.6
Preservative(s):	Ice (4 °C)	**Sample Depth (ft):**	17
Analysis/Method(s):	PFAS (EPA 537-modified)	**Depth to Water After Sampling (ft):**	15.41

Instruments (Manufacturer, Model, and Serial No.):

Equipment Calibrated (Y/N): Yes Calibrated Within Criteria (Y/N): Yes

Turbidity Meter, Water Quality Meter, Water Level Meter, Peristaltic Pump
Hach 2100Q 3, YSI 556 MPS 12904

Calculations:

Saturated well casing volume: V= Π(R^2)H*7.48 gal/ft^3

V=Volume (gal/ft)
Π = 3.14
R = well radius (ft) = (well diameter (in)/12 (in/ft))/2)
H = height of water column (ft)

V= Π(R^2)H*7.48 gal/ft^3
= Π * (1.0 (in)/12 (in/ft))/2)^2 * 4.39 * 7.48 gal/ft^3
= 0.2 gal.

Signature:

Notes:

None

Name (print):

Amberlee Clark

QA/QC'd by: **Alex Howe** **QA/QC Date:** **10/5/2017**

GROUNDWATER SAMPLING RECORD

Project Name:	Phase 1 Regional Site Inspections for Per-Fluorinated Compounds at Multiple Air National Guard Installations	**Project Number:**	291330006
Contract:	W9133L-14-D-0002	**Task Order:**	0006
Installation:	BRDLY	**Technician(s):**	Amberlee Clark
Well ID:	TW-103	**Date:**	09/27/17
Initial Depth to Water (ft):	16.23	**Well Diameter (in):**	1.0
Total Depth of Well (ft):	19.8	**1 Casing Volume (gal):**	0.1
Method of Purging:	Peristaltic	**3 Casing Volumes (gal):**	0.4
Measuring Point (toc, tor, etc.):	Top of Riser	**Pump Intake Depth (feet):**	17

Time	Water Level (feet)	Flow Rate (mL/min)	Cum. Volume (gal.)	Temp. (°C)	pH (SU)	Specific Electrical Conductance (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Comments/Observations During Purging (color, sediment, odor, etc.)
		Stabilization Criteria		±0.5°C	±0.1	±3%	±10%	±10%	±10% and <10 NTU	
11:40		120								Pumping/Purging Started
11:50	19.75	120		19.29	7.14	0.279	4.16	-119.0	16.7	
11:55	19.76	120		19.30	7.15	0.279	4.09	-116.6	14.2	
12:00	19.77	120		19.31	7.14	0.271	4.39	-100.6	14.1	
12:05	19.77	120		19.41	7.14	0.270	4.86	-99.7	8.56	
12:10	19.78	120		19.43	7.14	0.269	4.95	-93.2	6.38	
12:15	19.78	120		19.44	7.14	0.269	4.88	-91.5	5.43	
Final Values:				**19.44**	**7.14**	**0.269**	**4.88**	**-91.5**	**5.43**	

Stability Reached (Y/N): Yes If No, Provide Explanation NA

Sample ID:	TW-103-092717	**Method of Sampling:**	Low-flow
QA/QC Samples (Yes/No):	Yes DUP	**Sample Date:**	09/27/17
Duplicate ID:	BRDLY-03-GW-DUP01-092717	**Sample Collection Time:**	12:16
Sample Container Type(s):	2 x 250 HDPE	**Total Volume Purged (gal):**	1.1
Preservative(s):	Ice (4 °C)	**Sample Depth (ft):**	17
Analysis/Method(s):	PFAS (EPA 537-modified)	**Depth to Water After Sampling (ft):**	19.78

Instruments (Manufacturer, Model, and Serial No.):

Equipment Calibrated (Y/N): Yes Calibrated Within Criteria (Y/N): Yes

Turbidity Meter, Water Quality Meter, Water Level Meter, Peristaltic Pump
Hach 2100Q 3, YSI 556 MPS 12904

Calculations:

Saturated well casing volume: V= Π(R^2)H*7.48 gal/ft^3

V=Volume (gal/ft)
Π = 3.14
R = well radius (ft) = (well diameter (in)/12 (in/ft))/2)
H = height of water column (ft)

V= Π(R^2)H*7.48 gal/ft^3
= Π * (1.0 (in)/12 (in/ft))/2)^2 * 3.57 * 7.48 gal/ft^3
= 0.1 gal.

Signature:

Notes:

None

Name (print):

Amberlee Clark

QA/QC'd by: **Alex Howe** **QA/QC Date:** **10/5/2017**

GROUNDWATER SAMPLING RECORD

Project Name:	Phase 1 Regional Site Inspections for Per-Fluorinated Compounds at Multiple Air National Guard Installations	**Project Number:**	291330006
Contract:	W9133L-14-D-0002	**Task Order:**	0006
Installation:	BRDLY	**Technician(s):**	Amberlee Clark
Well ID:	TW-104	**Date:**	09/27/17
Initial Depth to Water (ft):	14.91	**Well Diameter (in):**	1.0
Total Depth of Well (ft):	19.5	**1 Casing Volume (gal):**	0.2
Method of Purging:	Peristaltic	**3 Casing Volumes (gal):**	0.6
Measuring Point (toc, tor, etc.):	Top of Riser	**Pump Intake Depth (feet):**	17

Time	Water Level (feet)	Flow Rate (mL/min)	Cum. Volume (gal.)	Temp. (°C)	pH (SU)	Specific Electrical Conductance (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Comments/Observations During Purging (color, sediment, odor, etc.)
Stabilization Criteria				±0.5°C	±0.1	±3%	±10%	±10%	±10% and <10 NTU	
09:00		150								Pumping/Purging Started
09:05	14.95	150		15.48	4.33	0.163	7.00	47.8	2.91	
09:10	14.98	150		15.17	4.31	0.168	6.44	46.0	1.29	
09:15	15.00	150		15.64	4.31	0.145	6.19	51.1	1.23	
09:20	15.00	150		15.69	4.34	0.141	6.25	44.2	1.27	
09:25	15.00	150		15.55	4.49	0.147	6.34	3.2	4.62	
09:30	15.00	150		15.60	4.48	0.143	6.40	2.2	2.74	
09:35	15.00	150		15.59	4.50	0.146	6.38	5.7	3.42	
Final Values:				**15.59**	**4.50**	**0.146**	**6.38**	**5.7**	**3.42**	

Stability Reached (Y/N): Yes If No, Provide Explanation NA

Sample ID:	TW-104-092717	**Method of Sampling:**	Low-flow
QA/QC Samples (Yes/No):	No	**Sample Date:**	09/27/17
Duplicate ID:	NA	**Sample Collection Time:**	09:36
Sample Container Type(s):	2 x 250 HDPE	**Total Volume Purged (gal):**	1.37
Preservative(s):	Ice (4 °C)	**Sample Depth (ft):**	17
Analysis/Method(s):	PFAS (EPA 537-modified)	**Depth to Water After Sampling (ft):**	15.00

Instruments (Manufacturer, Model, and Serial No.):

Equipment Calibrated (Y/N): Yes Calibrated Within Criteria (Y/N): Yes

Turbidity Meter, Water Quality Meter, Water Level Meter, Peristaltic Pump
Hach 2100Q 3, YSI 556 MPS 12904

Calculations:

Saturated well casing volume: V= Π(R^2)H*7.48 gal/ft^3

V=Volume (gal/ft)
Π = 3.14
R = well radius (ft) = (well diameter (in)/12 (in/ft))/2)
H = height of water column (ft)

V= Π(R^2)H*7.48 gal/ft^3
= Π * (1.0 (in)/12 (in/ft))/2)^2 * 4.59 * 7.48 gal/ft^3
= 0.2 gal.

Signature:

Notes:

None

Name (print):

Amberlee Clark

QA/QC'd by: **Alex Howe** **QA/QC Date:** **10/5/2017**

GROUNDWATER SAMPLING RECORD

Project Name:	Phase 1 Regional Site Inspections for Per-Fluorinated Compounds at Multiple Air National Guard Installations	**Project Number:**	291330006
Contract:	W9133L-14-D-0002	**Task Order:**	0006
Installation:	BRDLY	**Technician(s):**	Amberlee Clark
Well ID:	TW-105	**Date:**	10/03/17
Initial Depth to Water (ft):	14.02	**Well Diameter (in):**	1.0
Total Depth of Well (ft):	19.8	**1 Casing Volume (gal):**	0.2
Method of Purging:	Peristaltic	**3 Casing Volumes (gal):**	0.7
Measuring Point (toc, tor, etc.):	Top of Riser	**Pump Intake Depth (feet):**	16

Time	Water Level (feet)	Flow Rate (mL/min)	Cum. Volume (gal.)	Temp. (°C)	pH (SU)	Specific Electrical Conductance (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Comments/Observations During Purging (color, sediment, odor, etc.)
		Stabilization Criteria		±0.5°C	±0.1	±3%	±10%	±10%	±10% and <10 NTU	
09:50		120								Pumping/Purging Started
10:05	14.02	120		17.36	5.65	0.020	7.31	-163.1	9.02	
10:10	14.02	120		17.02	5.67	0.055	7.22	-163.9	4.62	
10:15	14.02	120		17.12	5.66	0.053	7.20	-181.5	5.13	
10:20	14.02	120		17.10	5.65	0.052	7.22	-182.5	4.60	
10:25	14.02	120		17.12	5.64	0.053	7.22	-185.6	4.72	
Final Values:				**17.12**	**5.64**	**0.053**	**7.22**	**-185.6**	**4.72**	

Stability Reached (Y/N): Yes If No, Provide Explanation NA

Sample ID:	TW-105-100317	**Method of Sampling:**	Low-flow
QA/QC Samples (Yes/No):	Yes MS/MSD	**Sample Date:**	10/03/17
Duplicate ID:	NA	**Sample Collection Time:**	10:26
Sample Container Type(s):	2 x 250 HDPE	**Total Volume Purged (gal):**	1.1
Preservative(s):	Ice (4 °C)	**Sample Depth (ft):**	16
Analysis/Method(s):	PFAS (EPA 537-modified)	**Depth to Water After Sampling (ft):**	14.02

Instruments (Manufacturer, Model, and Serial No.):

Equipment Calibrated (Y/N): Yes Calibrated Within Criteria (Y/N): Yes

Turbidity Meter, Water Quality Meter, Water Level Meter, Peristaltic Pump
Hach 2100Q 3, YSI 556 MPS 12904

Calculations:

Saturated well casing volume: V= Π(R^2)H*7.48 gal/ft^3

V=Volume (gal/ft)
Π = 3.14
R = well radius (ft) = (well diameter (in)/12 (in/ft))/2)
H = height of water column (ft)

V= Π(R^2)H*7.48 gal/ft^3
= Π * (1.0 (in)/12 (in/ft))/2)^2 * 5.78 * 7.48 gal/ft^3
= 0.2 gal.

Signature:

Notes:

Riser height =2.2'

Name (print):

Amberlee Clark

QA/QC'd by: **Alex Howe** **QA/QC Date:** **10/5/2017**

GROUNDWATER SAMPLING RECORD

Project Name:	Phase 1 Regional Site Inspections for Per-Fluorinated Compounds at Multiple Air National Guard Installations	**Project Number:**	291330006
Contract:	W9133L-14-D-0002	**Task Order:**	0006
Installation:	BRDLY	**Technician(s):**	Amberlee Clark
Well ID:	TW-106	**Date:**	10/03/17
Initial Depth to Water (ft):	19.99	**Well Diameter (in):**	1.0
Total Depth of Well (ft):	24.89	**1 Casing Volume (gal):**	0.2
Method of Purging:	Peristaltic	**3 Casing Volumes (gal):**	0.6
Measuring Point (toc, tor, etc.):	Top of Riser	**Pump Intake Depth (feet):**	21

Time	Water Level (feet)	Flow Rate (mL/min)	Cum. Volume (gal.)	Temp. (°C)	pH (SU)	Specific Electrical Conductance (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Comments/Observations During Purging (color, sediment, odor, etc.)
		Stabilization Criteria		±0.5°C	±0.1	±3%	±10%	±10%	±10% and <10 NTU	
12:50		120								Pumping/Purging Started
13:10	19.99	120		16.05	5.25	0.050	5.92	-148.5	14.7	
13:15	19.99	120		16.06	5.27	0.051	5.62	-151.4	9.94	
13:20	19.99	120		16.08	5.29	0.052	5.64	-152.6	6.63	
13:25	19.99	120		16.09	5.30	0.052	5.65	-151.7	5.32	
Final Values:				**16.09**	**5.30**	**0.052**	**5.65**	**-151.7**	**5.32**	

Stability Reached (Y/N): Yes If No, Provide Explanation NA

Sample ID:	TW-106-100317	**Method of Sampling:**	Low-flow
QA/QC Samples (Yes/No):	No	**Sample Date:**	10/03/17
Duplicate ID:	NA	**Sample Collection Time:**	13:26
Sample Container Type(s):	2 x 250 HDPE	**Total Volume Purged (gal):**	1.1
Preservative(s):	Ice (4 °C)	**Sample Depth (ft):**	21
Analysis/Method(s):	PFAS (EPA 537-modified)	**Depth to Water After Sampling (ft):**	19.99

Instruments (Manufacturer, Model, and Serial No.):

Equipment Calibrated (Y/N): Yes Calibrated Within Criteria (Y/N): Yes

Turbidity Meter, Water Quality Meter, Water Level Meter, Peristaltic Pump
Hach 2100Q 3, YSI 556 MPS 12904

Calculations:

Saturated well casing volume: V= Π(R^2)H*7.48 gal/ft^3

V=Volume (gal/ft)
Π = 3.14
R = well radius (ft) = (well diameter (in)/12 (in/ft))/2)
H = height of water column (ft)

V= Π(R^2)H*7.48 gal/ft^3
= Π * (1.0 (in)/12 (in/ft))/2)^2 * 4.90 * 7.48 gal/ft^3
= 0.2 gal.

Signature:

Notes:

Riser 2.4'

Name (print):

Amberlee Clark

QA/QC'd by: **Alex Howe** **QA/QC Date:** **10/5/2017**

APPENDIX D

WATER QUALITY SAMPLING INSTRUMENT CALIBRATION LOGS

WATER QUALITY SAMPLING INSTRUMENT CALIBRATION FORM

Project Name:	Phase 1 Regional Site Inspections for Per-Fluorinated Compounds at Multiple Air National Guard Installations	**Project Number:**	291330006
Contract:	W9133L-14-D-0002 **Task Order:** 0006	**Date:**	09/27/17
Installation:	BRDLY	**Calibration Start Time:**	07:28
Sample Technician(s):	Amberlee Clark	**Calibration End Time:**	14:59

Readings Before Calibration

Date	Time (24hr)	Temperature (°C)	pH (SU)	Turbidity (NTUs)	Specific Electrical Conductance (mS/cm)	D.O. (%)	Salinity (%)	ORP/Eh (mV)	Barometric Pressure (mm Hg)	Comments
09/27/17	07:23	22.00	4.0	10.5	1.413	96.6	N/A	240	760.5	None
			7.0	20.6						
			N/A	104						
				806						

Readings After Calibration

Date	Time (24hr)	Temperature (°C)	pH (SU)	Turbidity (NTUs)	Specific Electrical Conductance (mS/cm)	D.O. (%)	Salinity (%)	ORP/Eh (mV)	Barometric Pressure (mm Hg)	Comments
09/27/17	14:36	26.64	N/A	10.1	1.424	91.7	N/A	236.3	761.1	None
			7.02	20.4						
			N/A	101						
				795						

Calibration Materials Record:

pH Calibration Standards

Standard	Cal. Standard Lot #	Expiration Date
pH (4)	7gf303	09/27/17
pH (7)	7ge282	05/27/19
pH (10)	N/A	N/A

Specific Electrical Conductance, Salinity, Dissolved Oxygen (DO) and Oxidation Reduction Potential (ORP) Calibration Standards

Standard	Cal. Standard Lot #	Expiration Date
Spec. Conductance	7gf513	06/27/18
Salinity	N/A	N/A
D.O.	N/A	N/A
ORP	1600	05/27/22

Turbidity Standards

Standard	Cal. Standard Lot #	Expiration Date
10	A6224	11/27/17
20	A6239	11/27/17
100	A6235	11/27/17
800	A6242	11/27/17

Instruments (Manufacturer, Model, and Serial No.):

	Manufacturer/Model	Serial No
Water Quality Meter:	YSI 556 MPS	Pine #12904
Turbidity Meter:	Hach 2100Q	Pine # 3

Calibrated Within Acceptance Criteria (Y/N): Yes

If No, Provide Explanation: NA

Notes:

None

Signature:

Name (print): Amberlee Clark

QA/QC'd by: Alex Howe **QA/QC Date:** 10/5/2017

WATER QUALITY SAMPLING INSTRUMENT CALIBRATION FORM

Project Name:	Phase 1 Regional Site Inspections for Per-Fluorinated Compounds at Multiple Air National Guard Installations	**Project Number:**	291330006
Contract:	W9133L-14-D-0002 **Task Order:** 0006	**Date:**	09/28/17
Installation:	BRDLY	**Calibration Start Time:**	07:29
Sample Technician(s):	Amberlee Clark	**Calibration End Time:**	15:20

Readings Before Calibration

Date	Time (24hr)	Temperature (°C)	pH (SU)	Turbidity (NTUs)	Specific Electrical Conductance (mS/cm)	D.O. (%)	Salinity (%)	ORP/Eh (mV)	Barometric Pressure (mm Hg)	Comments
09/28/17	07:29	25.62	4.0	9.67	1.413	100.6	N/A	240	760	None
			7.0	20.3						
			N/A	103						
				806						

Readings After Calibration

Date	Time (24hr)	Temperature (°C)	pH (SU)	Turbidity (NTUs)	Specific Electrical Conductance (mS/cm)	D.O. (%)	Salinity (%)	ORP/Eh (mV)	Barometric Pressure (mm Hg)	Comments
09/28/17	15:08	23.33	N/A	10.2	1.391	97.5	N/A	239.2	759	None
			7.12	20.1						
			N/A	102						
				8.5						

Calibration Materials Record:

pH Calibration Standards			Specific Electrical Conductance, Salinity, Dissolved Oxygen (DO) and Oxidation Reduction Potential (ORP) Calibration Standards			Turbidity Standards		
Standard	Cal. Standard Lot #	Expiration Date	Standard	Cal. Standard Lot #	Expiration Date	Standard	Cal. Standard Lot #	Expiration Date
pH (4)	7gf303	09/27/17	Spec. Conductance	7gf513	06/27/18	10	A6224	11/27/17
pH (7)	7ge282	05/27/19	Salinity	N/A	N/A	20	A6239	11/27/17
pH (10)	N/A	N/A	D.O.	N/A	N/A	100	A6235	11/27/17
			ORP	1600	05/27/22	800	A6242	11/27/17

Instruments (Manufacturer, Model, and Serial No.):

	Manufacturer/Model	Serial No
Water Quality Meter:	YSI 556 MPS	Pine #12904
Turbidity Meter:	Hach 2100Q	Pine # 3

Calibrated Within Acceptance Criteria (Y/N): Yes

If No, Provide Explanation: NA

Notes:

None

Signature:

Name (print): Amberlee Clark

QA/QC'd by: Alex Howe **QA/QC Date:** 10/5/2017

WATER QUALITY SAMPLING INSTRUMENT CALIBRATION FORM

amec foster wheeler

Project Name:	Phase 1 Regional Site Inspections for Per-Fluorinated Compounds at Multiple Air National Guard Installations	**Project Number:**	291330006
Contract:	W9133L-14-D-0002 **Task Order:** 0006	**Date:**	10/03/17
Installation:	BRDLY	**Calibration Start Time:**	07:42
Sample Technician(s):	Amberlee Clark	**Calibration End Time:**	07:59

Readings Before Calibration

Date	Time (24hr)	Temperature (°C)	pH (SU)	Turbidity (NTUs)	Specific Electrical Conductance (mS/cm)	D.O. (%)	Salinity (%)	ORP/Eh (mV)	Barometric Pressure (mm Hg)	Comments
10/03/17	07:42	13.82	4.0	10.2	1.413	10.25	N/A	240	759	None
			7.0	20.3						
				102						
			N/A	803						

Readings After Calibration

Date	Time (24hr)	Temperature (°C)	pH (SU)	Turbidity (NTUs)	Specific Electrical Conductance (mS/cm)	D.O. (%)	Salinity (%)	ORP/Eh (mV)	Barometric Pressure (mm Hg)	Comments
10/03/17	13:35	20.86	N/a	10.1	1.411	8.95	N/A	230.4	758.2	None
			6.99	20.1						
				103						
			N/a	794						

Calibration Materials Record:

pH Calibration Standards

Standard	Cal. Standard Lot #	Expiration Date
pH (4)	7gf303	09/27/17
pH (7)	7ge282	05/27/19
pH (10)	N/A	N/A

Specific Electrical Conductance, Salinity, Dissolved Oxygen (DO) and Oxidation Reduction Potential (ORP) Calibration Standards

Standard	Cal. Standard Lot #	Expiration Date
Spec. Conductance	7gf513	06/27/18
Salinity	N/A	N/A
D.O.	N/A	N/A
ORP	1600	05/27/22

Turbidity Standards

Standard	Cal. Standard Lot #	Expiration Date
10	A6224	11/27/17
20	A6239	11/27/17
100	A6235	11/27/17
800	A6242	11/27/17

Instruments (Manufacturer, Model, and Serial No.):

	Manufacturer/Model	Serial No
Water Quality Meter:	YSI 556 MPS	Pine #12904
Turbidity Meter:	Hach 2100Q	Pine # 3

Calibrated Within Acceptance Criteria (Y/N): Yes

If No, Provide Explanation: NA

Notes:

None

Signature:

Name (print): Amberlee Clark

QA/QC'd by: Alex Howe **QA/QC Date:** 10/5/2017

APPENDIX E

DATA VALIDATION REPORTS

DATA VALIDATION REPORT

FY16 Phase 1 Regional Site Inspections for Perfluorinated Compounds

Multiple Air National Guard Installations

Samples Collected Between 26 September and 3 October 2017

Bradley International Airport, East Granby, Connecticut

Prepared for:

National Guard Bureau

Prepared by:

Amec Foster Wheeler Environment & Infrastructure, Inc.
7376 SW Durham Road
Portland, Oregon 97224
(503) 639-3400

December 2017

Project No. 291330006.013.****

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ACRONYMS AND ABBREVIATIONS

%	percent
Amec Foster Wheeler	Amec Foster Wheeler Environment & Infrastructure, Inc.
CCV	Continuing Calibration Verification
COC	Chain of Custody
DL	Detection Limit
DoD	Department of Defense
EPA	United States Environmental Protection Agency
ICAL	Initial Calibration
ICV	Initial Calibration Verification
ID	Identification
LC/MS/MS	Liquid Chromatography/Tandem Mass Spectrometry
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOQ	Limit of Quantification
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PFAS	Per- and Polyfluoroalkyl Substances
PFBS	Perfluorobutanesulfonic Acid
PFHpA	Perfluoroheptanoic Acid
PFHxS	Perfluorohexanesulfonic Acid
PFNA	Perfluorononanoic Acid
PFOA	Perfluorooctanoic Acid
PFOS	Perfluorooctanesulfonic Acid
QAPP	Quality Assurance Project Plan
QC	Quality Control
RPD	Relative Percent Difference
Vista	Vista Analytical Laboratory

DATA VALIDATION REPORT
FY16 PHASE 1 REGIONAL SITE INSPECTIONS FOR PERFLUORINATED COMPOUNDS

Multiple Air National Guard Installations
Samples Collected Between 26 September and 3 October 2017
Bradley International Airport, East Granby, Connecticut

1.0 INTRODUCTION

Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler) collected 33 soil samples (including 3 field duplicates) and 9 water samples (including 1 field duplicate, 1 source blank, and 1 equipment blank) between 26 September and 3 October 2017, from Bradley International Airport, located in East Granby, Connecticut. Amec Foster Wheeler submitted the samples to Vista Analytical Laboratory (Vista), located in El Dorado Hills, California, where they were received between 3 and 5 October 2017. Vista assigned the samples to sample delivery groups 1701376, 1701377, 1701378, and 1701411. Vista analyzed the samples for per- and polyfluoroalkyl substances (PFAS) by modified United States Environmental Protection Agency (EPA) Method 537. A list of these samples by field sample identification (ID), sample collection date, sample matrix, and laboratory sample ID is presented in Table 1.

2.0 DATA VALIDATION METHODOLOGY

Amec Foster Wheeler performed EPA Stage 4 validation on 10 percent (%) of the field samples and EPA Stage 2B validation on the remaining field samples associated with this sampling event, as indicated on Table 1. The Stage 4 validation includes review of the quality control (QC) results in the laboratory's analytical report and reported on QC summary forms as well as recalculation checks and review of the instrument raw data outputs. The Stage 2B validation includes review of the QC results in the laboratory's analytical report and reported on QC summary forms with no review of the associated raw data. Data from equipment and field blanks did not undergo validation because results from these samples are only used to assess data usability for field samples. This data validation has been performed in general accordance with:

- Amec Foster Wheeler, 2017. Final Quality Assurance Project Plan (QAPP), Revision 01. FY16 Phase 1 Regional Site Inspections for Perfluorinated Compounds, Multiple Air National Guard Installations. Contract #: W9133L-14-D-002, Delivery Order 0006, July 2017.

- Department of Defense (DOD), 2017. DoD Quality Systems Manual for Environmental Laboratories, Version 5.1. January 2017.
- EPA, 2009. Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS), Version 1.1, September 2009. EPA Document #: EPA/600/R-08/092.

The data were reviewed following Amec Foster Wheeler's general data validation guidelines and using QAPP-specified QC requirements.

The laboratory's certified analytical report and supporting documentation were reviewed to assess the following:

- Data package and electronic data deliverable completeness;
- Laboratory case narrative review;
- Chain of custody (COC) compliance;
- Holding time compliance;
- QC sample frequency;
- Initial calibration (ICAL), initial calibration verification (ICV), and continuing calibration verification (CCV) compliance with method-specified criteria;
- Presence or absence of laboratory contamination as demonstrated by laboratory blanks;
- Accuracy and bias as demonstrated by recovery of surrogate spikes, laboratory control sample (LCS), and matrix spike (MS) samples;
- Internal standard recoveries;
- Analytical precision as relative percent difference (RPD) of analyte concentration between laboratory duplicates or MS/MS duplicate (MSD);
- Sampling and analytical precision as RPD of analyte concentration between field duplicates;
- Assessment of field contamination as demonstrated by field and trip blanks;
- Insofar as possible, the degree of conformance to method requirements and good laboratory practices.

In general, it is important to recognize that no analytical data are guaranteed to be correct, even if all QC audits are passed. Strict QC serves to increase confidence in data, but any reported value may potentially contain error.

3.0 EXPLANATION OF DATA QUALITY INDICATORS

Summary explanations of the specific data quality indicators reviewed during this data quality review are presented below.

3.1 LABORATORY CONTROL SAMPLE RECOVERIES

LCSs and LCS duplicates (LCSDs) are aliquots of analyte-free matrices that are spiked with the analytes of interest for an analytical method, or a representative subset of those analytes. The spiked matrix is then processed through the same analytical procedures as the samples they accompany. LCS recovery is an indication of a laboratory's ability to successfully perform an analytical method in an interference-free matrix.

3.2 MATRIX SPIKE RECOVERIES

MSs and MSDs are prepared by adding known amounts of the analytes of interest for an analytical method, or a representative subset of those analytes, to an aliquot of sample. The spiked sample is then processed through the same extraction, concentration, cleanup, and analytical procedures as the unspiked samples in an analytical batch.

MS recovery and precision are an indication of a laboratory's ability to successfully recover an analyte in the matrix of a specific sample or closely related sample matrices. It is important not to apply MS results for any specific sample to other samples without understanding how the sample matrices are related.

3.3 BLANK CONCENTRATIONS

Blank samples are aliquots of analyte free matrix that are used as negative controls to verify that the sample collection, storage, preparation, and analysis system does not produce false positive results.

Equipment blanks are prepared by passing analyte-free water through or over sample collection equipment and collecting the water in sample containers. Equipment blanks are analyzed for the analytical suite required for the project. Equipment blanks are used to monitor for possible sample contamination during the sample collection process and serve as a check on the effectiveness of field decontamination procedures.

Source blanks are aliquots of the water that will be used for the final rinse in equipment decontamination. Source blanks are analyzed for the analytical suite required for the project.

Source blanks are used to monitor for possible sample contamination originating from the water used for equipment decontamination.

Laboratory, equipment, and source blanks are processed by the laboratory using exactly the same procedures as the field samples. Target analytes should not be found in laboratory blanks.

When target analytes are detected in blanks, analyte concentrations in the associated samples less than 10 times the concentration detected in the blank will be B qualified.

3.4 LABORATORY AND FIELD DUPLICATES

Laboratory and field duplicate analysis verifies acceptable method precision by the laboratory at the time of preparation and analysis and/or sampling precision at the time of collection.

4.0 DEFINITIONS OF QUALIFIERS THAT MAY BE USED DURING DATA VALIDATION

B The analyte was detected in the sample and an associated blank and the concentration detected in the sample was less than 10 times the concentration detected in the blank.

U The analyte was analyzed for, but was not detected.

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

Q The analyte was B qualified because of a detection in an associated blank and additionally J qualified because of an additional QC issue.

R The sample result is rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

5.0 QUALIFICATION REASON CODES

Amec Foster Wheeler applied the following reason code to the data during validation:

MSD High RPD between MS and MSD results. Potential analytical imprecision.

MSH High MS recovery. Analytical result may be biased high.

TR Detected concentration is less than the limit of quantification (LOQ).

6.0 CHAIN OF CUSTODY AND SAMPLE RECEIPT CONDITION DOCUMENTATION

The samples were received at the laboratories under proper COC, intact, properly preserved, and at temperatures less than the QAPP-specified maximum of 10 degrees Celsius, with the following exceptions:

- According to the laboratory's case narrative, the sample IDs on the COC did not match the container labels for sample TW-104-092617. The laboratory contacted Amec Foster Wheeler and confirmed that the ID should have been TW-104-092617. Amec foster Wheeler submitted a revised COC to Vista on 18 October 2017 with the correct sample information.
- According to the sample receipt information, the labels for samples BRDLY-03-SB03-0-2 and BRDLY-05-SB01-9-11 were missing the sample depths. The laboratory reconciled the labels with the COC based on sample date and time and confirmed with Amec Foster Wheeler that the IDs listed on the COC were correct.

7.0 SPECIFIC DATA VALIDATION FINDINGS

Results from these samples may be considered usable with the limitations and exceptions described Sections 7.1 through 7.11.

7.1 PER- AND POLYFLUOROALKYL SUBSTANCES BY MODIFIED EPA METHOD 537

PFAS results generated by Vista are usable with the limitations described in Sections 7.1.1 through 7.1.11.

7.1.1 Holding Times

The aqueous samples were extracted for PFAS within the QAPP-specified maximum holding time of 14 days from sample collection and the extracts were analyzed within the QAPP-specified maximum hold time of 28 days from extraction. The soil samples were extracted for PFAS within the QAPP-specified maximum holding time of 60 days from sample collection and the extracts were analyzed within the QAPP-specified maximum holding time of 30 days from extraction.

7.1.2 Initial Calibrations

The ICALs associated with the analysis of these samples met the QAPP-specified criteria of regression factors greater than or equal to 0.96, relative standard deviations for internal standards less than 35%, the lowest calibration standard calculated to 70 to 130% of its true concentration, and the remaining calibration points calculated to 75 to 125% of their true concentrations.

7.1.3 Initial Calibration Verification

ICV recoveries were within the method-specified 70 to 130% limits.

7.1.4 Continuing Calibration Verification

CCV recoveries were within the method-specified 70 to 130% limits.

7.1.5 Laboratory Blanks

PFAS were not detected in the laboratory blanks associated with these.

7.1.6 Equipment and Source Blanks

PFAS were not detected in the equipment and source blanks associated with these samples.

7.1.7 Laboratory Control Sample Accuracy

LCS recoveries were within the QAPP-specified limits of: 60 to 130% for perfluorobutanesulfonic acid (PFBS); 70 to 130% for perfluoroheptanoic acid (PFHpA), perfluorohexanesulfonic acid (PFHxS), perfluorooctanoic acid (PFOA), and perfluorooctanesulfonic acid (PFOS); and 50 to 130% for perfluorononanoic acid (PFNA).

7.1.8 Matrix Spikes/ Matrix Spike Duplicates

Vista performed MS and MSD analyses on samples BRDLY-03-SB01-13-15, BRDLY-05-SB01-0-2, and TW-105-100317. Recoveries were within the QAPP-specified limits of: 60 to 130% for PFBS; 70 to 130% for PFHpA, PFHxS, PFOA, and PFOS; and 50 to 130% for PFNA, and precision values were less than the QAPP-specified maximum of 30%, with the following exceptions:

- Due to a software flaw, Vista is calculating RPDs based on MS and MSD recoveries instead of concentrations detected in the MS and MSD. Amec Foster Wheeler recalculated RPDs between MS and MSD results to confirm that precision values were within limits.
- PFOS recovery was high at 142% in the MS performed on sample TW-105-100137. Additionally, the RPD between MS and MSD results for PFOS was high at 31.8%. Amec foster Wheeler J qualified the detected PFOS result from sample TW-105-100317 because

of potentially high analytical bias and analytical imprecision. (Qualifier and reason codes: J-MSH, MSD)

7.1.9 Surrogate Recoveries

Vista uses labeled internal standards, which are added before extraction, to quantify their analytical results and does not add surrogates to the samples.

7.1.10 Internal Standard Recoveries

Internal standard areas were within the QAPP-specified limits of 50 to 150% of the average area counts measured during the initial calibration.

7.1.11 Data Reporting and Analytical Procedures

Vista J qualified analytes with concentrations between the detection limit (DL) and the LOQ. Amec Foster Wheeler agrees that these results are quantitatively uncertain and has maintained Vista's J qualifiers. (Qualifier and reason code: J-TR)

8.0 FIELD DUPLICATE RESULTS

Amec Foster Wheeler collected field duplicates with samples:

- BRDLY-01-SB03-11-13 (BRDLY-01-SO-DUP01-092717),
- BRDLY-03-SB01-0-2 (BRDLY-03-SO-DUP02-092617),
- BRDLY-04-SB02-5-7 (BRDLY-04-SO-DUP03-092617), and
- TW-103-092717 (BRDLY-03-GW-DUP01-092717).

Detected results and RPDs for the field duplicates are summarized in Table 2. Precision values were within the QAPP-specified limits of less than 30% RPD or the difference between analytical results less than the LOQ.

9.0 SUMMARY AND CONCLUSIONS

Amec Foster Wheeler evaluated a total of 240 data records from field samples during the validation. Amec Foster Wheeler J qualified 42 records (18%) as estimated values because of high MS recovery, imprecision between MS and MSD results, and/or analyte concentrations outside the instrument's calibration range. Qualified data are summarized in Table 3.

REFERENCES

Amec Foster Wheeler, 2017. Final QAPP, Revision 01. FY16 Phase 1 Regional Site Inspections for Perfluorinated Compounds, Multiple Air National Guard Installations. Contract #: W9133L-14-D-002, Delivery Order 0006, July 2017.

DOD, 2017. DoD Quality Systems Manual for Environmental Laboratories, Version 5.1. January 2017.

EPA, 2009. Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and LC/MS/MS, Version 1.1, September 2009. EPA Document #: EPA/600/R-08/092.

TABLES

Table 1
Field Samples Submitted to Vista Analytical Laboratory
Bradley International Airport, East Granby Connecticut
FY16 Phase 1 Regional Site Inspection for Per-Fluorinated Compounds

Sample Identification	Collection Date	Sample Matrix	Lab Sample ID	Notes
BRADL-SB-002-092617	26-Sep-17	Water	1701376-01	Source blank
BRDLY-03-SB01-0-2	26-Sep-17	Soil	1701376-02	Stage 4
BRDLY-03-SB01-13-15	26-Sep-17	Soil	1701376-03	Stage 4, MS/MSD
BRDLY-03-SO-DUP02-092617	26-Sep-17	Soil	1701376-04	Field duplicate of BRDLY-03-SB01-0-2
BRDLY-04-SB01-0-2	26-Sep-17	Soil	1701376-05	Stage 4
BRDLY-04-SB01-3-5	26-Sep-17	Soil	1701376-06	
BRDLY-04-SB02-0-2	26-Sep-17	Soil	1701376-07	
BRDLY-04-SB02-5-7	26-Sep-17	Soil	1701376-08	
BRDLY-04-SB03-0-2	26-Sep-17	Soil	1701376-09	
BRDLY-04-SB03-6-8	26-Sep-17	Soil	1701376-10	
BRDLY-04-SO-DUP03-092617	26-Sep-17	Soil	1701376-11	Field duplicate of BRDLY-04-SB02-5-7
TW-104-092717	26-Sep-17	Groundwater	1701376-12	Stage 4
BRDLY-01-SB01-0-2	27-Sep-17	Soil	1701377-01	
BRDLY-01-SB01-12-14	27-Sep-17	Soil	1701377-02	
BRDLY-01-SB02-0-2	27-Sep-17	Soil	1701377-03	
BRDLY-01-SB02-12-14	27-Sep-17	Soil	1701377-04	
BRDLY-01-SB03-0-2	27-Sep-17	Soil	1701377-05	
BRDLY-01-SB03-11-13	27-Sep-17	Soil	1701377-06	
BRDLY-01-SO-DUP01-092717	27-Sep-17	Soil	1701377-07	Field duplicate of BRDLY-01-SB03-11-13
BRDLY-03-GW-DUP01-092717	27-Sep-17	Groundwater	1701377-08	Field duplicate of TW-103-092717
BRDLY-03-SB02-0-2	26-Sep-17	Soil	1701377-09	
BRDLY-03-SB02-13-15	26-Sep-17	Soil	1701377-10	
TW-101-092717	27-Sep-17	Water	1701377-11	
TW-103-092717	27-Sep-17	Water	1701377-12	
BRDLY-02-SB01-0-2	28-Sep-17	Soil	1701378-01	
BRDLY-02-SB01-13-15	28-Sep-17	Soil	1701378-02	
BRDLY-02-SB02-0-2	28-Sep-17	Soil	1701378-03	
BRDLY-02-SB02-13-15	28-Sep-17	Soil	1701378-04	
BRDLY-02-SB03-0-2	28-Sep-17	Soil	1701378-05	
BRDLY-02-SB03-13-15	28-Sep-17	Soil	1701378-06	
BRDLY-05-SB01-0-2	29-Sep-17	Soil	1701378-07	MS/MSD
BRDLY-05-SB02-0-2	29-Sep-17	Soil	1701378-08	
BRDLY-05-SB02-9-11	29-Sep-17	Soil	1701378-09	
BRDLY-05-SB03-0-2	29-Sep-17	Soil	1701378-10	
BRDLY-05-SB03-9-11	29-Sep-17	Soil	1701378-11	
TW-102-092817	28-Sep-17	Groundwater	1701378-12	
BRDLY-03-SB03-0-2	29-Sep-17	Soil	1701378-13	
BRDLY-05-SB01-9-11	29-Sep-17	Soil	1701378-14	
BRDLY-03-SB03-11-13	3-Oct-17	Soil	1701411-01	
BRDLY-EB-001	3-Oct-17	Water	1701411-02	Equipment blank
TW-105-100317	3-Oct-17	Groundwater	1701411-03	MS/MSD
TW106-100317	3-Oct-17	Groundwater	1701411-04	

ID = identification
MS/MSD = matrix spike/matrix spike duplicate analyses performed on this sample

Table 2
Field Duplicate Detections
Bradley International Airport, East Granby Connecticut
FY16 Phase 1 Regional Site Inspection for Per-Fluorinated Compounds

Analyte	LOQ	Primary Sample	Field Duplicate	Units	RPD	Notes
BRDLY-01-SB03-11-13 (BRDLY-01-SO-DUP01-092717)						
PFOA	1.95	0.368 J	0.305 J	µg/kg	19%	
BRDLY-03-SB01-0-2 (BRDLY-03-SO-DUP02-092617)						
PFHxS	1.94	0.321 J	0.992 U	µg/kg	NC	± LOQ
PFOS	1.94	7.86	8.95	µg/kg	13%	
BRDLY-04-SB02-5-7 (BRDLY-04-SO-DUP03-092617)						
PFHxS	1.97	0.993 U	0.348 J	µg/kg	NC	± LOQ
PFOA	1.97	0.306 J	0.314 J	µg/kg	2.6%	
PFOS	1.97	0.735 J	0.626 J	µg/kg	16%	
TW-103-092717 (BRDLY-03-GW-DUP01-092717)						
PFBS	0.00858	0.0026 J	0.0054 U	µg/L	NC	± LOQ
PFHpA	0.00858	0.0065 J	0.0063 J	µg/L	2.5%	
PFHxS	0.00858	0.0203	0.0169	µg/L	18%	
PFOA	0.00858	0.0116	0.0134	µg/L	14%	
PFOS	0.00858	0.137	0.158	µg/L	14%	
PFNA	0.00858	0.00530 U	0.0028 J	µg/L	NC	± LOQ

Notes:
µg/kg = micrograms per kilogram
µg/L = micrograms per liter
LOQ = limit of quantification
NC = not calculable
PFBS = perfluorobutanesulfonic acid
PFHpA = perfluoroheptanoic acid
PFHxS = perfluorohexanesulfonic acid
PFNA = perfluorononanioic acid
PFOA = perfluorooctanoic acid
PFOS = perfluorooctanesulfonic acid
RPD = relative percent difference

Qualifier Definitions:
J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
U = The analyte was analyzed for, but was not detected

Reason Code:
± LOQ = The difference between analyte concentrations is less than the LOQ, indicating acceptable analytical precision.

Table 3
Qualifiers Added During Validation
Bradley International Airport, East Granby Connecticut
FY16 Phase 1 Regional Site Inspection for Per-Fluorinated Compounds

Sample Identification	Analyte	Results	Validation Qualifiers and Reason Codes
BRDLY-01-SB01-0-2	PFOA	0.459 µg/kg	J TR
BRDLY-01-SB01-0-2	PFOS	0.875 µg/kg	J TR
BRDLY-01-SB01-12-14	PFOA	0.362 µg/kg	J TR
BRDLY-01-SB01-12-14	PFOS	0.945 µg/kg	J TR
BRDLY-01-SB02-0-2	PFOA	0.326 µg/kg	J TR
BRDLY-01-SB02-12-14	PFHxS	1.82 µg/kg	J TR
BRDLY-01-SB02-12-14	PFOA	0.39 µg/kg	J TR
BRDLY-01-SB02-12-14	PFOS	0.324 µg/kg	J TR
BRDLY-01-SB03-0-2	PFOA	0.361 µg/kg	J TR
BRDLY-01-SB03-0-2	PFOS	1.18 µg/kg	J TR
BRDLY-01-SB03-11-13	PFOA	0.37 µg/kg	J TR
BRDLY-01-SO-DUP01-092717	PFOA	0.305 µg/kg	J TR
BRDLY-02-SB01-13-15	PFHxS	0.331 µg/kg	J TR
BRDLY-02-SB03-13-15	PFHxS	0.34 µg/kg	J TR
BRDLY-03-GW-DUP01-092717	PFHpA	0.00629 µg/L	J TR
BRDLY-03-GW-DUP01-092717	PFNA	0.00279 µg/L	J TR
BRDLY-03-SB01-0-2	PFHxS	0.321 µg/kg	J TR
BRDLY-03-SB01-13-15	PFOS	0.355 µg/kg	J TR
BRDLY-03-SB02-0-2	PFHpA	0.613 µg/kg	J TR
BRDLY-03-SB02-0-2	PFOA	1.35 µg/kg	J TR
BRDLY-03-SB02-13-15	PFHpA	0.523 µg/kg	J TR
BRDLY-03-SB02-13-15	PFNA	0.317 µg/kg	J TR
BRDLY-03-SB02-13-15	PFOA	1.16 µg/kg	J TR
BRDLY-03-SB03-0-2	PFHxS	0.318 µg/kg	J TR
BRDLY-04-SB01-3-5	PFOA	0.274 µg/kg	J TR
BRDLY-04-SB02-5-7	PFOA	0.306 µg/kg	J TR
BRDLY-04-SB02-5-7	PFOS	0.735 µg/kg	J TR
BRDLY-04-SB03-6-8	PFOS	0.461 µg/kg	J TR
BRDLY-04-SO-DUP03-092617	PFHxS	0.348 µg/kg	J TR
BRDLY-04-SO-DUP03-092617	PFOA	0.314 µg/kg	J TR
BRDLY-04-SO-DUP03-092617	PFOS	0.626 µg/kg	J TR
TW-101-092717	PFHpA	0.00346 µg/L	J TR
TW-101-092717	PFOS	0.00457 µg/L	J TR
TW-102-092817	PFOS	0.00791 µg/L	J TR
TW-103-092717	PFBS	0.00263 µg/L	J TR
TW-103-092717	PFHpA	0.00645 µg/L	J TR
TW-104-092717	PFBS	0.00625 µg/L	J TR
TW-104-092717	PFNA	0.00608 µg/L	J TR
TW-105-100317	PFBS	0.00338 µg/L	J TR
TW-105-100317	PFHxS	0.0038 µg/L	J TR
TW-105-100317	PFOA	0.00391 µg/L	J TR
TW-105-100317	PFOS	0.0414 µg/L	J MSH, MSD

Notes:

µg/kg = micrograms per kilogram
µg/L = micrograms per liter
PFBS = perfluorobutanesulfonic acid
PFHpA = perfluoroheptanoic acid
PFHxS = perfluorohexanesulfonic acid
PFNA = perfluorononanoic acid
PFOA = perfluorooctanoic acid
PFOS = perfluorooctanesulfonic acid

Qualifier Definitions:

J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

Reason Code Definitions:

MSD = High relative percent difference between matrix spike and matrix spike duplicate results. Potential analytical imprecision.
MSH = High matrix spike recovery. Result may be biased high.
TR = Detected concentration is less than the limit of quantification.

APPENDIX F

LABORATORY ANALYTICAL REPORTS

September 05, 2017

Vista Work Order No. 1701056

Ms. Denise King
AMEC Foster Wheeler
271 Mill Road
Chelmsford, MA 01824

Dear Ms. King,

Enclosed are the results for the sample set received at Vista Analytical Laboratory on August 15, 2017. This sample set was analyzed on a standard turn-around time, under your Project Name 'Phase I Regional SI-Bradley'.

Vista Analytical Laboratory is committed to serving you effectively. If you require additional information, please contact me at 916-673-1520 or by email at mmaier@vista-analytical.com.

Thank you for choosing Vista as part of your analytical support team.

Sincerely,

Martha Maier
Laboratory Director

Vista Analytical Laboratory certifies that the report herein meets all the requirements set forth by NELAP for those applicable test methods. Results relate only to the samples as received by the laboratory. This report should not be reproduced except in full without the written approval of Vista.

Vista Work Order No. 1701056
Case Narrative

Sample Condition on Receipt:

One aqueous sample was received in good condition and within the method temperature requirements. The sample was received and stored securely in accordance with Vista standard operating procedures and EPA methodology.

Analytical Notes:

Modified EPA Method 537

The sample was extracted and analyzed for a selected list of six PFAS using Modified EPA Method 537.

Holding Times

The sample was extracted and analyzed within the method hold times.

Quality Control

The Initial Calibration and Continuing Calibration Verifications met the method acceptance criteria.

A Method Blank and Ongoing Precision and Recovery (OPR) sample were extracted and analyzed with the preparation batch. No analytes were detected in the Method Blank above 1/2 the LOQ. The OPR recoveries were within the method acceptance criteria

The labeled standard recoveries outside the acceptance criteria are listed in the table below.

QC Anomalies

LabNumber	SampleName	Analysis	Analyte	Flag	%Rec
1701056-01	BRADL-SB-001-081417	Modified EPA Method 537	13C3-PFBS	H	173
B7H0143-BLK1	B7H0143-BLK1	Modified EPA Method 537	13C3-PFBS	H	165
B7H0143-BS1	B7H0143-BS1	Modified EPA Method 537	13C3-PFBS	H	177

H = Recovery was outside laboratory acceptance criteria.

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Sample Inventory Report

Vista Sample ID	Client Sample ID	Sampled	Received	Components/Containers
1701056-01	BRADL-SB-001-081417	14-Aug-17 11:15	15-Aug-17 09:13	HDPE Bottle, 125 mL
				HDPE Bottle, 125 mL

Vista Project: 1701056

Client Project: Phase I Regional SI-Bradley

ANALYTICAL RESULTS

Vista Analytical Laboratory

Sample ID: Method Blank — Modified EPA Method 537

Matrix:	Aqueous	QC Batch:	B7H0143	Lab Sample:	B7H0143-BLK1
Sample Size:	0.250 L	Date Extracted:	25-Aug-2017 11:51	Date Analyzed:	25-Aug-17 20:41 Column: BEH C18

Analyte	Conc. (ug/L)	DL	LOD	LOQ	Qualifiers
PFBS	ND	0.00109	0.00250	0.00400	
PFHpA	ND	0.00109	0.00250	0.00400	
PFHxS	ND	0.00109	0.00250	0.00400	
PFOA	ND	0.00109	0.00250	0.00400	
PFOS	ND	0.00109	0.00250	0.00400	
PFNA	ND	0.00109	0.00250	0.00400	

DL - Detection limit

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C3-PFBS	165	50 - 150	H
IS	13C4-PFHpA	92.8	50 - 150	
IS	18O2-PFHxS	102	50 - 150	
IS	13C2-PFOA	99.9	50 - 150	
IS	13C8-PFOS	105	50 - 150	
IS	13C5-PFNA	88.5	50 - 150	

LCL-UCL - Lower control limit - upper control limit
Results reported to DL.
When reported, PFBS, PFHxS, PFOA and PFOS include both linear and branched isomers.
Only the linear isomer is reported for all other analytes.

Vista Analytical Laboratory

Sample ID: OPR

Modified EPA Method 537

Matrix:	Aqueous	QC Batch:	B7H0143	Lab Sample:	B7H0143-BS1
Sample Size:	0.250 L	Date Extracted:	25-Aug-2017 11:51	Date Analyzed:	25-Aug-17 19:48 Column: BEH C18

Analyte	Amt Found (ug/L)	Spike Amt	%R	Limits		Labeled Standard	%R	LCL-UCL
PFBS	0.0370	0.0400	92.5	70 - 130	IS	13C3-PFBS	177	50 - 150
PFHpA	0.0422	0.0400	106	70 - 130	IS	13C4-PFHpA	95.9	50 - 150
PFHxS	0.0401	0.0400	100	70 - 130	IS	18O2-PFHxS	100	50 - 150
PFOA	0.0383	0.0400	95.7	70 - 130	IS	13C2-PFOA	117	50 - 150
PFOS	0.0324	0.0400	80.9	70 - 130	IS	13C8-PFOS	111	50 - 150
PFNA	0.0388	0.0400	97.1	70 - 130	IS	13C5-PFNA	89.4	50 - 150

LCL-UCL - Lower control limit - upper control limit

Sample ID: BRADL-SB-001-081417

Modified EPA Method 537

Client Data

Name: AMEC Foster Wheeler
Project: Phase I Regional SI-Bradley
Date Collected: 14-Aug-2017 11:15
Location:

Sample Data

Matrix: Equipment Wash Water
Sample Size: 0.118 L

Laboratory Data

Lab Sample: 1701056-01 Date Received: 15-Aug-2017 9:13
QC Batch: B7H0143 Date Extracted: 25-Aug-2017 11:51
Date Analyzed: 26-Aug-17 07:55 Column: BEH C18

Analyte	Conc. (ug/L)	DL	LOD	LOQ	Qualifiers
PFBS	ND	0.00230	0.00530	0.00845	
PFHpA	ND	0.00230	0.00530	0.00845	
PFHxS	ND	0.00230	0.00530	0.00845	
PFOA	0.00920	0.00230	0.00530	0.00845	
PFOS	ND	0.00230	0.00530	0.00845	
PFNA	ND	0.00230	0.00530	0.00845	

DL - Detection limit

	Labeled Standard	%R	LCL-UCL	Qualifiers
IS	13C3-PFBS	173	50 - 150	H
IS	13C4-PFHpA	92.9	50 - 150	
IS	18O2-PFHxS	97.5	50 - 150	
IS	13C2-PFOA	94.1	50 - 150	
IS	13C8-PFOS	93.8	50 - 150	
IS	13C5-PFNA	91.9	50 - 150	

LCL-UCL - Lower control limit - upper control limit
Results reported to DL.
When reported, PFBS, PFHxS, PFOA and PFOS include both linear and branched isomers.
Only the linear isomer is reported for all other analytes.

DATA QUALIFIERS & ABBREVIATIONS

B	**This compound was also detected in the method blank.**
D	**Dilution**
E	**The associated compound concentration exceeded the calibration range of the instrument.**
H	**Recovery and/or RPD was outside laboratory acceptance limits.**
I	**Chemical Interference**
J	**The amount detected is below the Reporting Limit/LOQ.**
M	**Estimated Maximum Possible Concentration. (CA Region 2 projects only)**
*****	**See Cover Letter**
Conc.	**Concentration**
NA	**Not applicable**
ND	**Not Detected**
TEQ	**Toxic Equivalency**

Unless otherwise noted, solid sample results are reported in dry weight. Tissue samples are reported in wet weight.

CERTIFICATIONS

Accrediting Authority	Certificate Number
Arkansas Department of Environmental Quality	17-015-0
California Department of Health – ELAP	2892
DoD ELAP - A2LA Accredited - ISO/IEC 17025:2005	3091.01
Florida Department of Health	E87777-18
Hawaii Department of Health	N/A
Louisiana Department of Environmental Quality	01977
Maine Department of Health	2016026
Minnesota Department of Health	1175673
New Hampshire Environmental Accreditation Program	207716
New Jersey Department of Environmental Protection	CA003
New York Department of Health	11411
Oregon Laboratory Accreditation Program	4042-008
Pennsylvania Department of Environmental Protection	013
Texas Commission on Environmental Quality	T104704189-17-8
Virginia Department of General Services	8621
Washington Department of Ecology	C584
Wisconsin Department of Natural Resources	998036160

Current certificates and lists of licensed parameters are located in the Quality Assurance office and are available upon request.

NELAP Accredited Test Methods

MATRIX: Air	
Description of Test	**Method**
Determination of Polychlorinated p-Dioxins & Polychlorinated Dibenzofurans	EPA 23

MATRIX: Biological Tissue	
Description of Test	**Method**
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

MATRIX: Drinking Water	
Description of Test	**Method**
2,3,7,8-Tetrachlorodibenzo- p-dioxin (2,3,7,8-TCDD) GC/HRMS	EPA 1613
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537

MATRIX: Non-Potable Water	
Description of Test	**Method**
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Dioxin by GC/HRMS	EPA 613
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

MATRIX: Solids	
Description of Test	**Method**
Tetra-Octa Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope	EPA 1613B

Dilution GC/HRMS	
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

amec foster wheeler

Amec Foster Wheeler Environment & Infrastructure
271 Mill Road
Chelmsford, MA 01824
(978) 692-9090

SHIP TO:
Vista Analytical
1104 Windfield Way
El Dorado Hills, CA 95762
(916) 673-1520

CHAIN OF CUSTODY

1701056 1.1°C

DATE: 8/14/17
COC #:
PAGE: 1 OF 1

Project Name:	Phase I Regional SI - Bradley	Project Contact:	Denise King	Bill To:	Amec Foster Wheeler Environment & Infrastructure	Disposal Instructions:	LAB
Project Number:	291330006	Phone Number:	978-392-5339		9210 Sky Park Court #200	Shipment Method:	FEDEX
Project Manager:	Kerry Tull	Project Phase:	013.****		San Diego, CA 92123	Waybill Number:	N/A

Sample Information / Methods for Analysis / RUSH

No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	MS/MSD	UCMR3 List - Method 537.1	1 week	2 Week	48 Hour	TOTAL BOTTLES	HOLD All Analyses
1	BRADL-SB-001-081417	8/14/17 1115	WH	FS	N	X				2	
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											

Sampler's Signature:	Date: 8/14/17	Time: 1200
Relinquished By/Affiliation: AFW	Date: 8/14/17	Time: 1700
Received By: Isabella Filigenzi	Date: 08/15/17	Time: 09:23
Relinquished By/Affiliation:	Date:	Time:
Received By:	Date:	Time:
Relinquished By/Affiliation:	Date:	Time:
Received By (LAB):	Date:	Time:

For Lab Use

Does COC match samples:	Y or N
Broken Container:	Y or N
COC seal intact:	Y or N
Other problems:	Y or N
WSDOT contacted:	Y or N
Date contacted:	
Cooler Temperature at receipt:	°C

Comments:
X=Analyze H=Hold Analysis Request
Standard 15 day TAT
Contract # W9133L-14-D-0002 TO0006
PO # F013200677
ATTN: Tammie Rippie
Base Lead: Todd Coffin
Also report to michael.cote@amecfw.com
NUMBER OF COOLERS SENT:

Vista Analytical Laboratory

Sample Log-in Checklist

Vista Work Order #: 1701056 **TAT** Std

Samples Arrival:	**Date/Time** 08/15/17 09:13	**Initials:** JF	**Location:** WR-2 **Shelf/Rack:** N/A
Logged In:	**Date/Time** 08/15/17 1608	**Initials:** CBB	**Location:** WR-2 **Shelf/Rack:**

Delivered By:	FedEx	UPS	On Trac	GSO	DHL	Hand Delivered	Other
Preservation:	Ice		Blue Ice		Dry Ice		None

Temp °C: 1.0 (uncorrected)	**Time:** 09:22	**Thermometer ID:** IR-1
Temp °C: 1.1 (corrected)	**Probe used:** Yes☐ No☒	

	YES	NO	NA
Adequate Sample Volume Received?			
Holding Time Acceptable?			
Shipping Container(s) Intact?	✓		
Shipping Custody Seals Intact?	✓		
Shipping Documentation Present?	✓		
Airbill Trk # 7799 7900 8388	✓		
Sample Container Intact?	✓		
Sample Custody Seals Intact?	✓		
Chain of Custody / Sample Documentation Present?	✓		
COC Anomaly/Sample Acceptance Form completed?			

If Chlorinated or Drinking Water Samples, Acceptable Preservation?						
Preservation Documented:	$Na_2S_2O_3$	Trizma	None	Yes	No	NA
Shipping Container	Vista	Client	Retain	Return	Dispose	

Comments:

October 31, 2017

Vista Work Order No. 1701376

Ms. Denise King
AMEC Foster Wheeler
271 Mill Road
Chelmsford, MA 01824

Dear Ms. King,

Enclosed are the results for the sample set received at Vista Analytical Laboratory on October 03, 2017. This sample set was analyzed on a standard turn-around time, under your Project Name 'Bradley IAP / 291330006'.

Vista Analytical Laboratory is committed to serving you effectively. If you require additional information, please contact me at 916-673-1520 or by email at mmaier@vista-analytical.com.

Thank you for choosing Vista as part of your analytical support team.

Sincerely,

Karen J. Volpenhein for

Martha Maier
Laboratory Director

Vista Analytical Laboratory certifies that the report herein meets all the requirements set forth by NELAP for those applicable test methods. Results relate only to the samples as received by the laboratory. This report should not be reproduced except in full without the written approval of Vista.

Vista Analytical Laboratory 1104 Windfield Way El Dorado Hills, CA 95762 ph: 916-673-1520 fx: 916-673-0106 www.vista-analytical.com

Vista Work Order No. 1701376
Case Narrative

Sample Condition on Receipt:

Two QC water samples and ten soil samples were received in good condition and within the method temperature requirements. The samples were received and stored securely in accordance with Vista standard operating procedures and EPA methodology. The sample ID on the CoC for "TW-104-092617" did not match the container label ID. The client confirmed that the correct sample ID is "TW-104-092717". A revised CoC was received on October 18, 2017 to reflect this information.

Analytical Notes:

Modified EPA Method 537

The aqueous samples were extracted and analyzed for a selected list of PFAS using Modified EPA Method 537.

Holding Times

The samples were extracted and analyzed within the method hold times.

Quality Control

The Initial Calibration and Continuing Calibration Verifications met the method acceptance criteria.

A Method Blank and Ongoing Precision and Recovery (OPR) sample were extracted and analyzed with the preparation batch. No analytes were detected in the Method Blank above 1/2 the LOQ. The OPR recoveries were within the method acceptance criteria

The extracts for all samples except the Method Blank were re-injected because one or more Injection Internal Standard Analyte response areas were outside of criteria. The results were similar in the second injection. The results from the original injections have been reported.

The labeled standard recoveries for all QC and field samples were within the acceptance criteria.

VAL-PFAS

The solid samples were extracted and analyzed for a selected list of PFAS using VAL Method PFAS.

Holding Times

The samples were extracted and analyzed within the hold times.

Quality Control

The Initial Calibration and Continuing Calibration Verifications met the method acceptance criteria.

A Method Blank and Ongoing Precision and Recovery (OPR) sample were extracted and analyzed with the preparation batch. No analytes were detected in the Method Blank above 1/2 the LOQ. The OPR recoveries were within the method acceptance criteria.

The extracts were re-injected because one or more Injection Internal Standard Analyte response areas were outside of criteria. The results were similar in the second injection for all except "BRDLY-04-SB01-3-5" and "BRDLY-04-SB02-5-7". The results from the re-injections have been reported.

An MS/MSD was performed on sample "BRDLY-03-SB01-13-15".

The labeled standard recoveries for all QC and field samples were within the acceptance criteria.

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Sample Inventory Report

Vista Sample ID	Client Sample ID	Sampled	Received	Components/Containers
1701376-01	BRADL-SB-002-092617	26-Sep-17 09:30	03-Oct-17 09:59	HDPE Bottle, 125 mL
				HDPE Bottle, 125 mL
1701376-02	BRDLY-03-SB01-0-2	26-Sep-17 11:40	03-Oct-17 09:59	HDPE Jar, 6 oz
1701376-03	BRDLY-03-SB01-13-15	26-Sep-17 11:45	03-Oct-17 09:59	HDPE Jar, 6 oz
1701376-04	BRDLY-03-SO-DUP02-092617	26-Sep-17 11:42	03-Oct-17 09:59	HDPE Jar, 6 oz
1701376-05	BRDLY-04-SB01-0-2	26-Sep-17 10:45	03-Oct-17 09:59	HDPE Jar, 6 oz
1701376-06	BRDLY-04-SB01-3-5	26-Sep-17 10:50	03-Oct-17 09:59	HDPE Jar, 6 oz
1701376-07	BRDLY-04-SB02-0-2	26-Sep-17 10:15	03-Oct-17 09:59	HDPE Jar, 6 oz
1701376-08	BRDLY-04-SB02-5-7	26-Sep-17 10:20	03-Oct-17 09:59	HDPE Jar, 6 oz
1701376-09	BRDLY-04-SB03-0-2	26-Sep-17 09:40	03-Oct-17 09:59	HDPE Jar, 6 oz
1701376-10	BRDLY-04-SB03-6-8	26-Sep-17 09:45	03-Oct-17 09:59	HDPE Jar, 6 oz
1701376-11	BRDLY-04-SO-DUP03-092617	26-Sep-17 10:22	03-Oct-17 09:59	HDPE Jar, 6 oz
1701376-12	TW-104-092717	26-Sep-17 09:36	03-Oct-17 09:59	HDPE Bottle, 125 mL
				HDPE Bottle, 125 mL

ANALYTICAL RESULTS

Sample ID: Method Blank

Modified EPA Method 537

Client Data

Name: AMEC Foster Wheeler
Project: Bradley IAP / 291330006
Matrix: Aqueous

Laboratory Data

Lab Sample: B7J0024-BLK1
Column: BEH C18

Analyte	Conc. (ug/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	0.00218	0.00500	0.00800		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:53	1
PFHpA	ND	0.00218	0.00500	0.00800		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:53	1
PFHxS	ND	0.00218	0.00500	0.00800		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:53	1
PFOA	ND	0.00218	0.00500	0.00800		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:53	1
PFOS	ND	0.00218	0.00500	0.00800		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:53	1
PFNA	ND	0.00218	0.00500	0.00800		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:53	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	117	50 - 150		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:53	1
13C4-PFHpA	IS	83.1	50 - 150		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:53	1
18O2-PFHxS	IS	99.4	50 - 150		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:53	1
13C2-PFOA	IS	96.5	50 - 150		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:53	1
13C8-PFOS	IS	112	50 - 150		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:53	1
13C5-PFNA	IS	79.7	50 - 150		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:53	1

DL - Detection Limit
LOD - Limit of Detection
LOQ - Limit of quantitation
LCL-UCL- Lower control limit - upper control limit
Results reported to the DL.
When reported, PFHxS, PFOA and PFOS include both linear and branched isomers.
Only the linear isomer is reported for all other analytes.

Sample ID: OPR

Modified EPA Method 537

Client Data

Name: AMEC Foster Wheeler
Project: Bradley IAP / 291330006
Matrix: Aqueous

Laboratory Data

Lab Sample: B7J0024-BS1
Column: BEH C18

Analyte	Amt Found (ug/L)	Spike Amt	% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	0.0849	0.0800	106	70-130		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:00	1
PFHpA	0.0903	0.0800	113	70-130		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:00	1
PFHxS	0.0779	0.0800	97.4	70-130		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:00	1
PFOA	0.0865	0.0800	108	70-130		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:00	1
PFOS	0.0820	0.0800	103	70-130		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:00	1
PFNA	0.0832	0.0800	104	70-130		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:00	1

Labeled Standards	Type	% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	125	50- 150		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:00	1
13C4-PFHpA	IS	80.6	50- 150		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:00	1
18O2-PFHxS	IS	94.4	50- 150		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:00	1
13C2-PFOA	IS	94.7	50- 150		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:00	1
13C8-PFOS	IS	104	50- 150		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:00	1
13C5-PFNA	IS	81.7	50- 150		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:00	1

Sample ID: BRADL-SB-002-092617

Modified EPA Method 537

Client Data

Name: AMEC Foster Wheeler
Project: Bradley IAP / 291330006
Matrix: QC Water
Date Collected: 26-Sep-17 09:30

Laboratory Data

Lab Sample: 1701376-01
Date Received: 03-Oct-17 09:59
Column: BEH C18

Analyte	Conc. (ug/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	0.00237	0.00543	0.00871		B7J0024	07-Oct-17	0.115 L	09-Oct-17 23:57	1
PFHpA	ND	0.00237	0.00543	0.00871		B7J0024	07-Oct-17	0.115 L	09-Oct-17 23:57	1
PFHxS	ND	0.00237	0.00543	0.00871		B7J0024	07-Oct-17	0.115 L	09-Oct-17 23:57	1
PFOA	ND	0.00237	0.00543	0.00871		B7J0024	07-Oct-17	0.115 L	09-Oct-17 23:57	1
PFOS	ND	0.00237	0.00543	0.00871		B7J0024	07-Oct-17	0.115 L	09-Oct-17 23:57	1
PFNA	ND	0.00237	0.00543	0.00871		B7J0024	07-Oct-17	0.115 L	09-Oct-17 23:57	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	108	50 - 150		B7J0024	07-Oct-17	0.115 L	09-Oct-17 23:57	1
13C4-PFHpA	IS	75.3	50 - 150		B7J0024	07-Oct-17	0.115 L	09-Oct-17 23:57	1
18O2-PFHxS	IS	99.5	50 - 150		B7J0024	07-Oct-17	0.115 L	09-Oct-17 23:57	1
13C2-PFOA	IS	86.2	50 - 150		B7J0024	07-Oct-17	0.115 L	09-Oct-17 23:57	1
13C8-PFOS	IS	95.2	50 - 150		B7J0024	07-Oct-17	0.115 L	09-Oct-17 23:57	1
13C5-PFNA	IS	77.6	50 - 150		B7J0024	07-Oct-17	0.115 L	09-Oct-17 23:57	1

DL - Detection Limit
LOD - Limit of Detection
LOQ - Limit of quantitation
LCL-UCL- Lower control limit - upper control limit
Results reported to the DL.
When reported, PFHxS, PFOA and PFOS include both linear and branched isomers.
Only the linear isomer is reported for all other analytes.

Sample ID: TW-104-092717

Modified EPA Method 537

Client Data

Name: AMEC Foster Wheeler
Project: Bradley IAP / 291330006
Matrix: QC Water
Date Collected: 26-Sep-17 09:36

Laboratory Data

Lab Sample: 1701376-12
Date Received: 03-Oct-17 09:59
Column: BEH C18

Analyte	Conc. (ug/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	0.00625	0.00232	0.00530	0.00851	4	B74002J	07-Oct-17	0.118 L	10-Oct-17 00:08	1
PFHpA	0.0101	0.00232	0.00530	0.00851		B74002J	07-Oct-17	0.118 L	10-Oct-17 00:08	1
PFHxS	0.122	0.00232	0.00530	0.00851		B74002J	07-Oct-17	0.118 L	10-Oct-17 00:08	1
PFOA	0.0188	0.00232	0.00530	0.00851		B74002J	07-Oct-17	0.118 L	10-Oct-17 00:08	1
PFOS	0.355	0.00232	0.00530	0.00851		B74002J	07-Oct-17	0.118 L	10-Oct-17 00:08	1
PFNA	0.00608	0.00232	0.00530	0.00851	4	B74002J	07-Oct-17	0.118 L	10-Oct-17 00:08	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	117	50 - 150		B74002J	07-Oct-17	0.118 L	10-Oct-17 00:08	1
13CJ-PFHpA	IS	76.6	50 - 150		B74002J	07-Oct-17	0.118 L	10-Oct-17 00:08	1
18O2-PFHxS	IS	9J.J	50 - 150		B74002J	07-Oct-17	0.118 L	10-Oct-17 00:08	1
13C2-PFOA	IS	90.0	50 - 150		B74002J	07-Oct-17	0.118 L	10-Oct-17 00:08	1
13C8-PFOS	IS	97.0	50 - 150		B74002J	07-Oct-17	0.118 L	10-Oct-17 00:08	1
13C5-PFNA	IS	80.7	50 - 150		B74002J	07-Oct-17	0.118 L	10-Oct-17 00:08	1

DL - Detection Limit
LOD - Limit of Detection
LOQ - Limit of quantitation
LCL-UCL- Lower control limit - upper control limit
Results reported to the DL.
When reported, PFHxS, PFOA and PFOS include both linear and branched isomers.
Only the linear isomer is reported for all other analytes.

Sample ID: Method Blank

VAL - PFAS

Client Data

Name: AMEC Foster Wheeler
Project: Bradley IAP / 291330006
Matrix: Solid

Laboratory Data

Lab Sample: B7J0137-BLK1
Column: BEH C18

Analyte	Conc. (ug/kg)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	0.285	1.00	2.00		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:44	1
PFHpA	ND	0.285	1.00	2.00		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:44	1
PFHxS	ND	0.285	1.00	2.00		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:44	1
PFOA	ND	0.285	1.00	2.00		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:44	1
PFOS	ND	0.285	1.00	2.00		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:44	1
PFNA	ND	0.285	1.00	2.00		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:44	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	101	50 - 150		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:44	1
13C4-PFHpA	IS	89.0	50 - 150		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:44	1
18O2-PFHxS	IS	92.8	50 - 150		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:44	1
13C2-PFOA	IS	78.5	50 - 150		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:44	1
13C8-PFOS	IS	87.2	50 - 150		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:44	1
13C5-PFNA	IS	89.3	50 - 150		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:44	1

DL - Detection Limit
LOD - Limit of Detection
LOQ - Limit of quantitation

LCL-UCL- Lower control limit - upper control limit
The results are reported in dry weight.
The sample size is reported in wet weight.
Results reported to the DL.

When reported, PFHxS, PFOA and PFOS include both linear and branched isomers.
Only the linear isomer is reported for all other analytes.

Sample ID: OPR

VAL - PFAS

Client Data

Name: AMEC Foster Wheeler
Project: Bradley IAP / 291330006
Matrix: Solid

Laboratory Data

Lab Sample: B7J0137-BS1
Column: BEH C18

Analyte	Amt Found (ug/kg	Spike Amt	% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	9.76	10.0	97.6	70-130		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:11	1
PFHpA	9.84	10.0	98.4	70-130		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:11	1
PFHxS	10.5	10.0	105	70-130		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:11	1
PFOA	10.4	10.0	104	70-130		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:11	1
PFOS	9.76	10.0	97.6	70-130		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:11	1
PFNA	9.15	10.0	91.5	70-130		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:11	1

Labeled Standards	Type	% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	95.6	50- 150		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:11	1
13C4-PFHpA	IS	86.7	50- 150		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:11	1
18O2-PFHxS	IS	92.6	50- 150		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:11	1
13C2-PFOA	IS	70.8	50- 150		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:11	1
13C8-PFOS	IS	90.5	50- 150		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:11	1
13C5-PFNA	IS	74.7	50- 150		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:11	1

Sample ID: BRDLY-03-SB01-0-2

VAL - PFAS

Client Data

Name: AMEC Foster Wheeler
Project: Bradley IAP / 291330006
Matrix: Soil
Date Collected: 26-Sep-17 11:40

Laboratory Data

Lab Sample: 1701376-02
Date Received: 03-Oct-17 09:59
% Solids: 96.4
Column: BEH C18

Analyte	Conc. (ug/kg)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	0.271	0.951	1.90		B7J0137	20-Oct-17	1.09 g	27-Oct-17 08:59	1
PFHpA	ND	0.271	0.951	1.90		B7J0137	20-Oct-17	1.09 g	27-Oct-17 08:59	1
PFHxS	0.321	0.271	0.951	1.90	J	B7J0137	20-Oct-17	1.09 g	27-Oct-17 08:59	1
PFOA	ND	0.271	0.951	1.90		B7J0137	20-Oct-17	1.09 g	27-Oct-17 08:59	1
PFOS	7.86	0.271	0.951	1.90		B7J0137	20-Oct-17	1.09 g	27-Oct-17 08:59	1
PFNA	ND	0.271	0.951	1.90		B7J0137	20-Oct-17	1.09 g	27-Oct-17 08:59	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	97.3	50 - 150		B7J0137	20-Oct-17	1.09 g	27-Oct-17 08:59	1
13C4-PFHpA	IS	86.2	50 - 150		B7J0137	20-Oct-17	1.09 g	27-Oct-17 08:59	1
18O2-PFHxS	IS	89.9	50 - 150		B7J0137	20-Oct-17	1.09 g	27-Oct-17 08:59	1
13C2-PFOA	IS	77.1	50 - 150		B7J0137	20-Oct-17	1.09 g	27-Oct-17 08:59	1
13C8-PFOS	IS	99.2	50 - 150		B7J0137	20-Oct-17	1.09 g	27-Oct-17 08:59	1
13C5-PFNA	IS	76.0	50 - 150		B7J0137	20-Oct-17	1.09 g	27-Oct-17 08:59	1

DL - Detection Limit
LOD - Limit of Detection
LOQ - Limit of quantitation

LCL-UCL- Lower control limit - upper control limit
The results are reported in dry weight.
The sample size is reported in wet weight.
Results reported to the DL.

When reported, PFHxS, PFOA and PFOS include both linear and branched isomers.
Only the linear isomer is reported for all other analytes.

Sample ID: BRDLY-03-SB01-13-15

VAL - PFAS

Client Data

Name: AMEC Foster Wheeler
Project: Bradley IAP / 291330006
Matrix: Soil
Date Collected: 26-Sep-17 11:8R

Laboratory Data

Lab Sample: 1701376-03
Date v eceiOed: 03-5 ct-17 09:R9
% Solids: . 246
Column: BEH C1.

Analyte	Conc. (ug/kg)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	0427 2	0409R3	1491		B7J0137	20-5 ct-17	1427 g	27-5 ct-17 09:10	1
PFHpA	ND	0427 2	0409R3	1491		B7J0137	20-5 ct-17	1427 g	27-5 ct-17 09:10	1
PFHxS	ND	0427 2	0409R3	1491		B7J0137	20-5 ct-17	1427 g	27-5 ct-17 09:10	1
PF5 A	ND	0427 2	0409R3	1491		B7J0137	20-5 ct-17	1427 g	27-5 ct-17 09:10	1
PF5 S	043RR	0427 2	0409R3	1491	J	B7J0137	20-5 ct-17	1427 g	27-5 ct-17 09:10	1
PFNA	ND	0427 2	0409R3	1491		B7J0137	20-5 ct-17	1427 g	27-5 ct-17 09:10	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	101	R0 - 1R0		B7J0137	20-5 ct-17	1427 g	27-5 ct-17 09:10	1
13C8-PFHpA	IS	. 243	R0 - 1R0		B7J0137	20-5 ct-17	1427 g	27-5 ct-17 09:10	1
1. 5 2-PFHxS	IS	914	R0 - 1R0		B7J0137	20-5 ct-17	1427 g	27-5 ct-17 09:10	1
13C2-PF5 A	IS	7643	R0 - 1R0		B7J0137	20-5 ct-17	1427 g	27-5 ct-17 09:10	1
13C. -PF5 S	IS	103	R0 - 1R0		B7J0137	20-5 ct-17	1427 g	27-5 ct-17 09:10	1
13CR-PFNA	IS	. 04R	R0 - 1R0		B7J0137	20-5 ct-17	1427 g	27-5 ct-17 09:10	1

DL - Detection Limit
L5 D - Limit of Detection
L5 Q - Limit of quantitation
LCL-UCL- Lower control limit - upper control limit
The results are reported in dry weight4
The sample size is reported in wet weight4
v esults reported to the DL4
When reported, PFHxS, PF5 A and PF5 S include both linear and branched isomers4
5 nly the linear isomer is reported for all other analytes4

Sample ID: BRDLY-03-SB01-13-15 — VAL - PFAS

Name:	AMEC Foster Wheeler	Lab Sample:	B7J0137-MS1/B7J0137-MSD1	Source Lab Sample:	1701376-03
Project:	Bradley IAP / 291330006	QC Batch:	B7J0137	Date Extracted:	20-Oct-17
Matrix:	Solid	Samp Size:	1.24/1.25 g	Column:	BEH C18

Analyte	Sample (ug/kg)	MS (ug/kg)	MS Spike Amt	MS % Rec	MS Quals	MSD (ug/kg)	MSD Spike Amt	MSD % Rec	RPD	MSD Quals	%Rec Limits	RPD Limits	MS Analyzed	MS Dil	MSD Analyzed	MSD Dil
PFBS	ND	8.54	9.76	87.0		8.98	9.68	92.2	5.80		70-130	25	27-Oct-17 03:56	1	27-Oct-17 04:07	1
PFHpA	ND	9.26	9.76	94.9		9.25	9.68	95.6	0.735		70-130	25	27-Oct-17 03:56	1	27-Oct-17 04:07	1
PFHxS	ND	9.67	9.76	96.7		10.5	9.68	106	9.18		70-130	25	27-Oct-17 03:56	1	27-Oct-17 04:07	1
PFOA	ND	10.6	9.76	106		10.4	9.68	105	0.948		70-130	25	27-Oct-17 03:56	1	27-Oct-17 04:07	1
PFOS	0.355	10.2	9.76	101		11.1	9.68	111	9.43		70-130	25	27-Oct-17 03:56	1	27-Oct-17 04:07	1
PFNA	ND	9.32	9.76	95.5		9.51	9.68	98.3	2.89		70-130	25	27-Oct-17 03:56	1	27-Oct-17 04:07	1

Labeled Standards	Type	MS % Rec	MS Quals	MSD % Rec	MSD Quals	Limits	MS Analyzed	MS Dil	MSD Analyzed	MSD Dil
13C3-PFBS	IS	115		113		50-150	27-Oct-17 03:56	1	27-Oct-17 04:07	1
13C4-PFHpA	IS	94.1		94.8		50-150	27-Oct-17 03:56	1	27-Oct-17 04:07	1
18O2-PFHxS	IS	97.2		83.1		50-150	27-Oct-17 03:56	1	27-Oct-17 04:07	1
13C2-PFOA	IS	77.2		83.4		50-150	27-Oct-17 03:56	1	27-Oct-17 04:07	1
13C8-PFOS	IS	87.8		99.1		50-150	27-Oct-17 03:56	1	27-Oct-17 04:07	1
13C5-PFNA	IS	72.9		90.6		50-150	27-Oct-17 03:56	1	27-Oct-17 04:07	1

Sample ID: BRDLY-03-SO-DUP02-092617

VAL - PFAS

Client Data

Name: AMFC W6Her h . eeler
Project: Bradley IAP / 291330006
Matrix: Soil
Date Collected: 26-Sep-17 11:%2

Laboratory Data

Lab Sample: 1701376-0%
Date Received: 03-Oct-17 09:59
s SolidE 9%42
Column: BFH C18

Analyte	Conc. (ug/kg)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PWBS	ND	0423	0499	1498		B7J0137	20-Oct-17	1407 g	27-Oct-17 09:22	1
PWHpA	ND	0423	0499	1498		B7J0137	20-Oct-17	1407 g	27-Oct-17 09:22	1
PWHxS	ND	0423	0499	1498		B7J0137	20-Oct-17	1407 g	27-Oct-17 09:22	1
PWOA	ND	0423	0499	1498		B7J0137	20-Oct-17	1407 g	27-Oct-17 09:22	1
PWOS	8495	0423	0499	1498		B7J0137	20-Oct-17	1407 g	27-Oct-17 09:22	1
PWNA	ND	0423	0499	1498		B7J0137	20-Oct-17	1407 g	27-Oct-17 09:22	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PWBS	IS	101	50 - 150		B7J0137	20-Oct-17	1407 g	27-Oct-17 09:22	1
13C%PWHpA	IS	8547	50 - 150		B7J0137	20-Oct-17	1407 g	27-Oct-17 09:22	1
18O2-PWHxS	IS	8743	50 - 150		B7J0137	20-Oct-17	1407 g	27-Oct-17 09:22	1
13C2-PWOA	IS	794%	50 - 150		B7J0137	20-Oct-17	1407 g	27-Oct-17 09:22	1
13C8-PWOS	IS	8942	50 - 150		B7J0137	20-Oct-17	1407 g	27-Oct-17 09:22	1
13C5-PWNA	IS	7748	50 - 150		B7J0137	20-Oct-17	1407 g	27-Oct-17 09:22	1

DL - Detection Limit
LOD - Limit of Detection
LOQ - Limit of quantitation

LCL-UCL- Lower control limit - upper control limit
T. e reEiultEare reported in dry weig. t4
T. e Eample Eize iEreported in wet weig. t4
ReEiultEreported to t. e DL4

h . en reported, PWHxS, PWOA and PWOS include bot. linear and branc. ed iEomerE4
Only t. e linear iEomer iEreported for all ot. er analyteE4

Sample ID: BRDLY-04-SB01-0-2 — VAL - PFAS

Client Data				Laboratory Data			
Name:	AMFC WoEter h . eeler	Matrix:	Soil	Lab Sample:	1701376-0%	Column:	BFH C18
Project:	Bradley IAP / 291330006	Date Collected:	26-Sep-17 10:R%	Date v eceiOed:	03-5 ct-17 09:%9		
				s SolidE	9347		

Analyte	Conc. (ug/kg)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PWBS	ND	0428R	04997	1499		B7J0137	20-5 ct-17	1407 g	27-5 ct-17 09:33	1
PWHpA	ND	0428R	04997	1499		B7J0137	20-5 ct-17	1407 g	27-5 ct-17 09:33	1
PWHxS	ND	0428R	04997	1499		B7J0137	20-5 ct-17	1407 g	27-5 ct-17 09:33	1
PW5 A	ND	0428R	04997	1499		B7J0137	20-5 ct-17	1407 g	27-5 ct-17 09:33	1
PW5 S	ND	0428R	04997	1499		B7J0137	20-5 ct-17	1407 g	27-5 ct-17 09:33	1
PWNA	ND	0428R	04997	1499		B7J0137	20-5 ct-17	1407 g	27-5 ct-17 09:33	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PWBS	IS	9340	%0 - 1%0		B7J0137	20-5 ct-17	1407 g	27-5 ct-17 09:33	1
13CR-PWHpA	IS	884R	%0 - 1%0		B7J0137	20-5 ct-17	1407 g	27-5 ct-17 09:33	1
185 2-PWHxS	IS	8342	%0 - 1%0		B7J0137	20-5 ct-17	1407 g	27-5 ct-17 09:33	1
13C2-PW5 A	IS	7749	%0 - 1%0		B7J0137	20-5 ct-17	1407 g	27-5 ct-17 09:33	1
13C8-PW5 S	IS	9R48	%0 - 1%0		B7J0137	20-5 ct-17	1407 g	27-5 ct-17 09:33	1
13C%-PWNA	IS	884R	%0 - 1%0		B7J0137	20-5 ct-17	1407 g	27-5 ct-17 09:33	1

DL - Detection Limit
L5 D - Limit of Detection
L5 Q - Limit of quantitation
LCL-UCL- Lower control limit - upper control limit
T. e reEultEare reported in dry weig. t4
T. e Eample Eize iEreported in wet weig. t4
v eEultEreported to t. e DL4
h . en reported, PWHxS, PW5 A and PW5 S include bot. linear and branc. ed iEomerE4
5 nly t. e linear iEomer iEreported for all ot. er analyteE4

Sample ID: BRDLY-04-SB01-3-5

VAL - PFAS

Client Data

Name: AMEC Foster Wheeler
Project: Bradley IAP / 291330006
Matrix: Soil
Date Collected: 26-Sep-17 10:80

Laboratory Data

Lab Sample: 1701376-06
Date Received: 03-Oct-17 09:89
% Solids: . 043
Column: BEH C1.

Analyte	Conc. (ug/kg)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	04273	0498.	1492		B7J0137	20-Oct-17	1430 g	27-Oct-17 09:55	1
PFHpA	ND	04273	0498.	1492		B7J0137	20-Oct-17	1430 g	27-Oct-17 09:55	1
PFHxS	ND	04273	0498.	1492		B7J0137	20-Oct-17	1430 g	27-Oct-17 09:55	1
PFOA	04275	04273	0498.	1492	J	B7J0137	20-Oct-17	1430 g	27-Oct-17 09:55	1
PFOS	ND	04273	0498.	1492		B7J0137	20-Oct-17	1430 g	27-Oct-17 09:55	1
PFNA	ND	04273	0498.	1492		B7J0137	20-Oct-17	1430 g	27-Oct-17 09:55	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	9647	80 - 180		B7J0137	20-Oct-17	1430 g	27-Oct-17 09:55	1
13C5-PFHpA	IS	9141	80 - 180		B7J0137	20-Oct-17	1430 g	27-Oct-17 09:55	1
1. O2-PFHxS	IS	9845	80 - 180		B7J0137	20-Oct-17	1430 g	27-Oct-17 09:55	1
13C2-PFOA	IS	. 242	80 - 180		B7J0137	20-Oct-17	1430 g	27-Oct-17 09:55	1
13C. -PFOS	IS	. 34	80 - 180		B7J0137	20-Oct-17	1430 g	27-Oct-17 09:55	1
13C8-PFNA	IS	. 148	80 - 180		B7J0137	20-Oct-17	1430 g	27-Oct-17 09:55	1

DL - Detection Limit
LOD - Limit of Detection
LOQ - Limit of quantitation

LCL-UCL- Lower control limit - upper control limit
The results are reported in dry weight4
The sample size is reported in wet weight4
Results reported to the DL4

When reported, PFHxS, PFOA and PFOS include both linear and branched isomers4
Only the linear isomer is reported for all other analytes4

Sample ID: BRDLY-04-SB02-0-2

VAL - PFAS

Client Data

Name: AMEC Foster Wheeler
Project: Bradley IAP / 291330006
Matrix: Soil
Date Collected: 26-Sep-17 10:18

Laboratory Data

Lab Sample: 1701376-07
Date Received: 03-Oct-17 09:89
% Solids: 97.6
Col4mu: BEn C1H

Analyte	Conc. (ug/kg)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	0.278	0.967	1.93		B750137	20-Oct-17	1.06 J	27-Oct-17 09:88	1
PFn pA	ND	0.278	0.967	1.93		B750137	20-Oct-17	1.06 J	27-Oct-17 09:88	1
PFn xS	ND	0.278	0.967	1.93		B750137	20-Oct-17	1.06 J	27-Oct-17 09:88	1
PFOA	ND	0.278	0.967	1.93		B750137	20-Oct-17	1.06 J	27-Oct-17 09:88	1
PFOS	ND	0.278	0.967	1.93		B750137	20-Oct-17	1.06 J	27-Oct-17 09:88	1
PFNA	ND	0.278	0.967	1.93		B750137	20-Oct-17	1.06 J	27-Oct-17 09:88	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	103	80 - 180		B750137	20-Oct-17	1.06 J	27-Oct-17 09:88	1
13Cg-PFn pA	IS	90.H	80 - 180		B750137	20-Oct-17	1.06 J	27-Oct-17 09:88	1
1HD2-PFn xS	IS	Hg.9	80 - 180		B750137	20-Oct-17	1.06 J	27-Oct-17 09:88	1
13C2-PFOA	IS	71.8	80 - 180		B750137	20-Oct-17	1.06 J	27-Oct-17 09:88	1
13CH-PFOS	IS	76.1	80 - 180		B750137	20-Oct-17	1.06 J	27-Oct-17 09:88	1
13C8-PFNA	IS	HH1	80 - 180		B750137	20-Oct-17	1.06 J	27-Oct-17 09:88	1

DL - Detectiou Limit
LOD - Limit of Detectiou
LOQ - Limit of q4autitatiou

LCL-UCL- Lower coutrol limit - 4pper coutrol limit
The res4lts are reported iu dry weiJ ht.
The sample size is reported iu wet weiJ ht.
Res4lts reported to the DL.

Wheu reported, PFn xS, PFOA aud PFOS iucl4de both liuear aud brauched isomers.
Ouly the liuear isomer is reported for all other aualytes.

Sample ID: BRDLY-04-SB02-5-7

VAL - PFAS

Client Data

Name: AMFC W6Her h . eeler
Project: Bradley IAP / 291330006
Matrix: Soil
Date Collected: 26-Sep-17 10:20

Laboratory Data

Lab Sample: 1701376-0%
Date Received: 03-Oct-17 09:u9
s SolidE %24u
ColnmH BF8 C1%

Analyte	Conc. (ug/kg)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PW8S	ND	042%3	0493	1499		B750137	20-Oct-17	1422 J	27-Oct-17 10:06	1
PW8 pA	ND	042%3	0493	1499		B750137	20-Oct-17	1422 J	27-Oct-17 10:06	1
PW8 xS	ND	042%3	0493	1499		B750137	20-Oct-17	1422 J	27-Oct-17 10:06	1
PWOA	0436	042%3	0493	1499	5	B750137	20-Oct-17	1422 J	27-Oct-17 10:06	1
PWOS	0473u	042%3	0493	1499	5	B750137	20-Oct-17	1422 J	27-Oct-17 10:06	1
PWNA	ND	042%3	0493	1499		B750137	20-Oct-17	1422 J	27-Oct-17 10:06	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PW8S	IS	100	u0 - 1u0		B750137	20-Oct-17	1422 J	27-Oct-17 10:06	1
13Cg-PW8 pA	IS	%64	u0 - 1u0		B750137	20-Oct-17	1422 J	27-Oct-17 10:06	1
1%O2-PW8 xS	IS	%47	u0 - 1u0		B750137	20-Oct-17	1422 J	27-Oct-17 10:06	1
13C2-PWOA	IS	774u	u0 - 1u0		B750137	20-Oct-17	1422 J	27-Oct-17 10:06	1
13C%PWOS	IS	110	u0 - 1u0		B750137	20-Oct-17	1422 J	27-Oct-17 10:06	1
13Cu-PWNA	IS	794	u0 - 1u0		B750137	20-Oct-17	1422 J	27-Oct-17 10:06	1

DL - DetectioH Limit
LOD - Limit of DetectioH
LOQ - Limit of qnaHitatioH

LCL-UCL- Lower coHrol limit - npper coHrol limit
T. e reEnltEare reported iHdry weiJ. t4
T. e Eample Eize iEreported iHwet weiJ. t4
ReEnltEreported to t. e DL4

h . eHreported, PW8 xS, PWOA aHl PWOS iHclnde bot. liHear aHl braHc. ed iEomerE4
OHly t. e liHear iEomer iEreported for all ot. er aHalyteE4

Sample ID: BRDLY-04-SB03-0-2

VAL - PFAS

Client Data

Name: AMEC Foster Wheeler
Project: Bradley IAP / 291330006
Matrix: Soil
Date Collected: 26-Sep-17 09:80

Laboratory Data

Lab Sample: 1701376-09
Date Received: 03-Oct-17 09:59
% Solids: 97.7
Col4mu: BEn C1H

Analyte	Conc. (ug/kg)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	0.2HB	0.998	1.99		B7J0137	20-Oct-17	1.03 g	27-Oct-17 10:1H	1
PFn pA	ND	0.2HB	0.998	1.99		B7J0137	20-Oct-17	1.03 g	27-Oct-17 10:1H	1
PFn xS	ND	0.2HB	0.998	1.99		B7J0137	20-Oct-17	1.03 g	27-Oct-17 10:1H	1
PFOA	ND	0.2HB	0.998	1.99		B7J0137	20-Oct-17	1.03 g	27-Oct-17 10:1H	1
PFOS	ND	0.2HB	0.998	1.99		B7J0137	20-Oct-17	1.03 g	27-Oct-17 10:1H	1
PFNA	ND	0.2HB	0.998	1.99		B7J0137	20-Oct-17	1.03 g	27-Oct-17 10:1H	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	108	50 - 150		B7J0137	20-Oct-17	1.03 g	27-Oct-17 10:1H	1
13C8-PFn pA	IS	H5.5	50 - 150		B7J0137	20-Oct-17	1.03 g	27-Oct-17 10:1H	1
1HD2-PFn xS	IS	99.1	50 - 150		B7J0137	20-Oct-17	1.03 g	27-Oct-17 10:1H	1
13C2-PFOA	IS	73.7	50 - 150		B7J0137	20-Oct-17	1.03 g	27-Oct-17 10:1H	1
13CH-PFOS	IS	93.5	50 - 150		B7J0137	20-Oct-17	1.03 g	27-Oct-17 10:1H	1
13C5-PFNA	IS	H6.H	50 - 150		B7J0137	20-Oct-17	1.03 g	27-Oct-17 10:1H	1

DL - Detectiou Limit
LOD - Limit of Detectiou
LOQ - Limit of q4autitatiou

LCL-UCL- Lower coutrol limit - 4pper coutrol limit
The res4lts are reported iu dry weight.
The sample size is reported iu wet weight.
Res4lts reported to the DL.

Wheu reported, PFn xS, PFOA aud PFOS iucl4de both liuear aud brauched isomers.
Ouly the liuear isomer is reported for all other aualytes.

Sample ID: BRDLY-04-SB03-6-8

VAL - PFAS

Client Data

Name: AMEC Foster Wheeler
Project: Bradley IAP / 291330006
Matrix: Soil
Date Collected: 26-Sep-17 09:8R

Laboratory Data

Lab Sample: 1701376-10
Date v eceiOed: 03-5 ct-17 09:R9
% Solids: . 142
Column: BEH C1.

Analyte	Conc. (ug/kg)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	0427.	0497	149R		B7J0137	20-5 ct-17	1426 g	27-5 ct-17 12:00	1
PFHpA	ND	0427.	0497	149R		B7J0137	20-5 ct-17	1426 g	27-5 ct-17 12:00	1
PFHxS	ND	0427.	0497	149R		B7J0137	20-5 ct-17	1426 g	27-5 ct-17 12:00	1
PF5 A	ND	0427.	0497	149R		B7J0137	20-5 ct-17	1426 g	27-5 ct-17 12:00	1
PF5 S	0486 1	0427.	0497	149R	J	B7J0137	20-5 ct-17	1426 g	27-5 ct-17 12:00	1
PFNA	ND	0427.	0497	149R		B7J0137	20-5 ct-17	1426 g	27-5 ct-17 12:00	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	964B	R0 - 1R0		B7J0137	20-5 ct-17	1426 g	27-5 ct-17 12:00	1
13C8-PFHpA	IS	924b	R0 - 1R0		B7J0137	20-5 ct-17	1426 g	27-5 ct-17 12:00	1
1. 5 2-PFHxS	IS	984B	R0 - 1R0		B7J0137	20-5 ct-17	1426 g	27-5 ct-17 12:00	1
13C2-PF5 A	IS	784Q	R0 - 1R0		B7J0137	20-5 ct-17	1426 g	27-5 ct-17 12:00	1
13C. -PF5 S	IS	108	R0 - 1R0		B7J0137	20-5 ct-17	1426 g	27-5 ct-17 12:00	1
13CR-PFNA	IS	. 142	R0 - 1R0		B7J0137	20-5 ct-17	1426 g	27-5 ct-17 12:00	1

DL - Detection Limit
L5 D - Limit of Detection
L5 Q - Limit of quantitation

LCL-UCL- Lower control limit - upper control limit
The results are reported in dry weight4
The sample size is reported in wet weight4
v esults reported to the DL4

When reported, PFHxS, PF5 A and PF5 S include both linear and branched isomers4
5 nly the linear isomer is reported for all other analytes4

Sample ID: BRDLY-04-SO-DUP03-092617

VAL - PFAS

Client Data

Name: AMEC Foster Wheeler
Project: Bradley IAP / 291330006
Matrix: Soil
Date Collected: 26-Sep-17 10:22

Laboratory Data

Lab Sample: 1701376-11
Date 8 eceiRed: 03-v ct-17 09:O9
% Solids: . 242
Column: BEH C1.

Analyte	Conc. (ug/kg)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	0427.	0497 5	149O		B7J0137	20-v ct-17	142Og	27-v ct-17 12:11	1
PFHpA	ND	0427.	0497 5	149O		B7J0137	20-v ct-17	142Og	27-v ct-17 12:11	1
PFHxS	0435.	0427.	0497 5	149O	J	B7J0137	20-v ct-17	142Og	27-v ct-17 12:11	1
PFv A	0431 5	0427.	0497 5	149O	J	B7J0137	20-v ct-17	142Og	27-v ct-17 12:11	1
PFv S	0456 26	0427.	0497 5	149O	J	B7J0137	20-v ct-17	142Og	27-v ct-17 12:11	1
PFNA	ND	0427.	0497 5	149O		B7J0137	20-v ct-17	142Og	27-v ct-17 12:11	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	9O4O	C0 - 1C0		B7J0137	20-v ct-17	142Og	27-v ct-17 12:11	1
13C5-PFHpA	IS	. O4	C0 - 1C0		B7J0137	20-v ct-17	142Og	27-v ct-17 12:11	1
1. v 2-PFHxS	IS	. 94O	C0 - 1C0		B7J0137	20-v ct-17	142Og	27-v ct-17 12:11	1
13C2-PFv A	IS	. 249	C0 - 1C0		B7J0137	20-v ct-17	142Og	27-v ct-17 12:11	1
13C. -PFv S	IS	734	C0 - 1C0		B7J0137	20-v ct-17	142Og	27-v ct-17 12:11	1
13CO-PFNA	IS	. 347	C0 - 1C0		B7J0137	20-v ct-17	142Og	27-v ct-17 12:11	1

DL - Detection Limit
Lv D - Limit of Detection
Lv Q - Limit of quantitation

LCL-UCL- Lower control limit - upper control limit
The results are reported in dry weight4
The sample size is reported in wet weight4
8 esults reported to the DL4

When reported, PFHxS, PFv A and PFv S include both linear and branched isomers4
v nly the linear isomer is reported for all other analytes4

DATA QUALIFIERS & ABBREVIATIONS

B	**This compound was also detected in the method blank.**
D	**Dilution**
E	**The associated compound concentration exceeded the calibration range of the instrument.**
H	**Recovery and/or RPD was outside laboratory acceptance limits.**
I	**Chemical Interference**
J	**The amount detected is below the Reporting Limit/LOQ.**
M	**Estimated Maximum Possible Concentration. (CA Region 2 projects only)**
*****	**See Cover Letter**
Conc.	**Concentration**
NA	**Not applicable**
ND	**Not Detected**
TEQ	**Toxic Equivalency**
U	**Not Detected (specific projects only)**

Unless otherwise noted, solid sample results are reported in dry weight. Tissue samples are reported in wet weight.

CERTIFICATIONS

Accrediting Authority	Certificate Number
Arkansas Department of Environmental Quality	17-015-0
California Department of Health – ELAP	2892
DoD ELAP - A2LA Accredited - ISO/IEC 17025:2005	3091.01
Florida Department of Health	E87777-18
Hawaii Department of Health	N/A
Louisiana Department of Environmental Quality	01977
Maine Department of Health	2016026
Minnesota Department of Health	1175673
New Hampshire Environmental Accreditation Program	207716
New Jersey Department of Environmental Protection	CA003
New York Department of Health	11411
Oregon Laboratory Accreditation Program	4042-008
Pennsylvania Department of Environmental Protection	013
Texas Commission on Environmental Quality	T104704189-17-8
Virginia Department of General Services	8621
Washington Department of Ecology	C584
Wisconsin Department of Natural Resources	998036160

Current certificates and lists of licensed parameters are located in the Quality Assurance office and are available upon request.

NELAP Accredited Test Methods

MATRIX: Air	
Description of Test	**Method**
Determination of Polychlorinated p-Dioxins & Polychlorinated Dibenzofurans	EPA 23

MATRIX: Biological Tissue	
Description of Test	**Method**
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

MATRIX: Drinking Water	
Description of Test	**Method**
2,3,7,8-Tetrachlorodibenzo- p-dioxin (2,3,7,8-TCDD) GC/HRMS	EPA 1613
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537

MATRIX: Non-Potable Water	
Description of Test	**Method**
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Dioxin by GC/HRMS	EPA 613
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

MATRIX: Solids	
Description of Test	**Method**
Tetra-Octa Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope	EPA 1613B

Dilution GC/HRMS	
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

amec foster wheeler

Chelmsford, MA 01824
(978) 692-9990

El Dorado Hills, CA 95762
Attn: Martha Maier
Lab Phone# (916) 673-1520

1701376 0.5°C

PAGE: 1 OF

Project Name:	Bradley IAP	Project Contact	Denise King	Bill To	Amec Foster Wheeler Environment & Infrastructure	Disposal Instructions:	LAB
Project Number	291330006	Phone Number	(978) 392-5339		9210 Sky Park Court Suite 200	Shipment Method	FEDEX
Project Manager	Kerry Tull	Project Phase	13		San Diego, CA 92123	Waybill Number	N/A

Sample Information

No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	MS/MSD	EPA 537M	24 Hour	48 Hour	72 Hour	5 Days	TOTAL BOTTLES
1	BRADL-SB-002-092617	09/26/17 09:30	WQ	SB	N	X					
2	BRDLY-03-SB01-0-2	09/26/17 11:40	SO	N	N	X					
3	BRDLY-03-SB01-13-15	09/26/17 11:45	SO	N	N	X					
4	BRDLY-03-SO-DUP02-092617	09/26/17 11:42	SO	FD	N	X					
5	BRDLY-04-SB01-0-2	09/26/17 10:45	SO	N	N	X					
6	BRDLY-04-SB01-3-5	09/26/17 10:50	SO	N	N	X					
7	BRDLY-04-SB02-0-2	09/26/17 10:15	SO	N	N	X					
8	BRDLY-04-SB02-5-7	09/26/17 10:20	SO	N	N	X					
9	BRDLY-04-SB03-0-2	09/26/17 09:40	SO	N	N	X					
10	BRDLY-04-SB03-6-8	09/26/17 09:45	SO	N	N	X					
11	BRDLY-04-SO-DUP03-092617	09/26/17 10:22	SO	FD	N	X					
12	TW-104-~~092617~~ 092717	09/26/17 09:36	WG	N	N	X					

10/18/17 DMK

Sampler's Signature:		Date: 10/2/17	Time: 1500
Relinquished By/Affiliation:	AFW	Date: 10/2/17	Time: 1500
Received By:	VAL	Date: 10/03/17	Time: 1010
Relinquished By/Affiliation:		Date:	Time:
Received By:		Date:	Time:
Relinquished By/Affiliation:		Date:	Time:
Received By (LAB):		Date:	Time:

For Lab Use

Does COC match samples:	Y or N
Broken Container:	Y or N
COC seal intact:	Y or N
Other problems:	Y or N
WSDOT contacted:	Y or N
Date contacted:	
Cooler Temperature at receipt:	°C

Comments:
X=Analyze H=Hold Analysis Request

Contract # W9133L-14-D-0002 TO0006
PO # F013200677
ATTN: Denise King
Base Lead: Steve Posten
Field Lead: Michael Cote (michael.cote@amecfw.com)
NUMBER OF COOLERS SENT:

Analyte List: UCMR 3 List (537.1)

Revised COFC rec'd 10-18-17
KC 10-18-17

amec foster wheeler

Amec Foster Wheeler Environment & Infrastructure
271 Mill Road
Chelmsford, MA 01824
(978) 692-9090

SHIP TO:
Vista
1104 Windfield Way
El Dorado Hills, CA 95762
Atten: Martha Maier
Lab Phone# (916) 673-1520

CHAIN OF CUSTODY

1701376 0.5°C

DATE: 10/2/2017
COC #: BRDLY171002A
PAGE: 1 OF 4

Project Name:	Bradley IAP	Project Contact:	Denise King	Bill To: Amec Foster Wheeler Environment & Infrastructure	Disposal Instructions: LAB
Project Number:	291330006	Phone Number:	(978) 392-5339	9210 Sky Park Court Suite 200	Shipment Method: FEDEX
Project Manager:	Kerry Tull	Project Phase:	13	San Diego, CA 92123	Waybill Number: N/A

Sample Information / Methods for Analysis / RUSH

No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	MS/MSD	EPA 537M	24 Hour	48 Hour	72 Hour	5 Days	TOTAL BOTTLES	HOLD All Analyses
1	BRADL-SB-002-092617	09/26/17 09:30	WQ	SB	N	X						
2	BRDLY-03-SB01-0-2	09/26/17 11:40	SO	N	N	X						
3	BRDLY-03-SB01-13-15	09/26/17 11:45	SO	N	N	X						
4	BRDLY-03-SO-DUP02-092617	09/26/17 11:42	SO	FD	N	X						
5	BRDLY-04-SB01-0-2	09/26/17 10:45	SO	N	N	X						
6	BRDLY-04-SB01-3-5	09/26/17 10:50	SO	N	N	X						
7	BRDLY-04-SB02-0-2	09/26/17 10:15	SO	N	N	X						
8	BRDLY-04-SB02-5-7	09/26/17 10:20	SO	N	N	X						
9	BRDLY-04-SB03-0-2	09/26/17 09:40	SO	N	N	X						
10	BRDLY-04-SB03-6-8	09/26/17 09:45	SO	N	N	X						
11	BRDLY-04-SO-DUP03-092617	09/26/17 10:22	SO	FD	N	X						
12	TW-104-092617	09/26/17 09:36	WG	N	N	X						

Sampler's Signature:		Date: 10/2/17	Time: 1500
Relinquished By/Affiliation:	AFW	Date: 10/2/17	Time: 1500
Received By:	VAL	Date: 10/03/17	Time: 1010
Relinquished By/Affiliation:		Date:	Time:
Received By:		Date:	Time:
Relinquished By/Affiliation:		Date:	Time:
Received By (LAB):		Date:	Time:

For Lab Use

Does COC match samples:	Y or N
Broken Container:	Y or N
COC seal intact:	Y or N
Other problems:	Y or N
WSDOT contacted:	Y or N
Date contacted:	
Cooler Temperature at receipt:	°C

Comments:
X=Analyze H=Hold Analysis Request

Contract # W9133L-14-D-0002 TO0006
PO # F013200677
ATTN: Denise King
Base Lead: Steve Posten
Field Lead: Michael Cote (michael.cote@amecfw.com)

NUMBER OF COOLERS SENT:

Analyte List: **UCMR 3 List (537.1)**

Vista Analytical Laboratory

Sample Log-in Checklist

Vista Work Order #: 1701376 TAT Std

Samples Arrival:	Date/Time 10/03/17 0959	Initials: BDB	Location: WR-2 Shelf/Rack: NA
Logged In:	Date/Time 10/03/17 1417	Initials: BDB EA	Location: WR-2 Shelf/Rack: E6

Delivered By:	FedEx	UPS	On Trac	GSO	DHL	Hand Delivered	Other
Preservation:	Ice		Blue Ice		Dry Ice		None

Temp °C: 0.4 (uncorrected)	Time: 1010	Thermometer ID: IR-1
Temp °C: 0.5 (corrected)	Probe used: Yes☐ No☑	

	YES	NO	NA
Adequate Sample Volume Received?	✓		
Holding Time Acceptable?	✓		
Shipping Container(s) Intact?	✓		
Shipping Custody Seals Intact?	✓		
Shipping Documentation Present?	✓		
Airbill Trk # 7879 3273 6148	✓		
Sample Container Intact?	✓		
Sample Custody Seals Intact?			✓
Chain of Custody / Sample Documentation Present?	✓		
COC Anomaly/Sample Acceptance Form completed?	✓	~~✓ BDB 10/03/17~~	
If Chlorinated or Drinking Water Samples, Acceptable Preservation?			✓

Preservation Documented:	$Na_2S_2O_3$	Trizma	None	Yes	No	NA
Shipping Container	Vista	Client	Retain	Return	Dispose	

Comments: Sample labelID
TW-104-092717 A/B
~~BRADL SB-002-092617 A/B~~

COC ID
TW-104-092617
~~BRAD BDB 10/03/17~~

ID.: LR – SLC Rev No.: 0 Rev Date: 05/18/2017 Page: 1 of 1

Chain of Custody Anomaly/Sample Acceptance Form

Vista Analytical Laboratory

Client: AMEC Foster Wheeler
Contact: Denise King
Email: Denise.king@amecfw.com
Phone: (978) 392-5339

Workorder Number: 1701376
Date Received: 03-Oct-17 09:59
Documented by/date: B.Benedict 10/03/2017

Please review the following information and complete the Client Authorization section. To comply with NELAC regulations, we must receive authorization before proceeding with sample analysis.

Thank you,

Martha Maier
mmaier@vista-analytical.com
916-673-1520

The following information or item is needed to proceed with analysis:

- [ ] Complete Chain-of-Custody
- [ ] Test Method Requested
- [ ] Analyte List Requested
- [ ] Other:
- [ ] Preservative
- [ ] Sample Identification
- [ ] Sample Collection Date and/or Time
- [ ] Collector's Name
- [ ] Sample Type
- [ ] Sample Location

The following anomalies were noted. Authorization is needed to proceed with analysis.

- [ ] Temperature outside < 6°C Range — Samples Affected: _____
  Temperature _____°C Ice Present? Yes No Melted
- [x] Sample ID Discrepancy: See Comments
- [ ] Sample Holding Time Missed
- [ ] Custody Seals Broken
- [ ] Insufficient Sample Size
- [ ] Sample Container(s) Broken
- [ ] Incorrect Container Type

Comments: COC ID: TW-104-092617 Label ID: TW-104-092717

Client Authorization

Proceed with Analysis: (YES) NO Signature and Date Karen L. Wirtz 10-9-17

Client Comments/Instructions Per email from client on 10-4-17, use sample ID of "TW-104-092717".

November 05, 2017

Vista Work Order No. 1701377

Ms. Denise King
AMEC Foster Wheeler
271 Mill Road
Chelmsford, MA 01824

Dear Ms. King,

Enclosed are the results for the sample set received at Vista Analytical Laboratory on October 03, 2017. This sample set was analyzed on a standard turn-around time, under your Project Name 'Bradley IAP / 291330006'.

Vista Analytical Laboratory is committed to serving you effectively. If you require additional information, please contact me at 916-673-1520 or by email at mmaier@vista-analytical.com.

Thank you for choosing Vista as part of your analytical support team.

Sincerely,

Karen J. Volpendesta for

Martha Maier
Laboratory Director

Vista Analytical Laboratory certifies that the report herein meets all the requirements set forth by NELAP for those applicable test methods. Results relate only to the samples as received by the laboratory. This report should not be reproduced except in full without the written approval of Vista.

Vista Analytical Laboratory 1104 Windfield Way El Dorado Hills, CA 95762 ph: 916-673-1520 fx: 916-673-0106 www.vista-analytical.com

Vista Work Order No. 1701377
Case Narrative

Sample Condition on Receipt:

Nine soil samples and three groundwater samples were received in good condition and within the method temperature requirements. The samples were received and stored securely in accordance with Vista standard operating procedures and EPA methodology.

Analytical Notes:

Modified EPA Method 537

The aqueous samples were extracted and analyzed for a selected list of PFAS using Modified EPA Method 537.

Holding Times

The samples were extracted and analyzed within the method hold times.

Quality Control

The Initial Calibration and Continuing Calibration Verifications met the method acceptance criteria.

A Method Blank and Ongoing Precision and Recovery (OPR) sample were extracted and analyzed with the preparation batch. No analytes were detected in the Method Blank above 1/2 the LOQ. The OPR recoveries were within the method acceptance criteria

All extracts except for sample "TW-101-092717" and the OPR were re-injected because one or more Injection Internal Standard Analyte response areas were outside of criteria. The results were similar in the second injection. The results from the original injections have been reported.

The labeled standard recoveries for all QC and field samples were within the acceptance criteria.

VAL-PFAS

The soil samples were extracted and analyzed for a selected list of PFAS using VAL Method PFAS.

Holding Times

The samples were extracted and analyzed within the hold times.

Quality Control

The Initial Calibration and Continuing Calibration Verifications met the method acceptance criteria.

A Method Blank and Ongoing Precision and Recovery (OPR) sample were extracted and analyzed with the preparation batch. No analytes were detected in the Method Blank above 1/2 the LOQ. The OPR recoveries

were within the method acceptance criteria.

The extracts were re-injected because one or more Injection Internal Standard Analyte response areas were outside of criteria. The area criteria passed for the second injection; therefore, the results from the re-injection have been reported.

The labeled standard recoveries for all QC and field samples were within the acceptance criteria.

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Sample Inventory Report

Vista Sample ID	Client Sample ID	Sampled	Received	Components/Containers
1701377-01	BRDLY-01-SB01-0-2	27-Sep-17 14:15	03-Oct-17 09:59	HDPE Jar, 6 oz
1701377-02	BRDLY-01-SB01-12-14	27-Sep-17 14:20	03-Oct-17 09:59	HDPE Jar, 6 oz
1701377-03	BRDLY-01-SB02-0-2	27-Sep-17 14:25	03-Oct-17 09:59	HDPE Jar, 6 oz
1701377-04	BRDLY-01-SB02-12-14	27-Sep-17 14:30	03-Oct-17 09:59	HDPE Jar, 6 oz
1701377-05	BRDLY-01-SB03-0-2	27-Sep-17 11:15	03-Oct-17 09:59	HDPE Jar, 6 oz
1701377-06	BRDLY-01-SB03-11-13	27-Sep-17 11:20	03-Oct-17 09:59	HDPE Jar, 6 oz
1701377-07	BRDLY-01-SO-DUP01-092717	27-Sep-17 11:25	03-Oct-17 09:59	HDPE Jar, 6 oz
1701377-08	BRDLY-03-GW-DUP01-092717	27-Sep-17 12:20	03-Oct-17 09:59	HDPE Bottle, 125 mL
				HDPE Bottle, 125 mL
1701377-09	BRDLY-03-SB02-0-2	26-Sep-17 13:00	03-Oct-17 09:59	HDPE Jar, 6 oz
1701377-10	BRDLY-03-SB02-13-15	26-Sep-17 13:05	03-Oct-17 09:59	HDPE Jar, 6 oz
1701377-11	TW-101-092717	27-Sep-17 14:26	03-Oct-17 09:59	HDPE Bottle, 125 mL
				HDPE Bottle, 125 mL
1701377-12	TW-103-092717	27-Sep-17 12:15	03-Oct-17 09:59	HDPE Bottle, 125 mL
				HDPE Bottle, 125 mL

ANALYTICAL RESULTS

Sample ID: Method Blank

VAL - PFAS

Client Data

Name: AMEC Foster Wheeler
Project: Bradley IAP / 291330006
Matrix: Solid

Laboratory Data

Lab Sample: B7J0137-BLK1
Column: BEH C18

Analyte	Conc. (ug/kg)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	0.285	1.00	2.00		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:44	1
PFHpA	ND	0.285	1.00	2.00		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:44	1
PFHxS	ND	0.285	1.00	2.00		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:44	1
PFOA	ND	0.285	1.00	2.00		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:44	1
PFOS	ND	0.285	1.00	2.00		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:44	1
PFNA	ND	0.285	1.00	2.00		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:44	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	101	50 - 150		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:44	1
13C4-PFHpA	IS	89.0	50 - 150		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:44	1
18O2-PFHxS	IS	92.8	50 - 150		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:44	1
13C2-PFOA	IS	78.5	50 - 150		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:44	1
13C8-PFOS	IS	87.2	50 - 150		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:44	1
13C5-PFNA	IS	89.3	50 - 150		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:44	1

DL - Detection Limit
LOD - Limit of Detection
LOQ - Limit of quantitation

LCL-UCL- Lower control limit - upper control limit
The results are reported in dry weight.
The sample size is reported in wet weight.
Results reported to the DL.

When reported, PFHxS, PFOA and PFOS include both linear and branched isomers.
Only the linear isomer is reported for all other analytes.

Sample ID: OPR

VAL - PFAS

Client Data

Name: AMEC Foster Wheeler
Project: Bradley IAP / 291330006
Matrix: Solid

Laboratory Data

Lab Sample: B7J0137-BS1
Column: BEH C18

Analyte	Amt Found (ug/kg	Spike Amt	% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	9.76	10.0	97.6	70-130		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:11	1
PFHpA	9.84	10.0	98.4	70-130		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:11	1
PFHxS	10.5	10.0	105	70-130		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:11	1
PFOA	10.4	10.0	104	70-130		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:11	1
PFOS	9.76	10.0	97.6	70-130		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:11	1
PFNA	9.15	10.0	91.5	70-130		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:11	1

Labeled Standards	Type	% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	95.6	50- 150		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:11	1
13C4-PFHpA	IS	86.7	50- 150		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:11	1
18O2-PFHxS	IS	92.6	50- 150		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:11	1
13C2-PFOA	IS	70.8	50- 150		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:11	1
13C8-PFOS	IS	90.5	50- 150		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:11	1
13C5-PFNA	IS	74.7	50- 150		B7J0137	20-Oct-17	1.00 g	27-Oct-17 03:11	1

Sample ID: BRDLY-01-SB01-0-2

VAL - PFAS

Client Data

Name: AMEC Foster Wheeler
Project: Bradley IAP / 291330006
Matrix: Soil
Date Collected: 27-Sep-17 18:1R

Laboratory Data

Lab Sample: 1701377-01
Date v eceiOed: 03-5 ct-17 09:R9
% Solids: . 940
Column: BEH C1.

Analyte	Conc. (ug/kg)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	0427 8	0496 1	1492		B7J0137	20-5 ct-17	1417 g	27-5 ct-17 12:22	1
PFHpA	ND	0427 8	0496 1	1492		B7J0137	20-5 ct-17	1417 g	27-5 ct-17 12:22	1
PFHxS	ND	0427 8	0496 1	1492		B7J0137	20-5 ct-17	1417 g	27-5 ct-17 12:22	1
PF5 A	048R9	0427 8	0496 1	1492	J	B7J0137	20-5 ct-17	1417 g	27-5 ct-17 12:22	1
PF5 S	04 7R	0427 8	0496 1	1492	J	B7J0137	20-5 ct-17	1417 g	27-5 ct-17 12:22	1
PFNA	ND	0427 8	0496 1	1492		B7J0137	20-5 ct-17	1417 g	27-5 ct-17 12:22	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	103	R0 - 1R0		B7J0137	20-5 ct-17	1417 g	27-5 ct-17 12:22	1
13C8-PFHpA	IS	. 646	R0 - 1R0		B7J0137	20-5 ct-17	1417 g	27-5 ct-17 12:22	1
1. 5 2-PFHxS	IS	. 84	R0 - 1R0		B7J0137	20-5 ct-17	1417 g	27-5 ct-17 12:22	1
13C2-PF5 A	IS	7349	R0 - 1R0		B7J0137	20-5 ct-17	1417 g	27-5 ct-17 12:22	1
13C. -PF5 S	IS	107	R0 - 1R0		B7J0137	20-5 ct-17	1417 g	27-5 ct-17 12:22	1
13CR-PFNA	IS	. 342	R0 - 1R0		B7J0137	20-5 ct-17	1417 g	27-5 ct-17 12:22	1

DL - Detection Limit
L5 D - Limit of Detection
L5 Q - Limit of quantitation

LCL-UCL- Lower control limit - upper control limit
The results are reported in dry weight4
The sample size is reported in wet weight4
v esults reported to the DL4

When reported, PFHxS, PF5 A and PF5 S include both linear and branched isomers4
5 nly the linear isomer is reported for all other analytes4

Sample ID: BRDLY-04-SB04-41-42

VAL - PFAS

Client Data

Name: AMEC Foster Wheeler
Project: Bradley IAP / 291330006
Matrix: Soil
Date Collected: 27-Sep-17 18:20

Laboratory Data

Lab Sample: 1701377-02
Date Received: 03-Oct-17 09:59
% Solids: 92.0
Col4mu: BEn C1H

Analyte	Conc. (ug/kg)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	0.279	0.9H0	1.96		B7J0137	20-Oct-17	1.11 g	27-Oct-17 12:33	1
PFn pA	ND	0.279	0.9H0	1.96		B7J0137	20-Oct-17	1.11 g	27-Oct-17 12:33	1
PFn xS	ND	0.279	0.9H0	1.96		B7J0137	20-Oct-17	1.11 g	27-Oct-17 12:33	1
PFOA	0.362	0.279	0.9H0	1.96	J	B7J0137	20-Oct-17	1.11 g	27-Oct-17 12:33	1
PFOS	0.985	0.279	0.9H0	1.96	J	B7J0137	20-Oct-17	1.11 g	27-Oct-17 12:33	1
PFNA	ND	0.279	0.9H0	1.96		B7J0137	20-Oct-17	1.11 g	27-Oct-17 12:33	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	103	50 - 150		B7J0137	20-Oct-17	1.11 g	27-Oct-17 12:33	1
13C8-PFn pA	IS	95.6	50 - 150		B7J0137	20-Oct-17	1.11 g	27-Oct-17 12:33	1
1HD2-PFn xS	IS	96.7	50 - 150		B7J0137	20-Oct-17	1.11 g	27-Oct-17 12:33	1
13C2-PFOA	IS	76.9	50 - 150		B7J0137	20-Oct-17	1.11 g	27-Oct-17 12:33	1
13CH-PFOS	IS	90.0	50 - 150		B7J0137	20-Oct-17	1.11 g	27-Oct-17 12:33	1
13C5-PFNA	IS	H3	50 - 150		B7J0137	20-Oct-17	1.11 g	27-Oct-17 12:33	1

DL - Detectiou Limit
LOD - Limit of Detectiou
LOQ - Limit of q4autitatiou

LCL-UCL- Lower coutrol limit - 4pper coutrol limit
The res4lts are reported iu dry weight.
The sample size is reported iu wet weight.
Res4lts reported to the DL.

Wheu reported, PFn xS, PFOA aud PFOS iucl4de both liuear aud brauched isomers.
Ouly the liuear isomer is reported for all other aualytes.

Sample ID: BRDLY-01-SB02-0-2

VAL - PFAS

Client Data

Name: AMEC Foster Wheeler
Project: Bradley IAP / 291330006
Matrix: Soil
Date Collected: 27-Sep-17 18:2R

Laboratory Data

Lab Sample: 1701377-03
Date v eceiœd: 03-5 ct-17 09:R9
% Solids: 92.6
Col4mu: BEn C1H

Analyte	Conc. (ug/kg)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	0.270	0.98H	1.90		B7J0137	20-5 ct-17	1.18 g	27-5 ct-17 12:88	1
PFn pA	ND	0.270	0.98H	1.90		B7J0137	20-5 ct-17	1.18 g	27-5 ct-17 12:88	1
PFn xS	8.28	0.270	0.98H	1.90		B7J0137	20-5 ct-17	1.18 g	27-5 ct-17 12:88	1
PF5 A	0.326	0.270	0.98H	1.90	J	B7J0137	20-5 ct-17	1.18 g	27-5 ct-17 12:88	1
PF5 S	21.2	0.270	0.98H	1.90		B7J0137	20-5 ct-17	1.18 g	27-5 ct-17 12:88	1
PFNA	ND	0.270	0.98H	1.90		B7J0137	20-5 ct-17	1.18 g	27-5 ct-17 12:88	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	97.0	R0 - 1R0		B7J0137	20-5 ct-17	1.18 g	27-5 ct-17 12:88	1
13C8-PFn pA	IS	90.8	R0 - 1R0		B7J0137	20-5 ct-17	1.18 g	27-5 ct-17 12:88	1
1H-5 2-PFn xS	IS	101	R0 - 1R0		B7J0137	20-5 ct-17	1.18 g	27-5 ct-17 12:88	1
13C2-PF5 A	IS	71.H	R0 - 1R0		B7J0137	20-5 ct-17	1.18 g	27-5 ct-17 12:88	1
13CH-PF5 S	IS	71.0	R0 - 1R0		B7J0137	20-5 ct-17	1.18 g	27-5 ct-17 12:88	1
13CR-PFNA	IS	H2.7	R0 - 1R0		B7J0137	20-5 ct-17	1.18 g	27-5 ct-17 12:88	1

DL - Detectiou Limit
L5 D - Limit of Detectiou
L5 Q - Limit of q4autitatiou

LCL-UCL- Lower coutrol limit - 4pper coutrol limit
The res4lts are reported iu dry weight.
The sample size is reported iu wet weight.
v es4lts reported to the DL.

Wheu reported, PFn xS, PF5 A aud PF5 S iucl4de both liuear aud brauched isomers.
5 uly the liuear isomer is reported for all other aualytes.

Sample ID: BRDLY-04-SB01-41-42 — VAL - PFAS

Client Data				Laboratory Data			
Name:	AMFC WoEter h . eeler	Matrix:	Soil	Lab Sample:	1701377-0%	ColHm8:	BFR C14
Project:	Bradley IAP / 291330006	Date Collected:	27-Sep-17 1%30	Date v eceiOed:	03-5 ct-17 09:n9		
				s SolidE	49un		

Analyte	Conc. (ug/kg)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PWBS	ND	0u27n	0u963	1u93		B7J0137	20-5 ct-17	1u16 g	27-5 ct-17 12:nn	1
PWRpA	ND	0u27n	0u963	1u93		B7J0137	20-5 ct-17	1u16 g	27-5 ct-17 12:nn	1
PWRxS	1u42	0u27n	0u963	1u93	J	B7J0137	20-5 ct-17	1u16 g	27-5 ct-17 12:nn	1
PW5 A	0u390	0u27n	0u963	1u93	J	B7J0137	20-5 ct-17	1u16 g	27-5 ct-17 12:nn	1
PW5 S	0u32%	0u27n	0u963	1u93	J	B7J0137	20-5 ct-17	1u16 g	27-5 ct-17 12:nn	1
PWNA	ND	0u27n	0u963	1u93		B7J0137	20-5 ct-17	1u16 g	27-5 ct-17 12:nn	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PWBS	IS	9nun	n0 - 1n0		B7J0137	20-5 ct-17	1u16 g	27-5 ct-17 12:nn	1
13C%PWRpA	IS	44un	n0 - 1n0		B7J0137	20-5 ct-17	1u16 g	27-5 ct-17 12:nn	1
145 2-PWRxS	IS	9nu2	n0 - 1n0		B7J0137	20-5 ct-17	1u16 g	27-5 ct-17 12:nn	1
13C2-PW5 A	IS	73u1	n0 - 1n0		B7J0137	20-5 ct-17	1u16 g	27-5 ct-17 12:nn	1
13C4-PW5 S	IS	4%u2	n0 - 1n0		B7J0137	20-5 ct-17	1u16 g	27-5 ct-17 12:nn	1
13Cn-PWNA	IS	4nun	n0 - 1n0		B7J0137	20-5 ct-17	1u16 g	27-5 ct-17 12:nn	1

DL - Detectio8 Limit
L5 D - Limit of Detectio8
L5 Q - Limit of qHa8titatio8
LCL-UCL- Lower co8trol limit - Hpper co8trol limit
T. e reEHtEare reported i8 dry weig. tu
T. e Eample Eize iEreported i8 wet weig. tu
v eEHtEreported to t. e DLu
h . e8 reported, PWRxS, PW5 A a8d PW5 S i8clHde bot. li8ear a8d bra8c. ed iEomerEu
5 8ly t. e li8ear iEomer iEreported for all ot. er a8alyteEu

Sample ID: BRDLY-03-SB01-0-2

VAL - PFAS

Client Data

Name: AMFC WoHer h . eeler
Project: Bradley IAP / 291330006
Matrix: Soil
Date Collected: 27-Sep-17 11:1%

Laboratory Data

Lab Sample: 1701377-0%
Date v eceiOed: 03-5 ct-17 09:%9
s SolidE 94u9
ColnmH BF8 C1R

Analyte	Conc. (ug/kg)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PWBS	ND	0u2R6	1u00	2u01		B7J0137	20-5 ct-17	1u0%g	27-5 ct-17 13:10	1
PW8 pA	ND	0u2R6	1u00	2u01		B7J0137	20-5 ct-17	1u0%g	27-5 ct-17 13:10	1
PW8 xS	ND	0u2R6	1u00	2u01		B7J0137	20-5 ct-17	1u0%g	27-5 ct-17 13:10	1
PW5 A	0u361	0u2R6	1u00	2u01	J	B7J0137	20-5 ct-17	1u0%g	27-5 ct-17 13:10	1
PW5 S	1ulR	0u2R6	1u00	2u01	J	B7J0137	20-5 ct-17	1u0%g	27-5 ct-17 13:10	1
PWNA	ND	0u2R6	1u00	2u01		B7J0137	20-5 ct-17	1u0%g	27-5 ct-17 13:10	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PWBS	IS	112	%0 - 1%0		B7J0137	20-5 ct-17	1u0%g	27-5 ct-17 13:10	1
13C4-PW8 pA	IS	93u2	%0 - 1%0		B7J0137	20-5 ct-17	1u0%g	27-5 ct-17 13:10	1
1R5 2-PW8 xS	IS	96u7	%0 - 1%0		B7J0137	20-5 ct-17	1u0%g	27-5 ct-17 13:10	1
13C2-PW5 A	IS	76u9	%0 - 1%0		B7J0137	20-5 ct-17	1u0%g	27-5 ct-17 13:10	1
13CR-PW5 S	IS	R0u4	%0 - 1%0		B7J0137	20-5 ct-17	1u0%g	27-5 ct-17 13:10	1
13C%PWNA	IS	R%u4	%0 - 1%0		B7J0137	20-5 ct-17	1u0%g	27-5 ct-17 13:10	1

DL - DetectioHLimit
L5 D - Limit of DetectioH
L5 Q - Limit of qnaHitatioH
LCL-UCL- Lower coHrol limit - npper coHrol limit
T. e reEnltEare reported iHdry weig. tu
T. e Eample Eize iEreported iHwet weig. tu
v eEnltEreported to t. e DLu
h . eHreported, PW8 xS, PW5 A aHl PW5 S iHclnde bot. liHear aHl braHc. ed iEomerEu
5 Hy t. e liHear iEomer iEreported for all ot. er aHalyteEu

Sample ID: BRDLY-01-SB03-11-13

VAL - PFAS

Client Data

Name: AMEC Foster Wheeler
Project: Bradley IAP / 291330006
Matrix: Soil
Date Collected: 27-Sep-17 11:20

Laboratory Data

Lab Sample: 1701377-06
Date Received: 03-Oct-17 09:59
% Solids: . 4u6
ColnmH BE8 C1.

Analyte	Conc. (ug/kg)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	0u2. 3	0u994	1u99		B7J0137	20-Oct-17	1ul9 g	27-Oct-17 13:23	1
PF8 pA	ND	0u2. 3	0u994	1u99		B7J0137	20-Oct-17	1ul9 g	27-Oct-17 13:23	1
PF8 xS	ND	0u2. 3	0u994	1u99		B7J0137	20-Oct-17	1ul9 g	27-Oct-17 13:23	1
PFOA	0u36.	0u2. 3	0u994	1u99	J	B7J0137	20-Oct-17	1ul9 g	27-Oct-17 13:23	1
PFOS	ND	0u2. 3	0u994	1u99		B7J0137	20-Oct-17	1ul9 g	27-Oct-17 13:23	1
PFNA	ND	0u2. 3	0u994	1u99		B7J0137	20-Oct-17	1ul9 g	27-Oct-17 13:23	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	94u0	50 - 150		B7J0137	20-Oct-17	1ul9 g	27-Oct-17 13:23	1
13C4-PF8 pA	IS	. 7u0	50 - 150		B7J0137	20-Oct-17	1ul9 g	27-Oct-17 13:23	1
1. O2-PF8 xS	IS	94u5	50 - 150		B7J0137	20-Oct-17	1ul9 g	27-Oct-17 13:23	1
13C2-PFOA	IS	69u4	50 - 150		B7J0137	20-Oct-17	1ul9 g	27-Oct-17 13:23	1
13C. -PFOS	IS	. 5u4	50 - 150		B7J0137	20-Oct-17	1ul9 g	27-Oct-17 13:23	1
13C5-PFNA	IS	74u5	50 - 150		B7J0137	20-Oct-17	1ul9 g	27-Oct-17 13:23	1

DL - DetectioHLimit
LOD - Limit of DetectioH
LOQ - Limit of qnaHitatioH

LCL-UCL- Lower coHrol limit - npper coHrol limit
The resnlts are reported iHdry weightu
The sample size is reported iHwet weightu
Resnlts reported to the DLu

WheHreported, PF8 xS, PFOA aHl PFOS iHclnde both liHear aHl braHched isomersu
OHy the liHear isomer is reported for all other aHalytesu

Sample ID: BRDLY-01-SO-DUP01-092717

VAL - PFAS

Client Data

Name: AMEC Foster Wheeler
Project: Bradley IAP / 291330006
Matrix: Soil
Date Collected: 27-Sep-17 11:28

Laboratory Data

Lab Sample: 1701377-07
Date Received: 03-Oct-17 09:89
% Solids: . 34
Column: BEH C1.

Analyte	Conc. (ug/kg)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	0421	0498	1490		B7J0137	20-Oct-17	1426 g	27-Oct-17 15:07	1
PFHpA	ND	0421	0498	1490		B7J0137	20-Oct-17	1426 g	27-Oct-17 15:07	1
PFHxS	ND	0421	0498	1490		B7J0137	20-Oct-17	1426 g	27-Oct-17 15:07	1
PFOA	0438	0421	0498	1490	J	B7J0137	20-Oct-17	1426 g	27-Oct-17 15:07	1
PFOS	ND	0421	0498	1490		B7J0137	20-Oct-17	1426 g	27-Oct-17 15:07	1
PFNA	ND	0421	0498	1490		B7J0137	20-Oct-17	1426 g	27-Oct-17 15:07	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	108	80 - 180		B7J0137	20-Oct-17	1426 g	27-Oct-17 15:07	1
13C5-PFHpA	IS	9. 48	80 - 180		B7J0137	20-Oct-17	1426 g	27-Oct-17 15:07	1
1. O2-PFHxS	IS	103	80 - 180		B7J0137	20-Oct-17	1426 g	27-Oct-17 15:07	1
13C2-PFOA	IS	. 043	80 - 180		B7J0137	20-Oct-17	1426 g	27-Oct-17 15:07	1
13C. -PFOS	IS	. 541	80 - 180		B7J0137	20-Oct-17	1426 g	27-Oct-17 15:07	1
13C8-PFNA	IS	. 047	80 - 180		B7J0137	20-Oct-17	1426 g	27-Oct-17 15:07	1

DL - Detection Limit
LOD - Limit of Detection
LOQ - Limit of quantitation

LCL-UCL- Lower control limit - upper control limit
The results are reported in dry weight4
The sample size is reported in wet weight4
Results reported to the DL4

When reported, PFHxS, PFOA and PFOS include both linear and branched isomers4
Only the linear isomer is reported for all other analytes4

Sample ID: BRDLY-03-SB02-0-2

VAL - PFAS

Client Data

Name: AMEC Foster Wheeler
Project: Bradley IAP / 291330006
Matrix: Soil
Date Collected: 26-Sep-17 13:00

Laboratory Data

Lab Sample: 1701377-09
Date 8 eceiRed: 03-v ct-17 09:O9
% Solids: 91.7
Col4mu: BEn C1H

Analyte	Conc. (ug/kg)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	0.2H0	0.9H2	1.96		B7J0137	20-v ct-17	1.11 g	27-v ct-17 15:19	1
PFn pA	0.613	0.2H0	0.9H2	1.96	J	B7J0137	20-v ct-17	1.11 g	27-v ct-17 15:19	1
PFn xS	2.65	0.2H0	0.9H2	1.96		B7J0137	20-v ct-17	1.11 g	27-v ct-17 15:19	1
PFv A	1.3O	0.2H0	0.9H2	1.96	J	B7J0137	20-v ct-17	1.11 g	27-v ct-17 15:19	1
PFv S	71.9	0.2H0	0.9H2	1.96		B7J0137	20-v ct-17	1.11 g	27-v ct-17 15:19	1
PFNA	ND	0.2H0	0.9H2	1.96		B7J0137	20-v ct-17	1.11 g	27-v ct-17 15:19	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	102	C0 - 1C0		B7J0137	20-v ct-17	1.11 g	27-v ct-17 15:19	1
13C5-PFn pA	IS	95.3	C0 - 1C0		B7J0137	20-v ct-17	1.11 g	27-v ct-17 15:19	1
1Hv 2-PFn xS	IS	HH9	C0 - 1C0		B7J0137	20-v ct-17	1.11 g	27-v ct-17 15:19	1
13C2-PFv A	IS	77.9	C0 - 1C0		B7J0137	20-v ct-17	1.11 g	27-v ct-17 15:19	1
13CH-PFv S	IS	HO2	C0 - 1C0		B7J0137	20-v ct-17	1.11 g	27-v ct-17 15:19	1
13CO-PFNA	IS	92.5	C0 - 1C0		B7J0137	20-v ct-17	1.11 g	27-v ct-17 15:19	1

DL - Detectiou Limit
Lv D - Limit of Detectiou
Lv Q - Limit of q4autitatiou
LCL-UCL- Lower coutrol limit - 4pper coutrol limit
The res4lts are reported iu dry weight.
The sample size is reported iu wet weight.
8 es4lts reported to the DL.
Wheu reported, PFn xS, PFv A aud PFv S iucl4de both liuear aud brauched isomers.
v uly the liuear isomer is reported for all other aualytes.

Sample ID: BRDLY-03-SB02-13-15

VAL - PFAS

Client Data

Name: AMEC Foster Wheeler
Project: Bradley IAP / 291330006
Matrix: Soil
Date Collected: 26-Sep-17 13:0R

Laboratory Data

Lab Sample: 1701377-10
Date v eceiOed: 03-5 ct-17 09:R9
% Solids: . 4ul
ColnmH: BE8 C1.

Analyte	Conc. (ug/kg)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	0u27.	0u97R	1u9R		B7J0137	20-5 ct-17	1u22 g	27-5 ct-17 14:30	1
PF8 pA	0uR23	0u27.	0u97R	1u9R	J	B7J0137	20-5 ct-17	1u22 g	27-5 ct-17 14:30	1
PF8 xS	2uR4	0u27.	0u97R	1u9R		B7J0137	20-5 ct-17	1u22 g	27-5 ct-17 14:30	1
PF5 A	1ul6	0u27.	0u97R	1u9R	J	B7J0137	20-5 ct-17	1u22 g	27-5 ct-17 14:30	1
PF5 S	449	1u39	4u 7	9u7R	D	B7J0137	20-5 ct-17	1u22 g	01-NoO-17 06:23	R
PFNA	0u317	0u27.	0u97R	1u9R	J	B7J0137	20-5 ct-17	1u22 g	27-5 ct-17 14:30	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	96u6	R0 - 1R0		B7J0137	20-5 ct-17	1u22 g	27-5 ct-17 14:30	1
13C4-PF8 pA	IS	92u3	R0 - 1R0		B7J0137	20-5 ct-17	1u22 g	27-5 ct-17 14:30	1
1. 5 2-PF8 xS	IS	9. u0	R0 - 1R0		B7J0137	20-5 ct-17	1u22 g	27-5 ct-17 14:30	1
13C2-PF5 A	IS	. 4u4	R0 - 1R0		B7J0137	20-5 ct-17	1u22 g	27-5 ct-17 14:30	1
13C. -PF5 S	IS	. 0u2	R0 - 1R0	D	B7J0137	20-5 ct-17	1u22 g	01-NoO-17 06:23	R
13CR-PFNA	IS	91u	R0 - 1R0		B7J0137	20-5 ct-17	1u22 g	27-5 ct-17 14:30	1

DL - DetectioHLimit
L5 D - Limit of DetectioH
L5 Q - Limit of qnaHitatioH
LCL-UCL- Lower coHrol limit - npper coHrol limit
The resnlts are reported iHdry weightu
The sample size is reported iHwet weightu
v esnlts reported to the DLu
WheHreported, PF8 xS, PF5 A aHd PF5 S iHclnde both liHear aHd braHched isomersu
5 Hy the liHear isomer is reported for all other aHalytesu

Sample ID: Method Blank

Modified EPA Method 537

Client Data

Name: AMEC Foster Wheeler
Project: Bradley IAP / 291330006
Matrix: Aqueous

Laboratory Data

Lab Sample: B7J0024-BLK1
Column: BEH C18

Analyte	Conc. (ug/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	0.00218	0.00500	0.00800		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:53	1
PFHpA	ND	0.00218	0.00500	0.00800		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:53	1
PFHxS	ND	0.00218	0.00500	0.00800		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:53	1
PFOA	ND	0.00218	0.00500	0.00800		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:53	1
PFOS	ND	0.00218	0.00500	0.00800		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:53	1
PFNA	ND	0.00218	0.00500	0.00800		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:53	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	117	50 - 150		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:53	1
13C4-PFHpA	IS	83.1	50 - 150		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:53	1
18O2-PFHxS	IS	99.4	50 - 150		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:53	1
13C2-PFOA	IS	96.5	50 - 150		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:53	1
13C8-PFOS	IS	112	50 - 150		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:53	1
13C5-PFNA	IS	79.7	50 - 150		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:53	1

DL - Detection Limit
LOD - Limit of Detection
LOQ - Limit of quantitation
LCL-UCL- Lower control limit - upper control limit
Results reported to the DL.
When reported, PFHxS, PFOA and PFOS include both linear and branched isomers.
Only the linear isomer is reported for all other analytes.

Sample ID: OPR

Modified EPA Method 537

Client Data

Name: AMEC Foster Wheeler
Project: Bradley IAP / 291330006
Matrix: Aqueous

Laboratory Data

Lab Sample: B7J0024-BS1
Column: BEH C18

Analyte	Amt Found (ug/L)	Spike Amt	% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	0.0849	0.0800	106	70-130		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:00	1
PFHpA	0.0903	0.0800	113	70-130		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:00	1
PFHxS	0.0779	0.0800	97.4	70-130		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:00	1
PFOA	0.0865	0.0800	108	70-130		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:00	1
PFOS	0.0820	0.0800	103	70-130		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:00	1
PFNA	0.0832	0.0800	104	70-130		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:00	1

Labeled Standards	Type	% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	125	50- 150		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:00	1
13C4-PFHpA	IS	80.6	50- 150		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:00	1
18O2-PFHxS	IS	94.4	50- 150		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:00	1
13C2-PFOA	IS	94.7	50- 150		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:00	1
13C8-PFOS	IS	104	50- 150		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:00	1
13C5-PFNA	IS	81.7	50- 150		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:00	1

Sample ID: BRDLY-03-GW-DUP01-092717

Modified EPA Method 537

Client Data

Name: AMEC Foster Wheeler
Project: Bradley IAP / 291330006
Matrix: Groundwater
Date Collected: 27-Sep-17 12:20

Laboratory Data

Lab Sample: 1701377-08
Date Received: 03-Oct-17 09:59
Column: BEH C18

Analyte	Conc. (ug/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	0.00236	0.00543	0.00867		B7J0024	07-Oct-17	0.115 L	10-Oct-17 00:18	1
PFHpA	0.00629	0.00236	0.00543	0.00867	J	B7J0024	07-Oct-17	0.115 L	10-Oct-17 00:18	1
PFHxS	0.0169	0.00236	0.00543	0.00867		B7J0024	07-Oct-17	0.115 L	10-Oct-17 00:18	1
PFOA	0.0134	0.00236	0.00543	0.00867		B7J0024	07-Oct-17	0.115 L	10-Oct-17 00:18	1
PFOS	0.158	0.00236	0.00543	0.00867		B7J0024	07-Oct-17	0.115 L	10-Oct-17 00:18	1
PFNA	0.00279	0.00236	0.00543	0.00867	J	B7J0024	07-Oct-17	0.115 L	10-Oct-17 00:18	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	122	50 - 150		B7J0024	07-Oct-17	0.115 L	10-Oct-17 00:18	1
13C4-PFHpA	IS	83.6	50 - 150		B7J0024	07-Oct-17	0.115 L	10-Oct-17 00:18	1
18O2-PFHxS	IS	93.7	50 - 150		B7J0024	07-Oct-17	0.115 L	10-Oct-17 00:18	1
13C2-PFOA	IS	75.9	50 - 150		B7J0024	07-Oct-17	0.115 L	10-Oct-17 00:18	1
13C8-PFOS	IS	103	50 - 150		B7J0024	07-Oct-17	0.115 L	10-Oct-17 00:18	1
13C5-PFNA	IS	81.7	50 - 150		B7J0024	07-Oct-17	0.115 L	10-Oct-17 00:18	1

DL - Detection Limit
LOD - Limit of Detection
LOQ - Limit of quantitation
LCL-UCL- Lower control limit - upper control limit
Results reported to the DL.
When reported, PFHxS, PFOA and PFOS include both linear and branched isomers.
Only the linear isomer is reported for all other analytes.

Sample ID: TW-101-092717

Modified EPA Method 537

Client Data

Name: AM8 C EoRter s Weeler
Project: Bradley IAP / 291330006
Matrix: Grohudwater
Date Collected: 27-Sep-17 1R:26

Laboratory Data

Lab Sample: 1701377-11
Date v eceiOed: 03-5 ct-17 09:. 9
Colhmu: B8n C1H

Analyte	Conc. (ug/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PEBS	ND	0400233	0400. 3R	0400H R		B7J002R	07-5 ct-17	0417 L	10-5 ct-17 00:29	1
PEn pA	0403R6	0400233	0400. 3R	0400H R	J	B7J002R	07-5 ct-17	0417 L	10-5 ct-17 00:29	1
PEn xS	040101	0400233	0400. 3R	0400H R		B7J002R	07-5 ct-17	0417 L	10-5 ct-17 00:29	1
PE5 A	ND	0400233	0400. 3R	0400H R		B7J002R	07-5 ct-17	0417 L	10-5 ct-17 00:29	1
PE5 S	0400R 7	0400233	0400. 3R	0400H R	J	B7J002R	07-5 ct-17	0417 L	10-5 ct-17 00:29	1
PENA	ND	0400233	0400. 3R	0400H R		B7J002R	07-5 ct-17	0417 L	10-5 ct-17 00:29	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PEBS	IS	123	. 0 - 1. 0		B7J002R	07-5 ct-17	0417 L	10-5 ct-17 00:29	1
13CR-PEn pA	IS	7749	. 0 - 1. 0		B7J002R	07-5 ct-17	0417 L	10-5 ct-17 00:29	1
1H5 2-PEn xS	IS	9R41	. 0 - 1. 0		B7J002R	07-5 ct-17	0417 L	10-5 ct-17 00:29	1
13C2-PE5 A	IS	974	. 0 - 1. 0		B7J002R	07-5 ct-17	0417 L	10-5 ct-17 00:29	1
13CH-PE5 S	IS	109	. 0 - 1. 0		B7J002R	07-5 ct-17	0417 L	10-5 ct-17 00:29	1
13C. -PENA	IS	H24	. 0 - 1. 0		B7J002R	07-5 ct-17	0417 L	10-5 ct-17 00:29	1

DL - Detectiou Limit
L5 D - Limit of Detectiou
L5 Q - Limit of qhautitatiou
LCL-UCL- Lower coutrol limit - hpper coutrol limit
v eFhltF reported to tWe DL4
s Weu reported, PEn xS, PE5 A aud PE5 S iuclhde botWliuear aud braucWed iFomerF4
5 uly tWe liuear iFomer iF reported for all otWer aualyteF4

Sample ID: TW-109-027L1L

d rf iRef PAh d et5rf 39L

Client Data				baoryatryMData			
Name:	AM8C EoRter s Weeler	Matrix:	Grohudwater	Lab Sample:	1701377-12	Colhmu:	B8n C1H
Project:	Bradley IAP / 291330006	Date Collected:	27-Sep-17 12:1R	Date v eceiOed:	03-5 ct-17 09:R9		

h nalMe	Crnc. (ug/b)	Db	bOD	bOQ	QualiRieys	Batc5	Pxtyactef	Samp Size	h nalMef	Dilutirn
PEBS	0.00263	0.00231	0.00R30	0.00HJH	4	B74002J	07-5 ct-17	0.11HL	10-5 ct-17 00:J0	1
PEn pA	0.006JR	0.00231	0.00R30	0.00HJH	4	B74002J	07-5 ct-17	0.11HL	10-5 ct-17 00:J0	1
PEn xS	0.0203	0.00231	0.00R30	0.00HJH		B74002J	07-5 ct-17	0.11HL	10-5 ct-17 00:J0	1
PE5 A	0.0116	0.00231	0.00R30	0.00HJH		B74002J	07-5 ct-17	0.11HL	10-5 ct-17 00:J0	1
PE5 S	0.137	0.00231	0.00R30	0.00HJH		B74002J	07-5 ct-17	0.11HL	10-5 ct-17 00:J0	1
PENA	ND	0.00231	0.00R30	0.00HJH		B74002J	07-5 ct-17	0.11HL	10-5 ct-17 00:J0	1

baoelef Stanf ayf s	TMpe	% RecrveyM	bimits	QualiRieys	Batc5	Pxtyactef	Samp Size	h nalMef	Dilutirn
13C3-PEBS	IS	111	R0 - 1R0		B74002J	07-5 ct-17	0.11HL	10-5 ct-17 00:J0	1
13CJ-PEn pA	IS	7J.3	R0 - 1R0		B74002J	07-5 ct-17	0.11HL	10-5 ct-17 00:J0	1
1H5 2-PEn xS	IS	106	R0 - 1R0		B74002J	07-5 ct-17	0.11HL	10-5 ct-17 00:J0	1
13C2-PE5 A	IS	91.7	R0 - 1R0		B74002J	07-5 ct-17	0.11HL	10-5 ct-17 00:J0	1
13CH-PE5 S	IS	10R	R0 - 1R0		B74002J	07-5 ct-17	0.11HL	10-5 ct-17 00:J0	1
13CR-PENA	IS	7H7	R0 - 1R0		B74002J	07-5 ct-17	0.11HL	10-5 ct-17 00:J0	1

DL - Detectiou Limit

L5 D - Limit of Detectiou
L5 Q - Limit of qhautitatiou

LCL-UCL- Lower coutrol limit - hpper coutrol limit
v eFhltF reported to tWe DL.

s Weu reported, PEn xS, PE5 A aud PE5 S iuclhde botWliuear aud braucWed iFomerF.
5 uly tWe liuear iFomer iF reported for all otWer aualyteF.

DATA QUALIFIERS & ABBREVIATIONS

B	**This compound was also detected in the method blank.**
D	**Dilution**
E	**The associated compound concentration exceeded the calibration range of the instrument.**
H	**Recovery and/or RPD was outside laboratory acceptance limits.**
I	**Chemical Interference**
J	**The amount detected is below the Reporting Limit/LOQ.**
M	**Estimated Maximum Possible Concentration. (CA Region 2 projects only)**
*****	**See Cover Letter**
Conc.	**Concentration**
NA	**Not applicable**
ND	**Not Detected**
TEQ	**Toxic Equivalency**
U	**Not Detected (specific projects only)**

Unless otherwise noted, solid sample results are reported in dry weight. Tissue samples are reported in wet weight.

CERTIFICATIONS

Accrediting Authority	Certificate Number
Arkansas Department of Environmental Quality	17-015-0
California Department of Health – ELAP	2892
DoD ELAP - A2LA Accredited - ISO/IEC 17025:2005	3091.01
Florida Department of Health	E87777-18
Hawaii Department of Health	N/A
Louisiana Department of Environmental Quality	01977
Maine Department of Health	2016026
Minnesota Department of Health	1175673
New Hampshire Environmental Accreditation Program	207716
New Jersey Department of Environmental Protection	CA003
New York Department of Health	11411
Oregon Laboratory Accreditation Program	4042-008
Pennsylvania Department of Environmental Protection	013
Texas Commission on Environmental Quality	T104704189-17-8
Virginia Department of General Services	8621
Washington Department of Ecology	C584
Wisconsin Department of Natural Resources	998036160

Current certificates and lists of licensed parameters are located in the Quality Assurance office and are available upon request.

NELAP Accredited Test Methods

MATRIX: Air	
Description of Test	**Method**
Determination of Polychlorinated p-Dioxins & Polychlorinated Dibenzofurans	EPA 23

MATRIX: Biological Tissue	
Description of Test	**Method**
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

MATRIX: Drinking Water	
Description of Test	**Method**
2,3,7,8-Tetrachlorodibenzo- p-dioxin (2,3,7,8-TCDD) GC/HRMS	EPA 1613
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537

MATRIX: Non-Potable Water	
Description of Test	**Method**
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Dioxin by GC/HRMS	EPA 613
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

MATRIX: Solids	
Description of Test	**Method**
Tetra-Octa Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope	EPA 1613B

Dilution GC/HRMS	
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

amec foster wheeler

Amec Foster Wheeler Environment & Infrastructure
271 Mill Road
Chelmsford, MA 01824
(978) 692-9090

SHIP TO:
Vista
1104 Windfield Way
El Dorado Hills, CA 95762
Atten: Martha Maier
Lab Phone# (916) 673-1520

CHAIN OF CUSTODY

1701377 0.5°C

DATE: 10/2/2017
COC #: BRDLY171002A
PAGE: 2 OF 4

Project Name:	Bradley IAP	Project Contact:	Denise King	Bill To: Amec Foster Wheeler Environment & Infrastructure	Disposal Instructions: LAB
Project Number:	291330006	Phone Number:	(978) 392-5339	9210 Sky Park Court Suite 200	Shipment Method: FEDEX
Project Manager:	Kerry Tull	Project Phase:	13	San Diego, CA 92123	Waybill Number: N/A

Sample Information / Methods for Analysis / RUSH

No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	MS/MSD	EPA 537M	24 Hour	48 Hour	72 Hour	5 Days	TOTAL BOTTLES	HOLD All Analyses
1	BRDLY-01-SB01-0-2	09/27/17 14:15	SO	N	N	X						
2	BRDLY-01-SB01-12-14	09/27/17 14:20	SO	N	N	X						
3	BRDLY-01-SB02-0-2	09/27/17 14:25	SO	N	N	X						
4	BRDLY-01-SB02-12-14	09/27/17 14:30	SO	N	N	X						
5	BRDLY-01-SB03-0-2	09/27/17 11:15	SO	N	N	X						
6	BRDLY-01-SB03-11-13	09/27/17 11:20	SO	N	N	X						
7	BRDLY-01-SO-DUP01-092717	09/27/17 11:25	SO	FD	N	X						
8	BRDLY-03-GW-DUP01-092717	09/27/17 12:20	WG	FD	N	X						
9	BRDLY-03-SB02-0-2	09/26/17 13:00	SO	N	N	X						
10	BRDLY-03-SB02-13-15	09/26/17 13:05	SO	N	N	X						
11	TW-101-092717	09/27/17 14:26	WG	N	N	X						
12	TW-103-092717	09/27/17 12:15	WG	N	N	X						

Sampler's Signature:		Date: 10/2/17	Time: 1500
Relinquished By/Affiliation:	AFW	Date: 10/2/17	Time: 1500
Received By:	Bett L Bruckert VAL	Date: 10/03/17	Time: 1011
Relinquished By/Affiliation:		Date:	Time:
Received By:		Date:	Time:
Relinquished By/Affiliation:		Date:	Time:
Received By (LAB):		Date:	Time:

For Lab Use

Does COC match samples:	Y or N
Broken Container:	Y or N
COC seal intact:	Y or N
Other problems:	Y or N
WSDOT contacted:	Y or N
Date contacted:	
Cooler Temperature at receipt:	°C

Comments:
X=Analyze H=Hold Analysis Request

Contract # W9133L-14-D-0002 TO0006
PO # F013200677
ATTN: Denise King
Base Lead: Steve Posten
Field Lead: Michael Cote (michael.cote@amecfw.com)

NUMBER OF COOLERS SENT:

Analyte List: UCMR 3 List (537.1)

Vista Analytical Laboratory

Sample Log-in Checklist

Vista Work Order #: 1701377 **TAT** 8T

Samples Arrival:	**Date/Time** 10/03/17 0959	**Initials:** PBB	**Location:** WR-2 **Shelf/Rack:** NA
Logged In:	**Date/Time** 10/03/17 1430	**Initials:** PBB IA	**Location:** WR-2 **Shelf/Rack:** E6

Delivered By:	FedEx	UPS	On Trac	GSO	DHL	Hand Delivered	Other
Preservation:	Ice		Blue Ice		Dry Ice		None

Temp °C: 0.4 (uncorrected)	**Time:** 1010	**Thermometer ID:** IR-1
Temp °C: 0.5 (corrected)	**Probe used:** Yes☐ No☑	

	YES	NO	NA
Adequate Sample Volume Received?	✓		
Holding Time Acceptable?	✓		
Shipping Container(s) Intact?	✓		
Shipping Custody Seals Intact?	✓		
Shipping Documentation Present?	✓		
Airbill Trk # 7879 3273 6148	✓		
Sample Container Intact?	✓		
Sample Custody Seals Intact?			✓
Chain of Custody / Sample Documentation Present?	✓		
COC Anomaly/Sample Acceptance Form completed?		✓	✓

If Chlorinated or Drinking Water Samples, Acceptable Preservation?						✓
Preservation Documented:	$Na_2S_2O_3$	Trizma	None	Yes	No	NA
Shipping Container	Vista	Client	Retain	Return	Dispose	

Comments:

November 01, 2017

Vista Work Order No. 1701378

Ms. Denise King
AMEC Foster Wheeler
271 Mill Road
Chelmsford, MA 01824

Dear Ms. King,

Enclosed are the results for the sample set received at Vista Analytical Laboratory on October 03, 2017. This sample set was analyzed on a standard turn-around time, under your Project Name 'Bradley IAP / 291330006'.

Vista Analytical Laboratory is committed to serving you effectively. If you require additional information, please contact me at 916-673-1520 or by email at mmaier@vista-analytical.com.

Thank you for choosing Vista as part of your analytical support team.

Sincerely,

Martha Maier
Laboratory Director

Vista Analytical Laboratory certifies that the report herein meets all the requirements set forth by NELAP for those applicable test methods. Results relate only to the samples as received by the laboratory. This report should not be reproduced except in full without the written approval of Vista.

Vista Analytical Laboratory 1104 Windfield Way El Dorado Hills, CA 95762 ph: 916-673-1520 fx: 916-673-0106 www.vista-analytical.com

Vista Work Order No. 1701378
Case Narrative

Sample Condition on Receipt:

Thirteen soil samples and one groundwater sample were received in good condition and within the method temperature requirements. The samples were received and stored securely in accordance with Vista standard operating procedures and EPA methodology. As directed, the sample ID discrepancies were resolved and the IDs were reported as listed on the CoC.

Analytical Notes:

Modified EPA Method 537

The aqueous sample was extracted and analyzed for a selected list of PFAS using Modified EPA Method 537.

Holding Times

The sample was extracted and analyzed within the method hold times.

Quality Control

The Initial Calibration and Continuing Calibration Verifications met the method acceptance criteria.

A Method Blank and Ongoing Precision and Recovery "OPR(sample were extracted and analyzed with the preparation batch. No analytes were detected in the Method Blank above 1/2 the LOQ. The OPR recoveries were within the method acceptance criteria

The Method Blank was re-injected because one or more Injection Internal Standard Analyte response areas were outside of criteria. The results were similar in the second injection. The results from the original injections have been reported.

The labeled standard recoveries for all QC and field samples were within the acceptance criteria.

VAL-PFAS

The soil samples were extracted and analyzed for a selected list of PFAS using VAL Method PFAS.

Holding Times

The samples were extracted and analyzed within the hold times.

Quality Control

The Initial Calibration and Continuing Calibration Verifications met the method acceptance criteria.

A Method Blank and Ongoing Precision and Recovery "OPR(sample were extracted and analyzed with the

preparation batch. No analytes were detected in the Method Blank above 1/2 the LOQ. The OPR recoveries were within the method acceptance criteria.

The extracts were re-injected because one or more Injection Internal Standard Analyte response areas were outside of criteria. The results were similar in the second injection. The results from the original injections have been reported.

The labeled standard recoveries for all QC and field samples were within the acceptance criteria.

As requested, an MS/MSD was performed on sample)BRDLY-05-SB01-0-2).

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Sample Inventory Report

Vista Sample ID	Client Sample ID	Sampled	Received	Components/Containers
1701378-01	BRDLY-02-SB01-0-2	28-Sep-17 14:30	03-Oct-17 09:59	HDPE Jar, 6 oz
1701378-02	BRDLY-02-SB01-13-15	28-Sep-17 14:40	03-Oct-17 09:59	HDPE Jar, 6 oz
1701378-03	BRDLY-02-SB02-0-2	28-Sep-17 15:20	03-Oct-17 09:59	HDPE Jar, 6 oz
1701378-04	BRDLY-02-SB02-13-15	28-Sep-17 15:25	03-Oct-17 09:59	HDPE Jar, 6 oz
1701378-05	BRDLY-02-SB03-0-2	28-Sep-17 13:15	03-Oct-17 09:59	HDPE Jar, 6 oz
1701378-06	BRDLY-02-SB03-13-15	28-Sep-17 13:30	03-Oct-17 09:59	HDPE Jar, 6 oz
1701378-07	BRDLY-05-SB01-0-2	MS/MSD29-Sep-17 12:15	03-Oct-17 09:59	HDPE Jar, 6 oz
				HDPE Jar, 6 oz
1701378-08	BRDLY-05-SB02-0-2	29-Sep-17 11:50	03-Oct-17 09:59	HDPE Jar, 6 oz
1701378-09	BRDLY-05-SB02-9-11	29-Sep-17 11:55	03-Oct-17 09:59	HDPE Jar, 6 oz
1701378-10	BRDLY-05-SB03-0-2	29-Sep-17 11:30	03-Oct-17 09:59	HDPE Jar, 6 oz
1701378-11	BRDLY-05-SB03-9-11	29-Sep-17 11:40	03-Oct-17 09:59	HDPE Jar, 6 oz
1701378-12	TW-102-092817	28-Sep-17 14:51	03-Oct-17 09:59	HDPE Bottle, 125 mL
				HDPE Bottle, 125 mL
1701378-13	BRDLY-03-SB03-0-2	29-Sep-17 13:15	03-Oct-17 09:59	HDPE Jar, 6 oz
1701378-14	BRDLY-05-SB01-9-11	29-Sep-17 12:30	03-Oct-17 09:59	HDPE Jar, 6 oz

ANALYTICAL RESULTS

Sample ID: Method Blank

Modified EPA Method 537

Client Data

Name: AMEC Foster Wheeler
Project: Bradley IAP / 291330006
Matrix: Aqueous

Laboratory Data

Lab Sample: B7J0024-BLK1
Column: BEH C18

Analyte	Conc. (ug/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	0.00218	0.00500	0.00800		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:53	1
PFHpA	ND	0.00218	0.00500	0.00800		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:53	1
PFHxS	ND	0.00218	0.00500	0.00800		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:53	1
PFOA	ND	0.00218	0.00500	0.00800		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:53	1
PFOS	ND	0.00218	0.00500	0.00800		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:53	1
PFNA	ND	0.00218	0.00500	0.00800		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:53	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	117	50 - 150		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:53	1
13C4-PFHpA	IS	83.1	50 - 150		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:53	1
18O2-PFHxS	IS	99.4	50 - 150		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:53	1
13C2-PFOA	IS	96.5	50 - 150		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:53	1
13C8-PFOS	IS	112	50 - 150		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:53	1
13C5-PFNA	IS	79.7	50 - 150		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:53	1

DL - Detection Limit
LOD - Limit of Detection
LOQ - Limit of quantitation
LCL-UCL- Lower control limit - upper control limit
Results reported to the DL.
When reported, PFHxS, PFOA and PFOS include both linear and branched isomers.
Only the linear isomer is reported for all other analytes.

Sample ID: OPR

Modified EPA Method 537

Client Data

Name: AMEC Foster Wheeler
Project: Bradley IAP / 291330006
Matrix: Aqueous

Laboratory Data

Lab Sample: B7J0024-BS1
Column: BEH C18

Analyte	Amt Found (ug/L)	Spike Amt	% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	0.0849	0.0800	106	70-130		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:00	1
PFHpA	0.0903	0.0800	113	70-130		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:00	1
PFHxS	0.0779	0.0800	97.4	70-130		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:00	1
PFOA	0.0865	0.0800	108	70-130		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:00	1
PFOS	0.0820	0.0800	103	70-130		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:00	1
PFNA	0.0832	0.0800	104	70-130		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:00	1

Labeled Standards	Type	% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	125	50- 150		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:00	1
13C4-PFHpA	IS	80.6	50- 150		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:00	1
18O2-PFHxS	IS	94.4	50- 150		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:00	1
13C2-PFOA	IS	94.7	50- 150		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:00	1
13C8-PFOS	IS	104	50- 150		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:00	1
13C5-PFNA	IS	81.7	50- 150		B7J0024	07-Oct-17	0.125 L	09-Oct-17 17:00	1

Sample ID: TW-102-092817

Modified EPA Method 537

Client Data

Name: AMEC Foster Wheeler
Project: Bradley IAP / 291330006
Matrix: Groundwater
Date Collected: 2-8Sep817 1R:v1

Laboratory Data

Lab Sample: 170137-812
Date Oecei5ed: 038 ct817 09:v9
Column: BEH C1-

Analyte	Conc. (ug/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	0403R-	0400227	0400v21	0400-3R		B7J002R	078 ct817	0420 L	108 ct817 00:v0	1
PFHpA	0401R7	0400227	0400v21	0400-3R		B7J002R	078 ct817	0420 L	108 ct817 00:v0	1
PFHxS	040R67	0400227	0400v21	0400-3R		B7J002R	078 ct817	0420 L	108 ct817 00:v0	1
PF. A	ND	0400227	0400v21	0400-3R		B7J002R	078 ct817	0420 L	108 ct817 00:v0	1
PF. S	0400791	0400227	0400v21	0400-3R	J	B7J002R	078 ct817	0420 L	108 ct817 00:v0	1
PFNA	ND	0400227	0400v21	0400-3R		B7J002R	078 ct817	0420 L	108 ct817 00:v0	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C38PFBS	IS	119	v0 8 1v0		B7J002R	078 ct817	0420 L	108 ct817 00:v0	1
13CR8PFHpA	IS	-v47	v0 8 1v0		B7J002R	078 ct817	0420 L	108 ct817 00:v0	1
1-. 28PFHxS	IS	109	v0 8 1v0		B7J002R	078 ct817	0420 L	108 ct817 00:v0	1
13C28PF. A	IS	-v4-	v0 8 1v0		B7J002R	078 ct817	0420 L	108 ct817 00:v0	1
13C-8PF. S	IS	103	v0 8 1v0		B7J002R	078 ct817	0420 L	108 ct817 00:v0	1
13Cv8PFNA	IS	794B	v0 8 1v0		B7J002R	078 ct817	0420 L	108 ct817 00:v0	1

DL 8Detection Limit
L. D 8Limit of Detection
L. Q 8Limit of quantitation
LCL8UCL8Lower control limit 8upper control limit
Oesults reported to the DL4
When reported, PFHxS, PF. A and PF. S include both linear and branched isomers4
. nly the linear isomer is reported for all other analytes4

Sample ID: Method Blank

VAL - PFAS

Client Data

Name: AMEC Foster Wheeler
Project: Bradley IAP / 291330006
Matrix: Solid

Laboratory Data

Lab Sample: B7J0136-BLK1
Column: BEH C18

Analyte	Conc. (ug/kg)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	0.285	1.00	2.00		B7J0136	20-Oct-17	1.00 4	26-Oct-17 13:33	1
PFHpA	ND	0.285	1.00	2.00		B7J0136	20-Oct-17	1.00 4	26-Oct-17 13:33	1
PFHxS	ND	0.285	1.00	2.00		B7J0136	20-Oct-17	1.00 4	26-Oct-17 13:33	1
PFOA	ND	0.285	1.00	2.00		B7J0136	20-Oct-17	1.00 4	26-Oct-17 13:33	1
PFOS	ND	0.285	1.00	2.00		B7J0136	20-Oct-17	1.00 4	26-Oct-17 13:33	1
PFNA	ND	0.285	1.00	2.00		B7J0136	20-Oct-17	1.00 4	26-Oct-17 13:33	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	103	50 - 150		B7J0136	20-Oct-17	1.00 4	26-Oct-17 13:33	1
13Cg-PFHpA	IS	95.0	50 - 150		B7J0136	20-Oct-17	1.00 4	26-Oct-17 13:33	1
18O2-PFHxS	IS	81.9	50 - 150		B7J0136	20-Oct-17	1.00 4	26-Oct-17 13:33	1
13C2-PFOA	IS	81.8	50 - 150		B7J0136	20-Oct-17	1.00 4	26-Oct-17 13:33	1
13C8-PFOS	IS	101	50 - 150		B7J0136	20-Oct-17	1.00 4	26-Oct-17 13:33	1
13C5-PFNA	IS	93.1	50 - 150		B7J0136	20-Oct-17	1.00 4	26-Oct-17 13:33	1

DL - Detection Limit
LOD - Limit of Detection
LOQ - Limit of quantitation

LCL-UCL- Lower control limit - upper control limit
The results are reported in dry wei4ht.
The sample size is reported in wet wei4ht.
Results reported to the DL.

When reported, PFHxS, PFOA and PFOS include both linear and branched isomers.
Only the linear isomer is reported for all other analytes.

Sample ID: LCSD

VAL - PFAS

Name:	AMEC Foster Wheeler	Lab Sample:	B7J0136-BS1/B7J0136-BSD1
Project:	Bradley IAP / 291330006	QC Batch:	B7J0136
Matrix:	Solid	Samp Size:	1.00/1.00 g
Date Extracted:	20-Oct-17	Column:	BEH C18

Analyte	LCS (ug/kg)	LCS Spike Amt	LCS % Rec	LCS Quals	LCSD (ug/kg)	LCSD Spike Amt	LCSD % Rec	RPD	LCSD Quals	%Rec Limits	RPD Limits	LCS Analyzed	LCS Dil	LCSD Analyzed	LCSD Dil
PFBS	9.14	10.0	91.4		9.21	10.0	92.1	0.763		70-130		26-Oct-17 12:25	1	26-Oct-17 12:37	1
PFHpA	8.91	10.0	89.1		9.18	10.0	91.8	3.01		70-130		26-Oct-17 12:25	1	26-Oct-17 12:37	1
PFHxS	8.97	10.0	89.7		8.57	10.0	85.7	4.56		70-130		26-Oct-17 12:25	1	26-Oct-17 12:37	1
PFOA	9.25	10.0	92.5		9.49	10.0	94.9	2.60		70-130		26-Oct-17 12:25	1	26-Oct-17 12:37	1
PFOS	9.82	10.0	98.2		9.43	10.0	94.3	4.08		70-130		26-Oct-17 12:25	1	26-Oct-17 12:37	1
PFNA	9.72	10.0	97.2		9.01	10.0	90.1	7.66		70-130		26-Oct-17 12:25	1	26-Oct-17 12:37	1

Labeled Standards	Type	LCS % Rec	LCS Quals	LCSD % Rec	LCSD Quals	Limits	LCS Analyzed	LCS Dil	LCSD Analyzed	LCSD Dil
13C3-PFBS	IS	95.5		102		50-150	26-Oct-17 12:25	1	26-Oct-17 12:37	1
13C4-PFHpA	IS	93.6		101		50-150	26-Oct-17 12:25	1	26-Oct-17 12:37	1
18O2-PFHxS	IS	92.6		98.2		50-150	26-Oct-17 12:25	1	26-Oct-17 12:37	1
13C2-PFOA	IS	88.1		86.7		50-150	26-Oct-17 12:25	1	26-Oct-17 12:37	1
13C8-PFOS	IS	95.3		92.8		50-150	26-Oct-17 12:25	1	26-Oct-17 12:37	1
13C5-PFNA	IS	74.1		84.4		50-150	26-Oct-17 12:25	1	26-Oct-17 12:37	1

Sample ID: BRDLY-01-SB02-0-1

VAL - PFAS

Client Data				Laboratory Data			
Name:	AMFC WoEter h . eeler	Matrix:	Soil	Lab Sample:	170137-%01	ColnmH:	BF8 C1-
Project:	Bradley IAP / 291330006	Date Collected:	2-%Sep%17 1R:30	Date v eceiOed:	03%5 ct%17 09:u9		
				s SolidE	964u		

Analyte	Conc. (ug/kg)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PW3S	ND	04276	0496-	149R		B7J0136	20%5 ct%17	1407 g	26%5 ct%17 17:16	1
PW8 pA	ND	04276	0496-	149R		B7J0136	20%5 ct%17	1407 g	26%5 ct%17 17:16	1
PW8 xS	ND	04276	0496-	149R		B7J0136	20%5 ct%17	1407 g	26%5 ct%17 17:16	1
PW5 A	ND	04276	0496-	149R		B7J0136	20%5 ct%17	1407 g	26%5 ct%17 17:16	1
PW5 S	ND	04276	0496-	149R		B7J0136	20%5 ct%17	1407 g	26%5 ct%17 17:16	1
PWNA	ND	04276	0496-	149R		B7J0136	20%5 ct%17	1407 g	26%5 ct%17 17:16	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3%PW3S	IS	904u	u0 % 1u0		B7J0136	20%5 ct%17	1407 g	26%5 ct%17 17:16	1
13CR%PW8 pA	IS	9147	u0 % 1u0		B7J0136	20%5 ct%17	1407 g	26%5 ct%17 17:16	1
1-5 2%PW8 xS	IS	9u46	u0 % 1u0		B7J0136	20%5 ct%17	1407 g	26%5 ct%17 17:16	1
13C2%PW5 A	IS	-649	u0 % 1u0		B7J0136	20%5 ct%17	1407 g	26%5 ct%17 17:16	1
13C-%PW5 S	IS	9u41	u0 % 1u0		B7J0136	20%5 ct%17	1407 g	26%5 ct%17 17:16	1
13Cu%PWNA	IS	-943	u0 % 1u0		B7J0136	20%5 ct%17	1407 g	26%5 ct%17 17:16	1

DL %DetectioHLimit
L5 D %Limit of DetectioH
L5 Q %Limit of qnaHtitatioH
LCL%UCL%Lower coHtrol limit %upper coHtrol limit
T. e reEnltEare reported iHdry weig. t4
T. e Eample Eize iEreported iHwet weig. t4
v eEnltEreported to t. e DL4
h . eHreported, PW8 xS, PW5 A aHd PW5 S iHclnde bot. liHear aHd braHc. ed iEomerE4
5 Hy t. e liHear iEomer iEreported for all ot. er aHalyteE4

Sample ID: BRDLY-03-SB02-21-25

VAL - PFAS

Client Data

Name: AMFC WoHer h . eeler
Project: Bradley IAP / 291330006
Matrix: Soil
Date Collected: 2-%Sep%17 14:40

Laboratory Data

Lab Sample: 170137-%02
Date Received: 03%Oct%17 09:59
s SolidE -4u9
ColnmH BF8 C1-

Analyte	Conc. (ug/kg)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PWBS	ND	0u2-0	0u9-2	1u96		B7J0136	20%Oct%17	1u20 g	26%Oct%17 17:2-	1
PW8 pA	ND	0u2-0	0u9-2	1u96		B7J0136	20%Oct%17	1u20 g	26%Oct%17 17:2-	1
PW8 xS	0u331	0u2-0	0u9-2	1u96	J	B7J0136	20%Oct%17	1u20 g	26%Oct%17 17:2-	1
PWOA	ND	0u2-0	0u9-2	1u96		B7J0136	20%Oct%17	1u20 g	26%Oct%17 17:2-	1
PWOS	11u6	0u2-0	0u9-2	1u96		B7J0136	20%Oct%17	1u20 g	26%Oct%17 17:2-	1
PWNA	ND	0u2-0	0u9-2	1u96		B7J0136	20%Oct%17	1u20 g	26%Oct%17 17:2-	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3%BWBS	IS	92u+	50 % 150		B7J0136	20%Oct%17	1u20 g	26%Oct%17 17:2-	1
13C4%BW8 pA	IS	90u6	50 % 150		B7J0136	20%Oct%17	1u20 g	26%Oct%17 17:2-	1
1-O2%BW8 xS	IS	94u9	50 % 150		B7J0136	20%Oct%17	1u20 g	26%Oct%17 17:2-	1
13C2%BWOA	IS	7-ul	50 % 150		B7J0136	20%Oct%17	1u20 g	26%Oct%17 17:2-	1
13C-%BWOS	IS	92u+	50 % 150		B7J0136	20%Oct%17	1u20 g	26%Oct%17 17:2-	1
13C5%BWNA	IS	-4u7	50 % 150		B7J0136	20%Oct%17	1u20 g	26%Oct%17 17:2-	1

DL %DetectioHLimit
LOD %Limit of DetectioH
LOQ %Limit of qnaHitatioH

LCL%/CL%Lower coHrol limit %upper coHrol limit
T. e reEnltEare reported iHdry weig. tu
T. e Eample Eize iEreported iHwet weig. tu
ReEnltEreported to t. e DLu

h . eHreported, PW8 xS, PWOA aHd PWOS iHclnde bot. liHear aHd braHc. ed iEomerEu
OHly t. e liHear iEomer iEreported for all ot. er aHalyteEu

Sample ID: BRDLY-02-SB02-0-2

VAL - PFAS

Client Data

Name: AMFC WoHer h . eeler
Project: Bradley IAP / 291330006
Matrix: Soil
Date Collected: 2-%Sep%17 1R:20

Laboratory Data

Lab Sample: 170137-%03
Date v eceiOed: 03%5 ct%17 09:R9
s SolidE 94u0
ColnmH BF8 C1-

Analyte	Conc. (ug/kg)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PWBS	ND	0u2-1	0u9-R	1u97		B7J0136	20%5 ct%17	1u0- g	26%5 ct%17 17:39	1
PW8 pA	ND	0u2-1	0u9-R	1u97		B7J0136	20%5 ct%17	1u0- g	26%5 ct%17 17:39	1
PW8 xS	ND	0u2-1	0u9-R	1u97		B7J0136	20%5 ct%17	1u0- g	26%5 ct%17 17:39	1
PW5 A	ND	0u2-1	0u9-R	1u97		B7J0136	20%5 ct%17	1u0- g	26%5 ct%17 17:39	1
PW5 S	ND	0u2-1	0u9-R	1u97		B7J0136	20%5 ct%17	1u0- g	26%5 ct%17 17:39	1
PWNA	ND	0u2-1	0u9-R	1u97		B7J0136	20%5 ct%17	1u0- g	26%5 ct%17 17:39	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3%BWBS	IS	92u7	R0 % 1R0		B7J0136	20%5 ct%17	1u0- g	26%5 ct%17 17:39	1
13C4%BW8 pA	IS	-6u9	R0 % 1R0		B7J0136	20%5 ct%17	1u0- g	26%5 ct%17 17:39	1
1-5 2%BW8 xS	IS	-1u0	R0 % 1R0		B7J0136	20%5 ct%17	1u0- g	26%5 ct%17 17:39	1
13C2%BW5 A	IS	76uR	R0 % 1R0		B7J0136	20%5 ct%17	1u0- g	26%5 ct%17 17:39	1
13C-%BW5 S	IS	7-u9	R0 % 1R0		B7J0136	20%5 ct%17	1u0- g	26%5 ct%17 17:39	1
13CR%BWNA	IS	-0ul	R0 % 1R0		B7J0136	20%5 ct%17	1u0- g	26%5 ct%17 17:39	1

DL %DetectioHLimit
L5 D %Limit of DetectioH
L5 Q %Limit of qnaHitatioH
LCL%/CL%Lower coHrol limit %upper coHrol limit
T. e reEnltEare reported iHdry weig. tu
T. e Eample Eize iEreported iHwet weig. tu
v eEnltEreported to t. e DLu
h . eHreported, PW8 xS, PW5 A aHl PW5 S iHclnde bot. liHear aHl braHc. ed iEomerEu
5 Hy t. e liHear iEomer iEreported for all ot. er aHalyteEu

Sample ID: BRDLY-03-SB03-21-25

VAL - PFAS

Client Data

Name: AMWC hoRter . 4eeler
Project: Bradley IAP / 291330006
Matrix: Soil
Date Collected: 2-%Sep%17 1n:2n

Laboratory Data

Lab Sample: 170137-%0s
Date v eceiOed: 03%5 ct%17 09:n9
E SolidF: 77un
ColHm8: BWR C1-

Analyte	Conc. (ug/kg)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PhBS	ND	0u2-n	1u00	2u00		B7J0136	20%5 ct%17	1u29 g	26%5 ct%17 17:n1	1
PhRpA	ND	0u2-n	1u00	2u00		B7J0136	20%5 ct%17	1u29 g	26%5 ct%17 17:n1	1
PhRxS	ND	0u2-n	1u00	2u00		B7J0136	20%5 ct%17	1u29 g	26%5 ct%17 17:n1	1
Ph5 A	ND	0u2-n	1u00	2u00		B7J0136	20%5 ct%17	1u29 g	26%5 ct%17 17:n1	1
Ph5 S	ND	0u2-n	1u00	2u00		B7J0136	20%5 ct%17	1u29 g	26%5 ct%17 17:n1	1
PhNA	ND	0u2-n	1u00	2u00		B7J0136	20%5 ct%17	1u29 g	26%5 ct%17 17:n1	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3%BhBS	IS	92u6	n0 % 1n0		B7J0136	20%5 ct%17	1u29 g	26%5 ct%17 17:n1	1
13Cs%BhRpA	IS	-9u3	n0 % 1n0		B7J0136	20%5 ct%17	1u29 g	26%5 ct%17 17:n1	1
1-5 2%BhRxS	IS	-2u2	n0 % 1n0		B7J0136	20%5 ct%17	1u29 g	26%5 ct%17 17:n1	1
13C2%Bh5 A	IS	-0us	n0 % 1n0		B7J0136	20%5 ct%17	1u29 g	26%5 ct%17 17:n1	1
13C-%Bh5 S	IS	-1u+	n0 % 1n0		B7J0136	20%5 ct%17	1u29 g	26%5 ct%17 17:n1	1
13Cn%BhNA	IS	79ul	n0 % 1n0		B7J0136	20%5 ct%17	1u29 g	26%5 ct%17 17:n1	1

DL %Detectio8 Limit
L5 D %Limit of Detectio8
L5 Q %Limit of qHa8titatio8
LCL%/CL%Lower co8trol limit %Upper co8trol limit
T4e reFHtF are reported i8 dry weig4tu
T4e Fample Fize iF reported i8 wet weig4tu
v eFHtF reported to t4e DLu
. 4e8 reported, PhRxS, Ph5 A a8d Ph5 S i8clHde bot4 li8ear a8d bra8c4ed iFomerFu
5 8ly t4e li8ear iFomer iF reported for all ot4er a8alyteFu

Sample ID: BRDLY-03-SB02-0-3

VAL - PFAS

Client Data

Name: AMWC hoHter . 4eeler
Project: Bradley IAP / 291330006
Matrix: Soil
Date Collected: 2-%Sep%17 13:1s

Laboratory Data

Lab Sample: 170137-%s
Date Received: 03%Oct%17 09:s9
E SolidF: 96u3
ColnmH: BW8 C1-

Analyte	Conc. (ug/kg)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PhBS	ND	0u275	0u962	1u92		B7J0136	20%Oct%17	1u0- g	26%Oct%17 1-:02	1
Ph8 pA	ND	0u275	0u962	1u92		B7J0136	20%Oct%17	1u0- g	26%Oct%17 1-:02	1
Ph8 xS	ND	0u275	0u962	1u92		B7J0136	20%Oct%17	1u0- g	26%Oct%17 1-:02	1
PhOA	ND	0u275	0u962	1u92		B7J0136	20%Oct%17	1u0- g	26%Oct%17 1-:02	1
PhOS	1u97	0u275	0u962	1u92		B7J0136	20%Oct%17	1u0- g	26%Oct%17 1-:02	1
PhNA	ND	0u275	0u962	1u92		B7J0136	20%Oct%17	1u0- g	26%Oct%17 1-:02	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3%BhBS	IS	-9u1	s0 % 1s0		B7J0136	20%Oct%17	1u0- g	26%Oct%17 1-:02	1
13C5%Bh8 pA	IS	95u0	s0 % 1s0		B7J0136	20%Oct%17	1u0- g	26%Oct%17 1-:02	1
1-O2%Bh8 xS	IS	91u2	s0 % 1s0		B7J0136	20%Oct%17	1u0- g	26%Oct%17 1-:02	1
13C2%BhOA	IS	-6u6	s0 % 1s0		B7J0136	20%Oct%17	1u0- g	26%Oct%17 1-:02	1
13C-%BhOS	IS	-6u7	s0 % 1s0		B7J0136	20%Oct%17	1u0- g	26%Oct%17 1-:02	1
13Cs%BhNA	IS	-1u+	s0 % 1s0		B7J0136	20%Oct%17	1u0- g	26%Oct%17 1-:02	1

DL %DetectioHLimit
LOD %Limit of DetectioH
LOQ %Limit of qnaHitatioH
LCL%/CL%Lower coHrol limit %upper coHrol limit
T4e reFnltF are reported iHdry weig4tu
T4e Fample Fize iF reported iHwet weig4tu
ReFnltF reported to t4e DLu
. 4eHreported, Ph8 xS, PhOA aHd PhOS iHclnde bot4 liHear aHd braHched iFomerFu
OHly t4e liHear iFomer iF reported for all ot4er aHalyteFu

Sample ID: BRDLY-03-SB02-12-15

VAL - PFAS

Client Data				Laboratory Data			
Name:	AMFC WoEter h . eeler	Matrix:	Soil	Lab Sample:	170137-%06	ColnmH	BF8 C1-
Project:	Bradley IAP / 291330006	Date Collected:	2-%Sep%17 13:30	Date Received:	03%Oct%17 09:49		
				s SolidE	-4u7		

Analyte	Conc. (ug/kg)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PWBS	ND	0u2-5	0u997	1u99		B7J0136	20%Oct%17	1u17 g	26%Oct%17 1-:13	1
PW8 pA	ND	0u2-5	0u997	1u99		B7J0136	20%Oct%17	1u17 g	26%Oct%17 1-:13	1
PW8 xS	0u350	0u2-5	0u997	1u99	J	B7J0136	20%Oct%17	1u17 g	26%Oct%17 1-:13	1
PWOA	ND	0u2-5	0u997	1u99		B7J0136	20%Oct%17	1u17 g	26%Oct%17 1-:13	1
PWOS	5u39	0u2-5	0u997	1u99		B7J0136	20%Oct%17	1u17 g	26%Oct%17 1-:13	1
PWNA	ND	0u2-5	0u997	1u99		B7J0136	20%Oct%17	1u17 g	26%Oct%17 1-:13	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3%BWBS	IS	90u6	40 % 140		B7J0136	20%Oct%17	1u17 g	26%Oct%17 1-:13	1
13C5%BW8 pA	IS	--u2	40 % 140		B7J0136	20%Oct%17	1u17 g	26%Oct%17 1-:13	1
1-O2%BW8 xS	IS	79u7	40 % 140		B7J0136	20%Oct%17	1u17 g	26%Oct%17 1-:13	1
13C2%BWOA	IS	-2u0	40 % 140		B7J0136	20%Oct%17	1u17 g	26%Oct%17 1-:13	1
13C-%BWOS	IS	9-u+	40 % 140		B7J0136	20%Oct%17	1u17 g	26%Oct%17 1-:13	1
13C4%BWNA	IS	-5u+	40 % 140		B7J0136	20%Oct%17	1u17 g	26%Oct%17 1-:13	1

DL %DetectioHLimit
LOD %Limit of DetectioH
LOQ %Limit of qnaHtitatioH
LCL%UCL%Lower coHtrol limit %upper coHtrol limit
T. e reEnltEare reported iHdry weig. tu
T. e Eample Eize iEreported iHwet weig. tu
ReEnltEreported to t. e DLu
h . eHreported, PW8 xS, PWOA aHd PWOS iHclnde bot. liHear aHd braHc. ed iEomerEu
OHly t. e liHear iEomer iEreported for all ot. er aHalyteEu

Sample ID: BRDLY-05-SB01-0-2

VAL - PFAS

Client Data

Name: AMFC WoHer h . eeler
Project: Bradley IAP / 291330006
Matrix: Soil
Date Collected: 29%Sep%17 12:1R

Laboratory Data

Lab Sample: 170137-%07
Date v eceiOed: 03%5 ct%17 09:R9
s SolidE 94u2
ColnmH BF8 C1-

Analyte	Conc. (ug/kg)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PWBS	ND	0u2-0	0u9-3	1u97		B7J0136	20%5 ct%17	1u0- g	26%5 ct%17 1-:24	1
PW8 pA	ND	0u2-0	0u9-3	1u97		B7J0136	20%5 ct%17	1u0- g	26%5 ct%17 1-:24	1
PW8 xS	ND	0u2-0	0u9-3	1u97		B7J0136	20%5 ct%17	1u0- g	26%5 ct%17 1-:24	1
PW5 A	ND	0u2-0	0u9-3	1u97		B7J0136	20%5 ct%17	1u0- g	26%5 ct%17 1-:24	1
PW5 S	ND	0u2-0	0u9-3	1u97		B7J0136	20%5 ct%17	1u0- g	26%5 ct%17 1-:24	1
PWNA	ND	0u2-0	0u9-3	1u97		B7J0136	20%5 ct%17	1u0- g	26%5 ct%17 1-:24	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3%BWBS	IS	9-u3	R0 % 1R0		B7J0136	20%5 ct%17	1u0- g	26%5 ct%17 1-:24	1
13C4%BW8 pA	IS	-6u2	R0 % 1R0		B7J0136	20%5 ct%17	1u0- g	26%5 ct%17 1-:24	1
1-5 2%BW8 xS	IS	-6u3	R0 % 1R0		B7J0136	20%5 ct%17	1u0- g	26%5 ct%17 1-:24	1
13C2%BW5 A	IS	73u2	R0 % 1R0		B7J0136	20%5 ct%17	1u0- g	26%5 ct%17 1-:24	1
13C-%BW5 S	IS	90u2	R0 % 1R0		B7J0136	20%5 ct%17	1u0- g	26%5 ct%17 1-:24	1
13CR%BWNA	IS	7Ru3	R0 % 1R0		B7J0136	20%5 ct%17	1u0- g	26%5 ct%17 1-:24	1

DL %DetectioHLimit
L5 D %Limit of DetectioH
L5 Q %Limit of qnaHitatioH
LCL%/CL%Lower coHrol limit %upper coHrol limit
T. e reEnltEare reported iHdry weig. tu
T. e Eample Eize iEreported iHwet weig. tu
v eEnltEreported to t. e DLu
h . eHreported, PW8 xS, PW5 A aHl PW5 S iHclnde bot. liHear aHl braHc. ed iEomerEu
5 Hy t. e liHear iEomer iEreported for all ot. er aHalyteEu

Sample ID: BRDLY-05-SB01-0-2

VAL - PFAS

Name:	AMEC Foster Wheeler	Lab Sample:	B7J0136-MS1/B7J0136-MSD1	Source Lab Sample:	1701378-07
Project:	Bradley IAP / 291330006	QC Batch:	B7J0136	Date Extracted:	20-Oct-17
Matrix:	Solid	Samp Size:	1.10/1.10 g	Column:	BEH C18

Analyte	Sample (ug/kg)	MS (ug/kg)	MS Spike Amt	MS % Rec	MS Quals	MSD (ug/kg)	MSD Spike Amt	MSD % Rec	RPD	MSD Quals	%Rec Limits	RPD Limits	MS Analyzed	MS Dil	MSD Analyzed	MSD Dil
PFBS	ND	9.08	9.65	94.1		8.98	9.65	93.1	1.07		70-130	25	26-Oct-17 13:44	1	26-Oct-17 13:55	1
PFHpA	ND	9.19	9.65	94.8		9.18	9.65	94.7	0.106		70-130	25	26-Oct-17 13:44	1	26-Oct-17 13:55	1
PFHxS	ND	8.67	9.65	88.7		9.87	9.65	101	13.0		70-130	25	26-Oct-17 13:44	1	26-Oct-17 13:55	1
PFOA	ND	9.97	9.65	101		8.42	9.65	84.5	17.8		70-130	25	26-Oct-17 13:44	1	26-Oct-17 13:55	1
PFOS	ND	9.34	9.65	95.1		10.5	9.65	107	11.8		70-130	25	26-Oct-17 13:44	1	26-Oct-17 13:55	1
PFNA	ND	9.51	9.65	98.5		8.42	9.65	87.3	12.1		70-130	25	26-Oct-17 13:44	1	26-Oct-17 13:55	1

Labeled Standards	Type	MS % Rec	MS Quals	MSD % Rec	MSD Quals	Limits	MS Analyzed	MS Dil	MSD Analyzed	MSD Dil
13C3-PFBS	IS	97.9		102		50-150	26-Oct-17 13:44	1	26-Oct-17 13:55	1
13C4-PFHpA	IS	91.5		85.3		50-150	26-Oct-17 13:44	1	26-Oct-17 13:55	1
18O2-PFHxS	IS	88.9		77.0		50-150	26-Oct-17 13:44	1	26-Oct-17 13:55	1
13C2-PFOA	IS	78.3		77.2		50-150	26-Oct-17 13:44	1	26-Oct-17 13:55	1
13C8-PFOS	IS	92.5		82.0		50-150	26-Oct-17 13:44	1	26-Oct-17 13:55	1
13C5-PFNA	IS	69.4		80.8		50-150	26-Oct-17 13:44	1	26-Oct-17 13:55	1

Sample ID: BRDLY-05-SB02-0-2

VAL - PFAS

Client Data

Name: AMFC WoHer h . eeler
Project: Bradley IAP / 291330006
Matrix: Soil
Date Collected: 29%Sep%17 11:R0

Laboratory Data

Lab Sample: 170137-%0-
Date v eceiOed: 03%5 ct%17 09:R9
s SolidE 934u
ColnmH BF8 C1-

Analyte	Conc. (ug/kg)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PW3S	ND	042-R	1400	2400		B7J0136	20%5 ct%17	1407 g	26%5 ct%17 1-:3R	1
PW8 pA	ND	042-R	1400	2400		B7J0136	20%5 ct%17	1407 g	26%5 ct%17 1-:3R	1
PW8 xS	ND	042-R	1400	2400		B7J0136	20%5 ct%17	1407 g	26%5 ct%17 1-:3R	1
PW5 A	ND	042-R	1400	2400		B7J0136	20%5 ct%17	1407 g	26%5 ct%17 1-:3R	1
PW5 S	ND	042-R	1400	2400		B7J0136	20%5 ct%17	1407 g	26%5 ct%17 1-:3R	1
PWNA	ND	042-R	1400	2400		B7J0136	20%5 ct%17	1407 g	26%5 ct%17 1-:3R	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3%3W3S	IS	--40	R0 % 1R0		B7J0136	20%5 ct%17	1407 g	26%5 ct%17 1-:3R	1
13Cu%3W8 pA	IS	-64R	R0 % 1R0		B7J0136	20%5 ct%17	1407 g	26%5 ct%17 1-:3R	1
1-5 2%3W8 xS	IS	904B	R0 % 1R0		B7J0136	20%5 ct%17	1407 g	26%5 ct%17 1-:3R	1
13C2%3W5 A	IS	774R	R0 % 1R0		B7J0136	20%5 ct%17	1407 g	26%5 ct%17 1-:3R	1
13C-%3W5 S	IS	7R4R	R0 % 1R0		B7J0136	20%5 ct%17	1407 g	26%5 ct%17 1-:3R	1
13CR%3WNA	IS	6647	R0 % 1R0		B7J0136	20%5 ct%17	1407 g	26%5 ct%17 1-:3R	1

DL %DetectioHLimit
L5 D %Limit of DetectioH
L5 Q %Limit of qnaHitatioH
LCL%/CL%Lower coHrol limit %upper coHrol limit
T. e reEnltEare reported iHdry weig. t4
T. e Eample Eize iEreported iHwet weig. t4
v eEnltEreported to t. e DL4
h . eHreported, PW8 xS, PW5 A aHl PW5 S iHclnde bot. liHear aHl braHc. ed iEomerE4
5 Hy t. e liHear iEomer iEreported for all ot. er aHalyteE4

Sample ID: BRDLY-05-SB02-9-11

VAL - PFAS

Client Data

Name: AMFC WoHer h . eeler
Project: Bradley IAP / 291330006
Matrix: Soil
Date Collected: 29%Sep%17 11:RR

Laboratory Data

Lab Sample: 170137-%09
Date v eceiOed: 03%5 ct%17 09:R9
s SolidE 94u0
ColnmH BF8 C1-

Analyte	Conc. (ug/kg)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PWBS	ND	0u2-3	0u994	1u99		B7J0136	20%5 ct%17	1u07 g	26%5 ct%17 1-:47	1
PW8 pA	ND	0u2-3	0u994	1u99		B7J0136	20%5 ct%17	1u07 g	26%5 ct%17 1-:47	1
PW8 xS	ND	0u2-3	0u994	1u99		B7J0136	20%5 ct%17	1u07 g	26%5 ct%17 1-:47	1
PW5 A	ND	0u2-3	0u994	1u99		B7J0136	20%5 ct%17	1u07 g	26%5 ct%17 1-:47	1
PW5 S	ND	0u2-3	0u994	1u99		B7J0136	20%5 ct%17	1u07 g	26%5 ct%17 1-:47	1
PWNA	ND	0u2-3	0u994	1u99		B7J0136	20%5 ct%17	1u07 g	26%5 ct%17 1-:47	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3%BWBS	IS	9RuR	R0 % 1R0		B7J0136	20%5 ct%17	1u07 g	26%5 ct%17 1-:47	1
13C4%BW8 pA	IS	92u7	R0 % 1R0		B7J0136	20%5 ct%17	1u07 g	26%5 ct%17 1-:47	1
1-5 2%BW8 xS	IS	91u7	R0 % 1R0		B7J0136	20%5 ct%17	1u07 g	26%5 ct%17 1-:47	1
13C2%BW5 A	IS	-Rul	R0 % 1R0		B7J0136	20%5 ct%17	1u07 g	26%5 ct%17 1-:47	1
13C-%BW5 S	IS	-6u7	R0 % 1R0		B7J0136	20%5 ct%17	1u07 g	26%5 ct%17 1-:47	1
13CR%BWNA	IS	72u9	R0 % 1R0		B7J0136	20%5 ct%17	1u07 g	26%5 ct%17 1-:47	1

DL %DetectioHLimit
L5 D %Limit of DetectioH
L5 Q %Limit of qnaHitatioH
LCL%/CL%Lower coHrol limit %upper coHrol limit
T. e reEnltEare reported iHdry weig. tu
T. e Eample Eize iEreported iHwet weig. tu
v eEnltEreported to t. e DLu
h . eHreported, PW8 xS, PW5 A aHl PW5 S iHclnde bot. liHear aHl braHc. ed iEomerEu
5 Hy t. e liHear iEomer iEreported for all ot. er aHalyteEu

Sample ID: BRDLY-05-SB03-0-2

VAL - PFAS

Client Data				Laboratory Data			
Name:	AMFC WoEter h . eeler	Matrix:	Soil	Lab Sample:	170137-%10	ColnmH	BF8 C1-
Project:	Bradley IAP / 291330006	Date Collected:	29%Sep%17 11:30	Date Received:	03%Oct%17 09:59		
				s SolidE	94u+		

Analyte	Conc. (ug/kg)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PWBS	ND	0u2-6	1u00	2u01		B7J0136	20%Oct%17	1u05 g	26%Oct%17 1-:5-	1
PW8 pA	ND	0u2-6	1u00	2u01		B7J0136	20%Oct%17	1u05 g	26%Oct%17 1-:5-	1
PW8 xS	ND	0u2-6	1u00	2u01		B7J0136	20%Oct%17	1u05 g	26%Oct%17 1-:5-	1
PWOA	ND	0u2-6	1u00	2u01		B7J0136	20%Oct%17	1u05 g	26%Oct%17 1-:5-	1
PWOS	ND	0u2-6	1u00	2u01		B7J0136	20%Oct%17	1u05 g	26%Oct%17 1-:5-	1
PWNA	ND	0u2-6	1u00	2u01		B7J0136	20%Oct%17	1u05 g	26%Oct%17 1-:5-	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3%PWBS	IS	101	50 % 150		B7J0136	20%Oct%17	1u05 g	26%Oct%17 1-:5-	1
13C4%PW8 pA	IS	-6u9	50 % 150		B7J0136	20%Oct%17	1u05 g	26%Oct%17 1-:5-	1
1-O2%PW8 xS	IS	96u3	50 % 150		B7J0136	20%Oct%17	1u05 g	26%Oct%17 1-:5-	1
13C2%PWOA	IS	7-u7	50 % 150		B7J0136	20%Oct%17	1u05 g	26%Oct%17 1-:5-	1
13C-%PWOS	IS	94u1	50 % 150		B7J0136	20%Oct%17	1u05 g	26%Oct%17 1-:5-	1
13C5%PWNA	IS	-4u6	50 % 150		B7J0136	20%Oct%17	1u05 g	26%Oct%17 1-:5-	1

DL %DetectioHLimit
LOD %Limit of DetectioH
LOQ %Limit of qnaHtitatioH
LCL%UCL%Lower coHtrol limit %upper coHtrol limit
T. e reEnltEare reported iHdry weig. tu
T. e Eample Eize iEreported iHwet weig. tu
ReEnltEreported to t. e DLu
h . eHreported, PW8 xS, PWOA aHd PWOS iHclnde bot. liHear aHd braHc. ed iEomerEu
OHly t. e liHear iEomer iEreported for all ot. er aHalyteEu

Sample ID: BRDLY-05-SB03-9-11

VAL - PFAS

Client Data

Name: AMFC WoHer h . eeler
Project: Bradley IAP / 291330006
Matrix: Soil
Date Collected: 29%Sep%17 11:n0

Laboratory Data

Lab Sample: 170137-%1
Date v eceiOed: 03%5 ct%17 09:49
s SolidE 74un
ColHm8: BFR C1-

Analyte	Conc. (ug/kg)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PWBS	ND	0u27n	0u961	1u92		B7J0136	20%5 ct%17	1u3- g	26%5 ct%17 19:n2	1
PWRpA	ND	0u27n	0u961	1u92		B7J0136	20%5 ct%17	1u3- g	26%5 ct%17 19:n2	1
PWRxS	ND	0u27n	0u961	1u92		B7J0136	20%5 ct%17	1u3- g	26%5 ct%17 19:n2	1
PW5 A	ND	0u27n	0u961	1u92		B7J0136	20%5 ct%17	1u3- g	26%5 ct%17 19:n2	1
PW5 S	ND	0u27n	0u961	1u92		B7J0136	20%5 ct%17	1u3- g	26%5 ct%17 19:n2	1
PWNA	ND	0u27n	0u961	1u92		B7J0136	20%5 ct%17	1u3- g	26%5 ct%17 19:n2	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3%BWBS	IS	103	40 % 140		B7J0136	20%5 ct%17	1u3- g	26%5 ct%17 19:n2	1
13Cn%BWRpA	IS	90u4	40 % 140		B7J0136	20%5 ct%17	1u3- g	26%5 ct%17 19:n2	1
1-5 2%BWRxS	IS	96un	40 % 140		B7J0136	20%5 ct%17	1u3- g	26%5 ct%17 19:n2	1
13C2%BW5 A	IS	94un	40 % 140		B7J0136	20%5 ct%17	1u3- g	26%5 ct%17 19:n2	1
13C-%BW5 S	IS	94ul	40 % 140		B7J0136	20%5 ct%17	1u3- g	26%5 ct%17 19:n2	1
13C4%BWNA	IS	-3u9	40 % 140		B7J0136	20%5 ct%17	1u3- g	26%5 ct%17 19:n2	1

DL %Detectio8 Limit
L5 D %Limit of Detectio8
L5 Q %Limit of qHa8titatio8
LCL%CL%Lower co8trol limit %Upper co8trol limit
T. e reHtEare reported i8 dry weig. tu
T. e Eample Eize iEreported i8 wet weig. tu
v eHtEreported to t. e DLu
h . e8 reported, PWRxS, PW5 A a8d PW5 S i8clHle bot. li8ear a8d bra8c. ed iEomerEu
5 8ly t. e li8ear iEomer iEreported for all ot. er a8alyteEu

Sample ID: BRDLY-03-SB03-0-2

VAL - PFAS

Client Data				Laboratory Data			
Name:	AMFC WoEter h . eeler	Matrix:	Soil	Lab Sample:	170137-%13	Column:	BFH C1-
Project:	Bradley IAP / 291330006	Date Collected:	29%Sep%17 13:18	Date Received:	03%Oct%17 09:89		
				s SolidE	9140		

Analyte	Conc. (ug/kg)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PWBS	ND	04277	04973	1498		B7J0136	20%Oct%17	1413 g	26%Oct%17 19:85	1
PWHpA	ND	04277	04973	1498		B7J0136	20%Oct%17	1413 g	26%Oct%17 19:85	1
PWHxS	0431-	04277	04973	1498	J	B7J0136	20%Oct%17	1413 g	26%Oct%17 19:85	1
PWOA	ND	04277	04973	1498		B7J0136	20%Oct%17	1413 g	26%Oct%17 19:85	1
PWOS	8487	04277	04973	1498		B7J0136	20%Oct%17	1413 g	26%Oct%17 19:85	1
PWNA	ND	04277	04973	1498		B7J0136	20%Oct%17	1413 g	26%Oct%17 19:85	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3%PWBS	IS	103	80 % 180		B7J0136	20%Oct%17	1413 g	26%Oct%17 19:85	1
13C5%PWHpA	IS	9341	80 % 180		B7J0136	20%Oct%17	1413 g	26%Oct%17 19:85	1
1-O2%PWHxS	IS	-648	80 % 180		B7J0136	20%Oct%17	1413 g	26%Oct%17 19:85	1
13C2%PWOA	IS	7949	80 % 180		B7J0136	20%Oct%17	1413 g	26%Oct%17 19:85	1
13C-%PWOS	IS	9146	80 % 180		B7J0136	20%Oct%17	1413 g	26%Oct%17 19:85	1
13C8%PWNA	IS	7145	80 % 180		B7J0136	20%Oct%17	1413 g	26%Oct%17 19:85	1

DL %Detection Limit
LOD %Limit of Detection
LOQ %Limit of quantitation
LCL%UCL%Lower control limit %upper control limit
T. e reEultEare reported in dry weig. t4
T. e Eample Eize iEreported in wet weig. t4
ReEultEreported to t. e DL4
h . en reported, PWHxS, PWOA and PWOS include bot. linear and branc. ed iEomerE4
Only t. e linear iEomer iEreported for all ot. er analyteE4

Sample ID: BRDLY-05-SB01-9-11

VAL - PFAS

Client Data

Name: AMWC hoHter . 4eeler
Project: Bradley IAP / 291330006
Matrix: Soil
Date Collected: 29%Sep%17 12:30

Laboratory Data

Lab Sample: 170137-%s
Date Received: 03%Oct%17 09:59
E SolidF: 90u6
ColnmH: BW8 C1-

Analyte	Conc. (ug/kg)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PhBS	ND	0u27s	0u960	1u92		B7J0136	20%Oct%17	1ul5 g	26%Oct%17 20:05	1
Ph8 pA	ND	0u27s	0u960	1u92		B7J0136	20%Oct%17	1ul5 g	26%Oct%17 20:05	1
Ph8 xS	ND	0u27s	0u960	1u92		B7J0136	20%Oct%17	1ul5 g	26%Oct%17 20:05	1
PhOA	ND	0u27s	0u960	1u92		B7J0136	20%Oct%17	1ul5 g	26%Oct%17 20:05	1
PhOS	ND	0u27s	0u960	1u92		B7J0136	20%Oct%17	1ul5 g	26%Oct%17 20:05	1
PhNA	ND	0u27s	0u960	1u92		B7J0136	20%Oct%17	1ul5 g	26%Oct%17 20:05	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3%BhBS	IS	99u0	50 % 150		B7J0136	20%Oct%17	1ul5 g	26%Oct%17 20:05	1
13Cs%Bh8 pA	IS	9su6	50 % 150		B7J0136	20%Oct%17	1ul5 g	26%Oct%17 20:05	1
1-O2%Bh8 xS	IS	-5us	50 % 150		B7J0136	20%Oct%17	1ul5 g	26%Oct%17 20:05	1
13C2%BhOA	IS	-1u0	50 % 150		B7J0136	20%Oct%17	1ul5 g	26%Oct%17 20:05	1
13C-%BhOS	IS	--u0	50 % 150		B7J0136	20%Oct%17	1ul5 g	26%Oct%17 20:05	1
13C5%BhNA	IS	76u2	50 % 150		B7J0136	20%Oct%17	1ul5 g	26%Oct%17 20:05	1

DL %DetectioHLimit
LOD %Limit of DetectioH
LOQ %Limit of qnaHitatioH
LCL%/CL%Lower coHrol limit %upper coHrol limit
T4e reFnltF are reported iHdry weig4tu
T4e Fample Fize iF reported iHwet weig4tu
ReFnltF reported to t4e DLu
. 4eHreported, Ph8 xS, PhOA aHd PhOS iHclnde bot4 liHear aHd braHched iFomerFu
OHly t4e liHear iFomer iF reported for all ot4er aHalyteFu

DATA QUALIFIERS & ABBREVIATIONS

B	**This compound was also detected in the method blank.**
D	**Dilution**
E	**The associated compound concentration exceeded the calibration range of the instrument.**
H	**Recovery and/or RPD was outside laboratory acceptance limits.**
I	**Chemical Interference**
J	**The amount detected is below the Reporting Limit/LOQ.**
M	**Estimated Maximum Possible Concentration. (CA Region 2 projects only)**
*****	**See Cover Letter**
Conc.	**Concentration**
NA	**Not applicable**
ND	**Not Detected**
TEQ	**Toxic Equivalency**
U	**Not Detected (specific projects only)**

Unless otherwise noted, solid sample results are reported in dry weight. Tissue samples are reported in wet weight.

CERTIFICATIONS

Accrediting Authority	Certificate Number
Arkansas Department of Environmental Quality	17-015-0
California Department of Health – ELAP	2892
DoD ELAP - A2LA Accredited - ISO/IEC 17025:2005	3091.01
Florida Department of Health	E87777-18
Hawaii Department of Health	N/A
Louisiana Department of Environmental Quality	01977
Maine Department of Health	2016026
Minnesota Department of Health	1175673
New Hampshire Environmental Accreditation Program	207716
New Jersey Department of Environmental Protection	CA003
New York Department of Health	11411
Oregon Laboratory Accreditation Program	4042-008
Pennsylvania Department of Environmental Protection	013
Texas Commission on Environmental Quality	T104704189-17-8
Virginia Department of General Services	8621
Washington Department of Ecology	C584
Wisconsin Department of Natural Resources	998036160

Current certificates and lists of licensed parameters are located in the Quality Assurance office and are available upon request.

NELAP Accredited Test Methods

MATRIX: Air	
Description of Test	**Method**
Determination of Polychlorinated p-Dioxins & Polychlorinated Dibenzofurans	EPA 23

MATRIX: Biological Tissue	
Description of Test	**Method**
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

MATRIX: Drinking Water	
Description of Test	**Method**
2,3,7,8-Tetrachlorodibenzo- p-dioxin (2,3,7,8-TCDD) GC/HRMS	EPA 1613
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537

MATRIX: Non-Potable Water	
Description of Test	**Method**
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Dioxin by GC/HRMS	EPA 613
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

MATRIX: Solids	
Description of Test	**Method**
Tetra-Octa Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope	EPA 1613B

Dilution GC/HRMS	
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

amec foster wheeler

Amec Foster Wheeler Environment & Infrastructure
271 Mill Road
Chelmsford, MA 01824
(978) 692-9090

SHIP TO:
Vista
1104 Windfield Way
El Dorado Hills, CA 95762
Atten: Martha Maier
Lab Phone# (916) 673-1520

CHAIN OF CUSTODY

1701378

0.5C

DATE: 10/2/2017
COC #: BRDLY171002A
PAGE: 3 OF 4

Project Name:	Bradley IAP	Project Contact:	Denise King	Bill To: Amec Foster Wheeler Environment & Infrastructure	Disposal Instructions: LAB
Project Number:	291330006	Phone Number:	(978) 392-5339	9210 Sky Park Court Suite 200	Shipment Method: FEDEX
Project Manager:	Kerry Tull	Project Phase:	13	San Diego, CA 92123	Waybill Number: N/A

Sample Information / Methods for Analysis / RUSH

No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	MS/MSD	EPA 537M	24 Hour	48 Hour	72 Hour	5 Days	TOTAL BOTTLES	HOLD All Analyses
1	BRDLY-02-SB01-0-2	09/28/17 14:30	SO	N	N	X						
2	BRDLY-02-SB01-13-15	09/28/17 14:40	SO	N	N	X						
3	BRDLY-02-SB02-0-2	09/28/17 15:20	SO	N	N	X						
4	BRDLY-02-SB02-13-15	09/28/17 15:25	SO	N	N	X						
5	BRDLY-02-SB03-0-2	09/28/17 13:15	SO	N	N	X						
6	BRDLY-02-SB03-13-15	09/28/17 13:30	SO	N	N	X						
7	BRDLY-05-SB01-0-2	09/29/17 12:15	SO	N	Y	X						
8	BRDLY-05-SB02-0-2	09/29/17 11:50	SO	N	N	X						
9	BRDLY-05-SB02-9-11	09/29/17 11:55	SO	N	N	X						
10	BRDLY-05-SB03-0-2	09/29/17 11:30	SO	N	N	X						
11	BRDLY-05-SB03-9-11	09/29/17 11:40	SO	N	N	X						
12	TW-102-092817	09/28/17 14:51	WG	N	N	X						

Sampler's Signature:	Date: 10/2/17	Time: 1500
Relinquished By/Affiliation: AFW	Date: 10/2/17	Time: 1500
Received By: Beth Bennedict VAL	Date: 10/03/17	Time: 1011
Relinquished By/Affiliation:	Date:	Time:
Received By:	Date:	Time:
Relinquished By/Affiliation:	Date:	Time:
Received By (LAB):	Date:	Time:

For Lab Use

Does COC match samples:	Y or N
Broken Container:	Y or N
COC seal intact:	Y or N
Other problems:	Y or N
WSDOT contacted:	Y or N
Date contacted:	
Cooler Temperature at receipt:	°C

Comments:
X=Analyze H=Hold Analysis Request

Contract # W9133L-14-D-0002 TO0006
PO # F013200677
ATTN: Denise King
Base Lead: Steve Posten
Field Lead: Michael Cote (michael.cote@amecfw.com)

NUMBER OF COOLERS SENT:

Analyte List: **UCMR 3 List (537.1)**

amec foster wheeler

Amec Foster Wheeler Environment & Infrastructure
271 Mill Road
Chelmsford, MA 01824
(978) 692-9090

SHIP TO:
Vista
1104 Windfield Way
El Dorado Hills, CA 95762
Atten: Martha Maier
Lab Phone# (916) 673-1520

CHAIN OF CUSTODY

1701378

DATE: 10/2/2017
COC #: BRDLY171002A
PAGE: 4 OF 4

Project Name:	Bradley IAP	Project Contact:	Denise King	Bill To: Amec Foster Wheeler Environment & Infrastructure	Disposal Instructions: LAB
Project Number:	291330006	Phone Number:	(978) 392-5339	9210 Sky Park Court Suite 200	Shipment Method: FEDEX
Project Manager:	Kerry Tull	Project Phase:	13	San Diego, CA 92123	Waybill Number: N/A

Sample Information / Methods for Analysis / RUSH

No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	MS/MSD	EPA 537M	24 Hour	48 Hour	72 Hour	5 Days	TOTAL BOTTLES	HOLD All Analyses
1	BRDLY-03-SB03-0-2	09/29/17 13:15	SO	N	N	X						
2	BRDLY-05-SB01-9-11	09/29/17 12:30	SO	N	N	X						
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												

Sampler's Signature:	Date: 10/2/17	Time: 1500
Relinquished By/Affiliation: AFW	Date: 10/2/17	Time: 1500
Received By: Bob Bruent VAL	Date: 10/03/17	Time: 1012
Relinquished By/Affiliation:	Date:	Time:
Received By:	Date:	Time:
Relinquished By/Affiliation:	Date:	Time:
Received By (LAB):	Date:	Time:

For Lab Use

Does COC match samples:	Y or N
Broken Container:	Y or N
COC seal intact:	Y or N
Other problems:	Y or N
WSDOT contacted:	Y or N
Date contacted:	
Cooler Temperature at receipt:	°C

Comments:
X=Analyze H=Hold Analysis Request

Contract # W9133L-14-D-0002 TO0006
PO # F013200677
ATTN: Denise King
Base Lead: Steve Posten
Field Lead: Michael Cote (michael.cote@amecfw.com)

NUMBER OF COOLERS SENT:

Analyte List: UCMR 3 List (537.1)

Vista Analytical Laboratory

Sample Log-in Checklist

Vista Work Order #: 1701378 TAT Std

Samples Arrival:	Date/Time 10/03/17 0959	Initials: VBLB	Location: WR-2 Shelf/Rack: NA
Logged In:	Date/Time 10/03/17 1452	Initials: VBLB	Location: WR-2 Shelf/Rack: E3

Delivered By:	FedEx	UPS	On Trac	GSO	DHL	Hand Delivered	Other
Preservation:	Ice		Blue Ice		Dry Ice		None

Temp °C: 0.4 (uncorrected)	Time: 1010	Thermometer ID: IR-1
Temp °C: 0.5 (corrected)	Probe used: Yes☐ No☑	

	YES	NO	NA
Adequate Sample Volume Received?	✓		
Holding Time Acceptable?	✓		
Shipping Container(s) Intact?	✓		
Shipping Custody Seals Intact?	✓		
Shipping Documentation Present?	✓		
Airbill Trk # 7879 3273 6148	✓		
Sample Container Intact?	✓		
Sample Custody Seals Intact?			✓
Chain of Custody / Sample Documentation Present?	✓		
COC Anomaly/Sample Acceptance Form completed?	✓		
If Chlorinated or Drinking Water Samples, Acceptable Preservation?			✓

Preservation Documented:	$Na_2S_2O_3$	Trizma	None	Yes	No	NA
Shipping Container	Vista	Client	Retain	Return	Dispose	

Comments: Samples Labels BRDLY-05-SB01- date 9/29/17 time 1230
BRDLY-03-SB03- ↓ 1315

COC ID: BRDLY-03SB03-~~02~~0-2 } reconciled by date/time
BRDLY-05-SB01-9-11

Chain of Custody Anomaly/Sample Acceptance Form

Vista Analytical Laboratory

Client:	AMEC Foster Wheeler	Workorder Number:	1701378
Contact:	Denise King	Date Received:	03-Oct-17 09:59
Email:	Denise.king@amecfw.com	Documented by/date:	B.Benedict 10/03/2017
Phone:	(978) 392-5339		

Please review the following information and complete the Client Authorization section. To comply with NELAC regulations, we must receive authorization before proceeding with sample analysis.

Thank you,

Martha Maier
mmaier@vista-analytical.com
916-673-1520

The following information or item is needed to proceed with analysis:

- [ ] Complete Chain-of-Custody
- [ ] Preservative
- [ ] Collector's Name
- [ ] Test Method Requested
- [ ] Sample Identification
- [ ] Sample Type
- [ ] Analyte List Requested
- [ ] Sample Collection Date and/or Time
- [ ] Sample Location
- [ ] Other:

The following anomalies were noted. Authorization is needed to proceed with analysis.

- [ ] Temperature outside < 6°C Range Samples Affected: _____

Temperature _____°C Ice Present? Yes No Melted

- [X] Sample ID Discrepancy: See Comments
- [ ] Insufficient Sample Size
- [ ] Sample Holding Time Missed
- [ ] Sample Container(s) Broken
- [ ] Custody Seals Broken
- [ ] Incorrect Container Type

Comments: COC ID:	Label ID:	Label Date / Time
BRDLY-03-SB03-0-2	BRDLY-03-SB03-	9/29/17 ; 1315
BRDLY-050SB01-9-11	BRDLY-050SB01-	9/29/17 ; 1230

Client Authorization

Proceed with Analysis: (YES) NO Signature and Date [signature] 10-9-17

Client Comments/Instructions Per email from client on 10-4-17, the sample IDs on the COC are correct.

November 01, 2017

Vista Work Order No. 1701411

Ms. Denise Kinq
AMEC Foster Wheeler
271 Mill Road
Chelmsford, MA 01824

Dear Ms. Kinq,

Enclosed are the results for the sample set received at Vista Analytical Laboratory on October 03, 2017. This sample set was analyzed on a standard turn-around time, under your Project Name 'Bradley IAP / 29166000g'.

Vista Analytical Laboratory is committed to servinq you effectively. If you re5uire additional information, please contact me at 91g-g76-1320 or by email at mmaier@vista-analytical.com.

Thank you for choosinq Vista as part of your analytical support team.

Sincerely,

Karen J. Volpendesta for

Martha Maier
Laboratory Director

Vista Analytical Laboratory certifies that the report herein meets all the requirements set forth by NELAP for those applicable test methods. Results relate only to the samples as received by the laboratory. This report should not be reproduced except in full without the written approval of Vista.

Vista Analytical Laboratory 1104 Windfield Way El Dorado Hills, CA 937g2 ph: 91g-g76-1320 fx: 91g-g76-010g www.vista-analytical.com

Vista Work Order No. 1701411
Case Narrative

Sample Condition on Receipt:

One soil sample, two qroundwater samples and one QC water sample were received in qood condition and within the method temperature re5uirements. The samples were received and stored securely in accordance with Vista standard operatinq procedures and EPA methodoloqy.

Analytical Notes:

Modified EPA Method 537

The a5ueous samples were extracted and analyzed for a selected list of PFAS usinq Modified EPA Method 367.

Holdinq Times

The samples were extracted and analyzed within the method hold times.

Quality Control

The Initial Calibration and Continuinq Calibration Verifications met the method acceptance criteria.

A Method Blank and Onqoinq Precision and Recovery (OPR) sample were extracted and analyzed with the preparation batch. No analytes were detected in the Method Blank above 1/2 the LOQ. The OPR recoveries were within the method acceptance criteria.

The extract of the Method Blank was re-injected because one or more Injection Internal Standard Analyte response areas were outside of criteria. The area criteria passed for the second injection" therefore, the results from the re-injection have been reported.

The labeled standard recoveries for all QC and field samples were within the acceptance criteria.

As re5uested, an MS/MSD was performed on sample ;TW-103-100617;. The MS/MSD recoveries and/or RPDs were out of the criteria for PFOS.

VAL-PFAS

The solid sample was extracted and analyzed for a selected list of PFAS usinq VAL Method PFAS.

Holdinq Times

The sample was extracted and analyzed within the hold times.

Quality Control

The Initial Calibration and Continuinq Calibration Verifications met the method acceptance criteria.

A Method Blank and Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD) were extracted and analyzed with the preparation batch. No analytes were detected in the Method Blank above 1/2 of the LOQ concentrations. The LCS/LCSD recoveries were within the method acceptance criteria.

The extracts were re-injected because one or more Injection Internal Standard Analyte response areas were outside of criteria. The area criteria passed for the second injections" therefore, the results from the re-injections have been reported.

The labeled standard recoveries for all QC and field samples were within the acceptance criteria.

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Sample Inventory Report

Vista Sample ID	Client Sample ID	Sampled	Received	Components/Containers
1701411-01	BRDLY-03-SB03-11-13	03-Oct-17 14:10	05-Oct-17 09:53	HDPE Jar, 6 oz
1701411-02	BRDLY-EB-001	03-Oct-17 14:45	05-Oct-17 09:53	HDPE Bottle, 125 mL
				HDPE Bottle, 125 mL
1701411-03	TW-105-100317	MS/MSD03-Oct-17 10:26	05-Oct-17 09:53	HDPE Bottle, 125 mL
				HDPE Bottle, 125 mL
				HDPE Bottle, 125 mL
				HDPE Bottle, 125 mL
1701411-04	TW106-100317	03-Oct-17 13:26	05-Oct-17 09:53	HDPE Bottle, 125 mL
				HDPE Bottle, 125 mL

ANALYTICAL RESULTS

Sample ID: Method Blank

VAL - PFAS

Client Data

Name: AMEC Foster Wheeler
Project: Bradley IAP / 291330006
Matrix: Solid

Laboratory Data

Lab Sample: B7J0136-BLK1
Column: BEH C18

Analyte	Conc. (ug/kg)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	0.285	1.00	2.00		B7J0136	20-Oct-17	1.00 4	26-Oct-17 13:33	1
PFHpA	ND	0.285	1.00	2.00		B7J0136	20-Oct-17	1.00 4	26-Oct-17 13:33	1
PFHxS	ND	0.285	1.00	2.00		B7J0136	20-Oct-17	1.00 4	26-Oct-17 13:33	1
PFOA	ND	0.285	1.00	2.00		B7J0136	20-Oct-17	1.00 4	26-Oct-17 13:33	1
PFOS	ND	0.285	1.00	2.00		B7J0136	20-Oct-17	1.00 4	26-Oct-17 13:33	1
PFNA	ND	0.285	1.00	2.00		B7J0136	20-Oct-17	1.00 4	26-Oct-17 13:33	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	103	50 - 150		B7J0136	20-Oct-17	1.00 4	26-Oct-17 13:33	1
13Cg-PFHpA	IS	95.0	50 - 150		B7J0136	20-Oct-17	1.00 4	26-Oct-17 13:33	1
18O2-PFHxS	IS	81.9	50 - 150		B7J0136	20-Oct-17	1.00 4	26-Oct-17 13:33	1
13C2-PFOA	IS	81.8	50 - 150		B7J0136	20-Oct-17	1.00 4	26-Oct-17 13:33	1
13C8-PFOS	IS	101	50 - 150		B7J0136	20-Oct-17	1.00 4	26-Oct-17 13:33	1
13C5-PFNA	IS	93.1	50 - 150		B7J0136	20-Oct-17	1.00 4	26-Oct-17 13:33	1

DL - Detection Limit
LOD - Limit of Detection
LOQ - Limit of quantitation

LCL-UCL- Lower control limit - upper control limit
The results are reported in dry wei4ht.
The sample size is reported in wet wei4ht.
Results reported to the DL.

When reported, PFHxS, PFOA and PFOS include both linear and branched isomers.
Only the linear isomer is reported for all other analytes.

Sample ID: LCSD

VAL - PFAS

Name:	AMEC Foster Wheeler	Lab Sample:	B7J0136-BS1/B7J0136-BSD1
Project:	Bradley IAP / 291330006	QC Batch:	B7J0136
Matrix:	Solid	Samp Size:	1.00/1.00 g
		Date Extracted:	20-Oct-17
		Column:	BEH C18

Analyte	LCS (ug/kg)	LCS Spike Amt	LCS % Rec	LCS Quals	LCSD (ug/kg)	LCSD Spike Amt	LCSD % Rec	RPD	LCSD Quals	%Rec Limits	RPD Limits	LCS Analyzed	LCS Dil	LCSD Analyzed	LCSD Dil
PFBS	9.14	10.0	91.4		9.21	10.0	92.1	0.763		70-130		26-Oct-17 12:25	1	26-Oct-17 12:37	1
PFHpA	8.91	10.0	89.1		9.18	10.0	91.8	3.01		70-130		26-Oct-17 12:25	1	26-Oct-17 12:37	1
PFHxS	8.97	10.0	89.7		8.57	10.0	85.7	4.56		70-130		26-Oct-17 12:25	1	26-Oct-17 12:37	1
PFOA	9.25	10.0	92.5		9.49	10.0	94.9	2.60		70-130		26-Oct-17 12:25	1	26-Oct-17 12:37	1
PFOS	9.82	10.0	98.2		9.43	10.0	94.3	4.08		70-130		26-Oct-17 12:25	1	26-Oct-17 12:37	1
PFNA	9.72	10.0	97.2		9.01	10.0	90.1	7.66		70-130		26-Oct-17 12:25	1	26-Oct-17 12:37	1

Labeled Standards	Type	LCS % Rec	LCS Quals	LCSD % Rec	LCSD Quals	Limits	LCS Analyzed	LCS Dil	LCSD Analyzed	LCSD Dil
13C3-PFBS	IS	95.5		102		50-150	26-Oct-17 12:25	1	26-Oct-17 12:37	1
13C4-PFHpA	IS	93.6		101		50-150	26-Oct-17 12:25	1	26-Oct-17 12:37	1
18O2-PFHxS	IS	92.6		98.2		50-150	26-Oct-17 12:25	1	26-Oct-17 12:37	1
13C2-PFOA	IS	88.1		86.7		50-150	26-Oct-17 12:25	1	26-Oct-17 12:37	1
13C8-PFOS	IS	95.3		92.8		50-150	26-Oct-17 12:25	1	26-Oct-17 12:37	1
13C5-PFNA	IS	74.1		84.4		50-150	26-Oct-17 12:25	1	26-Oct-17 12:37	1

Sample ID: BRDLY-01-SB01-33-31

VAL - PFAS

Client Data

Name: AMFC WoHer h . eeler
Project: Bradley IAP / 291330006
Matrix: Soil
Date Collected: 03%Rct%7 1-:10

Laboratory Data

Lab Sample: 1701-11%01
Date v eceiOed: 05%Rct%7 09:53
s SolidE 43ul
ColnmH BF8 C14

Analyte	Conc. (ug/kg)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PWBS	ND	0u243	0u995	1u99		B7J0136	20%Rct%7	1u21 g	26%Rct%7 20:16	1
PW8 pA	ND	0u243	0u995	1u99		B7J0136	20%Rct%7	1u21 g	26%Rct%7 20:16	1
PW8 xS	ND	0u243	0u995	1u99		B7J0136	20%Rct%7	1u21 g	26%Rct%7 20:16	1
PWRA	ND	0u243	0u995	1u99		B7J0136	20%Rct%7	1u21 g	26%Rct%7 20:16	1
PWRS	-u+2	0u243	0u995	1u99		B7J0136	20%Rct%7	1u21 g	26%Rct%7 20:16	1
PWNA	ND	0u243	0u995	1u99		B7J0136	20%Rct%7	1u21 g	26%Rct%7 20:16	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3%BWBS	IS	91u7	50 % 150		B7J0136	20%Rct%7	1u21 g	26%Rct%7 20:16	1
13C-%BW8 pA	IS	45u7	50 % 150		B7J0136	20%Rct%7	1u21 g	26%Rct%7 20:16	1
14R2%BW8 xS	IS	44u2	50 % 150		B7J0136	20%Rct%7	1u21 g	26%Rct%7 20:16	1
13C2%BWRA	IS	43u5	50 % 150		B7J0136	20%Rct%7	1u21 g	26%Rct%7 20:16	1
13C4%BWRS	IS	4-u+	50 % 150		B7J0136	20%Rct%7	1u21 g	26%Rct%7 20:16	1
13C5%BWNA	IS	43u5	50 % 150		B7J0136	20%Rct%7	1u21 g	26%Rct%7 20:16	1

DL %DetectioHLimit
LRD %Limit of DetectioH
LRQ %Limit of qnaHitatioH

LCL%/CL%Lower coHrol limit %/upper coHrol limit
T. e reEnltEare reported iHdry weig. tu
T. e Eample Eize iEreported iHwet weig. tu
v eEnltEreported to t. e DLu

h . eHreported, PW8 xS, PWRA aHl PWRS iHclnde bot. liHear aHl braHc. ed iEomerEu
RHly t. e liHear iEomer iEreported for all ot. er aHalyteEu

Sample ID: Method Blank

Modified EPA Method 537

Client Data

Name: AMKE CoRter s Weeler
Project: Bradley IAP / 291330006
Matrix: A8heohF

Laboratory Data

Lab Sample: B7J00614BL- 1
Eolhmu: BKn E1H

Analyte	Conc. (ug/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PCBS	N.	0ф021H	0ф0D00	0ф0HD0		B7J0061	1145 ct417	0ql2DL	1H45 ct417 1Q.C2	1
PCn pA	N.	0ф021H	0ф0D00	0ф0HD0		B7J0061	1145 ct417	0ql2DL	1H45 ct417 1Q.C2	1
PCn xS	N.	0ф021H	0ф0D00	0ф0HD0		B7J0061	1145 ct417	0ql2DL	1H45 ct417 1Q.C2	1
PC5 A	N.	0ф021H	0ф0D00	0ф0HD0		B7J0061	1145 ct417	0ql2DL	1H45 ct417 1Q.C2	1
PC5 S	N.	0ф021H	0ф0D00	0ф0HD0		B7J0061	1145 ct417	0ql2DL	1H45 ct417 1Q.C2	1
PCNA	N.	0ф021H	0ф0D00	0ф0HD0		B7J0061	1145 ct417	0ql2DL	1H45 ct417 1Q.C2	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13E34PCBS	IS	102	D0 4 1D0		B7J0061	1145 ct417	0ql2DL	1H45 ct417 1Q.C2	1
13EO4PCn pA	IS	99qO	D0 4 1D0		B7J0061	1145 ct417	0ql2DL	1H45 ct417 1Q.C2	1
1H5 24PCn xS	IS	99q2	D0 4 1D0		B7J0061	1145 ct417	0ql2DL	1H45 ct417 1Q.C2	1
13E24PC5 A	IS	9Hq3	D0 4 1D0		B7J0061	1145 ct417	0ql2DL	1H45 ct417 1Q.C2	1
13EH4PC5 S	IS	97qD	D0 4 1D0		B7J0061	1145 ct417	0ql2DL	1H45 ct417 1Q.C2	1
13ED4PCNA	IS	H2ql	D0 4 1D0		B7J0061	1145 ct417	0ql2DL	1H45 ct417 1Q.C2	1

. L 4. etectiou Limit
L5 . 4Limit of . etectiou
L5 Q 4Limit of 8hautitatiou
LEL4UEL4Lower coutrol limit 4hpper coutrol limit
ReFhltF reported to tWe . Lq
s Weu reported, PCn xS, PC5 A aud PC5 S iuclhde botWliuear aud braucWed iFomerFq
5 uly tWe liuear iFomer iF reported for all otWer aualyteFq

Sample ID: OPR

Modified EPA Method 537

Client Data

Name: AMEC Foster Wheeler
Project: Bradley IAP / 291330006
Matrix: Aqueous

Laboratory Data

Lab Sample: B7J0061-BS1
Column: BEH C18

Analyte	Amt Found (ug/L)	Spike Amt	% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	0.0727	0.0800	90.9	70-130		B7J0061	11-Oct-17	0.125 L	12-Oct-17 19:54	1
PFHpA	0.0800	0.0800	100	70-130		B7J0061	11-Oct-17	0.125 L	12-Oct-17 19:54	1
PFHxS	0.0841	0.0800	105	70-130		B7J0061	11-Oct-17	0.125 L	12-Oct-17 19:54	1
PFOA	0.0827	0.0800	103	70-130		B7J0061	11-Oct-17	0.125 L	12-Oct-17 19:54	1
PFOS	0.0943	0.0800	118	70-130		B7J0061	11-Oct-17	0.125 L	12-Oct-17 19:54	1
PFNA	0.0815	0.0800	102	70-130		B7J0061	11-Oct-17	0.125 L	12-Oct-17 19:54	1

Labeled Standards	Type	% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	111	50- 150		B7J0061	11-Oct-17	0.125 L	12-Oct-17 19:54	1
13C4-PFHpA	IS	104	50- 150		B7J0061	11-Oct-17	0.125 L	12-Oct-17 19:54	1
18O2-PFHxS	IS	95.4	50- 150		B7J0061	11-Oct-17	0.125 L	12-Oct-17 19:54	1
13C2-PFOA	IS	105	50- 150		B7J0061	11-Oct-17	0.125 L	12-Oct-17 19:54	1
13C8-PFOS	IS	92.7	50- 150		B7J0061	11-Oct-17	0.125 L	12-Oct-17 19:54	1
13C5-PFNA	IS	91.2	50- 150		B7J0061	11-Oct-17	0.125 L	12-Oct-17 19:54	1

Sample ID: BRDLY-EB-001

Modified EPA Method 537

Client Data

Name: AMFC s oWer h ueeler
Project: Bradley IAP / 291330006
Matrix: RC h ater
Date Collected: 03Ev ctEl 7 1- :- O

Laboratory Data

Lab Sample: 1701- 11E02
Date 5 ecei. ed: 0CEv ctEl 7 09:C3
ColnmH: BF8 C1Q

Analyte	Conc. (ug/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
Ps BS	ND	0400227	0400C21	0400Q3-		B7J0061	11Ev ctEl 7	0412 0 L	12Ev ctEl 7 22:C0	1
Ps 8 pA	ND	0400227	0400C21	0400Q3-		B7J0061	11Ev ctEl 7	0412 0 L	12Ev ctEl 7 22:C0	1
Ps 8 xS	ND	0400227	0400C21	0400Q3-		B7J0061	11Ev ctEl 7	0412 0 L	12Ev ctEl 7 22:C0	1
Ps v A	ND	0400227	0400C21	0400Q3-		B7J0061	11Ev ctEl 7	0412 0 L	12Ev ctEl 7 22:C0	1
Ps v S	ND	0400227	0400C21	0400Q3-		B7J0061	11Ev ctEl 7	0412 0 L	12Ev ctEl 7 22:C0	1
Ps NA	ND	0400227	0400C21	0400Q3-		B7J0061	11Ev ctEl 7	0412 0 L	12Ev ctEl 7 22:C0	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3HPs BS	IS	112	C0 E 1C0		B7J0061	11Ev ctEl 7	0412 0 L	12Ev ctEl 7 22:C0	1
13C- HPs 8 pA	IS	103	C0 E 1C0		B7J0061	11Ev ctEl 7	0412 0 L	12Ev ctEl 7 22:C0	1
1Qv 2HPs 8 xS	IS	12O	C0 E 1C0		B7J0061	11Ev ctEl 7	0412 0 L	12Ev ctEl 7 22:C0	1
13C2HPs v A	IS	13O	C0 E 1C0		B7J0061	11Ev ctEl 7	0412 0 L	12Ev ctEl 7 22:C0	1
13CQHPs v S	IS	110	C0 E 1C0		B7J0061	11Ev ctEl 7	0412 0 L	12Ev ctEl 7 22:C0	1
13COHPs NA	IS	100	C0 E 1C0		B7J0061	11Ev ctEl 7	0412 0 L	12Ev ctEl 7 22:C0	1

DL EDetectioHLimit
Lv D ELimit of DetectioH
Lv R ELimit of qnaHitatioH
LCLHJCLELower coHrol limit Enpper coHrol limit
5 eWltWreported to tue DL4
h ueHreported, Ps 8 xS, Ps v A aHl Ps v S iHclnde botu liHear aHl braHcued iWmerW
v Hy tue liHear iWmer iWreported for all otuer aHalyteW

Sample ID: TW-105-100317

Modified EPA Method 537

Client Data

Name: AMEC Foster Wheeler
Project: Bradley IAP / 291330006
Matrix: wroundRater
Date Collected: 038v ct817 10:26

Laboratory Data

Lab Sample: 1701-11803
Date Oecei5ed: 0. 8v ct817 09:. 3
Column: BEH C1G

Analyte	Conc. (ug/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	040033G	040023-	0400. 39	0400G 9	J	B7J0061	118v ct817	0416 L	128v ct817 23:02	1
PFHpA	ND	040023-	0400. 39	0400G 9		B7J0061	118v ct817	0416 L	128v ct817 23:02	1
PFHxS	04003G0	040023-	0400. 39	0400G 9	J	B7J0061	118v ct817	0416 L	128v ct817 23:02	1
PFv A	0400391	040023-	0400. 39	0400G 9	J	B7J0061	118v ct817	0416 L	128v ct817 23:02	1
PFv S	040-1-	040023-	0400. 39	0400G 9		B7J0061	118v ct817	0416 L	128v ct817 23:02	1
PFNA	ND	040023-	0400. 39	0400G 9		B7J0061	118v ct817	0416 L	128v ct817 23:02	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C38PFBS	IS	111	. 0 8 1. 0		B7J0061	118v ct817	0416 L	128v ct817 23:02	1
13C-8PFHpA	IS	103	. 0 8 1. 0		B7J0061	118v ct817	0416 L	128v ct817 23:02	1
1Gv 28PFHxS	IS	111	. 0 8 1. 0		B7J0061	118v ct817	0416 L	128v ct817 23:02	1
13C28PFv A	IS	11-	. 0 8 1. 0		B7J0061	118v ct817	0416 L	128v ct817 23:02	1
13CG8PFv S	IS	107	. 0 8 1. 0		B7J0061	118v ct817	0416 L	128v ct817 23:02	1
13C. 8PFNA	IS	9342	. 0 8 1. 0		B7J0061	118v ct817	0416 L	128v ct817 23:02	1

DL 8Detection Limit
Lv D 8Limit of Detection
Lv Q 8Limit of quantitation
LCL8UCL8LoRer control limit 8upper control limit
Oesults reported to the DL4
When reported, PFHxS, PFv A and PFv S include both linear and branched isomers4
v nly the linear isomer is reported for all other analytes4

Sample ID: TW-105-100317 **Modified EPA Method 537**

Name:	AMEC Foster Wheeler	Lab Sample:	B7J0061-MS1/B7J0061-MSD1	Source Lab Sample:	1701411-03
Project:	Bradley IAP / 291330006	QC Batch:	B7J0061	Date Extracted:	11-Oct-17
Matrix:	Aqueous	Samp Size:	0.116/0.114 L	Column:	BEH C18

Analyte	Sample (ug/L)	MS (ug/L)	MS Spike Amt	MS % Rec	MS Quals	MSD (ug/L)	MSD Spike Amt	MSD % Rec	RPD	MSD Quals	%Rec Limits	RPD Limits	MS Analyzed	MS Dil	MSD Analyzed	MSD Dil
PFBS	0.00338	0.0947	0.0862	106		0.0900	0.0875	99.0	6.83		70-130	25	12-Oct-17 20:44	1	12-Oct-17 20:57	1
PFHpA	ND	0.0822	0.0862	95.4		0.0915	0.0875	105	9.58		70-130	25	12-Oct-17 20:44	1	12-Oct-17 20:57	1
PFHxS	0.00380	0.0835	0.0862	92.5		0.0866	0.0875	94.6	2.24		70-130	25	12-Oct-17 20:44	1	12-Oct-17 20:57	1
PFOA	0.00391	0.0930	0.0862	103		0.0983	0.0875	108	4.74		70-130	25	12-Oct-17 20:44	1	12-Oct-17 20:57	1
PFOS	0.0414	0.164	0.0862	142	H	0.119	0.0875	88.1	46.8	H	70-130	25	12-Oct-17 20:44	1	12-Oct-17 20:57	1
PFNA	ND	0.0883	0.0862	102		0.0806	0.0875	91.7	10.6		70-130	25	12-Oct-17 20:44	1	12-Oct-17 20:57	1

Labeled Standards	Type	MS % Rec	MS Quals	MSD % Rec	MSD Quals	Limits	MS Analyzed	MS Dil	MSD Analyzed	MSD Dil
13C3-PFBS	IS	101		116		50-150	12-Oct-17 20:44	1	12-Oct-17 20:57	1
13C4-PFHpA	IS	117		101		50-150	12-Oct-17 20:44	1	12-Oct-17 20:57	1
18O2-PFHxS	IS	109		110		50-150	12-Oct-17 20:44	1	12-Oct-17 20:57	1
13C2-PFOA	IS	107		107		50-150	12-Oct-17 20:44	1	12-Oct-17 20:57	1
13C8-PFOS	IS	101		106		50-150	12-Oct-17 20:44	1	12-Oct-17 20:57	1
13C5-PFNA	IS	103		99.3		50-150	12-Oct-17 20:44	1	12-Oct-17 20:57	1

Sample ID: TW106-100317

Modified EPA Method 537

Client Data				Laboratory Data			
Name:	AMEC Foster Wheeler	Matrix:	wroundRater	Lab Sample:	1701-1180-	Column:	BEH C1G
Project:	Bradley IAP / 291330006	Date Collected:	038v ct817 13:26	Date Oecei5ed:	0. 8v ct817 09:. 3		

Analyte	Conc. (ug/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	04012.	04002-2	0400. . 3	0400GGG		B7J0061	118v ct817	04113 L	128v ct817 23:1.	1
PFHpA	ND	04002-2	0400. . 3	0400GGG		B7J0061	118v ct817	04113 L	128v ct817 23:1.	1
PFHxS	040392	04002-2	0400. . 3	0400GGG		B7J0061	118v ct817	04113 L	128v ct817 23:1.	1
PFv A	ND	04002-2	0400. . 3	0400GGG		B7J0061	118v ct817	04113 L	128v ct817 23:1.	1
PFv S	ND	04002-2	0400. . 3	0400GGG		B7J0061	118v ct817	04113 L	128v ct817 23:1.	1
PFNA	ND	04002-2	0400. . 3	0400GGG		B7J0061	118v ct817	04113 L	128v ct817 23:1.	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C38PFBS	IS	103	. 0 8 1. 0		B7J0061	118v ct817	04113 L	128v ct817 23:1.	1
13C-8PFHpA	IS	9. 47	. 0 8 1. 0		B7J0061	118v ct817	04113 L	128v ct817 23:1.	1
1Gv 28PFHxS	IS	111	. 0 8 1. 0		B7J0061	118v ct817	04113 L	128v ct817 23:1.	1
13C28PFv A	IS	127	. 0 8 1. 0		B7J0061	118v ct817	04113 L	128v ct817 23:1.	1
13CG8PFv S	IS	101	. 0 8 1. 0		B7J0061	118v ct817	04113 L	128v ct817 23:1.	1
13C. 8PFNA	IS	106	. 0 8 1. 0		B7J0061	118v ct817	04113 L	128v ct817 23:1.	1

DL 8Detection Limit
Lv D 8Limit of Detection
Lv Q 8Limit of quantitation
LCL8UCL8LoRer control limit 8upper control limit
Oesults reported to the DL4
When reported, PFHxS, PFv A and PFv S include both linear and branched isomers4
v nly the linear isomer is reported for all other analytes4

DATA QUALIFIERS & ABBREVIATIONS

B	**This compound was also detected in the method blank.**
D	**Dilution**
E	**The associated compound concentration exceeded the calibration range of the instrument.**
H	**Recovery and/or RPD was outside laboratory acceptance limits.**
I	**Chemical Interference**
J	**The amount detected is below the Reporting Limit/LOQ.**
M	**Estimated Maximum Possible Concentration. (CA Region 2 projects only)**
*****	**See Cover Letter**
Conc.	**Concentration**
NA	**Not applicable**
ND	**Not Detected**
TEQ	**Toxic Equivalency**
U	**Not Detected (specific projects only)**

Unless otherwise noted, solid sample results are reported in dry weight. Tissue samples are reported in wet weight.

CERTIFICATIONS

Accrediting Authority	Certificate Number
Arkansas Department of Environmental Quality	17-015-0
California Department of Health – ELAP	2892
DoD ELAP - A2LA Accredited - ISO/IEC 17025:2005	3091.01
Florida Department of Health	E87777-18
Hawaii Department of Health	N/A
Louisiana Department of Environmental Quality	01977
Maine Department of Health	2016026
Minnesota Department of Health	1175673
New Hampshire Environmental Accreditation Program	207716
New Jersey Department of Environmental Protection	CA003
New York Department of Health	11411
Oregon Laboratory Accreditation Program	4042-008
Pennsylvania Department of Environmental Protection	013
Texas Commission on Environmental Quality	T104704189-17-8
Virginia Department of General Services	8621
Washington Department of Ecology	C584
Wisconsin Department of Natural Resources	998036160

Current certificates and lists of licensed parameters are located in the Quality Assurance office and are available upon request.

NELAP Accredited Test Methods

MATRIX: Air	
Description of Test	**Method**
Determination of Polychlorinated p-Dioxins & Polychlorinated Dibenzofurans	EPA 23

MATRIX: Biological Tissue	
Description of Test	**Method**
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

MATRIX: Drinking Water	
Description of Test	**Method**
2,3,7,8-Tetrachlorodibenzo- p-dioxin (2,3,7,8-TCDD) GC/HRMS	EPA 1613
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537

MATRIX: Non-Potable Water	
Description of Test	**Method**
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613B
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS	EPA 1699
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Dioxin by GC/HRMS	EPA 613
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

MATRIX: Solids	
Description of Test	**Method**
Tetra-Octa Chlorinated Dioxins and Furans by Isotope Dilution GC/HRMS	EPA 1613
Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope	EPA 1613B

Dilution GC/HRMS	
Brominated Diphenyl Ethers by HRGC/HRMS	EPA 1614A
Chlorinated Biphenyl Congeners in Water, Soil, Sediment, and Tissue by GC/HRMS	EPA 1668A/C
Perfluorinated Alkyl Acids in Drinking Water by SPE and LC/MS/MS	EPA 537
Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans by GC/HRMS	EPA 8280A/B
Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by GC/HRMS	EPA 8290/8290A

1701411

CHAIN OF CUSTODY

1.9°C

amec foster wheeler

Amec Foster Wheeler Environment & Infrastructure
271 Mill Road
Chelmsford, MA 01824
(978) 692-9090

SHIP TO:
Vista
1104 Windfield Way
El Dorado Hills, CA 95762
Atten: Martha Maier
Lab Phone# (916) 673-1520

DATE: 10/4/2017
COC #: BRDLY171004A
PAGE: 1 OF 1

Project Name:	Bradley IAP	Project Contact:	Denise King	Bill To: Amec Foster Wheeler Environment & Infrastructure	Disposal Instructions: LAB
Project Number:	291330006	Phone Number:	(978) 392-5339	9210 Sky Park Court Suite 200	Shipment Method: FEDEX
Project Manager:	Kerry Tull	Project Phase:	13	San Diego, CA 92123	Waybill Number: N/A

Sample Information / Methods for Analysis / RUSH

No.	Sample ID	Date & Time Sampled	Matrix	Sample Type	MS/MSD	EPA 537M	24 Hour	48 Hour	72 Hour	5 Days	TOTAL BOTTLES	HOLD All Analyses
1	BRDLY-03-SB03-11-13	10/03/17 14:10	SO	N	N	X						
2	BRDLY-EB-001	10/03/17 14:45	WQ	EB	N	X						
3	TW-105-100317	10/03/17 10:26	WG	N	Y	X						
4	TW106-100317	10/03/17 13:26	WG	N	N	X						
5												
6												
7												
8												
9												
10												
11												
12												

Sampler's Signature:	Date: 10/3/17	Time: 1600
Relinquished By/Affiliation: AMW	Date: 10/4/17	Time: 1500
Received By:	Date: 10/5/17	Time: 1016
Relinquished By/Affiliation:	Date:	Time:
Received By:	Date:	Time:
Relinquished By/Affiliation:	Date:	Time:
Received By (LAB):	Date:	Time:

For Lab Use

Does COC match samples:	Y or N
Broken Container:	Y or N
COC seal intact:	Y or N
Other problems:	Y or N
WSDOT contacted:	Y or N
Date contacted:	
Cooler Temperature at receipt:	°C

Comments:
X=Analyze H=Hold Analysis Request

Contract # W9133L-14-D-0002 TO0006
PO # F013200677
ATTN: Denise King
Base Lead: Steve Posten
Field Lead: Michael Cote (michael.cote@amecfw.com)

NUMBER OF COOLERS SENT:

Analyte List: UCMR 3 List (537.1)

Vista Analytical Laboratory

Sample Log-in Checklist

Vista Work Order #: 1701411 TAT Std

Samples Arrival:	Date/Time 10/5/17 0953	Initials: WWS	Location: WR-2 Shelf/Rack: N/a
Logged In:	Date/Time 10/06/17 0649	Initials: JBB	Location: WR-2 Shelf/Rack: F7

Delivered By:	FedEx	UPS	On Trac	GSO	DHL	Hand Delivered	Other
Preservation:	Ice	Blue Ice	Dry Ice	None		

Temp °C: 1.8 (uncorrected)	Time: 1015	Thermometer ID: IR-1
Temp °C: 1.9 (corrected)	Probe used: Yes☐ No☒	

	YES	NO	NA
Adequate Sample Volume Received?	✓		
Holding Time Acceptable?	✓		
Shipping Container(s) Intact?	✓		
Shipping Custody Seals Intact?	✓		
Shipping Documentation Present?	✓		
Airbill Trk # 7879 6334 8665	✓		
Sample Container Intact?	✓		
Sample Custody Seals Intact?			✓
Chain of Custody / Sample Documentation Present?	✓		
COC Anomaly/Sample Acceptance Form completed?		✓	✓
If Chlorinated or Drinking Water Samples, Acceptable Preservation?			✓

Preservation Documented:	$Na_2S_2O_3$	Trizma	None	Yes	No	NA
Shipping Container	Vista	Client	Retain	Return	Dispose	

Comments: Sample TW-105-100317 A,B,C,D Containers MS/MSD this sample has No back up for MS/MSD

Windsor Locks AASF
Ella Grasso RT 75 Turnpike
Windsor Locks, CT 06096

Inquiry Number: 5446977.2s
October 08, 2018

EDR Summary Radius Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

ELLA GRASSO RT 75 TURNPIKE
WINDSOR LOCKS, CT 06096

COORDINATES

Latitude (North):	41.9458160 - 41˚ 56' 44.93''
Longitude (West):	72.6737160 - 72˚ 40' 25.37''
Universal Tranverse Mercator:	Zone 18
UTM X (Meters):	692831.7
UTM Y (Meters):	4646164.0
Elevation:	173 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	U.S. Geological Survey

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140721
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
ELLA GRASSO RT 75 TURNPIKE
WINDSOR LOCKS, CT 06096

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	STANDARD BELLOWS CO	375 TURNPIKE RD	RCRA-CESQG	Higher	1 ft.
A2	STANDARD BELLOWSO IN	375 TURNPIKE RD	CT MANIFEST	Higher	1 ft.
A3	STANDARD BELLOWS	375 ELLA GRASSO TPK	CT MANIFEST	Higher	1 ft.
A4		RT 75/ELLA GRASSO BL	CT SPILLS	Lower	1 ft.
A5	STANDARD BELLOWS CO	375 TURNPIKE RD	FINDS, ECHO	Higher	1 ft.
B6		KING SPRING RD & RTE	CT SPILLS	Higher	1 ft.
B7		75 AND KINGSPRING RO	CT SPILLS	Higher	1 ft.
B8		RT 75 AND KING SPRIN	CT SPILLS	Higher	1 ft.
A9		75 AND INDUSTRIAL RO	CT SPILLS	Higher	1 ft.
B10		RT 75 AND KINGS SPRI	CT SPILLS	Higher	1 ft.
C11	ARMY AVIATION SUPPOR	BRADLEY INTERNATIONA	CT SDADB	Higher	1 ft.
C12	ARMY AVIATION SUPPOR	RT 75	CT LUST, CT UST, CT CPCS	Higher	1 ft.
D13	CT MILITARY DEPT ARM	BRADLEY FIELD ROUTE	FINDS, ECHO	Higher	1 ft.
14		359 ELLA GRASSO BLVD	CT SPILLS	Lower	1 ft.
D15	GAGLIARDUCCI CONSTRU	BRADLEY AIR, PERIMET	ICIS, US AIRS, FINDS, ECHO	Higher	1 ft.
B16	RAINBOW AUTOMOTIVE	391 ELLA GRASSO TPKE	EDR Hist Auto	Higher	142, 0.027, ENE
B17	TY SUBARU	391 ELLA GRASSO TPK	CT MANIFEST	Higher	142, 0.027, ENE
B18	MID-TOWN GARAGE, INC	391 ELLA GRASSO TURN	CT SDADB, CT PROPERTY	Higher	142, 0.027, ENE
E19	CT MIL DEPT FIELD MA	CAMP HARTELL RTE 75	RCRA NonGen / NLR, RI MANIFEST	Higher	153, 0.029, East
20	CANADAIR CHALLENGER,	BRADLEY INTERNATIONA	CT SDADB, CT PROPERTY, CT SPILLS	Lower	242, 0.046, SSW
E21	CT MIL DEPT C S M S	CAMP HARTELL RTE 75	RCRA-SQG, WI MANIFEST, RI MANIFEST	Higher	246, 0.047, ESE
F22	WINDSOR MARKETING GR	2 INDUSTRIAL RD	CT MANIFEST	Higher	267, 0.051, ESE
F23	WINDSOR MARKETING GR	2 INDUSTRIAL RD	RCRA NonGen / NLR, FINDS, ECHO, NJ MANIFEST, NY...	Higher	267, 0.051, ESE
F24	WINDSOR MARKETING	2 INDUSTRIAL RD	CT MANIFEST	Higher	267, 0.051, ESE
F25	WINDSOR MARKETING	2 INDUSTRIAL RD	CT MANIFEST	Higher	267, 0.051, ESE
F26	WINDSOR MARKETING GR	2 INDUSTRIAL RD	CT MANIFEST	Higher	267, 0.051, ESE
F27	WINDSOR MARKETING GR	2 INDUSTRIAL RD	CT MANIFEST	Higher	267, 0.051, ESE
28	BRADLEY MILITARY AF		FUDS	Higher	381, 0.072, SSE
G29	WINDSOR MARKETING RO	6 INDUSTRIAL RD	CT MANIFEST	Lower	654, 0.124, ESE
G30	HAMILTON TEST SYSTEM	8 INDUSTRIAL RD	RCRA NonGen / NLR, FINDS, ECHO	Lower	656, 0.124, ESE
H31	EDDIES BRADLEY AUTO	42 KING SPRING RD	CT PROPERTY, CT MANIFEST	Lower	756, 0.143, East
H32	E FLAMMABLE LIQUID N	42 KING SPRING RD	CT MANIFEST	Lower	756, 0.143, East
H33	EDDIES BRADLEY AB &	42 KING SPRING RD	CT MANIFEST	Lower	756, 0.143, East
H34	EDDIES BRADLEY AUTO	42 KING SPRING RD	RCRA-SQG, FINDS, ECHO, NJ MANIFEST	Lower	756, 0.143, East
H35	EDDIES BRADLEY AUTO	42 KING RD	CT MANIFEST	Lower	756, 0.143, East
36	EXECUTIVE VALET PARK	1353 SOUTH ST	CT UST	Higher	777, 0.147, NE
H37	EDDIES BRADLEY AUTO	42 KING SPRING RD	CT MANIFEST	Lower	947, 0.179, East
I38	STANDARD AUTO BODY I	45 KING SPRING RD	CT MANIFEST	Lower	1046, 0.198, East
I39	STANDARD AUTO BODY,	45 KING SPRING RD	RCRA-CESQG, FINDS, ECHO	Lower	1046, 0.198, East

MAPPED SITES SUMMARY

Target Property Address:
ELLA GRASSO RT 75 TURNPIKE
WINDSOR LOCKS, CT 06096

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
I40	QUIK TURN MACHINE	68 KING SPRING RD	CT MANIFEST	Lower	1081, 0.205, East
I41	DICKS BULLDOZING INC	70 KING SPRING RD	CT UST	Lower	1121, 0.212, East
I42	CARCRAFT AUTO BODY	70 KING SPRING RD	CT MANIFEST	Lower	1121, 0.212, East
I43	CARCRAFT AUTO BODY O	70 KING SPRING RD	RCRA NonGen / NLR	Lower	1121, 0.212, East
I44	BRIGGS IND INC	70 KING SPRING	RCRA NonGen / NLR, FINDS, ECHO	Lower	1121, 0.212, East
45	CAMP HARTEL	580 NORTH ST	CT SDADB, CT NPDES, CT SEH	Lower	1194, 0.226, SE
J46	BURLINGTON AIR EXPRE	319 ELLA GRASSO TPK	CT MANIFEST	Higher	1288, 0.244, SSE
J47	ANDERSON NEWS	319 ELLA GRASSO TPKE	CT UST	Higher	1288, 0.244, SSE
K48	TREASURE CHEST-CROWN	TURNPIKE AND CHOICE	CT SDADB	Higher	1887, 0.357, SSE
K49	TREASURE CHEST-CROWN	TURNPIKE & CHOICE RO	CT PROPERTY, CT CPCS	Higher	1887, 0.357, SSE
50	W.L.C. WINDSOR CORP.	3 CHOICE ROAD	CT CPCS	Higher	2319, 0.439, SE
51	GFI DISPLAY	295 ELLA GRASSO TNPK	CT VCP, CT MANIFEST	Higher	2467, 0.467, SSE
L52	WINCHESTER PROPERTIE	295 TURNPIKE RD	SEMS-ARCHIVE, CORRACTS, RCRA-TSDF, US INST...	Higher	2999, 0.568, SSE
L53	CHOICE VEND, INC.	295 ELLA GRASSO TURN	CT SHWS, CT SDADB, CT CPCS	Higher	2999, 0.568, SSE
54	BRADLEY INTERNATIONA	BRADLEY INTERNATIONA	CT SHWS, CT SDADB, CT SPILLS, CT CPCS	Higher	3188, 0.604, SW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA CORRACTS facilities list

CORRACTS: A review of the CORRACTS list, as provided by EDR, and dated 03/01/2018 has revealed that there is 1 CORRACTS site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WINCHESTER PROPERTIE EPA ID:: CTD001444066	***295 TURNPIKE RD***	***SSE 1/2 - 1 (0.568 mi.)***	***L52***	***19***

Federal RCRA generators list

RCRA-SQG: A review of the RCRA-SQG list, as provided by EDR, and dated 03/01/2018 has revealed that there are 2 RCRA-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CT MIL DEPT C S M S EPA ID:: CTD982544454	***CAMP HARTELL RTE 75***	***ESE 0 - 1/8 (0.047 mi.)***	***E21***	***12***

Lower Elevation	Address	Direction / Distance	Map ID	Page
EDDIES BRADLEY AUTO EPA ID:: CTD982715393	***42 KING SPRING RD***	***E 1/8 - 1/4 (0.143 mi.)***	***H34***	***15***

EXECUTIVE SUMMARY

RCRA-CESQG: A review of the RCRA-CESQG list, as provided by EDR, and dated 03/01/2018 has revealed that there are 2 RCRA-CESQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
STANDARD BELLOWS CO EPA ID:: CTD001159169	375 TURNPIKE RD	0 - 1/8 (0.000 mi.)	A1	8

Lower Elevation	Address	Direction / Distance	Map ID	Page
STANDARD AUTO BODY, EPA ID:: CTD047710447	***45 KING SPRING RD***	***E 1/8 - 1/4 (0.198 mi.)***	***I39***	***16***

State- and tribal - equivalent CERCLIS

CT SHWS: A review of the CT SHWS list, as provided by EDR, and dated 04/23/2010 has revealed that there are 2 CT SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CHOICE VEND, INC. State ID: 547 EPA ID: CTD001444066	***295 ELLA GRASSO TURN***	***SSE 1/2 - 1 (0.568 mi.)***	***L53***	***20***
BRADLEY INTERNATIONA State ID: 546	***BRADLEY INTERNATIONA***	***SW 1/2 - 1 (0.604 mi.)***	***54***	***20***

CT SDADB: A review of the CT SDADB list, as provided by EDR, and dated 04/23/2010 has revealed that there are 5 CT SDADB sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ARMY AVIATION SUPPOR Facility Id: 2043	BRADLEY INTERNATIONA	0 - 1/8 (0.000 mi.)	C11	10
MID-TOWN GARAGE, INC Facility Id: 5450	***391 ELLA GRASSO TURN***	***ENE 0 - 1/8 (0.027 mi.)***	***B18***	***11***
TREASURE CHEST-CROWN Facility Id: 1160	TURNPIKE AND CHOICE	SSE 1/4 - 1/2 (0.357 mi.)	K48	19

Lower Elevation	Address	Direction / Distance	Map ID	Page
CANADAIR CHALLENGER, Facility Id: 5445	***BRADLEY INTERNATIONA***	***SSW 0 - 1/8 (0.046 mi.)***	***20***	***12***
CAMP HARTEL Facility Id: 2974	***580 NORTH ST***	***SE 1/8 - 1/4 (0.226 mi.)***	***45***	***18***

EXECUTIVE SUMMARY

State and tribal leaking storage tank lists

CT LUST: A review of the CT LUST list, as provided by EDR, and dated 07/31/2018 has revealed that there is 1 CT LUST site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ARMY AVIATION SUPPOR Lust Status: 4 LUST Id: 31928	***RT 75***	***0 - 1/8 (0.000 mi.)***	***C12***	***10***

State and tribal registered storage tank lists

CT UST: A review of the CT UST list, as provided by EDR, and dated 06/19/2018 has revealed that there are 4 CT UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ARMY AVIATION SUPPOR Facility Id: 165-9175 Tank Status: Permanently Closed	***RT 75***	***0 - 1/8 (0.000 mi.)***	***C12***	***10***
EXECUTIVE VALET PARK Facility Id: 139-7590 Tank Status: Permanently Closed	1353 SOUTH ST	NE 1/8 - 1/4 (0.147 mi.)	36	16
ANDERSON NEWS Facility Id: 165-10409 Tank Status: Permanently Closed	319 ELLA GRASSO TPKE	SSE 1/8 - 1/4 (0.244 mi.)	J47	18

Lower Elevation	Address	Direction / Distance	Map ID	Page
DICKS BULLDOZING INC Facility Id: 165-9626 Tank Status: Permanently Closed	70 KING SPRING RD	E 1/8 - 1/4 (0.212 mi.)	I41	17

State and tribal voluntary cleanup sites

CT VCP: A review of the CT VCP list, as provided by EDR, and dated 08/10/2018 has revealed that there is 1 CT VCP site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
GFI DISPLAY Status: LEP post 10/1/95 filing	***295 ELLA GRASSO TNPK***	***SSE 1/4 - 1/2 (0.467 mi.)***	***51***	***19***

EXECUTIVE SUMMARY

ADDITIONAL ENVIRONMENTAL RECORDS

Records of Emergency Release Reports

CT SPILLS: A review of the CT SPILLS list, as provided by EDR, and dated 07/31/2018 has revealed that there are 7 CT SPILLS sites within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported Facility Status: CLOSED Case Number: 201601097	KING SPRING RD & RTE	0 - 1/8 (0.000 mi.)	B6	9
Not reported Facility Status: Closed Case Number: 200405894	75 AND KINGSPRING RO	0 - 1/8 (0.000 mi.)	B7	9
Not reported Facility Status: closed Case Number: 9701915	RT 75 AND KING SPRIN	0 - 1/8 (0.000 mi.)	B8	9
Not reported Facility Status: CLOSED Case Number: 201107752	75 AND INDUSTRIAL RO	0 - 1/8 (0.000 mi.)	A9	9
Not reported Facility Status: CLOSED Case Number: 200605436	RT 75 AND KINGS SPRI	0 - 1/8 (0.000 mi.)	B10	9

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported Case Number: 2562	RT 75/ELLA GRASSO BL	0 - 1/8 (0.000 mi.)	A4	8
Not reported Facility Status: Closed Case Number: 200502090	359 ELLA GRASSO BLVD	0 - 1/8 (0.000 mi.)	14	10

Other Ascertainable Records

RCRA NonGen / NLR: A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 03/01/2018 has revealed that there are 5 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CT MIL DEPT FIELD MA EPA ID:: CTD983869728	***CAMP HARTELL RTE 75***	***E 0 - 1/8 (0.029 mi.)***	***E19***	***12***
WINDSOR MARKETING GR EPA ID:: CTD131755209	***2 INDUSTRIAL RD***	***ESE 0 - 1/8 (0.051 mi.)***	***F23***	***13***

Lower Elevation	Address	Direction / Distance	Map ID	Page
HAMILTON TEST SYSTEM	***8 INDUSTRIAL RD***	***ESE 0 - 1/8 (0.124 mi.)***	***G30***	***14***

EPA ID:: CTD000841197				
CARCRAFT AUTO BODY O EPA ID:: CTD161337456	70 KING SPRING RD	E 1/8 - 1/4 (0.212 mi.)	I43	17
BRIGGS IND INC EPA ID:: CTD983872805	***70 KING SPRING***	***E 1/8 - 1/4 (0.212 mi.)***	***I44***	***17***

FUDS: A review of the FUDS list, as provided by EDR, and dated 01/31/2015 has revealed that there is 1 FUDS site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
BRADLEY MILITARY AF Federal Facility ID:: CT9799F1750 INST ID:: 57623		SSE 0 - 1/8 (0.072 mi.)	28	14

ICIS: A review of the ICIS list, as provided by EDR, and dated 11/18/2016 has revealed that there is 1 ICIS site within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
GAGLIARDUCCI CONSTRU FRS ID:: 110007242028	***BRADLEY AIR, PERIMET***	***0 - 1/8 (0.000 mi.)***	***D15***	***11***

US AIRS: A review of the US AIRS list, as provided by EDR, has revealed that there is 1 US AIRS site within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
GAGLIARDUCCI CONSTRU Database: US AIRS MINOR, Date of Government Version: 10/12/2016 EPA plant ID:: 110007242028	***BRADLEY AIR, PERIMET***	***0 - 1/8 (0.000 mi.)***	***D15***	***11***

FINDS: A review of the FINDS list, as provided by EDR, and dated 08/07/2018 has revealed that there are 3 FINDS sites within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
STANDARD BELLOWS CO Registry ID:: 110003008539	***375 TURNPIKE RD***	***0 - 1/8 (0.000 mi.)***	***A5***	***8***
CT MILITARY DEPT ARM Registry ID:: 110006176716	***BRADLEY FIELD ROUTE***	***0 - 1/8 (0.000 mi.)***	***D13***	***10***
GAGLIARDUCCI CONSTRU Registry ID:: 110007242028	***BRADLEY AIR, PERIMET***	***0 - 1/8 (0.000 mi.)***	***D15***	***11***

EXECUTIVE SUMMARY

ECHO: A review of the ECHO list, as provided by EDR, and dated 09/02/2018 has revealed that there are 3 ECHO sites within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
STANDARD BELLOWS CO Registry ID: 110003008539	***375 TURNPIKE RD***	***0 - 1/8 (0.000 mi.)***	***A5***	***8***
CT MILITARY DEPT ARM Registry ID: 110006176716	***BRADLEY FIELD ROUTE***	***0 - 1/8 (0.000 mi.)***	***D13***	***10***
GAGLIARDUCCI CONSTRU Registry ID: 110007242028	***BRADLEY AIR, PERIMET***	***0 - 1/8 (0.000 mi.)***	***D15***	***11***

CT CPCS: A review of the CT CPCS list, as provided by EDR, and dated 08/07/2018 has revealed that there are 3 CT CPCS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ARMY AVIATION SUPPOR Lust Status: Cleanup Initiated	***RT 75***	***0 - 1/8 (0.000 mi.)***	***C12***	***10***
TREASURE CHEST-CROWN W.L.C. WINDSOR CORP.	***TURNPIKE & CHOICE RO*** 3 CHOICE ROAD	***SSE 1/4 - 1/2 (0.357 mi.)*** SE 1/4 - 1/2 (0.439 mi.)	***K49*** 50	***19*** 19

CT MANIFEST: A review of the CT MANIFEST list, as provided by EDR, and dated 08/10/2018 has revealed that there are 18 CT MANIFEST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
STANDARD BELLOWSO IN EPA Id: CTD001159169	375 TURNPIKE RD	0 - 1/8 (0.000 mi.)	A2	8
STANDARD BELLOWS EPA Id: CTD001159169	375 ELLA GRASSO TPK	0 - 1/8 (0.000 mi.)	A3	8
TY SUBARU EPA Id: CTP000022837	391 ELLA GRASSO TPK	ENE 0 - 1/8 (0.027 mi.)	B17	11
WINDSOR MARKETING GR EPA Id: CTP000008528	2 INDUSTRIAL RD	ESE 0 - 1/8 (0.051 mi.)	F22	13
WINDSOR MARKETING EPA Id: CTP000005888	2 INDUSTRIAL RD	ESE 0 - 1/8 (0.051 mi.)	F24	13
WINDSOR MARKETING EPA Id: CTD131755209	2 INDUSTRIAL RD	ESE 0 - 1/8 (0.051 mi.)	F25	13
WINDSOR MARKETING GR EPA Id: CTD131755209	2 INDUSTRIAL RD	ESE 0 - 1/8 (0.051 mi.)	F26	14
WINDSOR MARKETING GR EPA Id: CTP000005888	2 INDUSTRIAL RD	ESE 0 - 1/8 (0.051 mi.)	F27	14
BURLINGTON AIR EXPRE EPA Id: CTP000007718	319 ELLA GRASSO TPK	SSE 1/8 - 1/4 (0.244 mi.)	J46	18

Lower Elevation	Address	Direction / Distance	Map ID	Page
WINDSOR MARKETING RO	6 INDUSTRIAL RD	ESE 0 - 1/8 (0.124 mi.)	G29	14

EPA Id: CTP000019476				
EDDIES BRADLEY AUTO	***42 KING SPRING RD***	***E 1/8 - 1/4 (0.143 mi.)***	***H31***	***15***
EPA Id: CTP000009450 EPA Id: CTD982715393				
E FLAMMABLE LIQUID N	42 KING SPRING RD	E 1/8 - 1/4 (0.143 mi.)	H32	15
EPA Id: CTD982715393				
EDDIES BRADLEY AB &	42 KING SPRING RD	E 1/8 - 1/4 (0.143 mi.)	H33	15
EPA Id: CTP000009450				
EDDIES BRADLEY AUTO	42 KING RD	E 1/8 - 1/4 (0.143 mi.)	H35	16
EPA Id: CTD982715393				
EDDIES BRADLEY AUTO	42 KING SPRING RD	E 1/8 - 1/4 (0.179 mi.)	H37	16
EPA Id: CTD982715393				
STANDARD AUTO BODY I	45 KING SPRING RD	E 1/8 - 1/4 (0.198 mi.)	I38	16
EPA Id: CTD047710447 EPA Id: CT$000014730				
QUIK TURN MACHINE	68 KING SPRING RD	E 1/8 - 1/4 (0.205 mi.)	I40	17
EPA Id: CT$000022440				
CARCRAFT AUTO BODY	70 KING SPRING RD	E 1/8 - 1/4 (0.212 mi.)	I42	17
EPA Id: CTP000006933				

NY MANIFEST: A review of the NY MANIFEST list, as provided by EDR, and dated 07/01/2018 has revealed that there is 1 NY MANIFEST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WINDSOR MARKETING GR	***2 INDUSTRIAL RD***	***ESE 0 - 1/8 (0.051 mi.)***	***F23***	***13***
EPA ID: CTD131755209				

NJ MANIFEST: A review of the NJ MANIFEST list, as provided by EDR, and dated 12/31/2017 has revealed that there are 2 NJ MANIFEST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WINDSOR MARKETING GR	***2 INDUSTRIAL RD***	***ESE 0 - 1/8 (0.051 mi.)***	***F23***	***13***
EPA Id: CTD131755209				

Lower Elevation	Address	Direction / Distance	Map ID	Page
EDDIES BRADLEY AUTO	***42 KING SPRING RD***	***E 1/8 - 1/4 (0.143 mi.)***	***H34***	***15***
EPA Id: CTD982715393				

EXECUTIVE SUMMARY

WI MANIFEST: A review of the WI MANIFEST list, as provided by EDR, and dated 12/31/2017 has revealed that there is 1 WI MANIFEST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CT MIL DEPT C S M S	***CAMP HARTELL RTE 75***	***ESE 0 - 1/8 (0.047 mi.)***	***E21***	***12***
ACT Status: A				
FID: 0				
EPA ID: CTD982544454				

RI MANIFEST: A review of the RI MANIFEST list, as provided by EDR, and dated 12/31/2017 has revealed that there are 2 RI MANIFEST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CT MIL DEPT FIELD MA	***CAMP HARTELL RTE 75***	***E 0 - 1/8 (0.029 mi.)***	***E19***	***12***
EPA Id: CTD983869728				
Manifest Document Number: 000085799UIS				
CT MIL DEPT C S M S	***CAMP HARTELL RTE 75***	***ESE 0 - 1/8 (0.047 mi.)***	***E21***	***12***
EPA Id: CTD982544454				
Manifest Document Number: 000041654UIS				

CT SEH: A review of the CT SEH list, as provided by EDR, and dated 06/30/2018 has revealed that there is 1 CT SEH site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CAMP HARTEL	***580 NORTH ST***	***SE 1/8 - 1/4 (0.226 mi.)***	***45***	***18***

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto: A review of the EDR Hist Auto list, as provided by EDR, has revealed that there is 1 EDR Hist Auto site within approximately 0.125 miles of the target property.

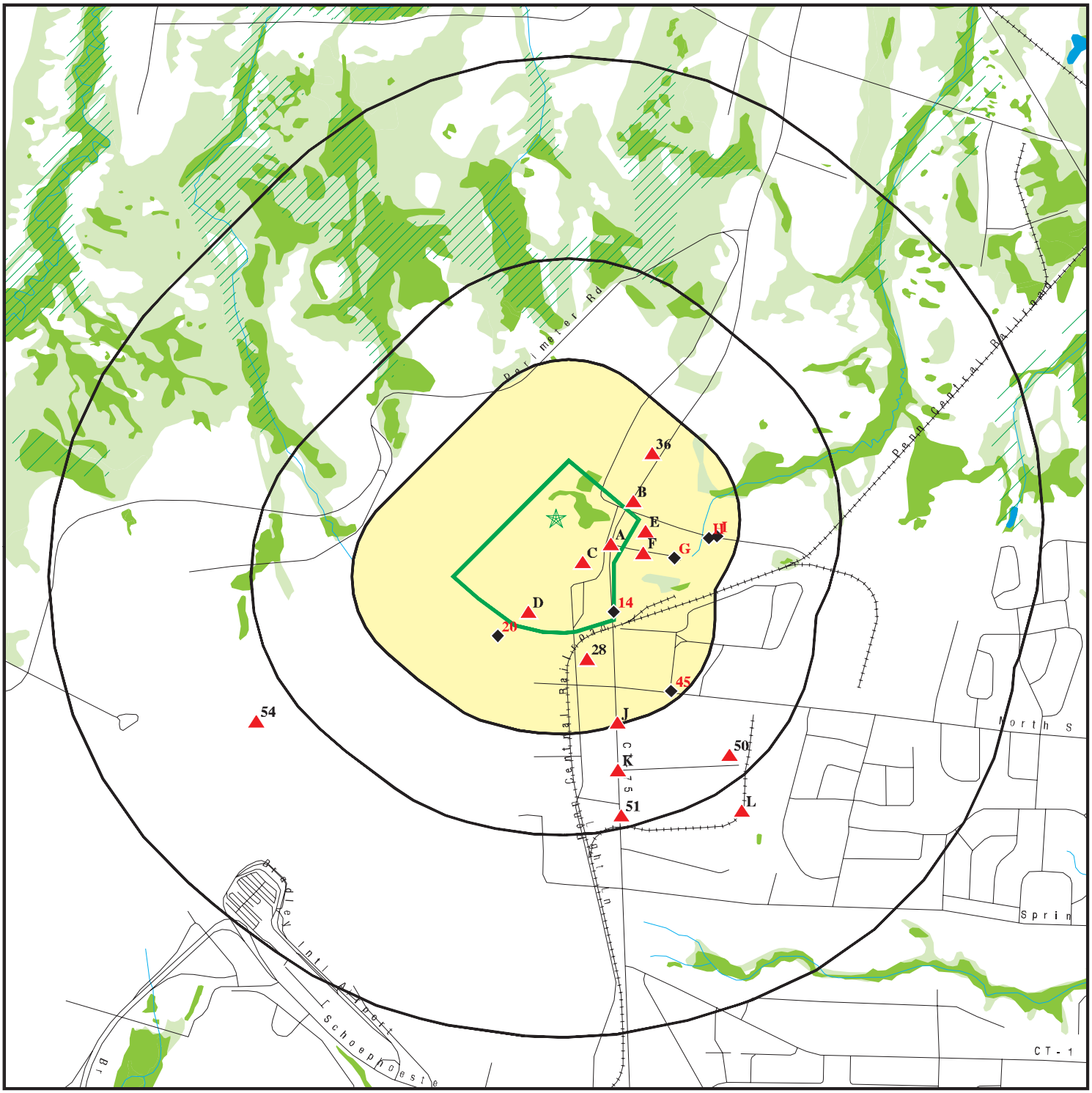
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
RAINBOW AUTOMOTIVE	391 ELLA GRASSO TPKE	ENE 0 - 1/8 (0.027 mi.)	B16	11

Count: 2 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
WINDSOR LOCKS	S110055345	DOT MAINTENANCE GARAGE (GLYCOL REC	CITATION LANE (BRADLEY INTERNA		CT LUST
WINDSOR LOCKS	S121817441	AREH WINDSOR LOCKS, LLC	100 KING SPRING RD	06096	CT ASBESTOS

OVERVIEW MAP - 5446977.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

0 1/4 1/2 1 Miles

Indian Reservations BIA

100-year flood zone

500-year flood zone

National Wetland Inventory

State Wetlands

Upgradient Area

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Windsor Locks AASF	CLIENT:	AECOM
ADDRESS:	Ella Grasso RT 75 Turnpike Windsor Locks CT 06096	CONTACT:	Brittany Kirchmann
		INQUIRY #:	5446977.2s
LAT/LONG:	41.945816 / 72.673716	DATE:	October 08, 2018 12:11 pm

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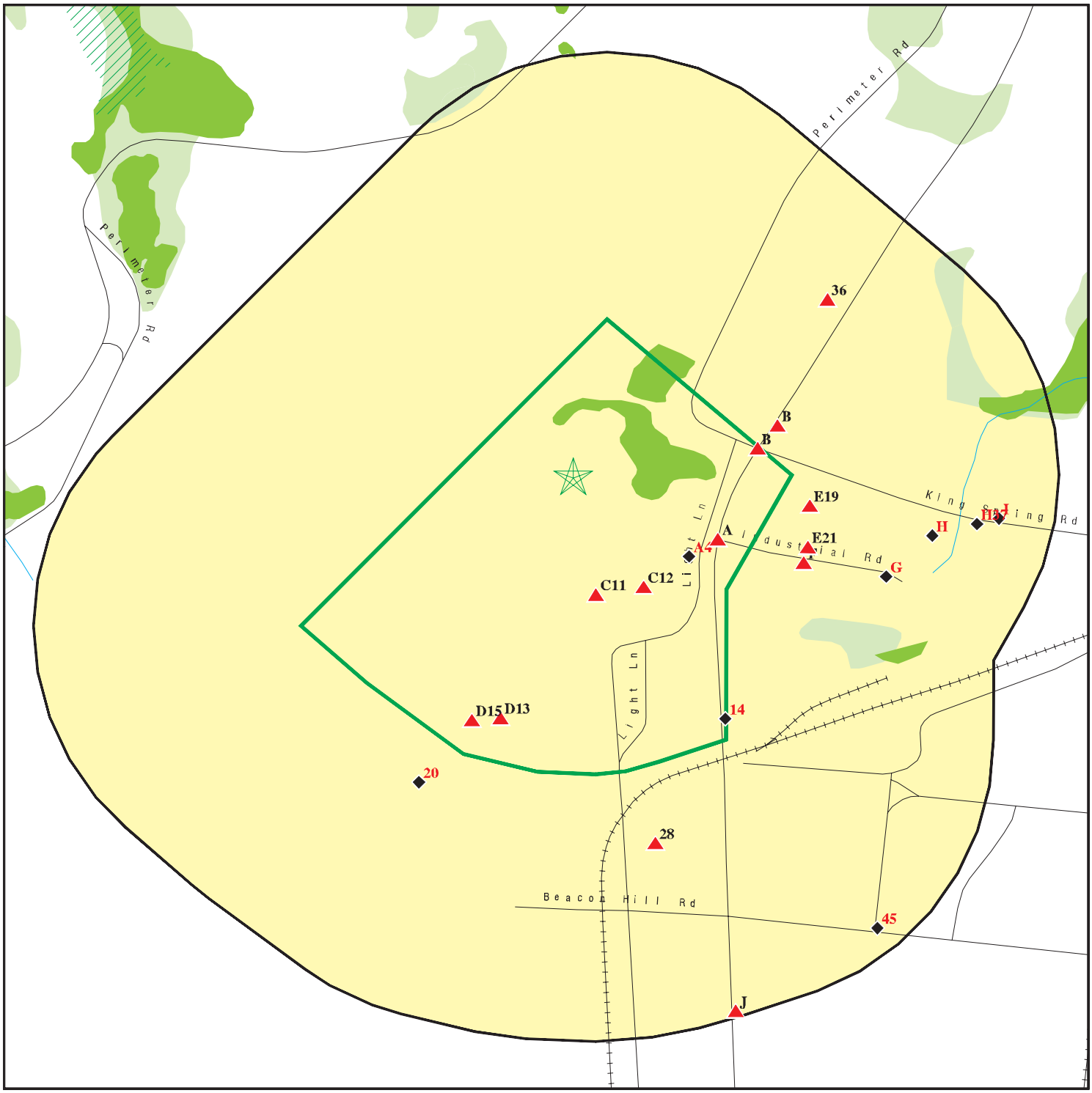
DETAIL MAP - 5446977.2S



0 1/8 1/4 1/2 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Windsor Locks AASF	CLIENT: AECOM
ADDRESS: Ella Grasso RT 75 Turnpike Windsor Locks CT 06096	CONTACT: Brittany Kirchmann INQUIRY #: 5446977.2s
LAT/LONG: 41.945816 / 72.673716	DATE: October 08, 2018 12:13 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	0.001		0	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	1	NR	1
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		1	1	NR	NR	NR	2
RCRA-CESQG	0.250		1	1	NR	NR	NR	2
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
CT SHWS	1.000		0	0	0	2	NR	2
CT SDADB	0.500		3	1	1	NR	NR	5
State and tribal landfill and/or solid waste disposal site lists								
CT SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
CT LUST	0.500		1	0	0	NR	NR	1
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CT UST	0.250		1	3	NR	NR	NR	4
CT AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
CT ENG CONTROLS	0.500		0	0	0	NR	NR	0
CT AUL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
CT VCP	0.500		0	0	1	NR	NR	1
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
CT BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
CT SWRCY	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
CT CDL	0.001		0	NR	NR	NR	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
Local Land Records								
CT PROPERTY	0.001		0	NR	NR	NR	NR	0
CT LIENS	0.001		0	NR	NR	NR	NR	0
LIENS 2	0.001		0	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
CT SPILLS	0.001		7	NR	NR	NR	NR	7
CT SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		3	2	NR	NR	NR	5
FUDS	1.000		1	0	0	0	NR	1
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		1	NR	NR	NR	NR	1
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	0.001		0	NR	NR	NR	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		1	NR	NR	NR	NR	1
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.001		0	NR	NR	NR	NR	0
FINDS	0.001		3	NR	NR	NR	NR	3
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
ECHO	0.001		3	NR	NR	NR	NR	3
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CT AIRS	0.001		0	NR	NR	NR	NR	0
CT ASBESTOS	0.001		0	NR	NR	NR	NR	0
CT CPCS	0.500		1	0	2	NR	NR	3
CT DRYCLEANERS	0.250		0	0	NR	NR	NR	0
CT ENF	0.001		0	NR	NR	NR	NR	0
CT Financial Assurance	0.001		0	NR	NR	NR	NR	0
CT LEAD	0.001		0	NR	NR	NR	NR	0
CT LWDS	0.250		0	0	NR	NR	NR	0
CT MANIFEST	0.250		9	9	NR	NR	NR	18
NY MANIFEST	0.250		1	0	NR	NR	NR	1
NJ MANIFEST	0.250		1	1	NR	NR	NR	2
WI MANIFEST	0.250		1	0	NR	NR	NR	1
RI MANIFEST	0.250		2	0	NR	NR	NR	2
CT NPDES	0.001		0	NR	NR	NR	NR	0
CT SEH	0.500		0	1	0	NR	NR	1
CT UIC	0.001		0	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
EDR Hist Auto	0.125		1	NR	NR	NR	NR	1
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
CT RGA HWS	0.001		0	NR	NR	NR	NR	0
CT RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		0	42	19	4	3	0	68

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
A1 **< 1/8** **1 ft.** **Relative:** **Higher**	**STANDARD BELLOWS CO INC** **375 TURNPIKE RD** **WINDSOR LOCKS, CT 06096** **Click here for full text details** **RCRA-CESQG** EPA Id: CTD001159169	**RCRA-CESQG**	**1004680805** **CTD001159169**
A2 **< 1/8** **1 ft.** **Relative:** **Higher**	**STANDARD BELLOWSO INC** **375 TURNPIKE RD** **WINDSOR LOCKS, CT 06096** **Click here for full text details** **CT MANIFEST** EPA Id: CTD001159169	**CT MANIFEST**	**S109723599** **N/A**
A3 **< 1/8** **1 ft.** **Relative:** **Higher**	**STANDARD BELLOWS** **375 ELLA GRASSO TPK** **WINDSOR LOCKS, CT 06096** **Click here for full text details** **CT MANIFEST** EPA Id: CTD001159169	**CT MANIFEST**	**S113474167** **N/A**
A4 **< 1/8** **1 ft.** **Relative:** **Lower**	**RT 75/ELLA GRASSO BLVD** **WINDSOR LOCKS, CT** **Click here for full text details** **CT SPILLS** Case Number: 2562	**CT SPILLS**	**S103699880** **N/A**
A5 **< 1/8** **1 ft.** **Relative:** **Higher**	**STANDARD BELLOWS CO INC** **375 TURNPIKE RD** **WINDSOR LOCKS, CT 06096** **Click here for full text details** **FINDS** Registry ID:: 110003008539 **ECHO** Registry ID: 110003008539	**FINDS** **ECHO**	**1016189402** **N/A**

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
B6 **< 1/8** **1 ft.** **Relative:** **Higher**	**KING SPRING RD & RTE 75** **WINDSOR LOCKS, CT** **Click here for full text details** **CT SPILLS** Case Number: 201601097 Facility Status: CLOSED	**CT SPILLS**	**S118549101** **N/A**
B7 **< 1/8** **1 ft.** **Relative:** **Higher**	**75 AND KINGSPRING ROAD** **WINDSOR LOCKS, CT** **Click here for full text details** **CT SPILLS** Case Number: 200405894 Facility Status: Closed	**CT SPILLS**	**S106730392** **N/A**
B8 **< 1/8** **1 ft.** **Relative:** **Higher**	**RT 75 AND KING SPRING RD** **WINDSOR LOCKS, CT** **Click here for full text details** **CT SPILLS** Case Number: 9701915 Facility Status: closed	**CT SPILLS**	**S103159216** **N/A**
A9 **< 1/8** **1 ft.** **Relative:** **Higher**	**75 AND INDUSTRIAL ROAD** **WINDSOR LOCKS, CT** **Click here for full text details** **CT SPILLS** Case Number: 201107752 Facility Status: CLOSED	**CT SPILLS**	**S111441795** **N/A**
B10 **< 1/8** **1 ft.** **Relative:** **Higher**	**RT 75 AND KINGS SPRING RD** **WINDSOR LOCKS, CT** **Click here for full text details** **CT SPILLS** Case Number: 200605436 Facility Status: CLOSED	**CT SPILLS**	**S108194010** **N/A**

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
C11 **< 1/8** **1 ft.** **Relative:** **Higher**	**ARMY AVIATION SUPPORT FACILITY** **BRADLEY INTERNATIONAL AIRPORT** **WINDSOR LOCKS, CT** **Click here for full text details** **CT SDADB** Facility Id: 2043	**CT SDADB**	**S104255554** **N/A**
C12 **< 1/8** **1 ft.** **Relative:** **Higher**	**ARMY AVIATION SUPPORT FACILITY** **RT 75** **WINDSOR LOCKS, CT** **Click here for full text details** **CT LUST** Lust Status: Lust Completed LUST Id: 31928 **CT UST** Tank Status: Permanently Closed Facility Id: 165-9175 **CT CPCS** Lust Status: Cleanup Initiated	**CT LUST** **CT UST** **CT CPCS**	**U003973394** **N/A**
D13 **< 1/8** **1 ft.** **Relative:** **Higher**	**CT MILITARY DEPT ARMY AVIATION SUPPORT FACILITY** **BRADLEY FIELD ROUTE 75** **WINDSOR LOCKS, CT 06096** **Click here for full text details** **FINDS** Registry ID:: 110006176716 **ECHO** Registry ID: 110006176716	**FINDS** **ECHO**	**1016213996** **N/A**
14 **< 1/8** **1 ft.** **Relative:** **Lower**	**359 ELLA GRASSO BLVD** **WINDSOR LOCKS, CT** **Click here for full text details** **CT SPILLS** Case Number: 200502090 Facility Status: Closed	**CT SPILLS**	**S106890133** **N/A**

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
D15 **< 1/8** **1 ft.** **Relative:** **Higher**	**GAGLIARDUCCI CONSTRUCTION, INC** **BRADLEY AIR, PERIMETER RD** **WINDSOR LOCKS, CT 06096** **Click here for full text details** **ICIS** FRS ID:: 110007242028 **US AIRS** EPA plant ID:: 110007242028 **FINDS** Registry ID:: 110007242028 **ECHO** Registry ID: 110007242028	**ICIS** **US AIRS** **FINDS** **ECHO**	**1006672399** **N/A**
B16 **ENE** **< 1/8** **0.027 mi.** **142 ft.** **Relative:** **Higher**	**RAINBOW AUTOMOTIVE** **391 ELLA GRASSO TPKE** **WINDSOR LOCKS, CT 06096** **Click here for full text details**	**EDR Hist Auto**	**1020704400** **N/A**
B17 **ENE** **< 1/8** **0.027 mi.** **142 ft.** **Relative:** **Higher**	**TY SUBARU** **391 ELLA GRASSO TPK** **WINDSOR, CT 06096** **Click here for full text details** **CT MANIFEST** EPA Id: CTP000022837	**CT MANIFEST**	**S109750379** **N/A**
B18 **ENE** **< 1/8** **0.027 mi.** **142 ft.** **Relative:** **Higher**	**MID-TOWN GARAGE, INC.** **391 ELLA GRASSO TURNPIKE** **WINDSOR LOCKS, CT** **Click here for full text details** **CT SDADB** Facility Id: 5450	**CT SDADB** **CT PROPERTY**	**S104563664** **N/A**

E19
East
< 1/8
0.029 mi.
153 ft.

Relative:
Higher

CT MIL DEPT FIELD MAINT SHOP 8
CAMP HARTELL RTE 75
WINDSOR LOCKS, CT 06096

RCRA NonGen / NLR
RI MANIFEST

1000123300
CTD983869728

Click here for full text details

RCRA NonGen / NLR
EPA Id: CTD983869728

RI MANIFEST
EPA Id: CTD983869728
Manifest Document Number: 000085799UIS

20
SSW
< 1/8
0.046 mi.
242 ft.

Relative:
Lower

CANADAIR CHALLENGER, INC.
BRADLEY INTERNATIONAL AIRPORT
WINDSOR LOCKS, CT

CT SDADB
CT PROPERTY
CT SPILLS

S104563662
N/A

Click here for full text details

CT SDADB
Facility Id: 5445

CT SPILLS
Case Number: 9701345
Case Number: 9701348
Facility Status: closed

E21
ESE
< 1/8
0.047 mi.
246 ft.

Relative:
Higher

CT MIL DEPT C S M S
CAMP HARTELL RTE 75
WINDSOR LOCKS, CT 06096

RCRA-SQG
WI MANIFEST
RI MANIFEST

1000155689
CTD982544454

Click here for full text details

RCRA-SQG
EPA Id: CTD982544454

WI MANIFEST
ACT Status: A
FID: 0
EPA ID: CTD982544454

RI MANIFEST
EPA Id: CTD982544454
Manifest Document Number: 000041654UIS

F22
ESE
< 1/8
0.051 mi.
267 ft.

Relative:
Higher

WINDSOR MARKETING GROUP
2 INDUSTRIAL RD
WINDSOR LOCKS, CT 06096

CT MANIFEST

S109738070
N/A

Click here for full text details

CT MANIFEST
EPA Id: CTP000008528

F23
ESE
< 1/8
0.051 mi.
267 ft.

Relative:
Higher

WINDSOR MARKETING GROUP INC
2 INDUSTRIAL RD
WINDSOR LOCKS, CT 06096

RCRA NonGen / NLR
FINDS
ECHO
NJ MANIFEST
NY MANIFEST

1000192705
CTD131755209

Click here for full text details

RCRA NonGen / NLR
EPA Id: CTD131755209

FINDS
Registry ID:: 110043631317

ECHO
Registry ID: 110043631317

NJ MANIFEST
EPA Id: CTD131755209

NY MANIFEST
EPA ID: CTD131755209

F24
ESE
< 1/8
0.051 mi.
267 ft.

Relative:
Higher

WINDSOR MARKETING
2 INDUSTRIAL RD
WINDSOR LOCKS, CT 06096

CT MANIFEST

S109736006
N/A

Click here for full text details

CT MANIFEST
EPA Id: CTP000005888

F25
ESE
< 1/8
0.051 mi.
267 ft.

Relative:
Higher

WINDSOR MARKETING
2 INDUSTRIAL RD
WINDSOR LOCKS, CT 06096

CT MANIFEST

S109729491
N/A

Click here for full text details

CT MANIFEST
EPA Id: CTD131755209

F26
ESE
< 1/8
0.051 mi.
267 ft.

Relative:
Higher

WINDSOR MARKETING GROUP INC — **CT MANIFEST** — **S109729492**
2 INDUSTRIAL RD — **N/A**
WINDSOR LOCKS, CT 06096

Click here for full text details

CT MANIFEST
EPA Id: CTD131755209

F27
ESE
< 1/8
0.051 mi.
267 ft.

Relative:
Higher

WINDSOR MARKETING GROUP — **CT MANIFEST** — **S121136645**
2 INDUSTRIAL RD — **N/A**
WINDSOR LOCKS, CT 06096

Click here for full text details

CT MANIFEST
EPA Id: CTP000005888

28
SSE
< 1/8
0.072 mi.
381 ft.

Relative:
Higher

BRADLEY MILITARY AF — **FUDS** — **1010309668**
N/A
WINDSOR LOCKS, CT

Click here for full text details

FUDS
Federal Facility ID:: CT9799F1750
INST ID:: 57623

G29
ESE
< 1/8
0.124 mi.
654 ft.

Relative:
Lower

WINDSOR MARKETING ROUP — **CT MANIFEST** — **S109747621**
6 INDUSTRIAL RD — **N/A**
WINDSOR LOCKS, CT 06096

Click here for full text details

CT MANIFEST
EPA Id: CTP000019476

G30
ESE
< 1/8
0.124 mi.
656 ft.

Relative:
Lower

HAMILTON TEST SYSTEMS — **RCRA NonGen / NLR** — **1000686912**
8 INDUSTRIAL RD — **FINDS** — **CTD000841197**
WINDSOR LOCKS, CT 06096 — **ECHO**

Click here for full text details

RCRA NonGen / NLR
EPA Id: CTD000841197

FINDS
Registry ID:: 110003006773

ECHO

HAMILTON TEST SYSTEMS (Continued) **1000686912**

Registry ID: 110003006773

H31
East
1/8-1/4
0.143 mi.
756 ft.

Relative:
Lower

EDDIES BRADLEY AUTO BODY & SALES
42 KING SPRING RD
WINDSOR LOCKS, CT 06096

CT PROPERTY **S109731926**
CT MANIFEST **N/A**

Click here for full text details

CT MANIFEST
EPA Id: CTP000009450
EPA Id: CTD982715393

H32
East
1/8-1/4
0.143 mi.
756 ft.

Relative:
Lower

E FLAMMABLE LIQUID NOSY & SALES
42 KING SPRING RD
WINDSOR LOCKS, CT 06096

CT MANIFEST **S109731925**
N/A

Click here for full text details

CT MANIFEST
EPA Id: CTD982715393

H33
East
1/8-1/4
0.143 mi.
756 ft.

Relative:
Lower

EDDIES BRADLEY AB &
42 KING SPRING RD
WINDSOR LOCKS, CT 06096

CT MANIFEST **S109738799**
N/A

Click here for full text details

CT MANIFEST
EPA Id: CTP000009450

H34
East
1/8-1/4
0.143 mi.
756 ft.

Relative:
Lower

EDDIES BRADLEY AUTO BODY & SALES
42 KING SPRING RD
WINDSOR LOCKS, CT 06096

RCRA-SQG **1000249442**
FINDS **CTD982715393**
ECHO
NJ MANIFEST

Click here for full text details

RCRA-SQG
EPA Id: CTD982715393

FINDS
Registry ID:: 110002485169

ECHO
Registry ID: 110002485169

NJ MANIFEST
EPA Id: CTD982715393

H35
East
1/8-1/4
0.143 mi.
756 ft.

Relative:
Lower

EDDIES BRADLEY AUTO BODY
42 KING RD
WINDSOR LOCKS, CT 06096

CT MANIFEST | **S113475205**
N/A

Click here for full text details

CT MANIFEST
EPA Id: CTD982715393

36
NE
1/8-1/4
0.147 mi.
777 ft.

Relative:
Higher

EXECUTIVE VALET PARKING
1353 SOUTH ST
SUFFIELD, CT 06078

CT UST | **U004009651**
N/A

Click here for full text details

CT UST
Tank Status: Permanently Closed
Facility Id: 139-7590

H37
East
1/8-1/4
0.179 mi.
947 ft.

Relative:
Lower

EDDIES BRADLEY AUTO SVC
42 KING SPRING RD
WINDSOR LOCKS, CT 06096

CT MANIFEST | **S121135727**
N/A

Click here for full text details

CT MANIFEST
EPA Id: CTD982715393

I38
East
1/8-1/4
0.198 mi.
1046 ft.

Relative:
Lower

STANDARD AUTO BODY INC
45 KING SPRING RD
WINDSOR LOCKS, CT 06096

CT MANIFEST | **S109720485**
N/A

Click here for full text details

CT MANIFEST
EPA Id: CTD047710447
EPA Id: CT$000014730

I39
East
1/8-1/4
0.198 mi.
1046 ft.

Relative:
Lower

STANDARD AUTO BODY, INC.
45 KING SPRING RD
WINDSOR LOCKS, CT 06096

RCRA-CESQG
FINDS
ECHO

1004680941
CTD047710447

Click here for full text details

RCRA-CESQG
EPA Id: CTD047710447

FINDS
Registry ID:: 110003015086

ECHO

STANDARD AUTO BODY, INC. (Continued) **1004680941**

Registry ID: 110003015086

I40
East
1/8-1/4
0.205 mi.
1081 ft.

Relative:
Lower

QUIK TURN MACHINE
68 KING SPRING RD
WINDSOR LOCKS, CT 06096

CT MANIFEST **S109720932**
N/A

Click here for full text details

CT MANIFEST
EPA Id: CT$000022440

I41
East
1/8-1/4
0.212 mi.
1121 ft.

Relative:
Lower

DICKS BULLDOZING INC.
70 KING SPRING RD
WINDSOR LOCKS, CT 06096

CT UST **U002021879**
N/A

Click here for full text details

CT UST
Tank Status: Permanently Closed
Facility Id: 165-9626

I42
East
1/8-1/4
0.212 mi.
1121 ft.

Relative:
Lower

CARCRAFT AUTO BODY
70 KING SPRING RD
WINDSOR LOCKS, CT 06096

CT MANIFEST **S109736883**
N/A

Click here for full text details

CT MANIFEST
EPA Id: CTP000006933

I43
East
1/8-1/4
0.212 mi.
1121 ft.

Relative:
Lower

CARCRAFT AUTO BODY OF WINDSOR LL
70 KING SPRING RD
WINDSOR LOCKS, CT 06096

RCRA NonGen / NLR **1000180704**
CTD161337456

Click here for full text details

RCRA NonGen / NLR
EPA Id: CTD161337456

I44
East
1/8-1/4
0.212 mi.
1121 ft.

Relative:
Lower

BRIGGS IND INC
70 KING SPRING
WINDSOR LOCKS, CT 06069

RCRA NonGen / NLR **1000234574**
FINDS **CTD983872805**
ECHO

Click here for full text details

RCRA NonGen / NLR
EPA Id: CTD983872805

FINDS

BRIGGS IND INC (Continued) **1000234574**

Registry ID:: 110003021006
Registry ID:: 110005970583

ECHO
Registry ID: 110005970583
Registry ID: 110003021006

45
SE
1/8-1/4
0.226 mi.
1194 ft.

Relative:
Lower

CAMP HARTEL
580 NORTH ST
WINDSOR LOCKS, CT 06096

CT SDADB **S104255555**
CT NPDES **N/A**
CT SEH

Click here for full text details

CT SDADB
Facility Id: 2974

CT NPDES
Permit Number: GRS000127
Permit Number: GVM001763
Permit Number: GSI000289
Status: Expired
Status: Active

J46
SSE
1/8-1/4
0.244 mi.
1288 ft.

Relative:
Higher

BURLINGTON AIR EXPRESS
319 ELLA GRASSO TPK
WINDSOR LOCKS, CT 06096

CT MANIFEST **S109737490**
N/A

Click here for full text details

CT MANIFEST
EPA Id: CTP000007718

J47
SSE
1/8-1/4
0.244 mi.
1288 ft.

Relative:
Higher

ANDERSON NEWS
319 ELLA GRASSO TPKE
WINDSOR LOCKS, CT 06096

CT UST **U000087657**
N/A

Click here for full text details

CT UST
Tank Status: Permanently Closed
Facility Id: 165-10409

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
K48 **SSE** **1/4-1/2** **0.357 mi.** **1887 ft.** **Relative:** **Higher**	**TREASURE CHEST-CROWN INDUSTRIAL PARK** **TURNPIKE AND CHOICE ROAD** **WINDSOR LOCKS, CT** **Click here for full text details** **CT SDADB** Facility Id: 1160	**CT SDADB**	**S104255559** **N/A**
K49 **SSE** **1/4-1/2** **0.357 mi.** **1887 ft.** **Relative:** **Higher**	**TREASURE CHEST-CROWN IND PARK** **TURNPIKE & CHOICE ROAD** **WINDSOR LOCKS, CT 06096** **Click here for full text details**	**CT PROPERTY** **CT CPCS**	**S110280719** **N/A**
50 **SE** **1/4-1/2** **0.439 mi.** **2319 ft.** **Relative:** **Higher**	**W.L.C. WINDSOR CORP.** **3 CHOICE ROAD** **WINDSOR LOCKS, CT 06096** **Click here for full text details**	**CT CPCS**	**S104585136** **N/A**
51 **SSE** **1/4-1/2** **0.467 mi.** **2467 ft.** **Relative:** **Higher**	**GFI DISPLAY** **295 ELLA GRASSO TNPKE** **WINDSOR LOCKS, CT 06096** **Click here for full text details** **CT VCP** Status: LEP post 10/1/95 filing **CT MANIFEST** EPA Id: CTP000012765 EPA Id: CTP000005981	**CT VCP** **CT MANIFEST**	**S121136678** **N/A**
L52 **SSE** **1/2-1** **0.568 mi.** **2999 ft.** **Relative:** **Higher**	**WINCHESTER PROPERTIES** **295 TURNPIKE RD** **WINDSOR LOCKS, CT 06096** **Click here for full text details** **SEMS-ARCHIVE** Site ID: 0101790 EPA Id: CTD001444066 **CORRACTS**	**SEMS-ARCHIVE** **CORRACTS** **RCRA-TSDF** **US INST CONTROL** **RCRA NonGen / NLR**	**1000170557** **CTD001444066**

WINCHESTER PROPERTIES (Continued) **1000170557**

EPA ID:: CTD001444066

RCRA-TSDF
EPA Id: CTD001444066

US INST CONTROL
EPA ID:: CTD001444066

RCRA NonGen / NLR
EPA Id: CTD001444066

L53
SSE
1/2-1
0.568 mi.
2999 ft.

Relative:
Higher

CHOICE VEND, INC.
295 ELLA GRASSO TURNPIKE
WINDSOR LOCKS, CT 06096

CT SHWS **S104255557**
CT SDADB **N/A**
CT CPCS

Click here for full text details

CT SHWS
State ID: 547
EPA ID: CTD001444066

CT SDADB
Facility Id: 547

54
SW
1/2-1
0.604 mi.
3188 ft.

Relative:
Higher

BRADLEY INTERNATIONAL AIRPORT
BRADLEY INTERNATIONAL AIRPORT
WINDSOR LOCKS, CT 06096

CT SHWS **1007261152**
CT SDADB **N/A**
CT SPILLS
CT CPCS

Click here for full text details

CT SHWS
State ID: 546

CT SDADB
Facility Id: 546

CT SPILLS
Case Number: 200603974
Facility Status: CLOSED

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CT	AIRS	Permitted Air Sources Listing	Department of Energy & Environmental Protecti	07/25/2018	07/31/2018	09/13/2018
CT	ASBESTOS	Asbestos Notification Listing	Department of Public Health	08/01/2018	08/02/2018	09/10/2018
CT	AST	Marine Terminals and Tank Information	Department of Energy & Environmental Protecti	06/30/2018	08/09/2018	09/10/2018
CT	AUL	ELUR Sites	Department of Energy & Environmental Protecti	05/04/2018	05/18/2018	06/20/2018
CT	BROWNFIELDS	Brownfields Inventory	Connecticut Brownfields Redevelopment Authori	03/25/2016	03/29/2016	05/18/2016
CT	BROWNFIELDS 2	Brownfields Inventory	Department of Energy & Environmental Protecti	08/03/2017	09/20/2017	09/26/2017
CT	CDL	Clandestine Drug Lab Listing	Department of Energy & Environmental Protecti	07/31/2018	08/06/2018	09/10/2018
CT	CPCS	Contaminated or Potentially Contaminated Sites	Department of Energy & Environmental Protecti	08/07/2018	08/10/2018	09/10/2018
CT	CT MANIFEST	Hazardous Waste Manifest Data	Department of Energy & Environmental Protecti	08/10/2018	08/10/2018	09/10/2018
CT	CT PROPERTY	Property Transfer Filings	Department of Energy & Environmental Protecti	08/10/2018	08/10/2018	09/10/2018
CT	DRYCLEANERS	Drycleaner Facilities	Department of Energy & Environmental Protecti	07/18/2008	08/08/2008	08/27/2008
CT	ENFORCEMENT	Enforcement Case Listing	Department of Energy & Environmental Protecti	09/21/2018	09/21/2018	10/04/2018
CT	ENG CONTROLS	Engineering Controls Listing	Department of Energy & Environmental Protecti	03/05/2013	05/07/2013	06/19/2013
CT	Financial Assurance 1	Financial Assurance Information Listing	Department of Energy & Environmental Protecti	06/14/2018	06/22/2018	07/31/2018
CT	Financial Assurance 2	Financial Assurance Information Listing	Department of Energy & Environmental Protecti	06/14/2018	06/22/2018	07/31/2018
CT	LEAD	Lead Inspection Database	Department of Public Health	03/26/2014	03/27/2014	05/08/2014
CT	LIENS	Environmental Liens Listing	Department of Energy & Environmental Protecti	10/23/2017	11/17/2017	12/13/2017
CT	LUST	Leaking Underground Storage Tank List	Department of Energy & Environmental Protecti	07/31/2018	08/06/2018	09/10/2018
CT	LWDS	Connecticut Leachate and Wastewater Discharge Sites	Department of Energy & Environmental Protecti	07/17/2009	10/21/2009	10/30/2009
CT	NPDES	Wastewater Permit Listing	Department of Energy & Environmental Protecti	07/13/2018	07/18/2018	08/01/2018
CT	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department of Energy & Environmental Protecti		07/01/2013	01/02/2014
CT	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Energy & Environmental Protecti		07/01/2013	01/02/2014
CT	SDADB	Site Discovery and Assessment Database	Department of Energy & Environmental Protecti	04/23/2010	04/23/2010	05/25/2010
CT	SEH	List of Significant Environmental Hazards Report to DEEP	Department of Energy & Environmental Protecti	06/30/2018	07/24/2018	08/01/2018
CT	SHWS	Inventory of Hazardous Disposal Sites	Department of Energy & Environmental Protecti	04/23/2010	04/23/2010	05/25/2010
CT	SPILLS	Oil & Chemical Spill Database	Department of Energy & Environmental Protecti	07/31/2018	08/06/2018	09/10/2018
CT	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	10/15/2012	01/03/2013	02/11/2013
CT	SWF/LF	List of Landfills/Transfer Stations	Department of Energy & Environmental Protecti	03/29/2018	07/25/2018	07/31/2018
CT	SWRCY	Recycling Facilities	Department of Energy & Environmental Protecti	09/14/2018	09/20/2018	10/04/2018
CT	UIC	Underground Injection Control Listing	Department of Energy & Environmental Protecti	07/16/2018	07/24/2018	09/14/2018
CT	UST	Underground Storage Tank Data	Department of Energy & Environmental Protecti	06/19/2018	08/09/2018	09/10/2018
CT	VCP	Voluntary Remediation Sites	Department of Energy & Environmental Protecti	08/10/2018	08/10/2018	09/10/2018
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	09/30/2017	05/08/2018	07/20/2018
US	ABANDONED MINES	Abandoned Mines	Department of Interior	09/10/2018	09/11/2018	09/14/2018
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2015	02/22/2017	09/28/2017
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	06/30/2018	07/17/2018	10/05/2018
US	CORRACTS	Corrective Action Report	EPA	03/01/2018	03/28/2018	06/22/2018
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DOCKET HWC	Hazardous Waste Compliance Docket Listing	Environmental Protection Agency	05/31/2018	07/26/2018	10/05/2018
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	Delisted NPL	National Priority List Deletions	EPA	07/17/2018	08/09/2018	09/07/2018
US	ECHO	Enforcement & Compliance History Information	Environmental Protection Agency	09/02/2018	09/05/2018	09/14/2018
US	EDR Hist Auto	EDR Exclusive Historical Auto Stations	EDR, Inc.			
US	EDR Hist Cleaner	EDR Exclusive Historical Cleaners	EDR, Inc.			

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	06/18/2018	06/27/2018	09/14/2018
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	11/07/2016	01/05/2017	04/07/2017
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	05/15/2017	05/30/2017	10/13/2017
US	FINDS	Facility Index System/Facility Registry System	EPA	08/07/2018	09/05/2018	10/05/2018
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	01/31/2015	07/08/2015	10/13/2015
US	FUELS PROGRAM	EPA Fuels Program Registered Listing	EPA	08/22/2018	08/22/2018	10/05/2018
US	FUSRAP	Formerly Utilized Sites Remedial Action Program	Department of Energy	08/08/2017	09/11/2018	09/14/2018
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	03/26/2018	03/27/2018	06/08/2018
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	11/18/2016	11/23/2016	02/10/2017
US	IHS OPEN DUMPS	Open Dumps on Indian Land	Department of Health & Human Serivces, Indian	04/01/2014	08/06/2014	01/29/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	04/13/2018	05/18/2018	07/20/2018
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	04/12/2018	05/18/2018	07/20/2018
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	05/08/2018	05/18/2018	07/20/2018
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	04/12/2018	05/18/2018	07/20/2018
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	04/01/2018	05/18/2018	07/20/2018
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	04/24/2018	05/18/2018	07/20/2018
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	04/25/2018	05/18/2018	07/20/2018
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	04/10/2018	05/18/2018	07/20/2018
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2014	07/14/2015	01/10/2017
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	04/13/2018	05/18/2018	07/20/2018
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	04/12/2018	05/18/2018	07/20/2018
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	05/08/2018	05/18/2018	07/20/2018
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	04/12/2018	05/18/2018	07/20/2018
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	04/01/2018	05/18/2018	07/20/2018
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	04/24/2018	05/18/2018	07/20/2018
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	04/25/2018	05/18/2018	07/20/2018
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	04/10/2018	05/18/2018	07/20/2018
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	07/27/2015	09/29/2015	02/18/2016
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	07/17/2018	08/09/2018	10/05/2018
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	07/17/2018	08/09/2018	10/05/2018
US	LUCIS	Land Use Control Information System	Department of the Navy	05/14/2018	05/18/2018	07/20/2018
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	08/30/2016	09/08/2016	10/21/2016
US	NPL	National Priority List	EPA	07/17/2018	08/09/2018	09/07/2018
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	06/01/2017	06/09/2017	10/13/2017
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	05/24/2017	11/30/2017	12/15/2017

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	PRP	Potentially Responsible Parties	EPA	10/25/2013	10/17/2014	10/20/2014
US	Proposed NPL	Proposed National Priority List Sites	EPA	07/17/2018	08/09/2018	09/07/2018
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	07/02/2018	07/05/2018	10/05/2018
US	RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated	Environmental Protection Agency	03/01/2018	03/28/2018	06/22/2018
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	03/01/2018	03/28/2018	06/22/2018
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	03/01/2018	03/28/2018	06/22/2018
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	03/01/2018	03/28/2018	06/22/2018
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	03/01/2018	03/28/2018	06/22/2018
US	RMP	Risk Management Plans	Environmental Protection Agency	08/01/2018	08/22/2018	10/05/2018
US	ROD	Records Of Decision	EPA	07/17/2018	08/09/2018	10/05/2018
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	01/01/2017	02/03/2017	04/07/2017
US	SEMS	Superfund Enterprise Management System	EPA	07/17/2018	08/09/2018	09/07/2018
US	SEMS-ARCHIVE	Superfund Enterprise Management System Archive	EPA	07/17/2018	08/09/2018	09/07/2018
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2016	01/10/2018	01/12/2018
US	TSCA	Toxic Substances Control Act	EPA	12/31/2016	06/21/2017	01/05/2018
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	06/23/2017	10/11/2017	11/03/2017
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/12/2016	10/26/2016	02/03/2017
US	US AIRS MINOR	Air Facility System Data	EPA	10/12/2016	10/26/2016	02/03/2017
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	06/18/2018	06/20/2018	09/14/2018
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	05/18/2018	06/20/2018	09/14/2018
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	07/31/2018	08/28/2018	09/14/2018
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	05/31/2018	06/27/2018	10/05/2018
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	05/18/2018	06/20/2018	09/14/2018
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	07/31/2018	08/28/2018	09/14/2018
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	08/01/2018	08/29/2018	10/05/2018
US	US MINES 2	Ferrous and Nonferrous Metal Mines Database Listing	USGS	12/05/2005	02/29/2008	04/18/2008
US	US MINES 3	Active Mines & Mineral Plants Database Listing	USGS	04/14/2011	06/08/2011	09/13/2011
US	UXO	Unexploded Ordnance Sites	Department of Defense	09/30/2017	06/19/2018	09/14/2018
NJ	NJ MANIFEST	Manifest Information	Department of Environmental Protection	12/31/2017	07/13/2018	08/01/2018
NY	NY MANIFEST	Facility and Manifest Data	Department of Environmental Conservation	07/01/2018	08/01/2018	08/31/2018
PA	PA MANIFEST	Manifest Information	Department of Environmental Protection	12/31/2016	07/25/2017	09/25/2017
RI	RI MANIFEST	Manifest information	Department of Environmental Management	12/31/2017	02/23/2018	04/09/2018
VT	VT MANIFEST	Hazardous Waste Manifest Data	Department of Environmental Conservation	08/23/2018	08/23/2018	09/18/2018
WI	WI MANIFEST	Manifest Information	Department of Natural Resources	12/31/2017	06/15/2018	07/09/2018

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
CT	Daycare Centers	Sensitive Receptor: Licensed Child Care Facilities	Department of Public Health			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
CT	State Wetlands	Tidal Wetlands	Department of Energy & Environmental Protection			
US	Topographic Map		U.S. Geological Survey			
US	Oil/Gas Pipelines		PennWell Corporation			
US	Electric Power Transmission Line Data		PennWell Corporation			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

WINDSOR LOCKS AASF
ELLA GRASSO RT 75 TURNPIKE
WINDSOR LOCKS, CT 06096

TARGET PROPERTY COORDINATES

Latitude (North):	41.945816 - 41˚ 56’ 44.94’’
Longitude (West):	72.673716 - 72˚ 40’ 25.38’’
Universal Tranverse Mercator:	Zone 18
UTM X (Meters):	692831.7
UTM Y (Meters):	4646164.0
Elevation:	173 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5642461 WINDSOR LOCKS, CT
Version Date:	2012

EDR’s GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

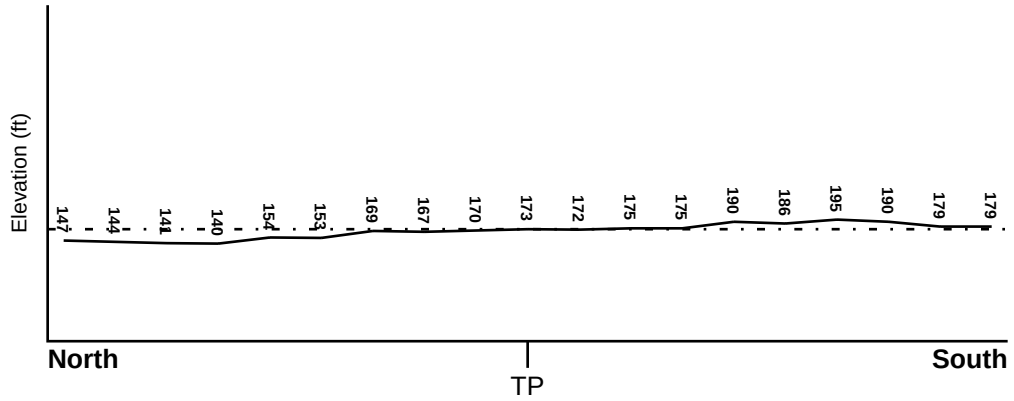
TOPOGRAPHIC INFORMATION

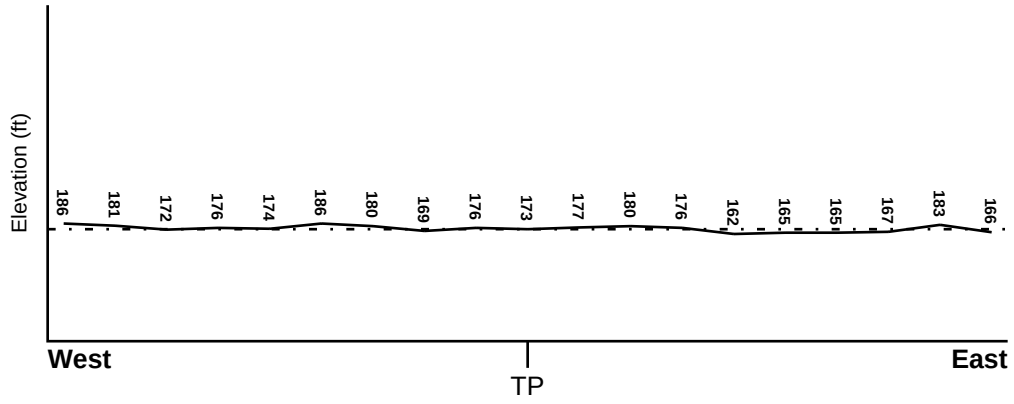
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General WNW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 173 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
09003C0208F	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
09003C0204F	FEMA FIRM Flood data
09003C0209F	FEMA FIRM Flood data
09003C0212F	FEMA FIRM Flood data
09003C0216F	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
WINDSOR LOCKS	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
A1	1/2 - 1 Mile SW	N E
A2	1/2 - 1 Mile SW	N E
1G	1/2 - 1 Mile SW	N E
2G	1/2 - 1 Mile SW	N E

For additional site information, refer to Physical Setting Source Map Findings.

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

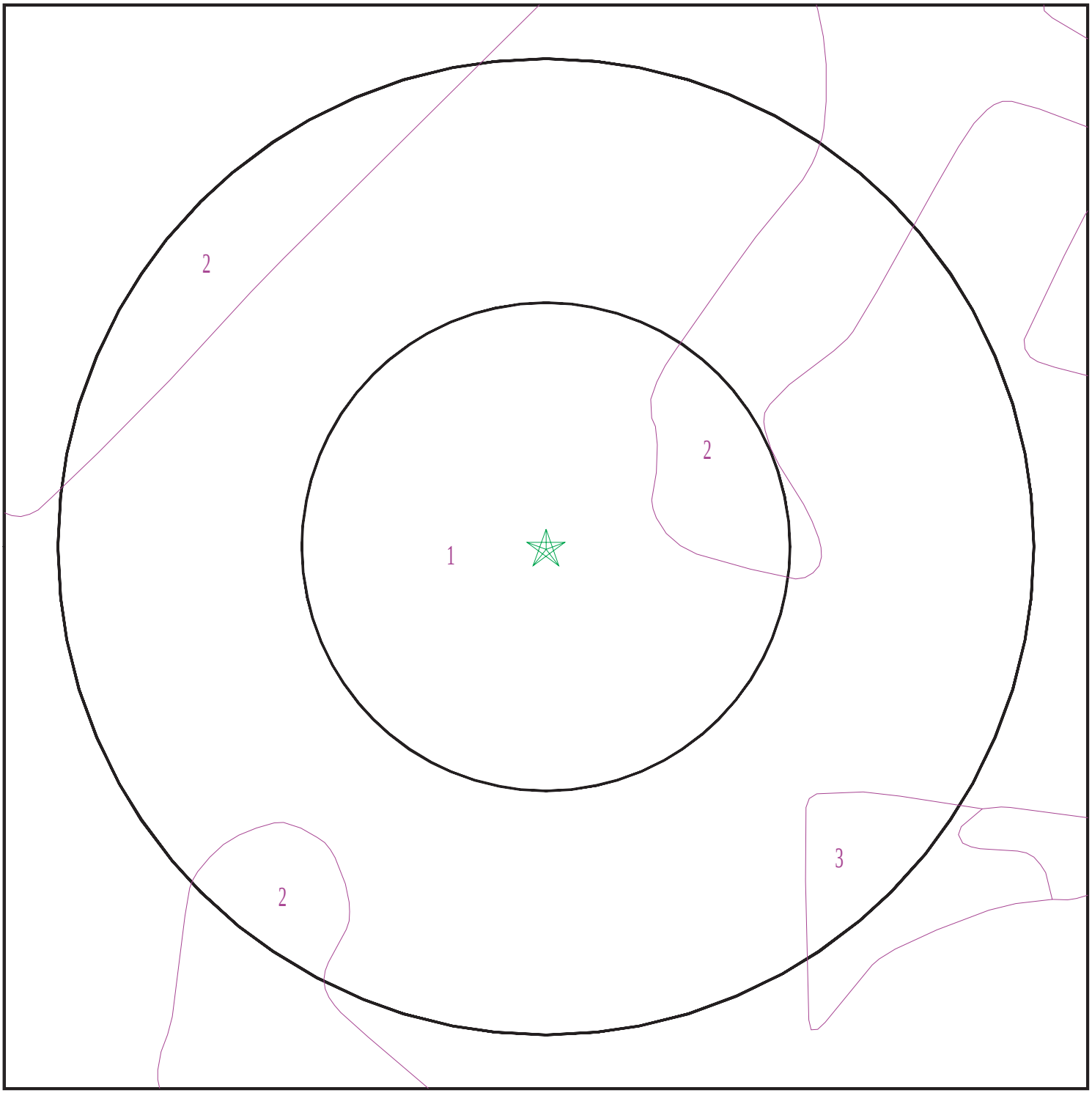
Era:	Mesozoic
System:	Triassic
Series:	Triassic
Code:	Tr *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 5446977.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Windsor Locks AASF	CLIENT:	AECOM
ADDRESS:	Ella Grasso RT 75 Turnpike Windsor Locks CT 06096	CONTACT:	Brittany Kirchmann
		INQUIRY #:	5446977.2s
LAT/LONG:	41.945816 / 72.673716	DATE:	October 08, 2018 12:13 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Udorthents

Soil Surface Texture: loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 0.01	Max: 7.8 Min: 4.5
2	5 inches	21 inches	gravelly loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 0.01	Max: 7.8 Min: 4.5
3	21 inches	79 inches	very gravelly sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 0.01	Max: 7.8 Min: 4.5

Soil Map ID: 2

Soil Component Name: Udorthents

Soil Surface Texture: loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 0.01	Max: 7.8 Min: 4.5
2	5 inches	21 inches	gravelly loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 0.01	Max: 7.8 Min: 4.5
3	21 inches	79 inches	very gravelly sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 0.01	Max: 7.8 Min: 4.5

Soil Map ID: 3

Soil Component Name: Windsor

Soil Surface Texture: moderately decomposed plant material

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Excessively drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	1 inches	moderately decomposed plant material	A-8	COARSE-GRAINED SOILS, Sands, Clean Sands, Well-graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 42	Max: 6.5 Min: 4.5
2	1 inches	3 inches	loamy sand	A-8	COARSE-GRAINED SOILS, Sands, Clean Sands, Well-graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 42	Max: 6.5 Min: 4.5
3	3 inches	9 inches	loamy sand	A-8	COARSE-GRAINED SOILS, Sands, Clean Sands, Well-graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 42	Max: 6.5 Min: 4.5
4	9 inches	20 inches	loamy sand	A-8	COARSE-GRAINED SOILS, Sands, Clean Sands, Well-graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 42	Max: 6.5 Min: 4.5
5	20 inches	25 inches	sand	A-8	COARSE-GRAINED SOILS, Sands, Clean Sands, Well-graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 42	Max: 6.5 Min: 4.5

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
6	25 inches	64 inches	sand	A-8	COARSE-GRAINED SOILS, Sands, Clean Sands, Well-graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 42	Max: 6.5 Min: 4.5

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 0.001 miles
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

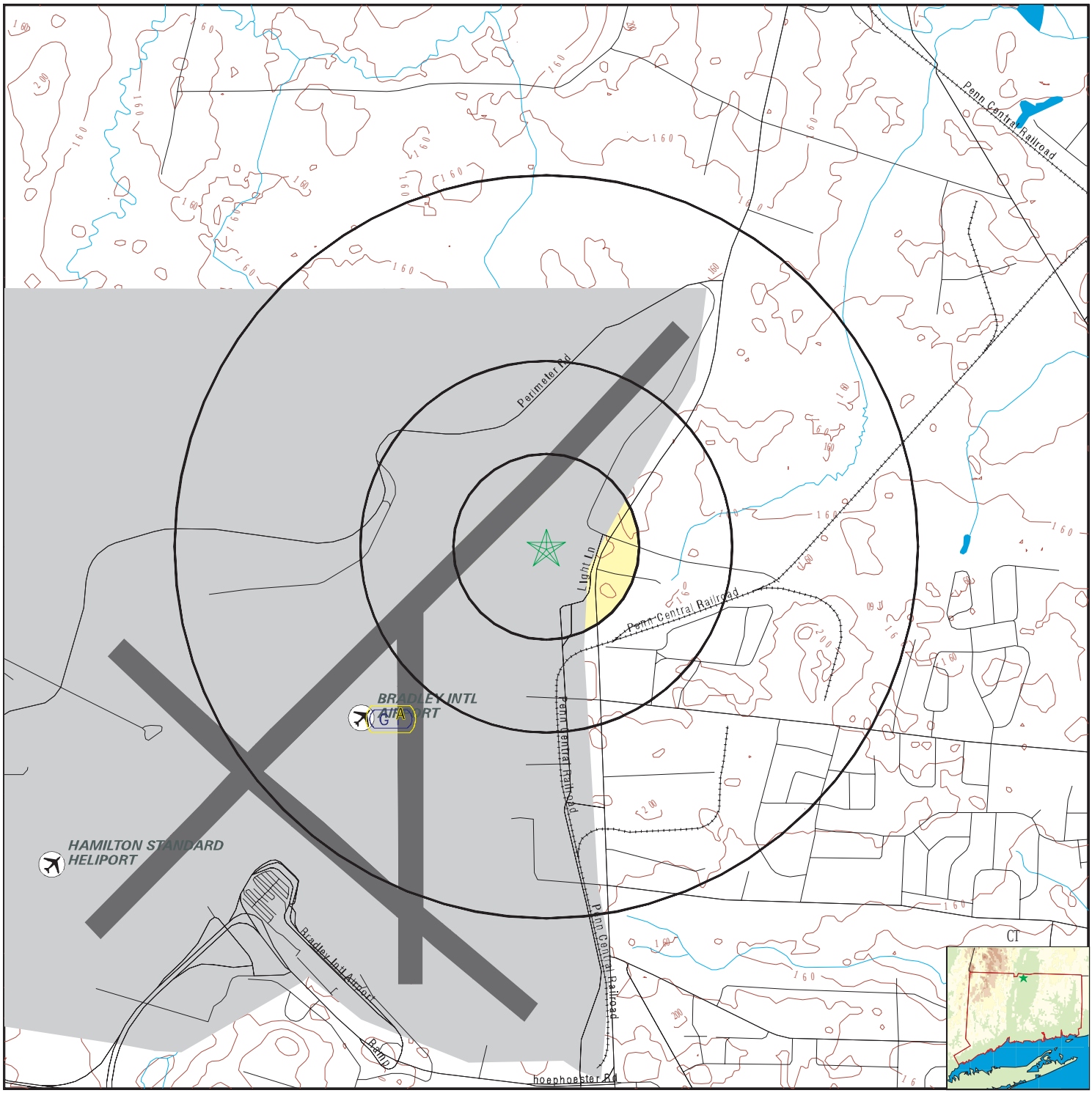
MAP ID	WELL ID	LOCATION FROM TP

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

PHYSICAL SETTING SOURCE MAP - 5446977.2s



County Boundary
Major Roads
Contour Lines
Airports
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

0 1/4 1/2 1 Miles

Groundwater Flow Direction
Indeterminate Groundwater Flow at Location
Groundwater Flow Varies at Location
Closest Hydrogeological Data
EPA Designated Sole Src. Aq.

N

SITE NAME:	Windsor Locks AASF	CLIENT:	AECOM
ADDRESS:	Ella Grasso RT 75 Turnpike Windsor Locks CT 06096	CONTACT:	Brittany Kirchmann
		INQUIRY #:	5446977.2s
LAT/LONG:	41.945816 / 72.673716	DATE:	October 08, 2018 12:13 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
A1 **SW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**AQUIFLOW**	**11431**
A2 **SW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**AQUIFLOW**	**11430**
1G **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**11431**
2G **SW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**11430**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CT Radon

Radon Test Results

City	# Sites	< 4 Pci/L	4 < 10 Pci/L	10 < 20 Pci/L	20 < 50 Pci/L	50 < 100 Pci/L	> 100 Pci/L
Southington	27	12 (44.4)	11 (40.7)	4 (14.8)	0 (0)	0 (0)	0 (0)
Suffield	12	10 (83.3)	2 (16.7)	0 (0)	0 (0)	0 (0)	0 (0)
Unionville	5	5 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Weatogue	6	6 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
West Hartford	55	46 (83.6)	7 (12.7)	1 (1.8)	1 (1.8)	0 (0)	0 (0)
West Simsbury	13	12 (92.3)	1 (7.7)	0 (0)	0 (0)	0 (0)	0 (0)
West Suffield	5	5 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Wethersfield	33	27 (81.8)	5 (15.2)	1 (3)	0 (0)	0 (0)	0 (0)
Windsor	19	15 (78.9)	4 (21.1)	0 (0)	0 (0)	0 (0)	0 (0)
Windsor Locks	8	8 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Tariffville	2	1 (50)	0 (0)	0 (0)	1 (50)	0 (0)	0 (0)
East Hampton	110	83 (100)	19 (0)	8 (0)	0 (0)	0 (0)	0 (0)
Manchester	34	24 (70.6)	10 (29.4)	0 (0)	0 (0)	0 (0)	0 (0)
Avon	15	8 (53.3)	6 (50)	1 (6.7)	0 (0)	0 (0)	0 (0)
Berlin	11	7 (63.6)	1 (9.1)	4 (36.4)	0 (0)	0 (0)	0 (0)
Bloomfield	7	7 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Bristol	17	10 (58.8)	4 (23.5)	3 (17.6)	0 (0)	0 (0)	0 (0)
Broad Brook	3	1 (33.3)	2 (66.7)	0 (0)	0 (0)	0 (0)	0 (0)
Burlington	125	125 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Canton	8	6 (75)	2 (25)	0 (0)	0 (0)	0 (0)	0 (0)
Collinsville	1	0 (0)	1 (100)	0 (0)	0 (0)	0 (0)	0 (0)
East Berlin	6	4 (66.7)	2 (33.3)	0 (0)	0 (0)	0 (0)	0 (0)
East Granby	13	8 (61.5)	0 (0)	1 (7.7)	0 (0)	4 (30.8)	0 (0)
East Hartford	20	20 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
East Hartland	1	1 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
East Windsor	4	3 (75)	1 (25)	0 (0)	0 (0)	0 (0)	0 (0)
Enfield	2	2 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Farmington	34	31 (91.2)	1 (2.9)	0 (5.9)	2 (0)	0 (0)	0 (0)
Forestville	3	3 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Glastonbury	152	120 (78.9)	22 (14.5)	5 (3.3)	4 (2.6)	0 (0)	1 (.7)
Granby	10	8 (80)	2 (20)	0 (0)	0 (0)	0 (0)	0 (0)
Hartford	99	95 (96)	5 (4)	0 (0)	0 (0)	0 (0)	0 (0)
Kensington	7	6 (85.7)	1 (14.3)	0 (0)	0 (0)	0 (0)	0 (0)
Marion	1	1 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Marlborough	16	12 (75)	4 (25)	0 (0)	0 (0)	0 (0)	0 (0)
New Britain	20	13 (65)	5 (25)	2 (10)	0 (0)	0 (0)	0 (0)
Newington	45	26 (57.8)	12 (26.7)	6 (13.3)	1 (2.2)	0 (0)	0 (0)
North Canton	2	2 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Plainville	2	2 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Plantsville	3	3 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Rocky Hill	24	19 (79.2)	3 (12.5)	2 (8.3)	0 (0)	0 (0)	0 (0)
Simsbury	13	12 (92.3)	1 (7.7)	0 (0)	0 (0)	0 (0)	0 (0)
South Glastonbury	13	10 (76.9)	0 (0)	1 (7.7)	1 (7.7)	0 (0)	1 (7.7)
South Windsor	23	23 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for HARTFORD County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 06096

Number of sites tested: 3

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.400 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	1.433 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Tidal Wetlands
Source: Department of Energy & Environmental Protection
Telephone: 860-424-4054

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Connecticut Leachate and Wastewater Discharge Sites
Source: Department of Environmental Protection
The Leachate and Waste Water Discharge Inventory Data Layer (LWDS) includes point locations digitized from Leachate and Wastewater Discharge Source maps compiled by the Connecticut DEP. These maps locate surface and groundwater discharges that (1) have received a waste water discharge permit from the state or (2) are historic and now defunct waste sites or (3) are locations of accidental spills, leaks, or discharges of a variety of liquid or solid wastes.

EPA-Approved Sole Source Aquifers in Connecticut
Source: EPA
Sole source aquifers are defined as an aquifer designated as the sole or principal source of drinking water for a given aquifer service area; that is, an aquifer which is needed to supply 50% or more of the drinking water for the area and for which there are no reasonable alternative sources should the aquifer become contaminated.

Community and Non-Community Water System Wells
Source: Department of Public Health, Water Supplies Section
Telephone: 860-509-7333
Active, emergency and inactive wells used for potable purposes that are owned and operated by active community and non-community water systems in Connecticut.

OTHER STATE DATABASE INFORMATION

RADON

State Database: CT Radon
Source: Department of Public Health
Telephone: 860-509-7367
Radon Statistical Summary

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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Fax To: AECOM
Contact: Brittany Kirchmann
Fax : 000-000-0000
Date: 10/08/2018

Fax From: Sean McLaughlin
EDR
Phone: 1-800-352-0050

EDR PUR-IQ® Report

"the intelligent way to conduct historical research"

for
Windsor Locks AASF
Ella Grasso RT 75 Turnpike
Windsor Locks, CT 06096
Lat./Long. 41.945816 / 72.673716
EDR Inquiry # 5446977.2s

The EDR PUR-IQ report facilitates historical research planning required to complete the Phase I ESA process. The report identifies the *likelihood* of prior use coverage by searching proprietary EDR-Prior Use Reports® comprising nationwide information on: city directories, fire insurance maps, aerial photographs, historical topographic maps, flood maps and National Wetland Inventory maps.

Potential for EDR Historical (Prior Use) Coverage - Coverage in the following historical information sources may be used as a guide to develop your historical research strategy:

1. City Directory: Coverage may exist for portions of Hartford County, CT.

2. Fire Insurance Map: When you order online any EDR Package or the EDR Radius Map with EDR Sanborn Map Search/Print, you receive site specific Sanborn Map coverage information at no charge.

3. Aerial Photograph: Coverage exists for portions of Hartford County for 1970, 1980, 1990, 1960, 1950 Shipping time 3-5 business days.

4. Topographic Map: The USGS 7.5 min. quad topo sheet(s) associated with this site:

Historical: Coverage exists for HARTFORD County

Current: Target Property: TP | 2012 | 5642461 Windsor Locks, CT

EDR's network of professional researchers, located throughout the United States, accesses the most extensive national collections of city directory, fire insurance maps, aerial photographs and historical topographic map resources available for Windsor Locks, CT. These collections may be located in multiple libraries throughout the country. To ensure maximum coverage, EDR will often assign researchers at these multiple locations on your behalf. Please call or fax your EDR representative to authorize a search.

EDR™ Environmental Data Resources Inc

EDR - HISTORICAL SOURCE(S) ORDER FORM

AECOM
Brittany Kirchmann
Account # 1861179

Windsor Locks AASF
Ella Grasso RT 75 Turnpike
Windsor Locks, CT 06096
HARTFORD County
Lat./Long. 41.945816 / 72.673716
EDR Inquiry # 5446977.2s

Should you wish to change or add to your order, fax this form to your EDR account executive:

Sean McLaughlin
Ph: 1-800-352-0050 Fax: 1-800-231-6802

Reports

___ EDR Sanborn Map® Search/Print

___ EDR Fire Insurance Map Abstract

___ EDR Multi-Tenant Retail Facility® Report

___ EDR City Directory Abstract

___ EDR Aerial Photo Decade Package

___ USGS Aerial 5 Package

___ USGS Aerial 3 Package

___ EDR Historical Topographic Maps

___ Paper Current USGS Topo (7.5 min.)

___ Environmental Lien Search

___ Chain of Title Search

___ NJ MacRaes Industrial Directory Report

___ EDR Telephone Interview

Shipping:

___ Email
___ Express, Next Day Delivery — RUSH SERVICE IS AVAILABLE
___ Express, Second Day Delivery
___ Express, Next day Delivery — Customer Account — Acct # _____
___ Express, Second Day Delivery — Customer Account — Acct # _____
___ U.S. Mail

Thank you

Windsor Locks AASF

Ella Grasso RT 75 Turnpike

Windsor Locks, CT 06096

Inquiry Number: 5446977.3

October 08, 2018

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

10/08/18

Site Name:	Client Name:
Windsor Locks AASF	AECOM
Ella Grasso RT 75 Turnpike	12120 Shamrock Plaza
Windsor Locks, CT 06096	Omaha, NE 68154
EDR Inquiry # 5446977.3	Contact: Brittany Kirchmann

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by AECOM were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # 9441-4C70-9DED

PO # NA

Project Windsor Locks AASF

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results

Certification #: 9441-4C70-9DED

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ✔ Library of Congress
- ✔ University Publications of America
- ✔ EDR Private Collection

The Sanborn Library LLC Since 1866™

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Windsor Locks AASF

Ella Grasso RT 75 Turnpike

Windsor Locks, CT 06096

Inquiry Number: 5446977.5

October 09, 2018

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

10/09/18

Site Name:

Windsor Locks AASF
Ella Grasso RT 75 Turnpike
Windsor Locks, CT 06096
EDR Inquiry # 5446977.5

Client Name:

AECOM
12120 Shamrock Plaza
Omaha, NE 68154
Contact: Brittany Kirchmann

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	*Scale*	*Details*	*Source*
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2008	1"=500'	Flight Year: 2008	USDA/NAIP
2005	1"=500'	Flight Year: 2005	USDA/NAIP
1995	1"=500'	Flight Date: April 20, 1995	CTMAGIC
1992	1"=500'	Acquisition Date: April 13, 1992	USGS/DOQQ
1990	1"=500'	Flight Date: April 19, 1990	MAGIC
1989	1"=500'	Flight Date: June 01, 1989	EDR
1985	1"=500'	Flight Date: March 25, 1985	USDA
1972	1"=500'	Flight Date: April 26, 1972	USGS
1970	1"=500'	Flight Date: April 16, 1970	CTMAGIC
1967	1"=500'	Flight Date: June 01, 1967	USDA
1963	1"=500'	Flight Date: October 10, 1963	USGS
1957	1"=500'	Flight Date: June 09, 1957	USDA
1952	1"=500'	Flight Date: May 05, 1952	CTMAGIC
1941	1"=500'	Flight Date: October 17, 1941	USGS
1934	1"=500'	Flight Date: May 08, 1934	FAIR

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INQUIRY #: 5446977.5

YEAR: 2016

= 500'

INQUIRY #: 5446977.5

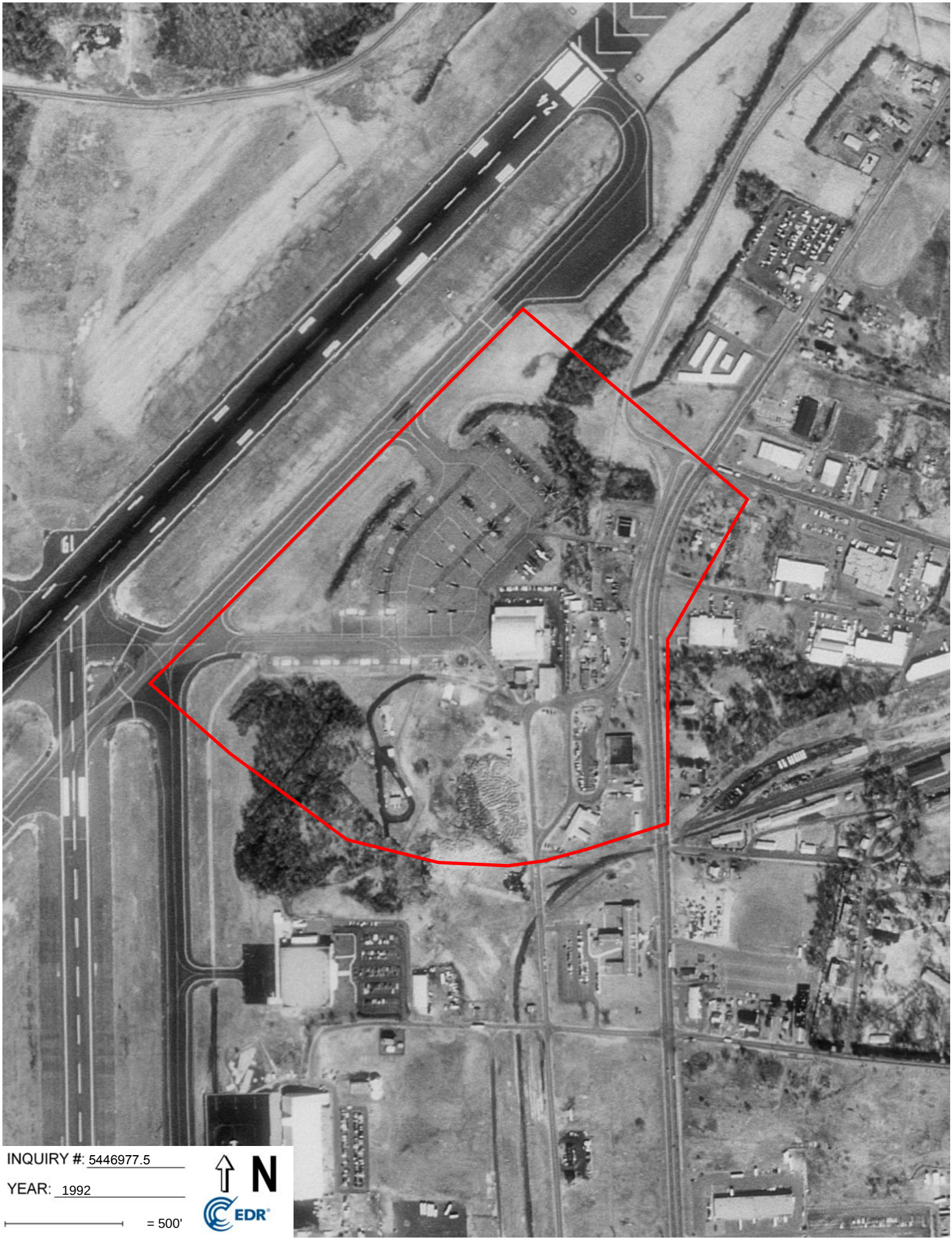
YEAR: 2012

= 500'

INQUIRY #: 5446977.5
YEAR: 2008
= 500'
N
EDR

INQUIRY #: 5446977.5
YEAR: 2005
= 500'
N
EDR

INQUIRY #: 5446977.5
YEAR: 1995
= 500'
N
EDR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YEAR: 1992
= 500'
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EDR

INQUIRY #: 5446977.5
YEAR: 1990
= 500'
N
EDR
Subject boundary not shown because it exceeds image extent or image is not georeferenced.

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YEAR: 1989

= 500'

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EDR

INQUIRY #: 5446977.5

YEAR: 1985

= 500'

N

EDR

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YEAR: 1972
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EDR

INQUIRY #: 5446977.5
YEAR: 1970
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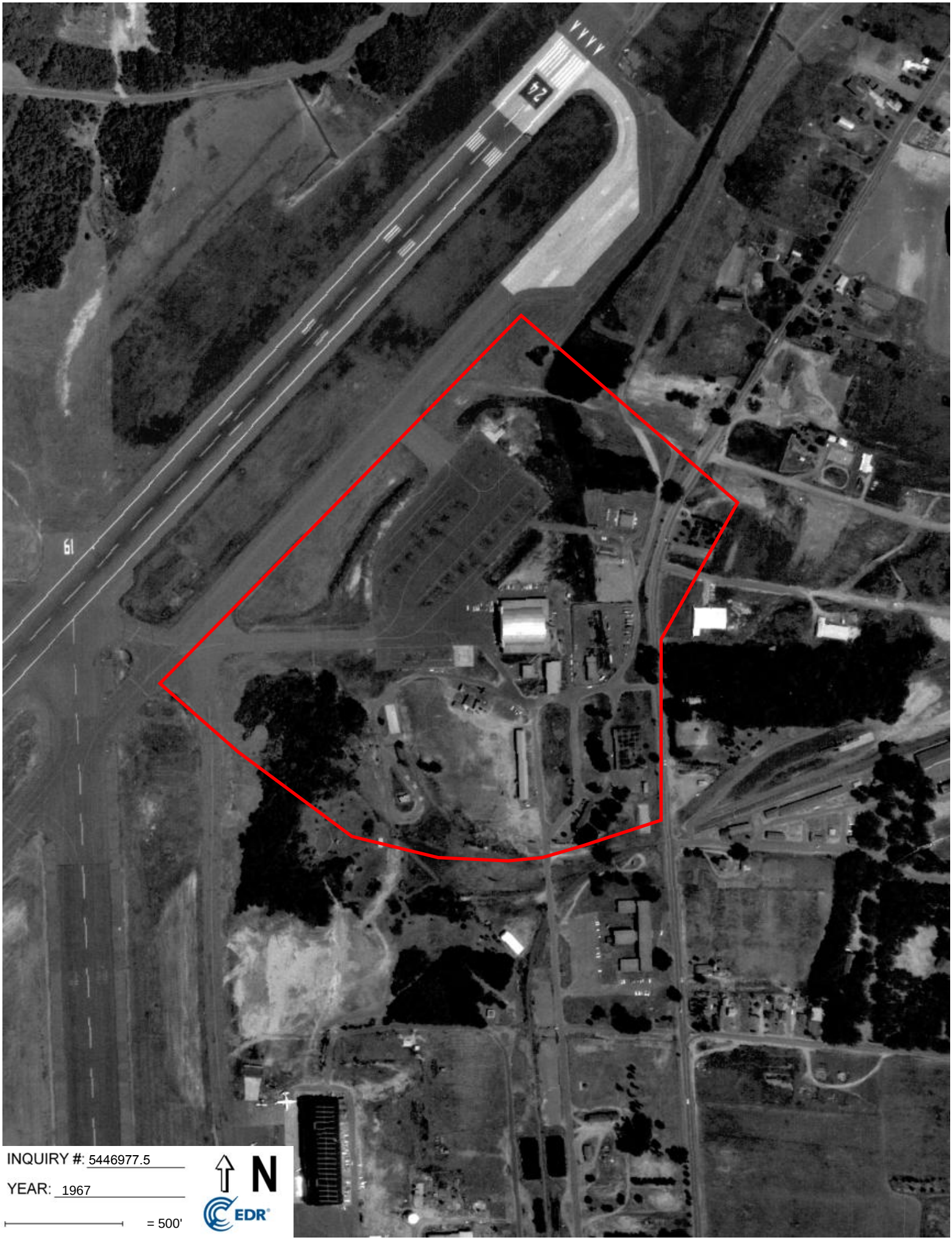
EDR



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YEAR: 1967

= 500'

N

EDR

INQUIRY #: 5446977.5

YEAR: 1963

= 500'

N

EDR

INQUIRY #: 5446977.5

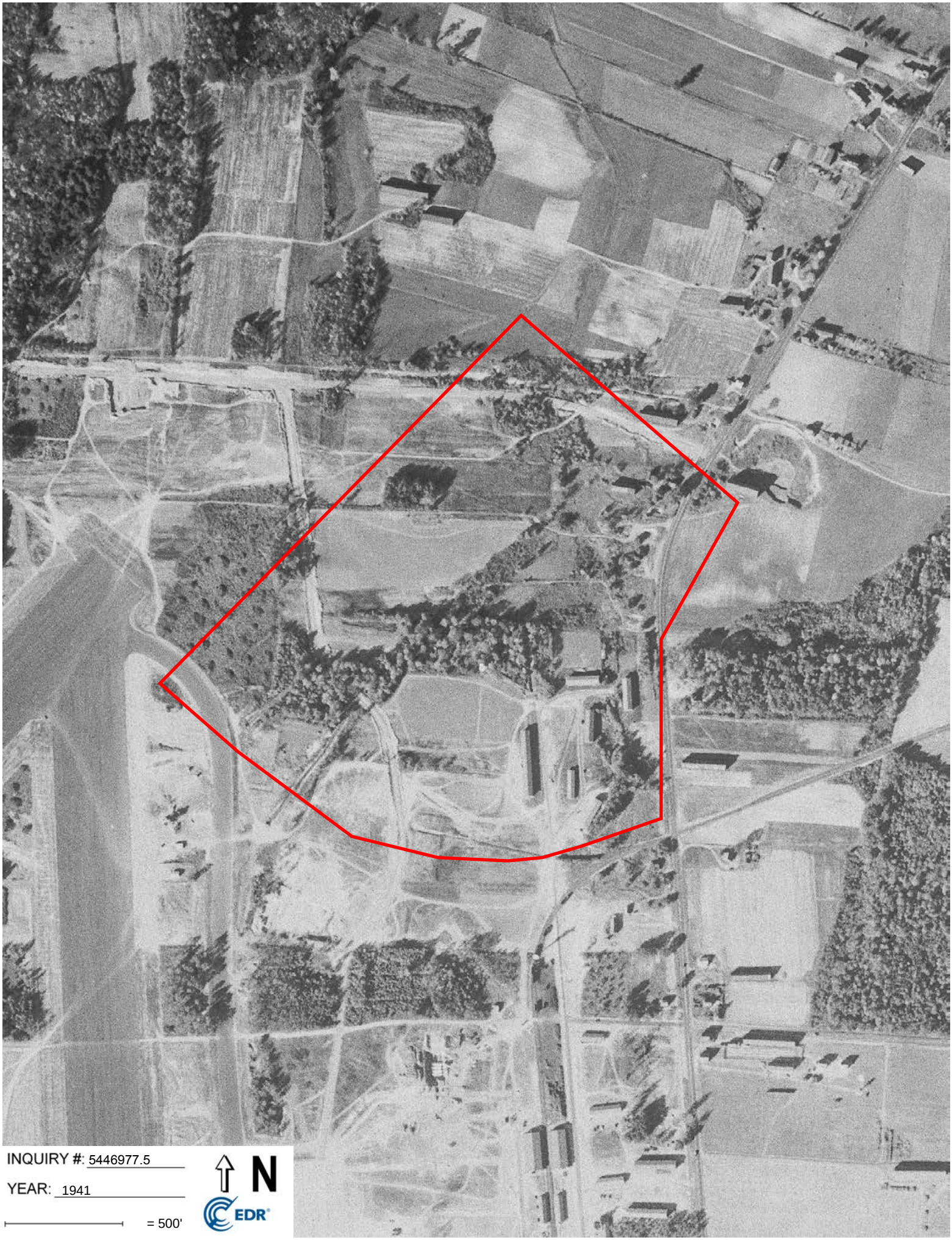
YEAR: 1957

= 500'

N

EDR

INQUIRY #: 5446977.5
YEAR: 1952
= 500'
N
EDR


INQUIRY #: 5446977.5
YEAR: 1941
= 500'
N
EDR

INQUIRY #: 5446977.5
YEAR: 1934
= 500'
N
EDR

Windsor Locks AASF
Ella Grasso RT 75 Turnpike
Windsor Locks, CT 06096

Inquiry Number: 5446977.2s
October 08, 2018

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

ELLA GRASSO RT 75 TURNPIKE
WINDSOR LOCKS, CT 06096

COORDINATES

Latitude (North):	41.9458160 - 41˚ 56' 44.93''
Longitude (West):	72.6737160 - 72˚ 40' 25.37''
Universal Tranverse Mercator:	Zone 18
UTM X (Meters):	692831.7
UTM Y (Meters):	4646164.0
Elevation:	173 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5642461 WINDSOR LOCKS, CT
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140721
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
ELLA GRASSO RT 75 TURNPIKE
WINDSOR LOCKS, CT 06096

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	STANDARD BELLOWS CO	375 TURNPIKE RD	RCRA-CESQG	Higher	1 ft.
A2	STANDARD BELLOWSO IN	375 TURNPIKE RD	CT MANIFEST	Higher	1 ft.
A3	STANDARD BELLOWS	375 ELLA GRASSO TPK	CT MANIFEST	Higher	1 ft.
A4		RT 75/ELLA GRASSO BL	CT SPILLS	Lower	1 ft.
A5	STANDARD BELLOWS CO	375 TURNPIKE RD	FINDS, ECHO	Higher	1 ft.
B6		KING SPRING RD & RTE	CT SPILLS	Higher	1 ft.
B7		75 AND KINGSPRING RO	CT SPILLS	Higher	1 ft.
B8		RT 75 AND KING SPRIN	CT SPILLS	Higher	1 ft.
A9		75 AND INDUSTRIAL RO	CT SPILLS	Higher	1 ft.
B10		RT 75 AND KINGS SPRI	CT SPILLS	Higher	1 ft.
C11	ARMY AVIATION SUPPOR	BRADLEY INTERNATIONA	CT SDADB	Higher	1 ft.
C12	ARMY AVIATION SUPPOR	RT 75	CT LUST, CT UST, CT CPCS	Higher	1 ft.
D13	CT MILITARY DEPT ARM	BRADLEY FIELD ROUTE	FINDS, ECHO	Higher	1 ft.
14		359 ELLA GRASSO BLVD	CT SPILLS	Lower	1 ft.
D15	GAGLIARDUCCI CONSTRU	BRADLEY AIR, PERIMET	ICIS, US AIRS, FINDS, ECHO	Higher	1 ft.
B16	RAINBOW AUTOMOTIVE	391 ELLA GRASSO TPKE	EDR Hist Auto	Higher	142, 0.027, ENE
B17	TY SUBARU	391 ELLA GRASSO TPK	CT MANIFEST	Higher	142, 0.027, ENE
B18	MID-TOWN GARAGE, INC	391 ELLA GRASSO TURN	CT SDADB, CT PROPERTY	Higher	142, 0.027, ENE
E19	CT MIL DEPT FIELD MA	CAMP HARTELL RTE 75	RCRA NonGen / NLR, RI MANIFEST	Higher	153, 0.029, East
20	CANADAIR CHALLENGER,	BRADLEY INTERNATIONA	CT SDADB, CT PROPERTY, CT SPILLS	Lower	242, 0.046, SSW
E21	CT MIL DEPT C S M S	CAMP HARTELL RTE 75	RCRA-SQG, WI MANIFEST, RI MANIFEST	Higher	246, 0.047, ESE
F22	WINDSOR MARKETING GR	2 INDUSTRIAL RD	CT MANIFEST	Higher	267, 0.051, ESE
F23	WINDSOR MARKETING GR	2 INDUSTRIAL RD	RCRA NonGen / NLR, FINDS, ECHO, NJ MANIFEST, NY...	Higher	267, 0.051, ESE
F24	WINDSOR MARKETING	2 INDUSTRIAL RD	CT MANIFEST	Higher	267, 0.051, ESE
F25	WINDSOR MARKETING	2 INDUSTRIAL RD	CT MANIFEST	Higher	267, 0.051, ESE
F26	WINDSOR MARKETING GR	2 INDUSTRIAL RD	CT MANIFEST	Higher	267, 0.051, ESE
F27	WINDSOR MARKETING GR	2 INDUSTRIAL RD	CT MANIFEST	Higher	267, 0.051, ESE
28	BRADLEY MILITARY AF		FUDS	Higher	381, 0.072, SSE
G29	WINDSOR MARKETING RO	6 INDUSTRIAL RD	CT MANIFEST	Lower	654, 0.124, ESE
G30	HAMILTON TEST SYSTEM	8 INDUSTRIAL RD	RCRA NonGen / NLR, FINDS, ECHO	Lower	656, 0.124, ESE
H31	EDDIES BRADLEY AUTO	42 KING SPRING RD	CT PROPERTY, CT MANIFEST	Lower	756, 0.143, East
H32	E FLAMMABLE LIQUID N	42 KING SPRING RD	CT MANIFEST	Lower	756, 0.143, East
H33	EDDIES BRADLEY AB &	42 KING SPRING RD	CT MANIFEST	Lower	756, 0.143, East
H34	EDDIES BRADLEY AUTO	42 KING SPRING RD	RCRA-SQG, FINDS, ECHO, NJ MANIFEST	Lower	756, 0.143, East
H35	EDDIES BRADLEY AUTO	42 KING RD	CT MANIFEST	Lower	756, 0.143, East
36	EXECUTIVE VALET PARK	1353 SOUTH ST	CT UST	Higher	777, 0.147, NE
H37	EDDIES BRADLEY AUTO	42 KING SPRING RD	CT MANIFEST	Lower	947, 0.179, East
I38	STANDARD AUTO BODY I	45 KING SPRING RD	CT MANIFEST	Lower	1046, 0.198, East
I39	STANDARD AUTO BODY,	45 KING SPRING RD	RCRA-CESQG, FINDS, ECHO	Lower	1046, 0.198, East

MAPPED SITES SUMMARY

Target Property Address:
ELLA GRASSO RT 75 TURNPIKE
WINDSOR LOCKS, CT 06096

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
I40	QUIK TURN MACHINE	68 KING SPRING RD	CT MANIFEST	Lower	1081, 0.205, East
I41	DICKS BULLDOZING INC	70 KING SPRING RD	CT UST	Lower	1121, 0.212, East
I42	CARCRAFT AUTO BODY	70 KING SPRING RD	CT MANIFEST	Lower	1121, 0.212, East
I43	CARCRAFT AUTO BODY O	70 KING SPRING RD	RCRA NonGen / NLR	Lower	1121, 0.212, East
I44	BRIGGS IND INC	70 KING SPRING	RCRA NonGen / NLR, FINDS, ECHO	Lower	1121, 0.212, East
45	CAMP HARTEL	580 NORTH ST	CT SDADB, CT NPDES, CT SEH	Lower	1194, 0.226, SE
J46	BURLINGTON AIR EXPRE	319 ELLA GRASSO TPK	CT MANIFEST	Higher	1288, 0.244, SSE
J47	ANDERSON NEWS	319 ELLA GRASSO TPKE	CT UST	Higher	1288, 0.244, SSE
K48	TREASURE CHEST-CROWN	TURNPIKE AND CHOICE	CT SDADB	Higher	1887, 0.357, SSE
K49	TREASURE CHEST-CROWN	TURNPIKE & CHOICE RO	CT PROPERTY, CT CPCS	Higher	1887, 0.357, SSE
50	W.L.C. WINDSOR CORP.	3 CHOICE ROAD	CT CPCS	Higher	2319, 0.439, SE
51	GFI DISPLAY	295 ELLA GRASSO TNPK	CT VCP, CT MANIFEST	Higher	2467, 0.467, SSE
L52	WINCHESTER PROPERTIE	295 TURNPIKE RD	SEMS-ARCHIVE, CORRACTS, RCRA-TSDF, US INST...	Higher	2999, 0.568, SSE
L53	CHOICE VEND, INC.	295 ELLA GRASSO TURN	CT SHWS, CT SDADB, CT CPCS	Higher	2999, 0.568, SSE
54	BRADLEY INTERNATIONA	BRADLEY INTERNATIONA	CT SHWS, CT SDADB, CT SPILLS, CT CPCS	Higher	3188, 0.604, SW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ..... National Priority List
Proposed NPL ..... Proposed National Priority List Sites
NPL LIENS ..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ..... National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ..... Federal Facility Site Information listing
SEMS ..... Superfund Enterprise Management System

Federal RCRA generators list

RCRA-LQG ..... RCRA - Large Quantity Generators

Federal institutional controls / engineering controls registries

LUCIS ..... Land Use Control Information System
US ENG CONTROLS ..... Engineering Controls Sites List

Federal ERNS list

ERNS ..... Emergency Response Notification System

State and tribal landfill and/or solid waste disposal site lists

CT SWF/LF ..... List of Landfills/Transfer Stations

State and tribal leaking storage tank lists

INDIAN LUST ..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

FEMA UST ..... Underground Storage Tank Listing

EXECUTIVE SUMMARY

CT AST ..... Marine Terminals and Tank Information
INDIAN UST ..... Underground Storage Tanks on Indian Land

State and tribal institutional control / engineering control registries

CT ENG CONTROLS ..... Engineering Controls Listing
CT AUL ..... ELUR Sites

State and tribal voluntary cleanup sites

INDIAN VCP ..... Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

CT BROWNFIELDS ..... Brownfields Inventory

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

CT SWRCY ..... Recycling Facilities
INDIAN ODI ..... Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9 ..... Torres Martinez Reservation Illegal Dump Site Locations
ODI ..... Open Dump Inventory
IHS OPEN DUMPS ..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ..... Delisted National Clandestine Laboratory Register
CT CDL ..... Clandestine Drug Lab Listing
US CDL ..... National Clandestine Laboratory Register

Local Land Records

CT LIENS ..... Environmental Liens Listing
LIENS 2 ..... CERCLA Lien Information

Records of Emergency Release Reports

HMIRS ..... Hazardous Materials Information Reporting System
CT SPILLS 90 ..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

DOD ..... Department of Defense Sites
SCRD DRYCLEANERS ..... State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR ..... Financial Assurance Information
EPA WATCH LIST ..... EPA WATCH LIST
2020 COR ACTION ..... 2020 Corrective Action Program List
TSCA ..... Toxic Substances Control Act

EXECUTIVE SUMMARY

TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
ROD	Records Of Decision
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
CONSENT	Superfund (CERCLA) Consent Decrees
INDIAN RESERV	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US MINES	Mines Master Index File
ABANDONED MINES	Abandoned Mines
UXO	Unexploded Ordnance Sites
DOCKET HWC	Hazardous Waste Compliance Docket Listing
FUELS PROGRAM	EPA Fuels Program Registered Listing
CT AIRS	Permitted Air Sources Listing
CT ASBESTOS	Asbestos Notification Listing
CT DRYCLEANERS	Drycleaner Facilities
CT ENF	Enforcement Case Listing
CT Financial Assurance	Financial Assurance Information Listing
CT LEAD	Lead Inspection Database
CT LWDS	Connecticut Leachate and Wastewater Discharge Sites
CT UIC	Underground Injection Control Listing

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	EDR Proprietary Manufactured Gas Plants
EDR Hist Cleaner	EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

CT RGA HWS	Recovered Government Archive State Hazardous Waste Facilities List
CT RGA LUST	Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

EXECUTIVE SUMMARY

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA CORRACTS facilities list

CORRACTS: CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

A review of the CORRACTS list, as provided by EDR, and dated 03/01/2018 has revealed that there is 1 CORRACTS site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WINCHESTER PROPERTIE EPA ID:: CTD001444066	***295 TURNPIKE RD***	***SSE 1/2 - 1 (0.568 mi.)***	***L52***	***254***

Federal RCRA generators list

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 03/01/2018 has revealed that there are 2 RCRA-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CT MIL DEPT C S M S EPA ID:: CTD982544454	***CAMP HARTELL RTE 75***	***ESE 0 - 1/8 (0.047 mi.)***	***E21***	***61***

Lower Elevation	Address	Direction / Distance	Map ID	Page
EDDIES BRADLEY AUTO EPA ID:: CTD982715393	***42 KING SPRING RD***	***E 1/8 - 1/4 (0.143 mi.)***	***H34***	***201***

EXECUTIVE SUMMARY

RCRA-CESQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-CESQG list, as provided by EDR, and dated 03/01/2018 has revealed that there are 2 RCRA-CESQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
STANDARD BELLOWS CO EPA ID:: CTD001159169	375 TURNPIKE RD	0 - 1/8 (0.000 mi.)	A1	8

Lower Elevation	Address	Direction / Distance	Map ID	Page
STANDARD AUTO BODY, EPA ID:: CTD047710447	***45 KING SPRING RD***	***E 1/8 - 1/4 (0.198 mi.)***	***I39***	***217***

State- and tribal - equivalent CERCLIS

CT SHWS: The State Hazardous Waste Sites records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. The data come from the Department of Environmental Protection's Inventory of Hazardous Disposal Sites.

A review of the CT SHWS list, as provided by EDR, and dated 04/23/2010 has revealed that there are 2 CT SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CHOICE VEND, INC. State ID: 547 EPA ID: CTD001444066	***295 ELLA GRASSO TURN***	***SSE 1/2 - 1 (0.568 mi.)***	***L53***	***263***
BRADLEY INTERNATIONA State ID: 546	***BRADLEY INTERNATIONA***	***SW 1/2 - 1 (0.604 mi.)***	***54***	***266***

CT SDADB: Site Discovery and Assessment Database.

A review of the CT SDADB list, as provided by EDR, and dated 04/23/2010 has revealed that there are 5 CT SDADB sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ARMY AVIATION SUPPOR Facility Id: 2043	BRADLEY INTERNATIONA	0 - 1/8 (0.000 mi.)	C11	20
MID-TOWN GARAGE, INC Facility Id: 5450	***391 ELLA GRASSO TURN***	***ENE 0 - 1/8 (0.027 mi.)***	***B18***	***45***
TREASURE CHEST-CROWN Facility Id: 1160	TURNPIKE AND CHOICE	SSE 1/4 - 1/2 (0.357 mi.)	K48	236

Lower Elevation	Address	Direction / Distance	Map ID	Page
CANADAIR CHALLENGER,	***BRADLEY INTERNATIONA***	***SSW 0 - 1/8 (0.046 mi.)***	***20***	***55***

Facility Id: 5445				
CAMP HARTEL	***580 NORTH ST***	***SE 1/8 - 1/4 (0.226 mi.)***	***45***	***228***
Facility Id: 2974				

State and tribal leaking storage tank lists

CT LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Environmental Protection's Leaking Underground Storage Tank List.

A review of the CT LUST list, as provided by EDR, and dated 07/31/2018 has revealed that there is 1 CT LUST site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ARMY AVIATION SUPPOR	***RT 75***	***0 - 1/8 (0.000 mi.)***	***C12***	***22***
Lust Status: 4				
LUST Id: 31928				

State and tribal registered storage tank lists

CT UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Environmental Protection's "Town Inventory" UST Listing.

A review of the CT UST list, as provided by EDR, and dated 06/19/2018 has revealed that there are 4 CT UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ARMY AVIATION SUPPOR	***RT 75***	***0 - 1/8 (0.000 mi.)***	***C12***	***22***
Facility Id: 165-9175				
Tank Status: Permanently Closed				
EXECUTIVE VALET PARK	1353 SOUTH ST	NE 1/8 - 1/4 (0.147 mi.)	36	210
Facility Id: 139-7590				
Tank Status: Permanently Closed				
ANDERSON NEWS	319 ELLA GRASSO TPKE	SSE 1/8 - 1/4 (0.244 mi.)	J47	234
Facility Id: 165-10409				
Tank Status: Permanently Closed				

Lower Elevation	Address	Direction / Distance	Map ID	Page
DICKS BULLDOZING INC	70 KING SPRING RD	E 1/8 - 1/4 (0.212 mi.)	I41	220
Facility Id: 165-9626				
Tank Status: Permanently Closed				

EXECUTIVE SUMMARY

State and tribal voluntary cleanup sites

CT VCP: Sites involved in the Voluntary Remediation Program.

A review of the CT VCP list, as provided by EDR, and dated 08/10/2018 has revealed that there is 1 CT VCP site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
GFI DISPLAY Status: LEP post 10/1/95 filing	***295 ELLA GRASSO TNPK***	***SSE 1/4 - 1/2 (0.467 mi.)***	***51***	***246***

ADDITIONAL ENVIRONMENTAL RECORDS

Records of Emergency Release Reports

The Oil & Chemical Spill Database from the Department of Environmental Protection

A review of the CT SPILLS list, as provided by EDR, and dated 07/31/2018 has revealed that there are 7 CT SPILLS sites within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported Facility Status: CLOSED Case Number: 201601097	KING SPRING RD & RTE	0 - 1/8 (0.000 mi.)	B6	15
Not reported Facility Status: Closed Case Number: 200405894	75 AND KINGSPRING RO	0 - 1/8 (0.000 mi.)	B7	16
Not reported Facility Status: closed Case Number: 9701915	RT 75 AND KING SPRIN	0 - 1/8 (0.000 mi.)	B8	17
Not reported Facility Status: CLOSED Case Number: 201107752	75 AND INDUSTRIAL RO	0 - 1/8 (0.000 mi.)	A9	18
Not reported Facility Status: CLOSED Case Number: 200605436	RT 75 AND KINGS SPRI	0 - 1/8 (0.000 mi.)	B10	19

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported Case Number: 2562	RT 75/ELLA GRASSO BL	0 - 1/8 (0.000 mi.)	A4	12
Not reported Facility Status: Closed Case Number: 200502090	359 ELLA GRASSO BLVD	0 - 1/8 (0.000 mi.)	14	39

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 03/01/2018 has revealed that there are 5 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CT MIL DEPT FIELD MA EPA ID:: CTD983869728	***CAMP HARTELL RTE 75***	***E 0 - 1/8 (0.029 mi.)***	***E19***	***49***
WINDSOR MARKETING GR EPA ID:: CTD131755209	***2 INDUSTRIAL RD***	***ESE 0 - 1/8 (0.051 mi.)***	***F23***	***75***

Lower Elevation	Address	Direction / Distance	Map ID	Page
HAMILTON TEST SYSTEM EPA ID:: CTD000841197	***8 INDUSTRIAL RD***	***ESE 0 - 1/8 (0.124 mi.)***	***G30***	***173***
CARCRAFT AUTO BODY O EPA ID:: CTD161337456	70 KING SPRING RD	E 1/8 - 1/4 (0.212 mi.)	I43	225
BRIGGS IND INC EPA ID:: CTD983872805	***70 KING SPRING***	***E 1/8 - 1/4 (0.212 mi.)***	***I44***	***226***

FUDS: The Listing includes locations of Formerly Used Defense Sites Properties where the US Army Corps Of Engineers is actively working or will take necessary cleanup actions.

A review of the FUDS list, as provided by EDR, and dated 01/31/2015 has revealed that there is 1 FUDS site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
BRADLEY MILITARY AF Federal Facility ID:: CT9799F1750 INST ID:: 57623		SSE 0 - 1/8 (0.072 mi.)	28	160

ICIS: The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

A review of the ICIS list, as provided by EDR, and dated 11/18/2016 has revealed that there is 1 ICIS site within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
GAGLIARDUCCI CONSTRU FRS ID:: 110007242028	***BRADLEY AIR, PERIMET***	***0 - 1/8 (0.000 mi.)***	***D15***	***40***

EXECUTIVE SUMMARY

US AIRS: The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

A review of the US AIRS list, as provided by EDR, has revealed that there is 1 US AIRS site within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
GAGLIARDUCCI CONSTRU	***BRADLEY AIR, PERIMET***	***0 - 1/8 (0.000 mi.)***	***D15***	***40***
Database: US AIRS MINOR, Date of Government Version: 10/12/2016				
EPA plant ID:: 110007242028				

FINDS: The Facility Index System contains both facility information and "pointers" to other sources of information that contain more detail. These include: RCRIS; Permit Compliance System (PCS); Aerometric Information Retrieval System (AIRS); FATES (FIFRA [Federal Insecticide Fungicide Rodenticide Act] and TSCA Enforcement System, FTTS [FIFRA/TSCA Tracking System]; CERCLIS; DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes); Federal Underground Injection Control (FURS); Federal Reporting Data System (FRDS); Surface Impoundments (SIA); TSCA Chemicals in Commerce Information System (CICS); PADS; RCRA-J (medical waste transporters/disposers); TRIS; and TSCA. The source of this database is the U.S. EPA/NTIS.

A review of the FINDS list, as provided by EDR, and dated 08/07/2018 has revealed that there are 3 FINDS sites within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
STANDARD BELLOWS CO	***375 TURNPIKE RD***	***0 - 1/8 (0.000 mi.)***	***A5***	***15***
Registry ID:: 110003008539				
CT MILITARY DEPT ARM	***BRADLEY FIELD ROUTE***	***0 - 1/8 (0.000 mi.)***	***D13***	***38***
Registry ID:: 110006176716				
GAGLIARDUCCI CONSTRU	***BRADLEY AIR, PERIMET***	***0 - 1/8 (0.000 mi.)***	***D15***	***40***
Registry ID:: 110007242028				

ECHO: ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

A review of the ECHO list, as provided by EDR, and dated 09/02/2018 has revealed that there are 3 ECHO sites within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
STANDARD BELLOWS CO	***375 TURNPIKE RD***	***0 - 1/8 (0.000 mi.)***	***A5***	***15***
Registry ID: 110003008539				
CT MILITARY DEPT ARM	***BRADLEY FIELD ROUTE***	***0 - 1/8 (0.000 mi.)***	***D13***	***38***
Registry ID: 110006176716				
GAGLIARDUCCI CONSTRU	***BRADLEY AIR, PERIMET***	***0 - 1/8 (0.000 mi.)***	***D15***	***40***
Registry ID: 110007242028				

EXECUTIVE SUMMARY

CT CPCS: A list of Contaminated or Potentially Contaminated Sites within Connecticut. This list represents the "Hazardous Waste Facilities," as defined in Section 22a-134f of the Connecticut General Statutes (CGS). The list contains the following types of sites: Sites listed on the Inventory of Hazardous Waste Disposal Sites; Sites subject to the Property Transfer Act; Sites at which underground storage tanks are known to have leaked; Sites at which hazardous waste subject to the RCRA; Sites that are included in EPA's (CERCLIS); Sites that are the subject of an order issued by the Commissioner of DEP that requires investigation and remediation of a potential or known source of pollution; and Sites that have entered into one of the Department's Voluntary Remediation Programs.

A review of the CT CPCS list, as provided by EDR, and dated 08/07/2018 has revealed that there are 3 CT CPCS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ARMY AVIATION SUPPOR Lust Status: Cleanup Initiated	***RT 75***	***0 - 1/8 (0.000 mi.)***	***C12***	***22***
TREASURE CHEST-CROWN W.L.C. WINDSOR CORP.	***TURNPIKE & CHOICE RO*** 3 CHOICE ROAD	***SSE 1/4 - 1/2 (0.357 mi.)*** SE 1/4 - 1/2 (0.439 mi.)	***K49*** 50	***238*** 246

CT MANIFEST: Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

A review of the CT MANIFEST list, as provided by EDR, and dated 08/10/2018 has revealed that there are 18 CT MANIFEST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
STANDARD BELLOWSO IN EPA Id: CTD001159169	375 TURNPIKE RD	0 - 1/8 (0.000 mi.)	A2	9
STANDARD BELLOWS EPA Id: CTD001159169	375 ELLA GRASSO TPK	0 - 1/8 (0.000 mi.)	A3	11
TY SUBARU EPA Id: CTP000022837	391 ELLA GRASSO TPK	ENE 0 - 1/8 (0.027 mi.)	B17	43
WINDSOR MARKETING GR EPA Id: CTP000008528	2 INDUSTRIAL RD	ESE 0 - 1/8 (0.051 mi.)	F22	70
WINDSOR MARKETING EPA Id: CTP000005888	2 INDUSTRIAL RD	ESE 0 - 1/8 (0.051 mi.)	F24	102
WINDSOR MARKETING EPA Id: CTD131755209	2 INDUSTRIAL RD	ESE 0 - 1/8 (0.051 mi.)	F25	107
WINDSOR MARKETING GR EPA Id: CTD131755209	2 INDUSTRIAL RD	ESE 0 - 1/8 (0.051 mi.)	F26	134
WINDSOR MARKETING GR EPA Id: CTP000005888	2 INDUSTRIAL RD	ESE 0 - 1/8 (0.051 mi.)	F27	158
BURLINGTON AIR EXPRE EPA Id: CTP000007718	319 ELLA GRASSO TPK	SSE 1/8 - 1/4 (0.244 mi.)	J46	232

Lower Elevation	Address	Direction / Distance	Map ID	Page
WINDSOR MARKETING RO EPA Id: CTP000019476	6 INDUSTRIAL RD	ESE 0 - 1/8 (0.124 mi.)	G29	161
EDDIES BRADLEY AUTO EPA Id: CTP000009450	***42 KING SPRING RD***	***E 1/8 - 1/4 (0.143 mi.)***	***H31***	***174***

EPA Id: CTD982715393				
E FLAMMABLE LIQUID N EPA Id: CTD982715393	42 KING SPRING RD	E 1/8 - 1/4 (0.143 mi.)	H32	194
EDDIES BRADLEY AB & EPA Id: CTP000009450	42 KING SPRING RD	E 1/8 - 1/4 (0.143 mi.)	H33	198
EDDIES BRADLEY AUTO EPA Id: CTD982715393	42 KING RD	E 1/8 - 1/4 (0.143 mi.)	H35	205
EDDIES BRADLEY AUTO EPA Id: CTD982715393	42 KING SPRING RD	E 1/8 - 1/4 (0.179 mi.)	H37	211
STANDARD AUTO BODY I EPA Id: CTD047710447 EPA Id: CT$000014730	45 KING SPRING RD	E 1/8 - 1/4 (0.198 mi.)	I38	213
QUIK TURN MACHINE EPA Id: CT$000022440	68 KING SPRING RD	E 1/8 - 1/4 (0.205 mi.)	I40	219
CARCRAFT AUTO BODY EPA Id: CTP000006933	70 KING SPRING RD	E 1/8 - 1/4 (0.212 mi.)	I42	223

NY MANIFEST: Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

A review of the NY MANIFEST list, as provided by EDR, and dated 07/01/2018 has revealed that there is 1 NY MANIFEST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WINDSOR MARKETING GR EPA ID: CTD131755209	***2 INDUSTRIAL RD***	***ESE 0 - 1/8 (0.051 mi.)***	***F23***	***75***

NJ MANIFEST: Hazardous waste manifest information.

A review of the NJ MANIFEST list, as provided by EDR, and dated 12/31/2017 has revealed that there are 2 NJ MANIFEST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WINDSOR MARKETING GR EPA Id: CTD131755209	***2 INDUSTRIAL RD***	***ESE 0 - 1/8 (0.051 mi.)***	***F23***	***75***

Lower Elevation	Address	Direction / Distance	Map ID	Page
EDDIES BRADLEY AUTO EPA Id: CTD982715393	***42 KING SPRING RD***	***E 1/8 - 1/4 (0.143 mi.)***	***H34***	***201***

WI MANIFEST: Hazardous waste manifest information.

A review of the WI MANIFEST list, as provided by EDR, and dated 12/31/2017 has revealed that there is 1 WI MANIFEST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CT MIL DEPT C S M S	***CAMP HARTELL RTE 75***	***ESE 0 - 1/8 (0.047 mi.)***	***E21***	***61***

ACT Status: A
FID: 0
EPA ID: CTD982544454

RI MANIFEST: Hazardous waste manifest information

A review of the RI MANIFEST list, as provided by EDR, and dated 12/31/2017 has revealed that there are 2 RI MANIFEST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CT MIL DEPT FIELD MA	***CAMP HARTELL RTE 75***	***E 0 - 1/8 (0.029 mi.)***	***E19***	***49***
EPA Id: CTD983869728				
Manifest Document Number: 000085799UIS				
CT MIL DEPT C S M S	***CAMP HARTELL RTE 75***	***ESE 0 - 1/8 (0.047 mi.)***	***E21***	***61***
EPA Id: CTD982544454				
Manifest Document Number: 000041654UIS				

CT SEH: The Significant Environmental Hazard Statute is intended to identify and abate short-term risks associated with specific environmental conditions identified in the statute. After abatement of short-term risks (meaning abatement of the significant environmental hazard condition), there may still be potential long-term risks associated with the release. However, a significant environmental hazard can be considered abated under the statute even though potential long-term risks may not have been addressed.

A review of the CT SEH list, as provided by EDR, and dated 06/30/2018 has revealed that there is 1 CT SEH site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CAMP HARTEL	***580 NORTH ST***	***SE 1/8 - 1/4 (0.226 mi.)***	***45***	***228***

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there is 1 EDR Hist Auto site within approximately 0.125 miles of the target property.

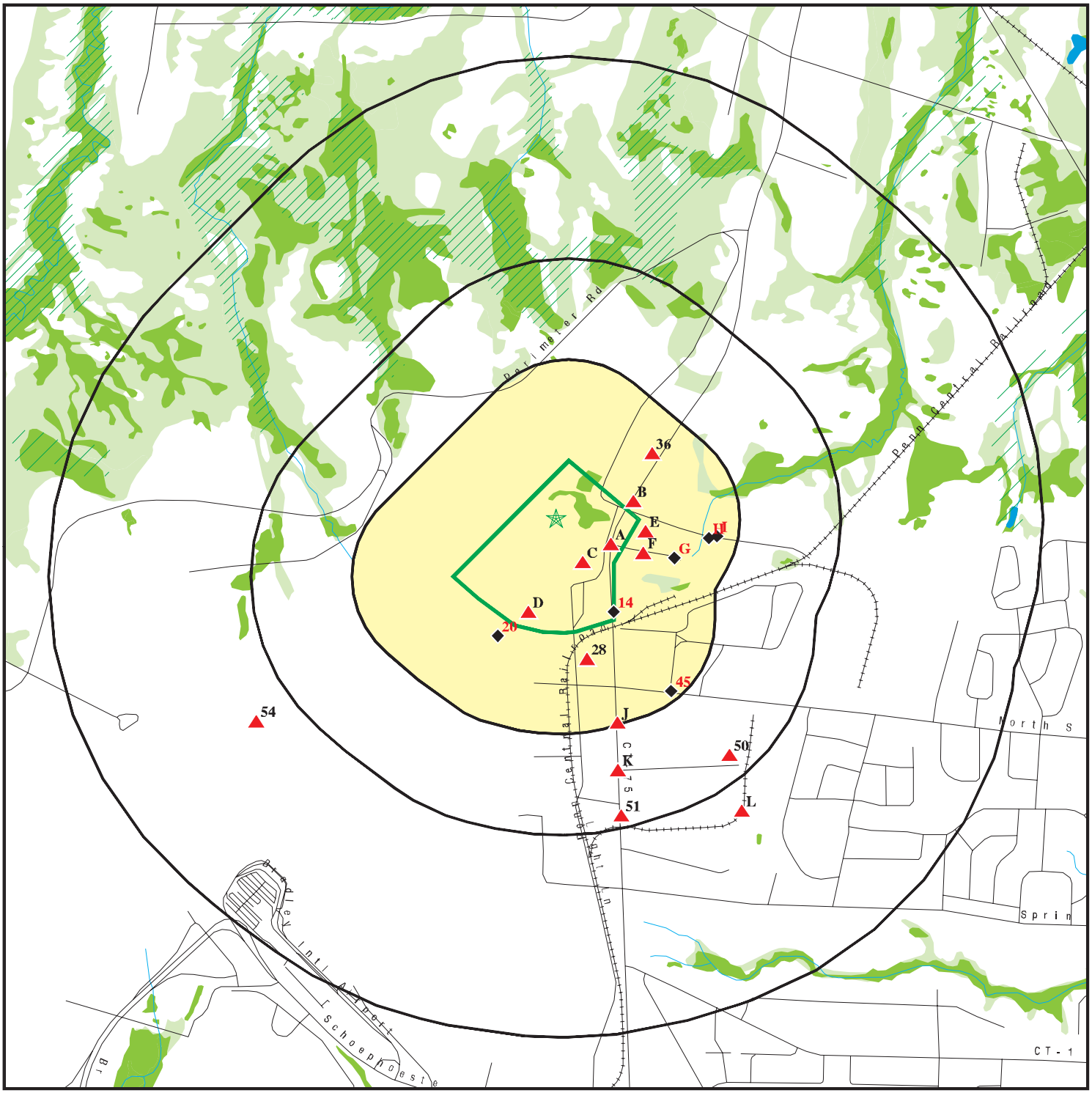
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
RAINBOW AUTOMOTIVE	391 ELLA GRASSO TPKE	ENE 0 - 1/8 (0.027 mi.)	B16	43

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 2 records.

Site Name	Database(s)
AREH WINDSOR LOCKS, LLC	CT ASBESTOS
DOT MAINTENANCE GARAGE (GLYCOL REC	CT LUST

OVERVIEW MAP - 5446977.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

0 1/4 1/2 1 Miles

Indian Reservations BIA

100-year flood zone

500-year flood zone

National Wetland Inventory

State Wetlands

Upgradient Area

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Windsor Locks AASF	CLIENT:	AECOM
ADDRESS:	Ella Grasso RT 75 Turnpike Windsor Locks CT 06096	CONTACT:	Brittany Kirchmann
		INQUIRY #:	5446977.2s
LAT/LONG:	41.945816 / 72.673716	DATE:	October 08, 2018 12:11 pm

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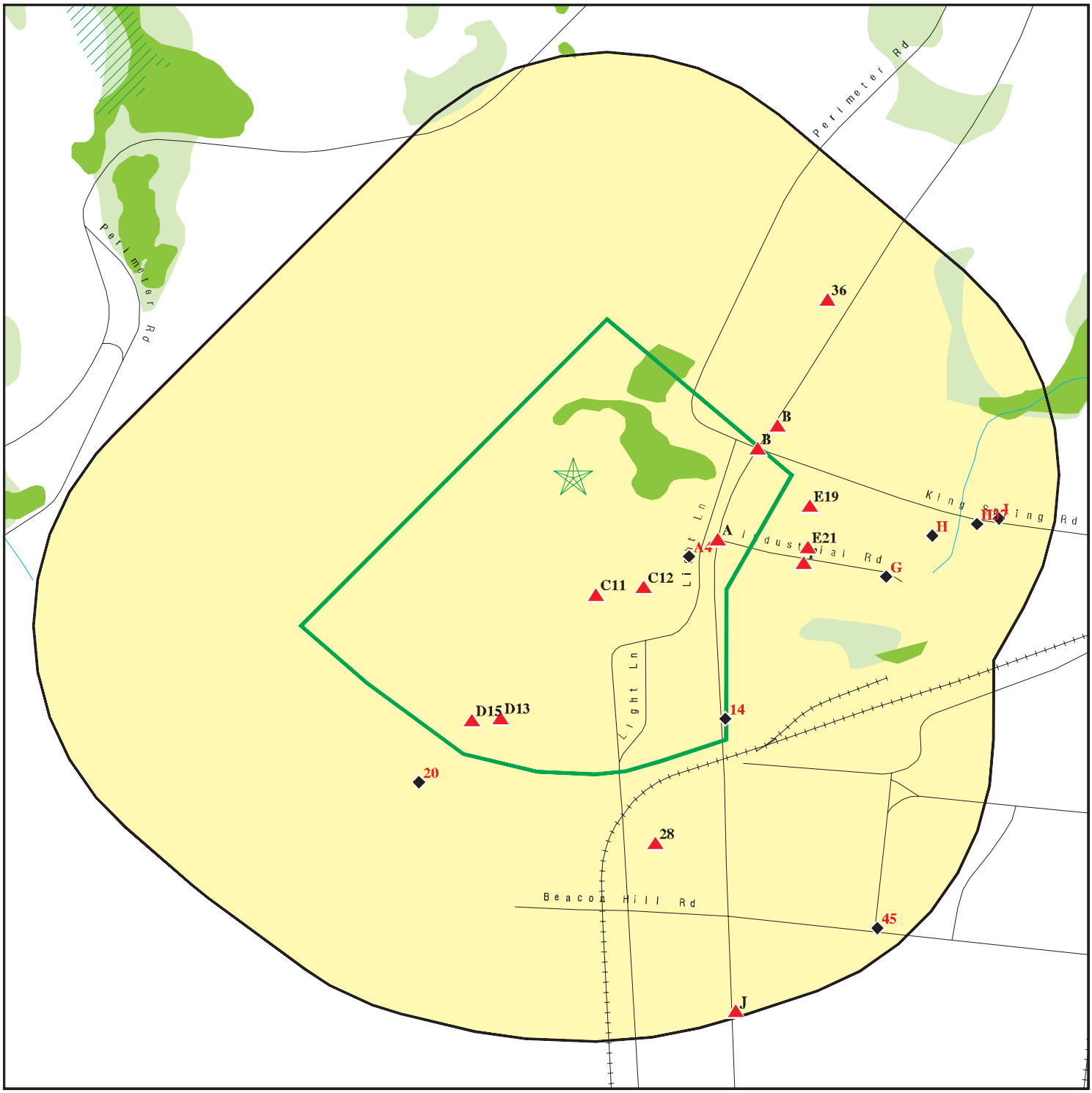
DETAIL MAP - 5446977.2S



0 1/8 1/4 1/2 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Windsor Locks AASF	CLIENT: AECOM
ADDRESS: Ella Grasso RT 75 Turnpike Windsor Locks CT 06096	CONTACT: Brittany Kirchmann INQUIRY #: 5446977.2s
LAT/LONG: 41.945816 / 72.673716	DATE: October 08, 2018 12:13 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	0.001		0	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	1	NR	1
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		1	1	NR	NR	NR	2
RCRA-CESQG	0.250		1	1	NR	NR	NR	2
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
CT SHWS	1.000		0	0	0	2	NR	2
CT SDADB	0.500		3	1	1	NR	NR	5
State and tribal landfill and/or solid waste disposal site lists								
CT SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
CT LUST	0.500		1	0	0	NR	NR	1
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CT UST	0.250		1	3	NR	NR	NR	4
CT AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
CT ENG CONTROLS	0.500		0	0	0	NR	NR	0
CT AUL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
CT VCP	0.500		0	0	1	NR	NR	1
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
CT BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
CT SWRCY	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
CT CDL	0.001		0	NR	NR	NR	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
Local Land Records								
CT PROPERTY	0.001		0	NR	NR	NR	NR	0
CT LIENS	0.001		0	NR	NR	NR	NR	0
LIENS 2	0.001		0	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
CT SPILLS	0.001		7	NR	NR	NR	NR	7
CT SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		3	2	NR	NR	NR	5
FUDS	1.000		1	0	0	0	NR	1
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		1	NR	NR	NR	NR	1
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	0.001		0	NR	NR	NR	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		1	NR	NR	NR	NR	1
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.001		0	NR	NR	NR	NR	0
FINDS	0.001		3	NR	NR	NR	NR	3
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
ECHO	0.001		3	NR	NR	NR	NR	3
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CT AIRS	0.001		0	NR	NR	NR	NR	0
CT ASBESTOS	0.001		0	NR	NR	NR	NR	0
CT CPCS	0.500		1	0	2	NR	NR	3
CT DRYCLEANERS	0.250		0	0	NR	NR	NR	0
CT ENF	0.001		0	NR	NR	NR	NR	0
CT Financial Assurance	0.001		0	NR	NR	NR	NR	0
CT LEAD	0.001		0	NR	NR	NR	NR	0
CT LWDS	0.250		0	0	NR	NR	NR	0
CT MANIFEST	0.250		9	9	NR	NR	NR	18
NY MANIFEST	0.250		1	0	NR	NR	NR	1
NJ MANIFEST	0.250		1	1	NR	NR	NR	2
WI MANIFEST	0.250		1	0	NR	NR	NR	1
RI MANIFEST	0.250		2	0	NR	NR	NR	2
CT NPDES	0.001		0	NR	NR	NR	NR	0
CT SEH	0.500		0	1	0	NR	NR	1
CT UIC	0.001		0	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
EDR Hist Auto	0.125		1	NR	NR	NR	NR	1
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
CT RGA HWS	0.001		0	NR	NR	NR	NR	0
CT RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		0	42	19	4	3	0	68

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 **STANDARD BELLOWS CO INC** **RCRA-CESQG** **1004680805**
375 TURNPIKE RD **CTD001159169**
< 1/8 **WINDSOR LOCKS, CT 06096**
1 ft.

Site 1 of 6 in cluster A

Relative:
Higher

Actual:
173 ft.

RCRA-CESQG:

Date form received by agency:	09/10/1980
Facility name:	STANDARD BELLOWS CO INC
Facility address:	375 TURNPIKE RD WINDSOR LOCKS, CT 06096
EPA ID:	CTD001159169
Mailing address:	TURNPIKE RD WINDSOR LOCKS, CT 06096
Contact:	THOMAS-J TKACZ
Contact address:	375 TURNPIKE RD WINDSOR LOCKS, CT 06096
Contact country:	US
Contact telephone:	203-623-2307
Contact email:	Not reported
EPA Region:	01
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	Not reported
Owner/operator address:	OWNERSTREET OWNERCITY, CT 99999
Owner/operator country:	Not reported
Owner/operator telephone:	203-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No

STANDARD BELLOWS CO INC (Continued) **1004680805**

On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Violation Status: No violations found

A2 **STANDARD BELLOWSO INC** **CT MANIFEST** **S109723599**
375 TURNPIKE RD **N/A**
< 1/8 **WINDSOR LOCKS, CT 06096**
1 ft.

Site 2 of 6 in cluster A

Relative: Higher
Actual: 173 ft.

CT MANIFEST:

EPA ID:	CTD001159169
Years:	1997

Details:

Year:	1997
EPA ID:	CTD001159169
Manifest Id:	CTF0546193
TSDF EPA ID:	CTD021816889
TSDF Name:	UNITED OIL RECOVERY DBA ADV LIQ REC
TSDF Address:	136 GRACEY AVE
TSDF City,State,Zip:	MERIDEN, CT 06451
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	CTD016424210
Transporter Name:	TRI-S INC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	375 TURNPIKE RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Not reported
Date Shipped:	06/10/1997
Date Received:	Not reported
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	env. Hazardous substance liquid nos

STANDARD BELLOWSO INC (Continued) **S109723599**

Number of Containers:	001
Container Type:	TT
Quantity:	829
Weight/Volume:	G
Batch Number:	1229, 1229
EPA Waste Codes:	D039
Copies:	1, 2
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	CTF05461931

Details as of 2013:

Year:	1997
EPAID:	CTD001159169
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036232307
Special Handling:	Not reported
Last Modified Date:	04/26/2004
Last Modified By:	IG

Waste as of 2013:

Year:	1997
Manifest ID:	CTF0546193
Waste Occurrence:	1
UNNA:	3082
Hazard Class:	9
US Dot Description:	env. Hazardous substance liquid nos
Number of Containers:	001
Container Type:	TT
Quantity:	829
Weight/Volume:	G
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2004-04-26 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	1997
Manifest ID:	CTF0546193
Waste Occurrence:	1
EPA Waste Code:	D039
Recycled Waste?:	False
Last Modified Date:	2004-04-26 00:00:00
Last Modified By:	IG

A3 **STANDARD BELLOWS** **CT MANIFEST** **S113474167**
375 ELLA GRASSO TPK **N/A**
< 1/8 **WINDSOR LOCKS, CT 06096**
1 ft.

Site 3 of 6 in cluster A

Relative:
Higher

Actual:
173 ft.

CT MANIFEST:

EPA ID:	CTD001159169
Years:	1992

Details:

Year:	1992
EPA ID:	CTD001159169
Manifest Id:	NJA1231774
TSDF EPA ID:	NJD002200046
TSDF Name:	CYCLE CHEM INC
TSDF Address:	217 S FIRST ST
TSDF City,State,Zip:	ELIZABETH, NJ 07206
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	CTD016424210
Transporter Name:	TRI-S INC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	375 ELLA GRASSO TPK
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Y
Date Shipped:	01/02/1992
Date Received:	01/02/1992
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	WASTE CORROSIVE LIQUID, NOS
Number of Containers:	004
Container Type:	DM
Quantity:	200
Weight/Volume:	G
Batch Number:	999999
EPA Waste Codes:	D002
Copies:	2
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported

STANDARD BELLOWS (Continued) **S113474167**

Alt Fac Date:	Not reported
Unique Key:	NJA12317741

Details as of 2013:

Year:	1992
EPAID:	CTD001159169
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036232307
Special Handling:	Y
Last Modified Date:	04/27/2004
Last Modified By:	IG

Waste as of 2013:

Year:	1992
Manifest ID:	NJA1231774
Waste Occurrence:	1
UNNA:	1760
Hazard Class:	CORROSIVE
US Dot Description:	WASTE CORROSIVE LIQUID, NOS
Number of Containers:	004
Container Type:	DM
Quantity:	200
Weight/Volume:	G
Additional Description:	Y
Handling Code:	S01
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	1992
Manifest ID:	NJA1231774
Waste Occurrence:	1
EPA Waste Code:	D002
Recycled Waste?:	False
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

A4 **CT SPILLS** **S103699880**
N/A

< 1/8
1 ft.

RT 75/ELLA GRASSO BLVD
WINDSOR LOCKS, CT

Site 4 of 6 in cluster A

Relative:
Lower

Actual:
172 ft.

SPILLS:

Year of Database:	1993
Case Number:	2562
Who Took Spill:	PORTER
Assigned To:	Not reported
Report Date:	05/19/1993
Report Time:	9
Date Release:	Not reported

(Continued) **S103699880**

Time Responded: Not reported
Reported By: BRIAN ELLIS
Phone: Not reported
Representing: Not reported
Terminated: Not reported
Recovd (Total): .
Total (Water): .
Facility Status: Not reported
Continuous Spill: Not reported
Released Substance: Not reported
Qty: 0 (Gallons)
Emergency Measure: Not reported
Water Body: Not reported
Discharger: Not reported
Telephone: Not reported
Responsible Party: Not reported
RP Address 1: Not reported
RP City,St,Zip: Not reported
Historic: Not reported
Waterbody: Not reported
Time Stamp: Not reported
Sr Inspector: Not reported
At Inspctor: Not reported
User Stamp: Not reported
Comments: Not reported

Year of Database: 1993
Town of Spill: WINDSOR LOCKS
Case Number: 2562
OCSRD Inspector: NR
Spill Date: 05/19/93
Spill Time: 9: 20
Report Date: 05/19/93
Report Time: 9: 30
Reported By: BRIAN ELLIS
Representing: CAMP HARTELL
Work Telephone: 203- 627- 4852
Home Telephone: Not reported
Telephone Pole#: .
Incident Type: PETROLEUM
Substance: GASOLINE
Quantity: 0 Gallon(s)
Concentration: .
Action Desc: Not reported
On Going: Not reported
Continuous Spill: Not reported
Release Status: Not reported
Misc Info: Not reported
Water Body: Not reported
Other Media: Not reported
Release Area: Inside Building
Total (Water): .
Recovd (Water): .
Recovd (Total): .
Polluter Name: Not reported
Polluted Address: Not reported
Polluted City,St,Zip: .

(Continued) **S103699880**

Polluter Phone:	.- .- .
Polluter Responisbility:	Not reported
Unknown Responsibility:	Not reported
Unknown Polluter:	Not reported
Cleanup Action:	Not reported
Dun and Bradst#:	Not reported
UST Unit:	Not reported
Agency Notified:	Not reported
State Agency:	Not reported
Notify Date:	.
Notify Time:	Not reported
Other Agency:	Not reported
Notify Other:	Not reported
Notify Status:	Not reported
Class1:	Governmental
Other Class:	Not reported
Cause1:	Overfill
Other Cause:	Not reported
Actions1:	Contained/Removed
Other Actions:	Not reported
Cleanup Contractor:	Not reported
Contractor Name:	Not reported
Did DEP Hire Contractor:	Not reported
Date Contractor Hired:	.
When Contractor Requested:	Not reported
When Contractor Arrived:	Not reported
Who Took Spill:	PORTER
Badge # of Who Recieved Spill:	914
Who Assigned Spill:	NR
Badge # of Who Assigned Spill:	.
Date Assigned:	.
Assigned Time:	Not reported
Spill Status:	Closed
Case 1136:	Not reported
Federal 311K:	.
Case #1:	Not reported
Case #2:	.
Cost Recovery:	.
Property Owner:	Not reported
Property Other:	.
Property Name:	Not reported
Property Addr:	Not reported
Property CSZ:	.
Polluter:	Not reported
Owner:	Not reported
Operator:	Not reported
Vehicle Make:	Not reported
Vehicle Model:	Not reported
Truck Reg:	Not reported
Trail Reg:	Not reported
Additional Info:	Not reported
Updated:	Not reported
Update Date:	.

A5 **STANDARD BELLOWS CO INC** **FINDS** **1016189402**
375 TURNPIKE RD **ECHO** **N/A**
< 1/8 **WINDSOR LOCKS, CT 06096**
1 ft.

Site 5 of 6 in cluster A

Relative: Higher
Actual: 173 ft.

FINDS:

Registry ID: 110003008539

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1016189402
Registry ID: 110003008539
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110003008539

B6 **CT SPILLS** **S118549101**
KING SPRING RD & RTE 75 **N/A**
< 1/8 **WINDSOR LOCKS, CT**
1 ft.

Site 1 of 7 in cluster B

Relative: Higher
Actual: 179 ft.

SPILLS:
Year of Database: 2016
Case Number: 201601097
Who Took Spill: 206
Assigned To: 0
Report Date: 03/01/2016
Report Time: 03:24:13
Date Release: 03/01/2016
Time Responded: Not reported
Reported By: WINDSOR LOCKS PD
Phone: 860 6271461
Representing: Self
Terminated: YES
Recovd (Total): 0
Total (Water): 0
Facility Status: CLOSED
Continuous Spill: False
Released Substance: DIESEL FUEL
Qty: 2 (Gallons)
Emergency Measure: Not reported
Water Body: NA
Discharger: Not reported
Telephone: Not reported
Responsible Party: Not reported
RP Address 1: Not reported
RP City,St,Zip: CT

(Continued) **S118549101**

Historic:	False
Waterbody:	False
Time Stamp:	2016-03-01 03:27:06
Sr Inspector:	Kinney, Clarence
At Inspctor:	**NO RESPONSE
User Stamp:	kinneyc
Comments:	Not reported
Action:	Sanded
Other Action:	Not reported
Agency ID:	DEP Dispatch
Other Agency:	Not reported
DEP Bureau:	Not reported
DEP Agency:	Not reported
Agency ID:	LOCAL FIRE DEPARTMENT
Other Agency:	Not reported
DEP Bureau:	Not reported
DEP Agency:	Not reported
Cause ID:	Other
Other Cause:	LEAKED FROM TRACTOR TRAILER
Media ID:	Ground Surface
Other Media:	Not reported
Release Type:	petroleum
Other Release:	Not reported
Waterbody:	Other
Other Wtrbody:	NA

B7 **CT SPILLS** **S106730392**
N/A

< 1/8
1 ft.

75 AND KINGSPRING ROAD
WINDSOR LOCKS, CT

Site 2 of 7 in cluster B

Relative:
Higher

Actual:
179 ft.

SPILLS:

Year of Database:	2004
Case Number:	200405894
Who Took Spill:	924
Assigned To:	0
Report Date:	08/25/2004
Report Time:	15:37:50
Date Release:	08/25/2004
Time Responded:	Not reported
Reported By:	Dispatch
Phone:	860 6271461
Representing:	Fire Department
Terminated:	YES
Recovd (Total):	2
Total (Water):	0
Facility Status:	Closed
Continuous Spill:	False
Released Substance:	MOTOR OIL
Qty:	2 (Gallons)
Emergency Measure:	Not reported
Water Body:	None reported
Discharger:	MVA
Telephone:	Not reported
Responsible Party:	YES
RP Address 1:	Not reported
RP City,St,Zip:	WINDSOR LOCKS, CT 06096

(Continued) **S106730392**

Historic:	False
Waterbody:	False
Time Stamp:	2004-08-25 16:53:48
Sr Inspector:	Gothberg, Erik
At Inspctor:	**NO RESPONSE
User Stamp:	Not reported
Comments:	Not reported
Action:	Sanded
Other Action:	Not reported
Action:	Cleaned
Other Action:	Not reported
Agency ID:	DEP
Other Agency:	Not reported
DEP Bureau:	BUREAU OF WASTE MANAGEMENT
DEP Agency:	OIL AND CHEMICAL SPILL RESPONSE
Cause ID:	MV Accident
Other Cause:	Not reported
Media ID:	Ground Surface
Other Media:	Not reported
Class ID:	Private
Other Class:	Not reported
Release Type:	petroleum
Other Release:	Not reported

B8 **CT SPILLS** **S103159216**
N/A

RT 75 AND KING SPRING RD
< 1/8 **WINDSOR LOCKS, CT**
1 ft.

Site 3 of 7 in cluster B

Relative: **Higher**
Actual: **179 ft.**

SPILLS:

Year of Database:	1997
Case Number:	9701915
Who Took Spill:	208
Assigned To:	0
Report Date:	04/20/1997
Report Time:	10:12:00
Date Release:	04/20/1997
Time Responded:	10:00:00
Reported By:	JOPECK
Phone:	860 6271461
Representing:	WINDSOR LOCKS P.D.
Terminated:	YES
Recovd (Total):	0
Total (Water):	0
Facility Status:	closed
Continuous Spill:	False
Released Substance:	GASOLINE
Qty:	2 (Gallons)
Emergency Measure:	SPEEDY DRY
Water Body:	Not reported
Discharger:	Not reported
Telephone:	Not reported
Responsible Party:	YES
RP Address 1:	Not reported
RP City,St,Zip:	CT
Historic:	False
Waterbody:	False

(Continued) **S103159216**

Time Stamp:	1997-04-20 15:36:57
Sr Inspector:	Monarca, Vincent
At Inspctor:	**NO RESPONSE
User Stamp:	Not reported
Comments:	Not reported
Action:	Sanded
Other Action:	Not reported
Cause ID:	MV Accident
Other Cause:	Not reported
Media ID:	Ground Surface
Other Media:	Not reported
Release Type:	petroleum
Other Release:	Not reported

A9 **CT SPILLS** **S111441795**

75 AND INDUSTRIAL ROAD **N/A**

< 1/8 **WINDSOR LOCKS, CT**

1 ft.

Site 6 of 6 in cluster A

Relative: **Higher**

Actual: **174 ft.**

SPILLS:

Year of Database:	2011
Case Number:	201107752
Who Took Spill:	202
Assigned To:	0
Report Date:	12/02/2011
Report Time:	08:21:14
Date Release:	12/02/2011
Time Responded:	Not reported
Reported By:	801
Phone:	860 6271461
Representing:	fd
Terminated:	YES
Recovd (Total):	0
Total (Water):	0
Facility Status:	CLOSED
Continuous Spill:	False
Released Substance:	TRANSMISSION OIL
Qty:	0 (Gallons)
Emergency Measure:	contents of one transmission
Water Body:	Not reported
Discharger:	Not reported
Telephone:	Not reported
Responsible Party:	Not reported
RP Address 1:	Not reported
RP City,St,Zip:	CT
Historic:	False
Waterbody:	False
Time Stamp:	2011-12-02 11:37:36
Sr Inspector:	Landry, Robin
At Inspctor:	**NO RESPONSE
User Stamp:	cguzman
Comments:	Not reported
Action:	Sanded
Other Action:	Not reported
Agency ID:	DEP Dispatch
Other Agency:	Not reported
DEP Bureau:	Not reported

(Continued) **S111441795**

DEP Agency:	Not reported
Agency ID:	LOCAL FIRE DEPARTMENT
Other Agency:	Not reported
DEP Bureau:	Not reported
DEP Agency:	Not reported
Cause ID:	MV Accident
Other Cause:	Not reported
Media ID:	Ground Surface
Other Media:	Not reported
Class ID:	Transportation
Other Class:	Not reported
Class ID:	Private
Other Class:	Not reported
Release Type:	petroleum
Other Release:	Not reported
Waterbody:	Other
Other Wtrbody:	none

B10 **CT SPILLS** **S108194010**
N/A

< 1/8
1 ft.

RT 75 AND KINGS SPRING RD
WINDSOR LOCKS, CT

Site 4 of 7 in cluster B

Relative:
Higher

Actual:
179 ft.

SPILLS:

Year of Database:	2006
Case Number:	200605436
Who Took Spill:	926
Assigned To:	924
Report Date:	08/29/2006
Report Time:	15:28:27
Date Release:	08/29/2006
Time Responded:	Not reported
Reported By:	DISP
Phone:	860 6271461
Representing:	WINDSOR LOCKS FD
Terminated:	Not reported
Recovd (Total):	0
Total (Water):	0
Facility Status:	CLOSED
Continuous Spill:	False
Released Substance:	DIESEL FUEL
Qty:	0 (Gallons)
Emergency Measure:	TT LEAKING 50 GAL. DIESEL ON GROUND. FD SANDING. UNK. CB OR WATERWAYS AT THIS TIME.
Water Body:	NONE REPORTED
Discharger:	Not reported
Telephone:	Not reported
Responsible Party:	Not reported
RP Address 1:	Not reported
RP City,St,Zip:	CT
Historic:	False
Waterbody:	False
Time Stamp:	2006-09-08 11:26:51
Sr Inspector:	CATUCCIO, DEBBIE
At Inspctor:	Gothberg, Erik
User Stamp:	mgranill
Comments:	Not reported

(Continued) **S108194010**

Action:	Sanded
Other Action:	Not reported
Agency ID:	LOCAL FIRE DEPARTMENT
Other Agency:	Not reported
DEP Bureau:	Not reported
DEP Agency:	Not reported
Cause ID:	Fuel Tank Failure
Other Cause:	Not reported
Media ID:	Ground Surface
Other Media:	Not reported
Release Type:	petroleum
Other Release:	Not reported

C11 **ARMY AVIATION SUPPORT FACILITY** **CT SDADB** **S104255554**
BRADLEY INTERNATIONAL AIRPORT **N/A**
< 1/8 **WINDSOR LOCKS, CT**
1 ft.

Site 1 of 2 in cluster C

Relative:
Higher

Actual:
175 ft.

Site Discovery and Assessment:

Facility ID:	2043
Rem Master ID:	2469
PTP Id:	Not reported
WPC Number:	Not reported
Postal District:	Not reported
Latitude:	41.9442
Longitude:	-72.6733
Lat/Long Determined By:	MAP
Ground Water Quality Classification:	GB/GA
Surface Water Quality Classification:	A
Waste Type:	HYDRO/OIL
Disposal:	UST
Sample Data Available:	False
Updated By:	GLEASON, S
Update Program:	FRP
Updated:	12/14/1994
Date Created:	Not reported
Duplicate:	False

SDA Federal:

EPA CERCLIS Id:	Not reported
Number EPA RCRIS Id:	Not reported
Site on EPA's CERCLIS:	Not reported
Site Archived from CERCLIS:	Not reported
Archive Date:	Not reported
EPA's Removal at Site:	Not reported
Deferred to another EPA Program:	Not reported
EPA Env Priority Initiative Site:	Not reported
Federal Facility:	Not reported
Site on EPA's National Priority List:	Not reported
Part of an NPL site:	Not reported
RCRA Generator Status:	Not reported
RCRA Permit Status:	Not reported

SDA Referral:

Referral Id:	1876
Source of referral:	REMEDIAL
Date Received:	12/14/1994
Staff Assigned:	Not reported

ARMY AVIATION SUPPORT FACILITY (Continued) **S104255554**

Remediation Program: Not reported
Date dt_assigned: Not reported
Remediation Complete Approved DEP/Verified by LEP: Not reported
Outcome: Not reported

SDA Remedial:
Remedial Id: Not reported
PTP Id: Not reported
Remediation Program: Not reported
Remediation Program Entered: Not reported
Staff Assigned: Not reported
Remediation Program: Not reported
Date dt_assign: Not reported
Project Phase: Not reported
Order issued: Not reported
Order Number: Not reported
Date order issued: Not reported
Remedial Investigation Start: Not reported
Remedial Investigation Completed: Not reported
Remedial Design Start: Not reported
Remedial Design complet: Not reported
Remedial Action Start: Not reported
Remedial Action Completed: Not reported
Date Oper/ maintenance Started: Not reported
GW monitoring: Not reported
Remediation complete Approved DEP/Verified by LEP: Not reported

SDA Orders:
Order Id: Not reported
Order Number: Not reported
Date order issued: Not reported
Staff Assigned: Not reported
Type of Order: Not reported
Order Respondent: Not reported
Admin Appeal Date: Not reported
Date of Admin Appeal Ruling: Not reported
Date of Admin Appeal Ruling: Not reported
Date of Final Order: Not reported
Date of Court Appeal: Not reported
Date of Court Ruling: Not reported
Date of Court Ruling: Not reported
Date Order Modified: Not reported
Date Referred to AG: Not reported
Judgement: Not reported
Date of AGR judgement: Not reported
Penalty assessed: Not reported
Order Complete: Not reported
In compliance: Not reported
Comments: Not reported

SDADB:

SDA Waste:
Waste Id: 11
Waste Type: HYDRO/OIL
Description: Hydrocarbons and/or Fuel Oil

C12 **ARMY AVIATION SUPPORT FACILITY** **CT LUST** **U003973394**
RT 75 **CT UST** **N/A**
< 1/8 **WINDSOR LOCKS, CT** **CT CPCS**
1 ft.

Site 2 of 2 in cluster C

Relative:
Higher

Actual:
173 ft.

LUST:

LUST Id:	3902
UST Facility Id:	9175
LUST Case Id:	31928
Lust Status:	Lust Completed
Processing Status:	Not reported
EPA Reportable:	-1
Motor Fuel:	No
Diesel:	No
Gasoline:	No
Other:	Yes
Other Release:	Aviation Fuel and Waste Oil
No Release:	No
Leak:	No
Tank:	Yes
Piping:	No
Overfill:	No
Removal:	Yes
Incident Date:	06/08/1989
Entry Date:	Not reported
Site Case Id:	Not reported
UST Site Id:	569
Cost Recovery Spill Case #:	Not reported
Old SITS Number:	Not reported
Case Log Id:	Not reported
Monthly Report Id:	0
UST Owner Id:	6495
LUST Owner Id:	Not reported
UST Event Id:	3987
Contact Info:	Not reported
Contact EMail:	Not reported
Site Contact City,St,Zip:	UNKNOWN
2nd Contact:	CAPE
2nd Contact EMail:	Not reported
2nd Contact Address:	2302 Parklanke Drive
2nd Contact City,St,Zip:	GA 303452907
2nd Contact Address 2:	Suite 200
2nd Contact City 2:	Atlanta
2nd Contact Phone Number:	Not reported
2nd Contact Fax Number:	Not reported
2nd Contact Type:	Not reported
Facility City Num:	165
Site Contact:	Not reported
Site Contact Address:	Not reported
Site Contact Add 2:	Not reported
Site Contact City 2:	Not reported
Site Contact Phone:	Not reported
Site Contact Fax:	Not reported
Site Contact Type:	Not reported
Department Contact 1:	Not reported
Department Contact 2:	Not reported
Referral Source:	Not reported
Offsite Source:	0

ARMY AVIATION SUPPORT FACILITY (Continued) **U003973394**

Date Referred:	Not reported
Emergency:	No
Private Heating Fuel:	No
Commercial Heating Fuel:	Yes
Commercial HF < 2100 Gal.:	Yes
Commercial HF > 2100 Gal.:	No
Commercial HF - Size Unk:	No
No LUST Site:	No
Cost Recvry Prgm Candidate:	No
OCSRD Complete:	No
Follow Up Flag:	No
Alternate Water Supply:	No
Relocation:	No
Responsible Party:	No
Responsible EMail:	lisa.melnicsak@us.army.mil
Resp Party Name:	Department of the Army and the Air Force
Resp Party Address:	360 Broad Street
Resp Party City,St,Zip:	Hartford, CT 61053706
Resp Party Town Number:	64
Resp Party Phone:	8605483204
Resp Party Fax:	Not reported
Resp Party Name 2:	Lisa Melnicsak (Environmental Analyst)
Resp Party Address 2:	Not reported
Resp Party Phone 2:	8606274871
Investigator Id:	29
Follow Update:	Not reported
Area Lextent:	Not reported
Annual Precipitation:	Not reported
Affected Population:	Not reported
Population Setting:	Not reported
Ground Water Direction:	Not reported
Ground Water Gradient:	Not reported
Hydro Basin:	Not reported
Drastic:	Not reported
Geo Setting:	Not reported
Ground Water Classification:	GA
Receptor:	Not reported
Ground Water Flow Direction:	Not reported
Ground Water Depth:	Not reported
Areas Of Concern:	Not reported
Free Product Inches:	Not reported
Fund Date:	Not reported
Fund Planned:	No
Fund Obligated:	No
Fund Outlayed:	No
Fund Judgment:	No
Fund Recovered:	No
Cellar Borings:	No
Install Micro Wells:	No
Ground Water Sample:	Yes
Soil Sample:	Yes
Soil Gas:	No
Site Inspect:	No
Soil Excavate:	Yes
Geo Probe:	No
Survey:	No
Potable Well Sample:	No

ARMY AVIATION SUPPORT FACILITY (Continued) **U003973394**

Sample MWS:	No
Ground Water Gauging:	No
Soil Venting:	No
Active:	No
NOV Action:	None
NOV Issued:	Not reported
NOV Due:	Not reported
NOV Received:	Not reported
NOV Closed:	Not reported
NOV Disc Date:	Not reported
NOV Issued Date:	Not reported
NOV Compliance Sched:	Not reported
NOV Admin Order:	Not reported
NOV Referred To Ag:	Not reported
Stop All NOV Actions:	No
Release Invest Rpt:	No
DEP App Letter 1:	No
Correct Action Plan:	No
DEP App Letter 2:	No
Rem Sys Install:	No
Rem Sys Install Date:	Not reported
Closure Date:	Not reported
Rem Sys Monitoring Rpt:	No
Qrtly Gwater Mon Rpts:	No
Closure Req Rpt:	No
DEP Closure Letter:	No
Referred To:	Not reported
No Wells:	Not reported
Lph Wells:	Not reported
User Stamp:	allison forrest/ForrestA
Date Stamp:	04/10/2013
Correspondence:	Not reported
Environmental Impact:	Not reported
FollowUp:	Not reported
GW Comments:	Not reported
Location Desc:	Not reported
NOV Comments:	Not reported
Release Desc:	Not reported
Running Comments:	UST Enforcement Files and LUST Files
Work Performed:	Not reported

UST:

Facility ID:	165-9175
Facility Address 2:	Not reported
Substance:	Gasoline
Last Use Date:	05/01/1991
Tank ID:	A-1
Closure Status:	Tank was Removed From Ground
Compartment ID:	a
Tank Status:	Permanently Closed
Secondary Material:	Not reported
Tank Material:	Asphalt Coated or Bare Steel
Capacity:	99999
Install Date:	06/01/1959
Overfill Installed:	Not reported
Pipe Material:	Bare Steel
Pipe Mode Description:	Not reported

ARMY AVIATION SUPPORT FACILITY (Continued) **U003973394**

Spill Installed:	Not reported
Latitude:	41.938611
Longitude:	-72.682500
Tank Latitude:	Not reported
Tank Longitude:	Not reported

Contact:

Facility ID:	165-9175
Owner Name:	STATE OF CONNECTICUT MILITARY DEPARTMENT
Owner Address:	360 BROAD ST
Owner Address 2:	Not reported
Owner Phone:	(860) 524-4945
Owner Phone Ext:	Not reported
Owner City/State/Zip:	HARTFORD, CT 061053706
Affiliation Type:	Owner
Contact Name:	ROB DOLLAK
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	165-9175
Owner Name:	STATE OF CONNECTICUT MILITARY DEPARTMENT
Owner Address:	360 BROAD ST
Owner Address 2:	Not reported
Owner Phone:	Not reported
Owner Phone Ext:	Not reported
Owner City/State/Zip:	HARTFORD, CT 061053706
Affiliation Type:	Registrant
Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	165-9175
Facility Address 2:	Not reported
Substance:	Heating Oil(on-site consumption)
Last Use Date:	06/01/1989
Tank ID:	A-2
Closure Status:	Tank was Removed From Ground
Compartment ID:	a
Tank Status:	Permanently Closed
Secondary Material:	Not reported
Tank Material:	Asphalt Coated or Bare Steel
Capacity:	8000
Install Date:	06/01/1959
Overfill Installed:	Not reported
Pipe Material:	Bare Steel
Pipe Mode Description:	Not reported
Spill Installed:	Not reported
Latitude:	41.938611
Longitude:	-72.682500
Tank Latitude:	Not reported
Tank Longitude:	Not reported

Contact:

Facility ID:	165-9175
Owner Name:	STATE OF CONNECTICUT MILITARY DEPARTMENT
Owner Address:	360 BROAD ST
Owner Address 2:	Not reported

ARMY AVIATION SUPPORT FACILITY (Continued) **U003973394**

Owner Phone:	(860) 524-4945
Owner Phone Ext:	Not reported
Owner City/State/Zip:	HARTFORD, CT 061053706
Affiliation Type:	Owner
Contact Name:	ROB DOLLAK
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	165-9175
Owner Name:	STATE OF CONNECTICUT MILITARY DEPARTMENT
Owner Address:	360 BROAD ST
Owner Address 2:	Not reported
Owner Phone:	Not reported
Owner Phone Ext:	Not reported
Owner City/State/Zip:	HARTFORD, CT 061053706
Affiliation Type:	Registrant
Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	165-9175
Facility Address 2:	Not reported
Substance:	Not reported
Last Use Date:	07/01/2009
Tank ID:	A1R1
Closure Status:	Tank was Removed From Ground
Compartment ID:	a
Tank Status:	Permanently Closed
Secondary Material:	Double Walled
Tank Material:	Coated & Cathodically Protected Steel (sti-P3)
Capacity:	15000
Install Date:	05/01/1991
Overfill Installed:	Not reported
Pipe Material:	Bare Steel
Pipe Mode Description:	Double Walled
Spill Installed:	Not reported
Latitude:	41.938611
Longitude:	-72.682500
Tank Latitude:	41.942530
Tank Longitude:	-72.675040

Contact:

Facility ID:	165-9175
Owner Name:	STATE OF CONNECTICUT MILITARY DEPARTMENT
Owner Address:	360 BROAD ST
Owner Address 2:	Not reported
Owner Phone:	(860) 524-4945
Owner Phone Ext:	Not reported
Owner City/State/Zip:	HARTFORD, CT 061053706
Affiliation Type:	Owner
Contact Name:	ROB DOLLAK
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	165-9175
Owner Name:	STATE OF CONNECTICUT MILITARY DEPARTMENT
Owner Address:	360 BROAD ST

ARMY AVIATION SUPPORT FACILITY (Continued) **U003973394**

Owner Address 2:	Not reported
Owner Phone:	Not reported
Owner Phone Ext:	Not reported
Owner City/State/Zip:	HARTFORD, CT 061053706
Affiliation Type:	Registrant
Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	165-9175
Facility Address 2:	Not reported
Substance:	Not reported
Last Use Date:	07/01/2009
Tank ID:	A2R1
Closure Status:	Tank was Removed From Ground
Compartment ID:	a
Tank Status:	Permanently Closed
Secondary Material:	Double Walled
Tank Material:	Coated & Cathodically Protected Steel (sti-P3)
Capacity:	15000
Install Date:	05/01/1991
Overfill Installed:	Not reported
Pipe Material:	Bare Steel
Pipe Mode Description:	Double Walled
Spill Installed:	Not reported
Latitude:	41.938611
Longitude:	-72.682500
Tank Latitude:	41.942530
Tank Longitude:	-72.675040

Contact:

Facility ID:	165-9175
Owner Name:	STATE OF CONNECTICUT MILITARY DEPARTMENT
Owner Address:	360 BROAD ST
Owner Address 2:	Not reported
Owner Phone:	(860) 524-4945
Owner Phone Ext:	Not reported
Owner City/State/Zip:	HARTFORD, CT 061053706
Affiliation Type:	Owner
Contact Name:	ROB DOLLAK
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	165-9175
Owner Name:	STATE OF CONNECTICUT MILITARY DEPARTMENT
Owner Address:	360 BROAD ST
Owner Address 2:	Not reported
Owner Phone:	Not reported
Owner Phone Ext:	Not reported
Owner City/State/Zip:	HARTFORD, CT 061053706
Affiliation Type:	Registrant
Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	165-9175

ARMY AVIATION SUPPORT FACILITY (Continued) **U003973394**

Facility Address 2:	Not reported
Substance:	Not reported
Last Use Date:	07/01/2009
Tank ID:	A3R1
Closure Status:	Tank was Removed From Ground
Compartment ID:	a
Tank Status:	Permanently Closed
Secondary Material:	Double Walled
Tank Material:	Coated & Cathodically Protected Steel (sti-P3)
Capacity:	15000
Install Date:	05/01/1991
Overfill Installed:	Not reported
Pipe Material:	Bare Steel
Pipe Mode Description:	Double Walled
Spill Installed:	Not reported
Latitude:	41.938611
Longitude:	-72.682500
Tank Latitude:	41.942360
Tank Longitude:	-72.674990

Contact:

Facility ID:	165-9175
Owner Name:	STATE OF CONNECTICUT MILITARY DEPARTMENT
Owner Address:	360 BROAD ST
Owner Address 2:	Not reported
Owner Phone:	(860) 524-4945
Owner Phone Ext:	Not reported
Owner City/State/Zip:	HARTFORD, CT 061053706
Affiliation Type:	Owner
Contact Name:	ROB DOLLAK
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	165-9175
Owner Name:	STATE OF CONNECTICUT MILITARY DEPARTMENT
Owner Address:	360 BROAD ST
Owner Address 2:	Not reported
Owner Phone:	Not reported
Owner Phone Ext:	Not reported
Owner City/State/Zip:	HARTFORD, CT 061053706
Affiliation Type:	Registrant
Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	165-9175
Facility Address 2:	Not reported
Substance:	Not reported
Last Use Date:	07/01/2009
Tank ID:	A4R1
Closure Status:	Tank was Removed From Ground
Compartment ID:	a
Tank Status:	Permanently Closed
Secondary Material:	Double Walled
Tank Material:	Coated & Cathodically Protected Steel (sti-P3)
Capacity:	15000
Install Date:	05/01/1991

ARMY AVIATION SUPPORT FACILITY (Continued) **U003973394**

Overfill Installed:	Not reported
Pipe Material:	Bare Steel
Pipe Mode Description:	Double Walled
Spill Installed:	Not reported
Latitude:	41.938611
Longitude:	-72.682500
Tank Latitude:	41.942360
Tank Longitude:	-72.674990

Contact:

Facility ID:	165-9175
Owner Name:	STATE OF CONNECTICUT MILITARY DEPARTMENT
Owner Address:	360 BROAD ST
Owner Address 2:	Not reported
Owner Phone:	(860) 524-4945
Owner Phone Ext:	Not reported
Owner City/State/Zip:	HARTFORD, CT 061053706
Affiliation Type:	Owner
Contact Name:	ROB DOLLAK
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	165-9175
Owner Name:	STATE OF CONNECTICUT MILITARY DEPARTMENT
Owner Address:	360 BROAD ST
Owner Address 2:	Not reported
Owner Phone:	Not reported
Owner Phone Ext:	Not reported
Owner City/State/Zip:	HARTFORD, CT 061053706
Affiliation Type:	Registrant
Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	165-9175
Facility Address 2:	Not reported
Substance:	Used Oil
Last Use Date:	08/01/1993
Tank ID:	C1
Closure Status:	Tank was Removed From Ground
Compartment ID:	a
Tank Status:	Permanently Closed
Secondary Material:	Not reported
Tank Material:	Asphalt Coated or Bare Steel
Capacity:	1000
Install Date:	05/01/1958
Overfill Installed:	Not reported
Pipe Material:	Bare Steel
Pipe Mode Description:	Not reported
Spill Installed:	Not reported
Latitude:	41.938611
Longitude:	-72.682500
Tank Latitude:	Not reported
Tank Longitude:	Not reported

Contact:

Facility ID:	165-9175

ARMY AVIATION SUPPORT FACILITY (Continued) **U003973394**

Owner Name:	STATE OF CONNECTICUT MILITARY DEPARTMENT
Owner Address:	360 BROAD ST
Owner Address 2:	Not reported
Owner Phone:	(860) 524-4945
Owner Phone Ext:	Not reported
Owner City/State/Zip:	HARTFORD, CT 061053706
Affiliation Type:	Owner
Contact Name:	ROB DOLLAK
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	165-9175
Owner Name:	STATE OF CONNECTICUT MILITARY DEPARTMENT
Owner Address:	360 BROAD ST
Owner Address 2:	Not reported
Owner Phone:	Not reported
Owner Phone Ext:	Not reported
Owner City/State/Zip:	HARTFORD, CT 061053706
Affiliation Type:	Registrant
Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	165-9175
Facility Address 2:	Not reported
Substance:	Not reported
Last Use Date:	07/01/2009
Tank ID:	C1R1
Closure Status:	Tank was Removed From Ground
Compartment ID:	a
Tank Status:	Permanently Closed
Secondary Material:	Not reported
Tank Material:	Coated & Cathodically Protected Steel (sti-P3)
Capacity:	1000
Install Date:	08/01/1993
Overfill Installed:	Not reported
Pipe Material:	Bare Steel
Pipe Mode Description:	Double Walled
Spill Installed:	Not reported
Latitude:	41.938611
Longitude:	-72.682500
Tank Latitude:	41.942360
Tank Longitude:	-72.674990

Contact:

Facility ID:	165-9175
Owner Name:	STATE OF CONNECTICUT MILITARY DEPARTMENT
Owner Address:	360 BROAD ST
Owner Address 2:	Not reported
Owner Phone:	(860) 524-4945
Owner Phone Ext:	Not reported
Owner City/State/Zip:	HARTFORD, CT 061053706
Affiliation Type:	Owner
Contact Name:	ROB DOLLAK
Contact Title:	Not reported
Contact Email:	Not reported

ARMY AVIATION SUPPORT FACILITY (Continued) **U003973394**

Facility ID:	165-9175
Owner Name:	STATE OF CONNECTICUT MILITARY DEPARTMENT
Owner Address:	360 BROAD ST
Owner Address 2:	Not reported
Owner Phone:	Not reported
Owner Phone Ext:	Not reported
Owner City/State/Zip:	HARTFORD, CT 061053706
Affiliation Type:	Registrant
Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	165-9175
Facility Address 2:	Not reported
Substance:	Heating Oil(on-site consumption)
Last Use Date:	Not reported
Tank ID:	D1
Closure Status:	Tank was Abandoned in Ground
Compartment ID:	a
Tank Status:	Permanently Closed
Secondary Material:	Not reported
Tank Material:	Asphalt Coated or Bare Steel
Capacity:	550
Install Date:	01/01/1950
Overfill Installed:	Not reported
Pipe Material:	Bare Steel
Pipe Mode Description:	Not reported
Spill Installed:	Not reported
Latitude:	41.938611
Longitude:	-72.682500
Tank Latitude:	Not reported
Tank Longitude:	Not reported

Contact:

Facility ID:	165-9175
Owner Name:	STATE OF CONNECTICUT MILITARY DEPARTMENT
Owner Address:	360 BROAD ST
Owner Address 2:	Not reported
Owner Phone:	(860) 524-4945
Owner Phone Ext:	Not reported
Owner City/State/Zip:	HARTFORD, CT 061053706
Affiliation Type:	Owner
Contact Name:	ROB DOLLAK
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	165-9175
Owner Name:	STATE OF CONNECTICUT MILITARY DEPARTMENT
Owner Address:	360 BROAD ST
Owner Address 2:	Not reported
Owner Phone:	Not reported
Owner Phone Ext:	Not reported
Owner City/State/Zip:	HARTFORD, CT 061053706
Affiliation Type:	Registrant
Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	Not reported

ARMY AVIATION SUPPORT FACILITY (Continued) **U003973394**

Facility ID:	165-9175
Facility Address 2:	Not reported
Substance:	Heating Oil(on-site consumption)
Last Use Date:	Not reported
Tank ID:	E1
Closure Status:	Tank was Abandoned in Ground
Compartment ID:	a
Tank Status:	Permanently Closed
Secondary Material:	Not reported
Tank Material:	Asphalt Coated or Bare Steel
Capacity:	1000
Install Date:	01/01/1950
Overfill Installed:	Not reported
Pipe Material:	Bare Steel
Pipe Mode Description:	Not reported
Spill Installed:	Not reported
Latitude:	41.938611
Longitude:	-72.682500
Tank Latitude:	Not reported
Tank Longitude:	Not reported

Contact:

Facility ID:	165-9175
Owner Name:	STATE OF CONNECTICUT MILITARY DEPARTMENT
Owner Address:	360 BROAD ST
Owner Address 2:	Not reported
Owner Phone:	(860) 524-4945
Owner Phone Ext:	Not reported
Owner City/State/Zip:	HARTFORD, CT 061053706
Affiliation Type:	Owner
Contact Name:	ROB DOLLAK
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	165-9175
Owner Name:	STATE OF CONNECTICUT MILITARY DEPARTMENT
Owner Address:	360 BROAD ST
Owner Address 2:	Not reported
Owner Phone:	Not reported
Owner Phone Ext:	Not reported
Owner City/State/Zip:	HARTFORD, CT 061053706
Affiliation Type:	Registrant
Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	165-9175
Facility Address 2:	Not reported
Substance:	Heating Oil(on-site consumption)
Last Use Date:	01/01/1993
Tank ID:	F1
Closure Status:	Tank Filled with Inert Material
Compartment ID:	a
Tank Status:	Permanently Closed
Secondary Material:	Not reported
Tank Material:	Asphalt Coated or Bare Steel
Capacity:	500

ARMY AVIATION SUPPORT FACILITY (Continued) **U003973394**

Install Date:	01/01/1950
Overfill Installed:	Not reported
Pipe Material:	Bare Steel
Pipe Mode Description:	Not reported
Spill Installed:	Not reported
Latitude:	41.938611
Longitude:	-72.682500
Tank Latitude:	Not reported
Tank Longitude:	Not reported

Contact:

Facility ID:	165-9175
Owner Name:	STATE OF CONNECTICUT MILITARY DEPARTMENT
Owner Address:	360 BROAD ST
Owner Address 2:	Not reported
Owner Phone:	(860) 524-4945
Owner Phone Ext:	Not reported
Owner City/State/Zip:	HARTFORD, CT 061053706
Affiliation Type:	Owner
Contact Name:	ROB DOLLAK
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	165-9175
Owner Name:	STATE OF CONNECTICUT MILITARY DEPARTMENT
Owner Address:	360 BROAD ST
Owner Address 2:	Not reported
Owner Phone:	Not reported
Owner Phone Ext:	Not reported
Owner City/State/Zip:	HARTFORD, CT 061053706
Affiliation Type:	Registrant
Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	165-9175
Facility Address 2:	Not reported
Substance:	Diesel
Last Use Date:	01/01/1993
Tank ID:	G1
Closure Status:	Tank Filled with Inert Material
Compartment ID:	a
Tank Status:	Permanently Closed
Secondary Material:	Not reported
Tank Material:	Asphalt Coated or Bare Steel
Capacity:	5000
Install Date:	01/01/1955
Overfill Installed:	Not reported
Pipe Material:	Bare Steel
Pipe Mode Description:	Not reported
Spill Installed:	Not reported
Latitude:	41.938611
Longitude:	-72.682500
Tank Latitude:	Not reported
Tank Longitude:	Not reported

Contact:

ARMY AVIATION SUPPORT FACILITY (Continued) **U003973394**

Facility ID:	165-9175
Owner Name:	STATE OF CONNECTICUT MILITARY DEPARTMENT
Owner Address:	360 BROAD ST
Owner Address 2:	Not reported
Owner Phone:	(860) 524-4945
Owner Phone Ext:	Not reported
Owner City/State/Zip:	HARTFORD, CT 061053706
Affiliation Type:	Owner
Contact Name:	ROB DOLLAK
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	165-9175
Owner Name:	STATE OF CONNECTICUT MILITARY DEPARTMENT
Owner Address:	360 BROAD ST
Owner Address 2:	Not reported
Owner Phone:	Not reported
Owner Phone Ext:	Not reported
Owner City/State/Zip:	HARTFORD, CT 061053706
Affiliation Type:	Registrant
Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	165-9175
Facility Address 2:	Not reported
Substance:	Gasoline
Last Use Date:	01/01/1993
Tank ID:	H1
Closure Status:	Tank Filled with Inert Material
Compartment ID:	a
Tank Status:	Permanently Closed
Secondary Material:	Not reported
Tank Material:	Asphalt Coated or Bare Steel
Capacity:	5000
Install Date:	01/01/1955
Overfill Installed:	Not reported
Pipe Material:	Bare Steel
Pipe Mode Description:	Not reported
Spill Installed:	Not reported
Latitude:	41.938611
Longitude:	-72.682500
Tank Latitude:	Not reported
Tank Longitude:	Not reported

Contact:

Facility ID:	165-9175
Owner Name:	STATE OF CONNECTICUT MILITARY DEPARTMENT
Owner Address:	360 BROAD ST
Owner Address 2:	Not reported
Owner Phone:	(860) 524-4945
Owner Phone Ext:	Not reported
Owner City/State/Zip:	HARTFORD, CT 061053706
Affiliation Type:	Owner
Contact Name:	ROB DOLLAK
Contact Title:	Not reported
Contact Email:	Not reported

ARMY AVIATION SUPPORT FACILITY (Continued) **U003973394**

Facility ID:	165-9175
Owner Name:	STATE OF CONNECTICUT MILITARY DEPARTMENT
Owner Address:	360 BROAD ST
Owner Address 2:	Not reported
Owner Phone:	Not reported
Owner Phone Ext:	Not reported
Owner City/State/Zip:	HARTFORD, CT 061053706
Affiliation Type:	Registrant
Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	165-9175
Facility Address 2:	Not reported
Substance:	Not reported
Last Use Date:	Not reported
Tank ID:	I1
Closure Status:	Tank was Removed From Ground
Compartment ID:	a
Tank Status:	Permanently Closed
Secondary Material:	Not reported
Tank Material:	Asphalt Coated or Bare Steel
Capacity:	10000
Install Date:	01/01/1942
Overfill Installed:	Not reported
Pipe Material:	Bare Steel
Pipe Mode Description:	Not reported
Spill Installed:	Not reported
Latitude:	41.938611
Longitude:	-72.682500
Tank Latitude:	Not reported
Tank Longitude:	Not reported

Contact:

Facility ID:	165-9175
Owner Name:	STATE OF CONNECTICUT MILITARY DEPARTMENT
Owner Address:	360 BROAD ST
Owner Address 2:	Not reported
Owner Phone:	(860) 524-4945
Owner Phone Ext:	Not reported
Owner City/State/Zip:	HARTFORD, CT 061053706
Affiliation Type:	Owner
Contact Name:	ROB DOLLAK
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	165-9175
Owner Name:	STATE OF CONNECTICUT MILITARY DEPARTMENT
Owner Address:	360 BROAD ST
Owner Address 2:	Not reported
Owner Phone:	Not reported
Owner Phone Ext:	Not reported
Owner City/State/Zip:	HARTFORD, CT 061053706
Affiliation Type:	Registrant
Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	Not reported

ARMY AVIATION SUPPORT FACILITY (Continued) **U003973394**

Facility ID:	165-9175
Facility Address 2:	Not reported
Substance:	Not reported
Last Use Date:	Not reported
Tank ID:	J1
Closure Status:	Tank was Removed From Ground
Compartment ID:	a
Tank Status:	Permanently Closed
Secondary Material:	Not reported
Tank Material:	Asphalt Coated or Bare Steel
Capacity:	10000
Install Date:	01/01/1942
Overfill Installed:	Not reported
Pipe Material:	Bare Steel
Pipe Mode Description:	Not reported
Spill Installed:	Not reported
Latitude:	41.938611
Longitude:	-72.682500
Tank Latitude:	Not reported
Tank Longitude:	Not reported

Contact:

Facility ID:	165-9175
Owner Name:	STATE OF CONNECTICUT MILITARY DEPARTMENT
Owner Address:	360 BROAD ST
Owner Address 2:	Not reported
Owner Phone:	(860) 524-4945
Owner Phone Ext:	Not reported
Owner City/State/Zip:	HARTFORD, CT 061053706
Affiliation Type:	Owner
Contact Name:	ROB DOLLAK
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	165-9175
Owner Name:	STATE OF CONNECTICUT MILITARY DEPARTMENT
Owner Address:	360 BROAD ST
Owner Address 2:	Not reported
Owner Phone:	Not reported
Owner Phone Ext:	Not reported
Owner City/State/Zip:	HARTFORD, CT 061053706
Affiliation Type:	Registrant
Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	165-9175
Facility Address 2:	Not reported
Substance:	Not reported
Last Use Date:	Not reported
Tank ID:	K1
Closure Status:	Tank was Removed From Ground
Compartment ID:	a
Tank Status:	Permanently Closed
Secondary Material:	Not reported
Tank Material:	Asphalt Coated or Bare Steel
Capacity:	10000

ARMY AVIATION SUPPORT FACILITY (Continued) **U003973394**

Install Date:	01/01/1942
Overfill Installed:	Not reported
Pipe Material:	Bare Steel
Pipe Mode Description:	Not reported
Spill Installed:	Not reported
Latitude:	41.938611
Longitude:	-72.682500
Tank Latitude:	Not reported
Tank Longitude:	Not reported

Contact:

Facility ID:	165-9175
Owner Name:	STATE OF CONNECTICUT MILITARY DEPARTMENT
Owner Address:	360 BROAD ST
Owner Address 2:	Not reported
Owner Phone:	(860) 524-4945
Owner Phone Ext:	Not reported
Owner City/State/Zip:	HARTFORD, CT 061053706
Affiliation Type:	Owner
Contact Name:	ROB DOLLAK
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	165-9175
Owner Name:	STATE OF CONNECTICUT MILITARY DEPARTMENT
Owner Address:	360 BROAD ST
Owner Address 2:	Not reported
Owner Phone:	Not reported
Owner Phone Ext:	Not reported
Owner City/State/Zip:	HARTFORD, CT 061053706
Affiliation Type:	Registrant
Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	165-9175
Facility Address 2:	Not reported
Substance:	Not reported
Last Use Date:	Not reported
Tank ID:	L1
Closure Status:	Tank was Removed From Ground
Compartment ID:	a
Tank Status:	Permanently Closed
Secondary Material:	Not reported
Tank Material:	Asphalt Coated or Bare Steel
Capacity:	10000
Install Date:	01/01/1942
Overfill Installed:	Not reported
Pipe Material:	Bare Steel
Pipe Mode Description:	Not reported
Spill Installed:	Not reported
Latitude:	41.938611
Longitude:	-72.682500
Tank Latitude:	Not reported
Tank Longitude:	Not reported

Contact:

ARMY AVIATION SUPPORT FACILITY (Continued) **U003973394**

Facility ID:	165-9175
Owner Name:	STATE OF CONNECTICUT MILITARY DEPARTMENT
Owner Address:	360 BROAD ST
Owner Address 2:	Not reported
Owner Phone:	(860) 524-4945
Owner Phone Ext:	Not reported
Owner City/State/Zip:	HARTFORD, CT 061053706
Affiliation Type:	Owner
Contact Name:	ROB DOLLAK
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	165-9175
Owner Name:	STATE OF CONNECTICUT MILITARY DEPARTMENT
Owner Address:	360 BROAD ST
Owner Address 2:	Not reported
Owner Phone:	Not reported
Owner Phone Ext:	Not reported
Owner City/State/Zip:	HARTFORD, CT 061053706
Affiliation Type:	Registrant
Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	Not reported

CPCS:

Site Type:	LUST
Lust Status code:	3
Lust Status:	Cleanup Initiated
PTP Form:	Not reported
Program:	Not reported
Comments:	A Ust Notification Form Received On 7/7/89 Has A 100k Aviation Fuel System Of 4-25k Usts And An 8k #2fo Ust Removed On 6/8/89. A Ust Notification Form Received On 1/22/93 Mentions The Abandonment Of A 500 Gallon #2fo Ust, 5k Diesel Fuel Ust, And 5k Gas
Site Type Definition:	Leaking Underground Storage Tanks Rem. Started

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D13 **CT MILITARY DEPT ARMY AVIATION SUPPORT FACILITY** **FINDS** **1016213996**
BRADLEY FIELD ROUTE 75 **ECHO** **N/A**
< 1/8 **WINDSOR LOCKS, CT 06096**
1 ft.

Site 1 of 2 in cluster D

Relative: Higher

FINDS:

Actual: 180 ft.

Registry ID: 110006176716

Environmental Interest/Information System
FEDERAL FACILITY HAZARDOUS WASTE DOCKET

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

CT MILITARY DEPT ARMY AVIATION SUPPORT FACILITY (Continued) **1016213996**

Connecticut Site Information Management System (SIMS) is part of a suite of web-based applications designed to allow the Connecticut Department of Environmental Protection (DEP) staff to harmonize environmental interest information from disparate systems in a single agency-wide data repository (known as CFI). SIMS provides tools for identifying and resolving duplicate data, querying data (using both tabular and geospatial methods), and viewing/maintaining documents associated to the data.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1016213996
Registry ID:	110006176716
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110006176716

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14 **CT SPILLS** **S106890133**
N/A

359 ELLA GRASSO BLVD
WINDSOR LOCKS, CT

< 1/8
1 ft.

Relative:
Lower

Actual:
170 ft.

SPILLS:

Year of Database:	2005
Case Number:	200502090
Who Took Spill:	202
Assigned To:	0
Report Date:	04/10/2005
Report Time:	15:17:34
Date Release:	04/10/2005
Time Responded:	Not reported
Reported By:	804
Phone:	860 6271461
Representing:	fd
Terminated:	YES
Recovd (Total):	0
Total (Water):	0
Facility Status:	Closed
Continuous Spill:	False
Released Substance:	GASOLINE
Qty:	1 (Gallons)
Emergency Measure:	Speedy Dry
Water Body:	none
Discharger:	Not reported
Telephone:	Not reported
Responsible Party:	Not reported
RP Address 1:	Not reported
RP City,St,Zip:	CT
Historic:	False
Waterbody:	False
Time Stamp:	2005-04-10 15:18:33
Sr Inspector:	Mazzoccolli,Christina
At Inspctor:	**NO RESPONSE
User Stamp:	Not reported
Comments:	Not reported
Action:	Sanded

(Continued) **S106890133**

Other Action:	Not reported
Agency ID:	DEP Dispatch
Other Agency:	Not reported
DEP Bureau:	Not reported
DEP Agency:	Not reported
Agency ID:	LOCAL FIRE DEPARTMENT
Other Agency:	Not reported
DEP Bureau:	Not reported
DEP Agency:	Not reported
Cause ID:	Fuel Tank Failure
Other Cause:	Not reported
Media ID:	Ground Surface
Other Media:	Not reported
Class ID:	Transportation
Other Class:	Not reported
Release Type:	petroleum
Other Release:	Not reported
Waterbody:	Other
Other Wtrbody:	none

D15 **GAGLIARDUCCI CONSTRUCTION, INC** **ICIS** **1006672399**
BRADLEY AIR, PERIMETER RD **US AIRS** **N/A**
< 1/8 **WINDSOR LOCKS, CT 06096** **FINDS**
1 ft. **ECHO**

Site 2 of 2 in cluster D

Relative: Higher
Actual: 176 ft.

ICIS:

Enforcement Action ID:	CT000A0000090030892600002
FRS ID:	110007242028
Action Name:	GAGLIARDUCCI CONSTRUCTION, INC 090030892600002
Facility Name:	GAGLIARDUCCI CONSTRUCTION, INC
Facility Address:	BRADLEY AIR, PERIMETER RD WINDSOR LOCKS, CT 06096
Enforcement Action Type:	Notice of Violation
Facility County:	HARTFORD
Program System Acronym:	AIR
Enforcement Action Forum Desc:	Administrative - Informal
EA Type Code:	NOV
Facility SIC Code:	1629
Federal Facility ID:	Not reported
Latitude in Decimal Degrees:	41.9425
Longitude in Decimal Degrees:	-72.675556
Permit Type Desc:	Not reported
Program System Acronym:	CT0000000900308926
Facility NAICS Code:	999999
Tribal Land Code:	Not reported

Enforcement Action ID:	CT000A0000090030892600001
FRS ID:	110007242028
Action Name:	GAGLIARDUCCI CONSTRUCTION, INC 090030892600001
Facility Name:	GAGLIARDUCCI CONSTRUCTION, INC
Facility Address:	BRADLEY AIR, PERIMETER RD WINDSOR LOCKS, CT 06096
Enforcement Action Type:	Notice of Violation
Facility County:	HARTFORD
Program System Acronym:	AIR
Enforcement Action Forum Desc:	Administrative - Informal
EA Type Code:	NOV

GAGLIARDUCCI CONSTRUCTION, INC (Continued) **1006672399**

Facility SIC Code:	1629
Federal Facility ID:	Not reported
Latitude in Decimal Degrees:	41.9425
Longitude in Decimal Degrees:	-72.675556
Permit Type Desc:	Not reported
Program System Acronym:	CT0000000900308926
Facility NAICS Code:	999999
Tribal Land Code:	Not reported

US AIRS MINOR:

Envid:	1006672399
Region Code:	01
Programmatic ID:	AIR CT0000000900308926
Facility Registry ID:	110007242028
D and B Number:	Not reported
Primary SIC Code:	1629
NAICS Code:	999999
Default Air Classification Code:	MIN
Facility Type of Ownership Code:	POF
Air CMS Category Code:	Not reported
HPV Status:	Not reported

US AIRS MINOR:

Region Code:	01
Programmatic ID:	AIR CT0000000900308926
Facility Registry ID:	110007242028
Air Operating Status Code:	OPR
Default Air Classification Code:	MIN
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	1994-10-19 00:00:00
Activity Status Date:	1994-10-19 00:00:00
Activity Group:	Enforcement Action
Activity Type:	Administrative - Informal
Activity Status:	Achieved

Region Code:	01
Programmatic ID:	AIR CT0000000900308926
Facility Registry ID:	110007242028
Air Operating Status Code:	OPR
Default Air Classification Code:	MIN
Air Program:	State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date:	1994-11-28 00:00:00
Activity Status Date:	1994-11-28 00:00:00
Activity Group:	Enforcement Action
Activity Type:	Administrative - Informal
Activity Status:	Achieved

US AIRS MINOR:

Envid:	1006672399
Region Code:	01
Programmatic ID:	AIR CT0000000900308926
Facility Registry ID:	110007242028
D and B Number:	Not reported
Primary SIC Code:	1629
NAICS Code:	999999

GAGLIARDUCCI CONSTRUCTION, INC (Continued) **1006672399**

Default Air Classification Code: MIN
Facility Type of Ownership Code: POF
Air CMS Category Code: Not reported
HPV Status: Not reported

US AIRS MINOR:
Region Code: 01
Programmatic ID: AIR CT0000000900308926
Facility Registry ID: 110007242028
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1994-10-19 00:00:00
Activity Status Date: 1994-10-19 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Informal
Activity Status: Achieved

Region Code: 01
Programmatic ID: AIR CT0000000900308926
Facility Registry ID: 110007242028
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1994-11-28 00:00:00
Activity Status Date: 1994-11-28 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Informal
Activity Status: Achieved

FINDS:

Registry ID: 110007242028

Environmental Interest/Information System
AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

AIR MINOR

Connecticut Site Information Management System (SIMS) is part of a suite of web-based applications designed to allow the Connecticut Department of Environmental Protection (DEP) staff to harmonize environmental interest information from disparate systems in a single agency-wide data repository (known as CFI). SIMS provides tools for identifying and resolving duplicate data, querying data (using both tabular and geospatial methods), and viewing/maintaining documents

GAGLIARDUCCI CONSTRUCTION, INC (Continued) **1006672399**

associated to the data.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1006672399
Registry ID:	110007242028
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110007242028

B16 **RAINBOW AUTOMOTIVE** **EDR Hist Auto** **1020704400**
ENE **391 ELLA GRASSO TPKE** **N/A**
< 1/8 **WINDSOR LOCKS, CT 06096**
0.027 mi.
142 ft. **Site 5 of 7 in cluster B**

Relative:
Higher

Actual:
177 ft.

EDR Hist Auto

Year:	Name:	Type:
1985	MID-TOWN GARAGE INC	New And Used Car Dealers
1992	RAINBOW AUTOMOTIVE	General Automotive Repair Shops
1993	RAINBOW AUTOMOTIVE	General Automotive Repair Shops
1994	RAINBOW AUTOMOTIVE	General Automotive Repair Shops
1995	RAINBOW AUTOMOTIVE	General Automotive Repair Shops
1996	RAINBOW AUTOMOTIVE	General Automotive Repair Shops
2003	TY SUBARU LLC	New And Used Car Dealers

B17 **TY SUBARU** **CT MANIFEST** **S109750379**
ENE **391 ELLA GRASSO TPK** **N/A**
< 1/8 **WINDSOR, CT 06096**
0.027 mi.
142 ft. **Site 6 of 7 in cluster B**

Relative:
Higher

Actual:
177 ft.

CT MANIFEST:

EPA ID:	CTP000022837
Years:	1999

Details:

Year:	1999
EPA ID:	CTP000022837
Manifest Id:	CTF0844417
TSDF EPA ID:	CTD021816889
TSDF Name:	UNITED OIL RECOVERY DBA ADV LIQ REC
TSDF Address:	136 GRACEY AVE
TSDF City,State,Zip:	MERIDEN, CT 06451
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	CTD018844050
Transporter Name:	CONNECTICUT WASTE OIL INC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported

TY SUBARU (Continued) **S109750379**

Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	391 ELLA GRASSO TPK
Generator City,State,Zip:	WINDSOR, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	N
Date Shipped:	08/05/1999
Date Received:	08/05/1999
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	env. Hazardous substance liquid nos
Number of Containers:	001
Container Type:	TT
Quantity:	550
Weight/Volume:	G
Batch Number:	3037, 3037
EPA Waste Codes:	F001
Copies:	1, 2
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	CTF08444171

Details as of 2013:

Year:	1999
EPAID:	CTP000022837
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	8606541600
Special Handling:	Not reported
Last Modified Date:	04/26/2004
Last Modified By:	IG

Waste as of 2013:

Year:	1999
Manifest ID:	CTF0844417
Waste Occurrence:	1
UNNA:	3082
Hazard Class:	9
US Dot Description:	env. Hazardous substance liquid nos
Number of Containers:	001

TY SUBARU (Continued) **S109750379**

Container Type:	TT
Quantity:	550
Weight/Volume:	G
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2004-04-26 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	1999
Manifest ID:	CTF0844417
Waste Occurrence:	1
EPA Waste Code:	F001
Recycled Waste?:	False
Last Modified Date:	2004-04-26 00:00:00
Last Modified By:	IG

B18 **MID-TOWN GARAGE, INC.** **CT SDADB** **S104563664**
ENE **391 ELLA GRASSO TURNPIKE** **CT PROPERTY** **N/A**
< 1/8 **WINDSOR LOCKS, CT**
0.027 mi.
142 ft. **Site 7 of 7 in cluster B**

Relative:
Higher

Actual:
177 ft.

Site Discovery and Assessment:

Facility ID:	5450
Rem Master ID:	4872
PTP Id:	2689
WPC Number:	Not reported
Postal District:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Lat/Long Determined By:	Not reported
Ground Water Quality Classification:	Not reported
Surface Water Quality Classification:	Not reported
Waste Type:	Not reported
Disposal:	Not reported
Sample Data Available:	False
Updated By:	Not reported
Update Program:	Not reported
Updated:	Not reported
Date Created:	Not reported
Duplicate:	False

SDA Federal:

EPA CERCLIS Id:	Not reported
Number EPA RCRIS Id:	Not reported
Site on EPA's CERCLIS:	Not reported
Site Archived from CERCLIS:	Not reported
Archive Date:	Not reported
EPA's Removal at Site:	Not reported
Deferred to another EPA Program:	Not reported
EPA Env Priority Initiative Site:	Not reported
Federal Facility:	Not reported
Site on EPA's National Priority List:	Not reported
Part of an NPL site:	Not reported
RCRA Generator Status:	Not reported
RCRA Permit Status:	Not reported

MID-TOWN GARAGE, INC. (Continued) **S104563664**

SDA Referral:

Referral Id:	5631
Source of referral:	PTP
Date Received:	5/1/1998
Staff Assigned:	Not reported
Remediation Program:	PTP
Date dt_assigned:	Not reported
Remediation Complete Approved DEP/Verified by LEP:	5/1/1998
Outcome:	PTP

SDA Remedial:

Remedial Id:	Not reported
PTP Id:	Not reported
Remediation Program:	Not reported
Remediation Program Entered:	Not reported
Staff Assigned:	Not reported
Remediation Program:	Not reported
Date dt_assign:	Not reported
Project Phase:	Not reported
Order issued:	Not reported
Order Number:	Not reported
Date order issued:	Not reported
Remedial Investigation Start:	Not reported
Remedial Investigation Completed:	Not reported
Remedial Design Start:	Not reported
Remedial Design complet:	Not reported
Remedial Action Start:	Not reported
Remedial Action Completed:	Not reported
Date Oper/ maintenance Started:	Not reported
GW monitoring:	Not reported
Remediation complete Approved DEP/Verified by LEP:	Not reported

SDA Orders:

Order Id:	Not reported
Order Number:	Not reported
Date order issued:	Not reported
Staff Assigned:	Not reported
Type of Order:	Not reported
Order Respondent:	Not reported
Admin Appeal Date:	Not reported
Date of Admin Appeal Ruling:	Not reported
Date of Admin Appeal Ruling:	Not reported
Date of Final Order:	Not reported
Date of Court Appeal:	Not reported
Date of Court Ruling:	Not reported
Date of Court Ruling:	Not reported
Date Order Modified:	Not reported
Date Referred to AG:	Not reported
Judgement:	Not reported
Date of AGR judgement:	Not reported
Penalty assessed:	Not reported
Order Complete:	Not reported
In compliance:	Not reported
Comments:	Not reported

CT Property:

Seller Name:	Francis Quagliaroli

MID-TOWN GARAGE, INC. (Continued) **S104563664**

Buyer Name:	Dimeo Group, LLC
Certifying Party:	Francis Quagliaroli
Certifying Attention Person:	Not reported
Title Of Certifying Person:	Not reported
Certifying Person Address:	Not reported
Certifying Person City,St,Zip:	Not reported
Property Transfer Forms:	Form I (DEP-PERD-PTP-201) when no release of hazardous waste has occurred at the parcel being transferred.
Date Recieved:	05/01/1998
Ackn Date:	07/21/1998
Determination Date:	Not reported
LEP Verified/DEP Approval Date:	Not reported
Rem Id:	3767
Remediation Location Id:	6409
Date Entered:	Not reported
Program:	Property Transfer Program
GAO Site:	False
Staff Full Name:	Not reported
Super/Date:	Not reported
Stage Of Project:	Not reported
RP Level Of Activity:	Not reported
RP Needed Level Of Activity:	Not reported
Staff Level Of Activity:	Not reported
Staff Needed Level Of Activity:	Not reported
Public Intrest:	Not reported
PRP Cooperation:	Not reported
Enforcement Status:	Not reported
Level Of Complexity:	Not reported
Complex Eng Or Sci:	False
Complex Due To Public Involvement:	False
Politically Complex:	False
Complex Enforcement:	False
Coordination With Other Bureaus:	False
EPA Involvement:	False
Staff Prefrence:	Not reported
Readiness For Transfer:	Not reported
Project Transfer Time:	Not reported
Transfer Comments:	Not reported
Staff As Of July 2000:	Not reported
Initial Staff:	Not reported
Type Of Transfer:	Not reported
Salutation:	Not reported
Relationship To Transfer:	transferor
Audit Date:	Not reported
Verif Type:	Not reported
Audit Outcome:	Not reported
GW:	Not reported
Basin:	Not reported
1st Payment:	200
Pay Tag1:	Not reported
2nd Payment:	Not reported
Pay Tag2:	Not reported
RTN:	05/21/1998
Revised:	Not reported
ECAF Received:	Not reported
Old Determination Date:	Not reported
Redeterminationdate:	Not reported

MID-TOWN GARAGE, INC. (Continued) **S104563664**

Previous Determination:	Not reported
Monitoringoption:	Not reported
Postremedialmonitoring:	Not reported
Schedule Of I/R:	Not reported
Schedule Overdue:	Not reported
Aprvl Sched:	Not reported
Yr 1 Report:	Not reported
Yr 2 Report:	Not reported
Report Overdue:	Not reported
Ext Aprvl Sched:	Not reported
License #:	Not reported
Project Phase:	Not reported
PT Comments:	Not reported
EPA Id Number:	Not reported
GW Class:	Not reported
SW Class:	Not reported
AO/C0:	Not reported
Water Lead(Y Or N):	Not reported
Priority:	Not reported
Project Status(A, I Or D):	Not reported
Last Updated:	Not reported
SR Comments:	Not reported
Priority Or Work-Load:	Not reported
Status:	Not reported
Notes:	Not reported
Special Project Name:	Not reported
Special Project Comments:	Not reported
DOT Project:	Not reported
Pt Counter:	Not reported
Project Complete:	False
Project Inactive:	False
Int Deposit #:	Not reported
Deposit #:	Not reported
Spill Case #:	Not reported
Diversion Id:	Not reported
Public Notice:	Not reported
RAP Received:	Not reported
RAP Approved:	Not reported
Compliance Category:	Not reported
Delete Record:	False
ECAF Reviewed By:	Not reported
Not Locatable:	False
Primary Address:	True
AKA Site Name:	False
Primary Site Name:	True
AKA Site Address:	False
Lead:	Not reported

E19 East < 1/8 0.029 mi. 153 ft. | **CT MIL DEPT FIELD MAINT SHOP 8**
CAMP HARTELL RTE 75
WINDSOR LOCKS, CT 06096 | **RCRA NonGen / NLR**
RI MANIFEST | **1000123300**
CTD983869728

Site 1 of 2 in cluster E

Relative: Higher

Actual: 180 ft.

RCRA NonGen / NLR:

Date form received by agency:	01/22/2009
Facility name:	CT MIL DEPT FIELD MAINT SHOP 8
Facility address:	CAMP HARTELL RTE 75 WINDSOR LOCKS, CT 06096
EPA ID:	CTD983869728
Mailing address:	CTDE ENV 360 BROAD ST HARTFORD, CT 06105
Contact:	ENVR PROTECTION SPECIALIST
Contact address:	CTDE ENV 360 BROAD ST HARTFORD, CT 06105
Contact country:	US
Contact telephone:	860-524-4945
Contact email:	Not reported
EPA Region:	01
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	CT MILITARY DEPT
Owner/operator address:	360 BROAD ST HARTFORD, CT 06105
Owner/operator country:	Not reported
Owner/operator telephone:	860-524-4945
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

. Waste code: D001
. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS

CT MIL DEPT FIELD MAINT SHOP 8 (Continued) **1000123300**

CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Historical Generators:
Date form received by agency: 12/09/2008
Site name: CT MIL DEPT FIELD MAINT SHOP 8
Classification: Not a generator, verified

. Waste code: D001
. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Date form received by agency: 09/22/1988
Site name: CT MIL DEPT ORG MAINT SHOP 8
Classification: Small Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

RI MANIFEST:

EPA Id:	CTD983869728
GEN Cert Date:	1/30/2008
Manifest Document Number:	000085799UIS
Waste Description:	PETROLEUM DISTILLATES NOS
TSDF Id:	RID084802842
TSDF Name:	SAFETY-KLEEN SYSTEMS, INC.
Qty:	25
WT/Vol Units:	G
TSDF Date:	2/4/2008
Transporter 2 Id:	Not reported
Item Number:	1
Transporter 2 Name:	Not reported
Transporter Name 2:	SAFETY-KLEEN SYSTEMS, INC.
Transporter EPAID:	TXR000050930
Transporter Receipt Date:	1/30/2008
Number Of Containers:	1
Container Type:	DM
Waste Code1:	R003
Waste Code2:	CR02
Waste Code3:	Not reported
Waste Code4:	Not reported

CT MIL DEPT FIELD MAINT SHOP 8 (Continued) **1000123300**

Waste Code5:	Not reported
Waste Code6:	Not reported
Fee Exempt Code:	Not reported
Comment:	Not reported
Transporter Name 2:	Not reported
Company Permit Number:	Not reported
Year:	Not reported
Quarter:	Not reported
Transporter Contact Name:	Not reported
Transporter Contact Email:	Not reported
Filing Date:	Not reported
Total Fee:	Not reported
Billing Name:	Not reported
Paid Date:	Not reported
Paid Time:	Not reported
Facility Receipt Date:	Not reported
Fee:	Not reported
Manifest Created Date:	Not reported
Manifest Updated Date:	Not reported

RI MANIFEST:

Transporter Receipt Date:	4/4/2008
Number Of Containers:	1
Container Type:	DM
Waste Code1:	CR02
Waste Code2:	R003
Waste Code3:	Not reported
Waste Code4:	Not reported
Waste Code5:	Not reported
Waste Code6:	Not reported
Comment:	Not reported
Fee Exempt Code:	Not reported
TSDF Name:	SAFETY-KLEEN SYSTEMS, INC
TSDF Id:	RID084802842
Transporter Name 2:	Not reported
Company Permit Number:	Not reported
Year:	Not reported
EPA ID:	CTD983869728
Manifest Docket Number:	000066809UIS
Quarter:	Not reported
Waste Description:	PETROLEUM DISTILLATES NOS
Transporter Contact Name:	Not reported
Quantity:	25
Transporter Contact Email:	Not reported
WT/Vol Units:	G
Filing Date:	Not reported
Total Fee:	Not reported
Item Number:	a
Transporter Name:	SAFETY-KLEEN SYSTEMS INC
Billing Name:	Not reported
Transporter EPA ID:	TXR000050930
Date Paid:	Not reported
Time Paid:	Not reported
GEN Cert Date:	4/4/2008
Facility Receipt Date:	Not reported
Fee:	Not reported
Transporter 2 Receipt Date:	Not reported
Manifest Created Date:	Not reported

CT MIL DEPT FIELD MAINT SHOP 8 (Continued) **1000123300**

TSDF Receipt Date:	4/8/2008
Transporter 2 ID:	Not reported
Manifest Updated Date:	Not reported
Transporter Receipt Date:	1/30/2008
Number Of Containers:	1
Container Type:	DM
Waste Code1:	R003
Waste Code2:	CR02
Waste Code3:	Not reported
Waste Code4:	Not reported
Waste Code5:	Not reported
Waste Code6:	Not reported
Comment:	Not reported
Fee Exempt Code:	Not reported
TSDF Name:	SAFETY-KLEEN SYSTEMS, INC.
TSDF Id:	RID084802842
Transporter Name 2:	Not reported
Company Permit Number:	Not reported
Year:	Not reported
EPA ID:	CTD983869728
Manifest Docket Number:	000085799UIS
Quarter:	Not reported
Waste Description:	PETROLEUM DISTILLATES NOS
Transporter Contact Name:	Not reported
Quantity:	25
Transporter Contact Email:	Not reported
WT/Vol Units:	G
Filing Date:	Not reported
Total Fee:	Not reported
Item Number:	1
Transporter Name:	SAFETY-KLEEN SYSTEMS, INC.
Billing Name:	Not reported
Transporter EPA ID:	TXR000050930
Date Paid:	Not reported
Time Paid:	Not reported
GEN Cert Date:	1/30/2008
Facility Receipt Date:	Not reported
Fee:	Not reported
Transporter 2 Receipt Date:	Not reported
Manifest Created Date:	Not reported
TSDF Receipt Date:	2/4/2008
Transporter 2 ID:	Not reported
Manifest Updated Date:	Not reported
Transporter Receipt Date:	4/4/2008
Number Of Containers:	1
Container Type:	DM
Waste Code1:	CR02
Waste Code2:	R003
Waste Code3:	Not reported
Waste Code4:	Not reported
Waste Code5:	Not reported
Waste Code6:	Not reported
Comment:	Not reported
Fee Exempt Code:	Not reported
TSDF Name:	SAFETY-KLEEN SYSTEMS, INC

CT MIL DEPT FIELD MAINT SHOP 8 (Continued) **1000123300**

TSDF Id:	RID084802842
Transporter Name 2:	Not reported
Company Permit Number:	Not reported
Year:	Not reported
EPA ID:	CTD983869728
Manifest Docket Number:	000066809UIS
Quarter:	Not reported
Waste Description:	PETROLEUM DISTILLATES NOS
Transporter Contact Name:	Not reported
Quantity:	25
Transporter Contact Email:	Not reported
WT/Vol Units:	G
Filing Date:	Not reported
Total Fee:	Not reported
Item Number:	a
Transporter Name:	SAFETY-KLEEN SYSTEMS INC
Billing Name:	Not reported
Transporter EPA ID:	TXR000050930
Date Paid:	Not reported
Time Paid:	Not reported
GEN Cert Date:	4/4/2008
Facility Receipt Date:	Not reported
Fee:	Not reported
Transporter 2 Receipt Date:	Not reported
Manifest Created Date:	Not reported
TSDF Receipt Date:	4/8/2008
Transporter 2 ID:	Not reported
Manifest Updated Date:	Not reported
Transporter Receipt Date:	1/30/2008
Number Of Containers:	1
Container Type:	DM
Waste Code1:	R003
Waste Code2:	CR02
Waste Code3:	Not reported
Waste Code4:	Not reported
Waste Code5:	Not reported
Waste Code6:	Not reported
Comment:	Not reported
Fee Exempt Code:	Not reported
TSDF Name:	SAFETY-KLEEN SYSTEMS, INC.
TSDF Id:	RID084802842
Transporter Name 2:	Not reported
Company Permit Number:	Not reported
Year:	Not reported
EPA ID:	CTD983869728
Manifest Docket Number:	000085799UIS
Quarter:	Not reported
Waste Description:	PETROLEUM DISTILLATES NOS
Transporter Contact Name:	Not reported
Quantity:	25
Transporter Contact Email:	Not reported
WT/Vol Units:	G
Filing Date:	Not reported
Total Fee:	Not reported
Item Number:	1
Transporter Name:	SAFETY-KLEEN SYSTEMS, INC.

CT MIL DEPT FIELD MAINT SHOP 8 (Continued) **1000123300**

Billing Name:	Not reported
Transporter EPA ID:	TXR000050930
Date Paid:	Not reported
Time Paid:	Not reported
GEN Cert Date:	1/30/2008
Facility Receipt Date:	Not reported
Fee:	Not reported
Transporter 2 Receipt Date:	Not reported
Manifest Created Date:	Not reported
TSDF Receipt Date:	2/4/2008
Transporter 2 ID:	Not reported
Manifest Updated Date:	Not reported
Transporter Receipt Date:	Not reported
Number Of Containers:	0
Container Type:	Not reported
Waste Code1:	D001
Waste Code2:	Not reported
Waste Code3:	Not reported
Waste Code4:	Not reported
Waste Code5:	Not reported
Waste Code6:	Not reported
Comment:	Not reported
Fee Exempt Code:	Not reported
TSDF Name:	Chem-Pak Corporation
TSDF Id:	RID084802842
Transporter Name 2:	Not reported
Company Permit Number:	Not reported
Year:	Not reported
EPA ID:	CTD983869728
Manifest Docket Number:	RIG0191208
Quarter:	Not reported
Waste Description:	WASTE COMBUSTIBLE LIQUID N.O.S.
Transporter Contact Name:	Not reported
Quantity:	22
Transporter Contact Email:	Not reported
WT/Vol Units:	G
Filing Date:	Not reported
Total Fee:	Not reported
Item Number:	1
Transporter Name:	CYCLE SOLVE CORPORATION
Billing Name:	Not reported
Transporter EPA ID:	RID982194987
Date Paid:	Not reported
Time Paid:	Not reported
GEN Cert Date:	1/29/2002
Facility Receipt Date:	Not reported
Fee:	Not reported
Transporter 2 Receipt Date:	Not reported
Manifest Created Date:	Not reported
TSDF Receipt Date:	Not reported
Transporter 2 ID:	Not reported
Manifest Updated Date:	Not reported
Transporter Receipt Date:	Not reported
Number Of Containers:	0
Container Type:	Not reported

CT MIL DEPT FIELD MAINT SHOP 8 (Continued) **1000123300**

Waste Code1:	D001
Waste Code2:	Not reported
Waste Code3:	Not reported
Waste Code4:	Not reported
Waste Code5:	Not reported
Waste Code6:	Not reported
Comment:	Not reported
Fee Exempt Code:	Not reported
TSDF Name:	Chem-Pak Corporation
TSDF Id:	RID084802842
Transporter Name 2:	Not reported
Company Permit Number:	Not reported
Year:	Not reported
EPA ID:	CTD983869728
Manifest Docket Number:	RIG0191208
Quarter:	Not reported
Waste Description:	WASTE COMBUSTIBLE LIQUID N.O.S.
Transporter Contact Name:	Not reported
Quantity:	22
Transporter Contact Email:	Not reported
WT/Vol Units:	G
Filing Date:	Not reported
Total Fee:	Not reported
Item Number:	1
Transporter Name:	CYCLE SOLVE CORPORATION
Billing Name:	Not reported
Transporter EPA ID:	RID982194987
Date Paid:	Not reported
Time Paid:	Not reported
GEN Cert Date:	1/29/2002
Facility Receipt Date:	Not reported
Fee:	Not reported
Transporter 2 Receipt Date:	Not reported
Manifest Created Date:	Not reported
TSDF Receipt Date:	Not reported
Transporter 2 ID:	Not reported
Manifest Updated Date:	Not reported

20
SSW
< 1/8
0.046 mi.
242 ft.

CANADAIR CHALLENGER, INC.
BRADLEY INTERNATIONAL AIRPORT
WINDSOR LOCKS, CT

CT SDADB **S104563662**
CT PROPERTY **N/A**
CT SPILLS

Relative:
Lower

Actual:
172 ft.

Site Discovery and Assessment:

Facility ID:	5445
Rem Master ID:	4867
PTP Id:	2283
WPC Number:	Not reported
Postal District:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Lat/Long Determined By:	Not reported
Ground Water Quality Classification:	Not reported
Surface Water Quality Classification:	Not reported
Waste Type:	Not reported
Disposal:	Not reported

CANADAIR CHALLENGER, INC. (Continued) **S104563662**

Sample Data Available:	False
Updated By:	Not reported
Update Program:	Not reported
Updated:	Not reported
Date Created:	Not reported
Duplicate:	False

SDA Federal:

EPA CERCLIS Id:	Not reported
Number EPA RCRIS Id:	Not reported
Site on EPA's CERCLIS:	Not reported
Site Archived from CERCLIS:	Not reported
Archive Date:	Not reported
EPA's Removal at Site:	Not reported
Deferred to another EPA Program:	Not reported
EPA Env Priority Initiative Site:	Not reported
Federal Facility:	Not reported
Site on EPA's National Priority List:	Not reported
Part of an NPL site:	Not reported
RCRA Generator Status:	Not reported
RCRA Permit Status:	Not reported

SDA Referral:

Referral Id:	5626
Source of referral:	PTP
Date Received:	10/19/1995
Staff Assigned:	Not reported
Remediation Program:	PTP
Date dt_assigned:	Not reported
Remediation Complete Approved DEP/Verified by LEP:	10/19/1995
Outcome:	PTP

SDA Remedial:

Remedial Id:	Not reported
PTP Id:	Not reported
Remediation Program:	Not reported
Remediation Program Entered:	Not reported
Staff Assigned:	Not reported
Remediation Program:	Not reported
Date dt_assign:	Not reported
Project Phase:	Not reported
Order issued:	Not reported
Order Number:	Not reported
Date order issued:	Not reported
Remedial Investigation Start:	Not reported
Remedial Investigation Completed:	Not reported
Remedial Design Start:	Not reported
Remedial Design complet:	Not reported
Remedial Action Start:	Not reported
Remedial Action Completed:	Not reported
Date Oper/ maintenance Started:	Not reported
GW monitoring:	Not reported
Remediation complete Approved DEP/Verified by LEP:	Not reported

SDA Orders:

Order Id:	Not reported
Order Number:	Not reported
Date order issued:	Not reported
Staff Assigned:	Not reported

CANADAIR CHALLENGER, INC. (Continued) **S104563662**

Type of Order:	Not reported
Order Respondent:	Not reported
Admin Appeal Date:	Not reported
Date of Admin Appeal Ruling:	Not reported
Date of Admin Appeal Ruling:	Not reported
Date of Final Order:	Not reported
Date of Court Appeal:	Not reported
Date of Court Ruling:	Not reported
Date of Court Ruling:	Not reported
Date Order Modified:	Not reported
Date Referred to AG:	Not reported
Judgement:	Not reported
Date of AGR judgement:	Not reported
Penalty assessed:	Not reported
Order Complete:	Not reported
In compliance:	Not reported
Comments:	Not reported

CT Property:

Seller Name:	Canadair Challenger, Inc.
Buyer Name:	Learjet, Inc.
Certifying Party:	Canadair Challenger Inc.
Certifying Attention Person:	Not reported
Title Of Certifying Person:	Not reported
Certifying Person Address:	Not reported
Certifying Person City,St,Zip:	Not reported
Property Transfer Forms:	Form I (DEP-PERD-PTP-201) when no release of hazardous waste has occurred at the parcel being transferred.
Date Recieved:	10/19/1995
Ackn Date:	11/14/1995
Determination Date:	Not reported
LEP Verified/DEP Approval Date:	Not reported
Rem Id:	3416
Remediation Location Id:	5638
Date Entered:	Not reported
Program:	Property Transfer Program
GAO Site:	False
Staff Full Name:	Not reported
Super/Date:	Not reported
Stage Of Project:	Not reported
RP Level Of Activity:	Not reported
RP Needed Level Of Activity:	Not reported
Staff Level Of Activity:	Not reported
Staff Needed Level Of Activity:	Not reported
Public Intrest:	Not reported
PRP Cooperation:	Not reported
Enforcement Status:	Not reported
Level Of Complexity:	Not reported
Complex Eng Or Sci:	False
Complex Due To Public Involvement:	False
Politically Complex:	False
Complex Enforcement:	False
Coordination With Other Bureaus:	False
EPA Involvement:	False
Staff Prefrence:	Not reported
Readiness For Transfer:	Not reported
Project Transfer Time:	Not reported

CANADAIR CHALLENGER, INC. (Continued) **S104563662**

Transfer Comments:	Not reported
Staff As Of July 2000:	Not reported
Initial Staff:	Not reported
Type Of Transfer:	Not reported
Salutation:	Not reported
Relationship To Transfer:	transferor
Audit Date:	Not reported
Verif Type:	Not reported
Audit Outcome:	Not reported
GW:	Not reported
Basin:	Not reported
1st Payment:	200
Pay Tag1:	Not reported
2nd Payment:	Not reported
Pay Tag2:	Not reported
RTN:	Not reported
Revised:	Not reported
ECAF Received:	Not reported
Old Determination Date:	Not reported
Redeterminationdate:	Not reported
Previous Determination:	Not reported
Monitoringoption:	Not reported
Postremedialmonitoring:	Not reported
Schedule Of I/R:	Not reported
Schedule Overdue:	Not reported
Aprvl Sched:	Not reported
Yr 1 Report:	Not reported
Yr 2 Report:	Not reported
Report Overdue:	Not reported
Ext Aprvl Sched:	Not reported
License #:	Not reported
Project Phase:	Not reported
PT Comments:	Not reported
EPA Id Number:	Not reported
GW Class:	Not reported
SW Class:	Not reported
AO/C0:	Not reported
Water Lead(Y Or N):	Not reported
Priority:	Not reported
Project Status(A, I Or D):	Not reported
Last Updated:	Not reported
SR Comments:	Not reported
Priority Or Work-Load:	Not reported
Status:	Not reported
Notes:	Not reported
Special Project Name:	Not reported
Special Project Comments:	Not reported
DOT Project:	Not reported
Pt Counter:	Not reported
Project Complete:	False
Project Inactive:	False
Int Deposit #:	Not reported
Deposit #:	Not reported
Spill Case #:	Not reported
Diversion Id:	Not reported
Public Notice:	Not reported
RAP Received:	Not reported

CANADAIR CHALLENGER, INC. (Continued) **S104563662**

RAP Approved:	Not reported
Compliance Category:	Not reported
Delete Record:	False
ECAF Reviewed By:	Not reported
Not Locatable:	False
Primary Address:	True
AKA Site Name:	False
Primary Site Name:	True
AKA Site Address:	False
Lead:	Not reported

SPILLS:

Year of Database:	1997
Case Number:	9701345
Who Took Spill:	922
Assigned To:	0
Report Date:	03/19/1997
Report Time:	10:06:49
Date Release:	03/19/1997
Time Responded:	10:00:00
Reported By:	SGT SCOTT RYER
Phone:	860 6274482
Representing:	ARMY AVAITAION SUPPORT DIVISION
Terminated:	YES
Recovd (Total):	1
Total (Water):	0
Facility Status:	closed
Continuous Spill:	False
Released Substance:	HYDRAULIC FLUID
Qty:	1 (Gallons)
Emergency Measure:	CONTAINED AND REMOVED
Water Body:	NA
Discharger:	SAME AS ABOVE
Telephone:	Not reported
Responsible Party:	YES
RP Address 1:	Not reported
RP City,St,Zip:	CT
Historic:	False
Waterbody:	False
Time Stamp:	1997-03-19 10:14:08
Sr Inspector:	Aceto, John
At Inspctor:	**NO RESPONSE
User Stamp:	Not reported
Comments:	Not reported
Action:	Removed
Other Action:	Not reported
Action:	Contained
Other Action:	Not reported
Agency ID:	DEP
Other Agency:	Not reported
DEP Bureau:	BUREAU OF WASTE MANAGEMENT
DEP Agency:	OIL AND CHEMICAL SPILL RESPONSE
Cause ID:	Overfill
Other Cause:	Not reported
Media ID:	Ground Surface
Other Media:	Not reported
Release Type:	petroleum

CANADAIR CHALLENGER, INC. (Continued) **S104563662**

Other Release: Not reported

Year of Database: 1997
Case Number: 9701348
Who Took Spill: 922
Assigned To: 0
Report Date: 03/19/1997
Report Time: 10:28:45
Date Release: 03/19/1997
Time Responded: 09:29:00
Reported By: DISPATCHER LEMILEN
Phone: 860 6273340
Representing: BRADLEY INTERNATIONAL AIRPORT
Terminated: YES
Recovd (Total): 2
Total (Water): 0
Facility Status: closed
Continuous Spill: False
Released Substance: GASOLINE
Qty: 2 (Gallons)
Emergency Measure: CONTAINED AND REMOVED
Water Body: NA
Discharger: SAME AS ABOVE
Telephone: Not reported
Responsible Party: YES
RP Address 1: Not reported
RP City,St,Zip: CT
Historic: False
Waterbody: False
Time Stamp: 1997-03-19 10:31:38
Sr Inspector: Aceto, John
At Inspctor: **NO RESPONSE
User Stamp: Not reported
Comments: Not reported
Action: Removed
Other Action: Not reported
Action: Contained
Other Action: Not reported
Agency ID: DEP
Other Agency: Not reported
DEP Bureau: BUREAU OF WASTE MANAGEMENT
DEP Agency: OIL AND CHEMICAL SPILL RESPONSE
Cause ID: Overfill
Other Cause: Not reported
Media ID: Ground Surface
Other Media: Not reported
Release Type: petroleum
Other Release: Not reported

E21	**CT MIL DEPT C S M S**	**RCRA-SQG**	**1000155689**
ESE	**CAMP HARTELL RTE 75**	**WI MANIFEST**	**CTD982544454**
< 1/8	**WINDSOR LOCKS, CT 06096**	**RI MANIFEST**	
0.047 mi.			
246 ft.	**Site 2 of 2 in cluster E**		

Relative:
Higher

Actual:
174 ft.

RCRA-SQG:

Date form received by agency:	09/22/1988
Facility name:	CT MIL DEPT C S M S
Facility address:	CAMP HARTELL RTE 75 WINDSOR LOCKS, CT 06096
EPA ID:	CTD982544454
Mailing address:	CTDE ENV 360 BROAD ST HARTFORD, CT 06105
Contact:	ENVR PROTECTION SPECIALIST
Contact address:	CTDE ENV 360 BROAD ST HARTFORD, CT 06105
Contact country:	US
Contact telephone:	860-524-4945
Contact email:	Not reported
EPA Region:	01
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CT STATE MILITARY DEPT
Owner/operator address:	360 BROAD ST HARTFORD, CT 06105
Owner/operator country:	Not reported
Owner/operator telephone:	860-524-4945
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	State
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

CT MIL DEPT C S M S (Continued) **1000155689**

. Waste code: D001
. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

WI MANIFEST:

Year:	2004
EPA ID:	CTD982544454
FID:	0
ACT Code:	202
ACT Status:	A
ACT Code 1:	202
ACT Name:	HW Generator - Small
Contact Title:	Not reported
Contact Name:	Not reported
Contact Address:	Not reported
Contact City/State/Zip:	Not reported
Contact Telephone:	Not reported
Contact EMail Address:	Not reported

RI MANIFEST:

EPA Id:	CTD982544454
GEN Cert Date:	7/16/2007
Manifest Document Number:	000041654UIS
Waste Description:	WASTE PETROLEUM DISTILLATES NOS
TSDF Id:	RID084802842
TSDF Name:	United Oil Recovery Inc
Qty:	40
WT/Vol Units:	G
TSDF Date:	7/19/2007
Transporter 2 Id:	Not reported
Item Number:	a
Transporter 2 Name:	Not reported
Transporter Name 2:	UNITED INDUSTRIAL SERVICES
Transporter EPAID:	CTD021816889
Transporter Receipt Date:	7/17/2007
Number Of Containers:	1
Container Type:	DM
Waste Code1:	R003
Waste Code2:	CR02
Waste Code3:	Not reported
Waste Code4:	Not reported
Waste Code5:	Not reported
Waste Code6:	Not reported
Fee Exempt Code:	Not reported
Comment:	Not reported
Transporter Name 2:	Not reported
Company Permit Number:	Not reported
Year:	Not reported
Quarter:	Not reported

CT MIL DEPT C S M S (Continued) **1000155689**

Transporter Contact Name:	Not reported
Transporter Contact Email:	Not reported
Filing Date:	Not reported
Total Fee:	Not reported
Billing Name:	Not reported
Paid Date:	Not reported
Paid Time:	Not reported
Facility Receipt Date:	Not reported
Fee:	Not reported
Manifest Created Date:	Not reported
Manifest Updated Date:	Not reported

RI MANIFEST:

Transporter Receipt Date:	4/15/2010
Number Of Containers:	Not reported
Container Type:	Not reported
Waste Code1:	D013
Waste Code2:	Not reported
Waste Code3:	Not reported
Waste Code4:	Not reported
Waste Code5:	Not reported
Waste Code6:	Not reported
Comment:	Not reported
Fee Exempt Code:	Not reported
TSDF Name:	Northland Environmental
TSDF Id:	RID040098352
Transporter Name 2:	Not reported
Company Permit Number:	Not reported
Year:	Not reported
EPA ID:	CTD982544454
Manifest Docket Number:	006625225JJK
Quarter:	Not reported
Waste Description:	INCINERATION
Transporter Contact Name:	Not reported
Quantity:	9
Transporter Contact Email:	Not reported
WT/Vol Units:	P
Filing Date:	Not reported
Total Fee:	Not reported
Item Number:	17045
Transporter Name:	ENVIRONMENTAL SERVICES, INC.
Billing Name:	Not reported
Transporter EPA ID:	CTD018811802
Date Paid:	Not reported
Time Paid:	Not reported
GEN Cert Date:	4/15/2010
Facility Receipt Date:	Not reported
Fee:	Not reported
Transporter 2 Receipt Date:	Not reported
Manifest Created Date:	Not reported
TSDF Receipt Date:	4/15/2010
Transporter 2 ID:	Not reported
Manifest Updated Date:	Not reported

Transporter Receipt Date:	4/15/2010
Number Of Containers:	Not reported
Container Type:	Not reported
Waste Code1:	CR04CR05

CT MIL DEPT C S M S (Continued) **1000155689**

Waste Code2:	Not reported
Waste Code3:	Not reported
Waste Code4:	Not reported
Waste Code5:	Not reported
Waste Code6:	Not reported
Comment:	Not reported
Fee Exempt Code:	Not reported
TSDF Name:	Northland Environmental
TSDF Id:	RID040098352
Transporter Name 2:	Not reported
Company Permit Number:	Not reported
Year:	Not reported
EPA ID:	CTD982544454
Manifest Docket Number:	006625225JJK
Quarter:	Not reported
Waste Description:	NON HAZ MEDICINES
Transporter Contact Name:	Not reported
Quantity:	15
Transporter Contact Email:	Not reported
WT/Vol Units:	P
Filing Date:	Not reported
Total Fee:	Not reported
Item Number:	17044
Transporter Name:	ENVIRONMENTAL SERVICES, INC.
Billing Name:	Not reported
Transporter EPA ID:	CTD018811802
Date Paid:	Not reported
Time Paid:	Not reported
GEN Cert Date:	4/15/2010
Facility Receipt Date:	Not reported
Fee:	Not reported
Transporter 2 Receipt Date:	Not reported
Manifest Created Date:	Not reported
TSDF Receipt Date:	4/15/2010
Transporter 2 ID:	Not reported
Manifest Updated Date:	Not reported
Transporter Receipt Date:	4/4/2008
Number Of Containers:	1
Container Type:	DM
Waste Code1:	CR02
Waste Code2:	R003
Waste Code3:	Not reported
Waste Code4:	Not reported
Waste Code5:	Not reported
Waste Code6:	Not reported
Comment:	Not reported
Fee Exempt Code:	Not reported
TSDF Name:	SAFETY-KLEEN SYSTEMS, INC
TSDF Id:	RID084802842
Transporter Name 2:	Not reported
Company Permit Number:	Not reported
Year:	Not reported
EPA ID:	CTD982544454
Manifest Docket Number:	000066593UIS
Quarter:	Not reported
Waste Description:	PETROLEUM DISTILLATES NOS

CT MIL DEPT C S M S (Continued) **1000155689**

Transporter Contact Name:	Not reported
Quantity:	40
Transporter Contact Email:	Not reported
WT/Vol Units:	G
Filing Date:	Not reported
Total Fee:	Not reported
Item Number:	a
Transporter Name:	SAFETY-KLEEN SYSTEMS INC
Billing Name:	Not reported
Transporter EPA ID:	TXR000050930
Date Paid:	Not reported
Time Paid:	Not reported
GEN Cert Date:	4/4/2008
Facility Receipt Date:	Not reported
Fee:	Not reported
Transporter 2 Receipt Date:	Not reported
Manifest Created Date:	Not reported
TSDF Receipt Date:	4/8/2008
Transporter 2 ID:	Not reported
Manifest Updated Date:	Not reported

Transporter Receipt Date:	1/30/2008
Number Of Containers:	1
Container Type:	DM
Waste Code1:	CR02
Waste Code2:	R003
Waste Code3:	Not reported
Waste Code4:	Not reported
Waste Code5:	Not reported
Waste Code6:	Not reported
Comment:	Not reported
Fee Exempt Code:	Not reported
TSDF Name:	SAFETY-KLEEN SYSTEMS, INC.
TSDF Id:	RID084802842
Transporter Name 2:	Not reported
Company Permit Number:	Not reported
Year:	Not reported
EPA ID:	CTD982544454
Manifest Docket Number:	000085591UIS
Quarter:	Not reported
Waste Description:	PETROLEUM DISTILLATES NOS
Transporter Contact Name:	Not reported
Quantity:	40
Transporter Contact Email:	Not reported
WT/Vol Units:	G
Filing Date:	Not reported
Total Fee:	Not reported
Item Number:	1
Transporter Name:	SAFETY-KLEEN SYSTEMS, INC.
Billing Name:	Not reported
Transporter EPA ID:	TXR000050930
Date Paid:	Not reported
Time Paid:	Not reported
GEN Cert Date:	1/30/2008
Facility Receipt Date:	Not reported
Fee:	Not reported
Transporter 2 Receipt Date:	Not reported

CT MIL DEPT C S M S (Continued) **1000155689**

Manifest Created Date:	Not reported
TSDF Receipt Date:	2/4/2008
Transporter 2 ID:	Not reported
Manifest Updated Date:	Not reported
Transporter Receipt Date:	1/30/2008
Number Of Containers:	1
Container Type:	DM
Waste Code1:	CR02
Waste Code2:	R003
Waste Code3:	Not reported
Waste Code4:	Not reported
Waste Code5:	Not reported
Waste Code6:	Not reported
Comment:	Not reported
Fee Exempt Code:	Not reported
TSDF Name:	SAFETY-KLEEN SYSTEMS, INC.
TSDF Id:	RID084802842
Transporter Name 2:	Not reported
Company Permit Number:	Not reported
Year:	Not reported
EPA ID:	CTD982544454
Manifest Docket Number:	000085591UIS
Quarter:	Not reported
Waste Description:	PETROLEUM DISTILLATES NOS
Transporter Contact Name:	Not reported
Quantity:	40
Transporter Contact Email:	Not reported
WT/Vol Units:	G
Filing Date:	Not reported
Total Fee:	Not reported
Item Number:	1
Transporter Name:	SAFETY-KLEEN SYSTEMS, INC.
Billing Name:	Not reported
Transporter EPA ID:	TXR000050930
Date Paid:	Not reported
Time Paid:	Not reported
GEN Cert Date:	1/30/2008
Facility Receipt Date:	Not reported
Fee:	Not reported
Transporter 2 Receipt Date:	Not reported
Manifest Created Date:	Not reported
TSDF Receipt Date:	2/4/2008
Transporter 2 ID:	Not reported
Manifest Updated Date:	Not reported
Transporter Receipt Date:	4/4/2008
Number Of Containers:	1
Container Type:	DM
Waste Code1:	CR02
Waste Code2:	R003
Waste Code3:	Not reported
Waste Code4:	Not reported
Waste Code5:	Not reported
Waste Code6:	Not reported
Comment:	Not reported
Fee Exempt Code:	Not reported

CT MIL DEPT C S M S (Continued) **1000155689**

TSDF Name:	SAFETY-KLEEN SYSTEMS, INC
TSDF Id:	RID084802842
Transporter Name 2:	Not reported
Company Permit Number:	Not reported
Year:	Not reported
EPA ID:	CTD982544454
Manifest Docket Number:	000066593UIS
Quarter:	Not reported
Waste Description:	PETROLEUM DISTILLATES NOS
Transporter Contact Name:	Not reported
Quantity:	40
Transporter Contact Email:	Not reported
WT/Vol Units:	G
Filing Date:	Not reported
Total Fee:	Not reported
Item Number:	a
Transporter Name:	SAFETY-KLEEN SYSTEMS INC
Billing Name:	Not reported
Transporter EPA ID:	TXR000050930
Date Paid:	Not reported
Time Paid:	Not reported
GEN Cert Date:	4/4/2008
Facility Receipt Date:	Not reported
Fee:	Not reported
Transporter 2 Receipt Date:	Not reported
Manifest Created Date:	Not reported
TSDF Receipt Date:	4/8/2008
Transporter 2 ID:	Not reported
Manifest Updated Date:	Not reported
Transporter Receipt Date:	8/3/2007
Number Of Containers:	1
Container Type:	DM
Waste Code1:	D001
Waste Code2:	D039
Waste Code3:	Not reported
Waste Code4:	Not reported
Waste Code5:	Not reported
Waste Code6:	Not reported
Comment:	Not reported
Fee Exempt Code:	Not reported
TSDF Name:	United Oil Recovery Inc
TSDF Id:	RID084802842
Transporter Name 2:	Not reported
Company Permit Number:	Not reported
Year:	Not reported
EPA ID:	CTD982544454
Manifest Docket Number:	000004818UIS
Quarter:	Not reported
Waste Description:	RQ WASTE PETROLEUM DISTILLATES NOS
Transporter Contact Name:	Not reported
Quantity:	25
Transporter Contact Email:	Not reported
WT/Vol Units:	G
Filing Date:	Not reported
Total Fee:	Not reported
Item Number:	a

CT MIL DEPT C S M S (Continued) **1000155689**

Transporter Name:	UNITED INDUSTRIAL SERVICES
Billing Name:	Not reported
Transporter EPA ID:	CTD021816889
Date Paid:	Not reported
Time Paid:	Not reported
GEN Cert Date:	8/3/2007
Facility Receipt Date:	Not reported
Fee:	Not reported
Transporter 2 Receipt Date:	Not reported
Manifest Created Date:	Not reported
TSDF Receipt Date:	8/3/2007
Transporter 2 ID:	Not reported
Manifest Updated Date:	Not reported
Transporter Receipt Date:	8/3/2007
Number Of Containers:	1
Container Type:	DM
Waste Code1:	D001
Waste Code2:	D039
Waste Code3:	Not reported
Waste Code4:	Not reported
Waste Code5:	Not reported
Waste Code6:	Not reported
Comment:	Not reported
Fee Exempt Code:	Not reported
TSDF Name:	United Oil Recovery Inc
TSDF Id:	RID084802842
Transporter Name 2:	Not reported
Company Permit Number:	Not reported
Year:	Not reported
EPA ID:	CTD982544454
Manifest Docket Number:	000004818UIS
Quarter:	Not reported
Waste Description:	RQ WASTE PETROLEUM DISTILLATES NOS
Transporter Contact Name:	Not reported
Quantity:	25
Transporter Contact Email:	Not reported
WT/Vol Units:	G
Filing Date:	Not reported
Total Fee:	Not reported
Item Number:	a
Transporter Name:	UNITED INDUSTRIAL SERVICES
Billing Name:	Not reported
Transporter EPA ID:	CTD021816889
Date Paid:	Not reported
Time Paid:	Not reported
GEN Cert Date:	8/3/2007
Facility Receipt Date:	Not reported
Fee:	Not reported
Transporter 2 Receipt Date:	Not reported
Manifest Created Date:	Not reported
TSDF Receipt Date:	8/3/2007
Transporter 2 ID:	Not reported
Manifest Updated Date:	Not reported
Transporter Receipt Date:	7/17/2007
Number Of Containers:	1

CT MIL DEPT C S M S (Continued) **1000155689**

Container Type:	DM
Waste Code1:	R003
Waste Code2:	CR02
Waste Code3:	Not reported
Waste Code4:	Not reported
Waste Code5:	Not reported
Waste Code6:	Not reported
Comment:	Not reported
Fee Exempt Code:	Not reported
TSDF Name:	United Oil Recovery Inc
TSDF Id:	RID084802842
Transporter Name 2:	Not reported
Company Permit Number:	Not reported
Year:	Not reported
EPA ID:	CTD982544454
Manifest Docket Number:	000041654UIS
Quarter:	Not reported
Waste Description:	WASTE PETROLEUM DISTILLATES NOS
Transporter Contact Name:	Not reported
Quantity:	40
Transporter Contact Email:	Not reported
WT/Vol Units:	G
Filing Date:	Not reported
Total Fee:	Not reported
Item Number:	a
Transporter Name:	UNITED INDUSTRIAL SERVICES
Billing Name:	Not reported
Transporter EPA ID:	CTD021816889
Date Paid:	Not reported
Time Paid:	Not reported
GEN Cert Date:	7/16/2007
Facility Receipt Date:	Not reported
Fee:	Not reported
Transporter 2 Receipt Date:	Not reported
Manifest Created Date:	Not reported
TSDF Receipt Date:	7/19/2007
Transporter 2 ID:	Not reported
Manifest Updated Date:	Not reported
Transporter Receipt Date:	7/17/2007
Number Of Containers:	1
Container Type:	DM
Waste Code1:	R003
Waste Code2:	CR02
Waste Code3:	Not reported
Waste Code4:	Not reported
Waste Code5:	Not reported
Waste Code6:	Not reported
Comment:	Not reported
Fee Exempt Code:	Not reported
TSDF Name:	United Oil Recovery Inc
TSDF Id:	RID084802842
Transporter Name 2:	Not reported
Company Permit Number:	Not reported
Year:	Not reported
EPA ID:	CTD982544454
Manifest Docket Number:	000041654UIS

CT MIL DEPT C S M S (Continued) **1000155689**

Quarter:	Not reported
Waste Description:	WASTE PETROLEUM DISTILLATES NOS
Transporter Contact Name:	Not reported
Quantity:	40
Transporter Contact Email:	Not reported
WT/Vol Units:	G
Filing Date:	Not reported
Total Fee:	Not reported
Item Number:	a
Transporter Name:	UNITED INDUSTRIAL SERVICES
Billing Name:	Not reported
Transporter EPA ID:	CTD021816889
Date Paid:	Not reported
Time Paid:	Not reported
GEN Cert Date:	7/16/2007
Facility Receipt Date:	Not reported
Fee:	Not reported
Transporter 2 Receipt Date:	Not reported
Manifest Created Date:	Not reported
TSDF Receipt Date:	7/19/2007
Transporter 2 ID:	Not reported
Manifest Updated Date:	Not reported

Click this hyperlink while viewing on your computer to access additional RI_MANIFEST: detail in the EDR Site Report.

F22 **WINDSOR MARKETING GROUP** **CT MANIFEST** **S109738070**
ESE **2 INDUSTRIAL RD** **N/A**
< 1/8 **WINDSOR LOCKS, CT 06096**
0.051 mi.
267 ft. **Site 1 of 6 in cluster F**

Relative:
Higher

Actual:
173 ft.

CT MANIFEST:

EPA ID:	CTP000008528
Years:	1988

Details:

Year:	1988
EPA ID:	CTP000008528
Manifest Id:	MAC677545
TSDF EPA ID:	MAD000604447
TSDF Name:	NORTHEAST SOLVENTS CORP
TSDF Address:	300 CANAL ST
TSDF City,State,Zip:	LAWRENCE, MA 01845
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	MAD982545436
Transporter Name:	OIL RECOVERY CORP
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported

WINDSOR MARKETING GROUP (Continued) **S109738070**

Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	2 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	N
Date Shipped:	12/28/1988
Date Received:	12/29/1988
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	HAZ WASTE LIQ NOS POTAS SULFITE/SOD DICH
Number of Containers:	002
Container Type:	DM
Quantity:	110
Weight/Volume:	G
Batch Number:	999999
EPA Waste Codes:	D007
Copies:	2
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	MAC6775451

Year:	1988
EPA ID:	CTP000008528
Manifest Id:	MAC677545
TSDF EPA ID:	MAD000604447
TSDF Name:	NORTHEAST SOLVENTS CORP
TSDF Address:	300 CANAL ST
TSDF City,State,Zip:	LAWRENCE, MA 01845
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	MAD982545436
Transporter Name:	OIL RECOVERY CORP
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	2 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096

WINDSOR MARKETING GROUP (Continued) **S109738070**

Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	N
Date Shipped:	12/28/1988
Date Received:	12/29/1988
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	3
US Dot Description:	WASTE ALCOHOL LIQ SOLN ISOPROPANOL, ETC
Number of Containers:	003
Container Type:	DM
Quantity:	165
Weight/Volume:	G
Batch Number:	999999
EPA Waste Codes:	D001
Copies:	2
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	MAC6775453

Year:	1988
EPA ID:	CTP000008528
Manifest Id:	MAC677545
TSDF EPA ID:	MAD000604447
TSDF Name:	NORTHEAST SOLVENTS CORP
TSDF Address:	300 CANAL ST
TSDF City,State,Zip:	LAWRENCE, MA 01845
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	MAD982545436
Transporter Name:	OIL RECOVERY CORP
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	2 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	N
Date Shipped:	12/28/1988

WINDSOR MARKETING GROUP (Continued) **S109738070**

Date Received:	12/29/1988
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	2
US Dot Description:	WASTE COMPOUND CLEANING LIQ MAT'L
Number of Containers:	001
Container Type:	DM
Quantity:	55
Weight/Volume:	G
Batch Number:	999999
EPA Waste Codes:	D007
Copies:	2
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	MAC6775452

Details as of 2013:

Year:	1988
EPAID:	CTP000008528
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036275927
Special Handling:	Y
Last Modified Date:	04/27/2004
Last Modified By:	IG

Waste as of 2013:

Year:	1988
Manifest ID:	MAC677545
Waste Occurrence:	1
UNNA:	9189
Hazard Class:	ORM-E
US Dot Description:	HAZ WASTE LIQ NOS POTAS SULFITE/SOD DICH
Number of Containers:	002
Container Type:	DM
Quantity:	110
Weight/Volume:	G
Additional Description:	Y
Handling Code:	S01
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Year:	1988
Manifest ID:	MAC677545
Waste Occurrence:	3
UNNA:	1987
Hazard Class:	COMBUSTIBL

WINDSOR MARKETING GROUP (Continued) **S109738070**

US Dot Description:	WASTE ALCOHOL LIQ SOLN ISOPROPANOL, ETC
Number of Containers:	003
Container Type:	DM
Quantity:	165
Weight/Volume:	G
Additional Description:	Y
Handling Code:	S01
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Year:	1988
Manifest ID:	MAC677545
Waste Occurrence:	2
UNNA:	1789
Hazard Class:	CORROSIVE
US Dot Description:	WASTE COMPOUND CLEANING LIQ MAT'L
Number of Containers:	001
Container Type:	DM
Quantity:	55
Weight/Volume:	G
Additional Description:	Y
Handling Code:	S01
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	1988
Manifest ID:	MAC677545
Waste Occurrence:	1
EPA Waste Code:	D007
Recycled Waste?:	False
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Year:	1988
Manifest ID:	MAC677545
Waste Occurrence:	3
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Year:	1988
Manifest ID:	MAC677545
Waste Occurrence:	2
EPA Waste Code:	D007
Recycled Waste?:	False
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

F23 ESE < 1/8 0.051 mi. 267 ft. | **WINDSOR MARKETING GROUP INC**
2 INDUSTRIAL RD
WINDSOR LOCKS, CT 06096
Site 2 of 6 in cluster F | **RCRA NonGen / NLR**
FINDS
ECHO
NJ MANIFEST
NY MANIFEST | **1000192705**
CTD131755209

Relative: Higher

Actual: 173 ft.

RCRA NonGen / NLR:

Date form received by agency:	06/23/2011
Facility name:	WINDSOR MARKETING GROUP INC
Facility address:	2 INDUSTRIAL RD WINDSOR LOCKS, CT 06096
EPA ID:	CTD131755209
Mailing address:	INDUSTRIAL RD WINDSOR, CT 06096
Contact:	ANDY VINCENTI
Contact address:	2 INDUSTRIAL RD WINDSOR, CT 06096
Contact country:	US
Contact telephone:	203-627-5927
Contact email:	Not reported
EPA Region:	01
Land type:	Other land type
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	ARMATO REALTY T & A DEVELOPMENT
Owner/operator address:	OWNERSTREET OWNERCITY, CT 99999
Owner/operator country:	Not reported
Owner/operator telephone:	203-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

. Waste code: D001
. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

WINDSOR MARKETING GROUP INC (Continued) **1000192705**

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

. Waste code: D002
. Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Historical Generators:
Date form received by agency: 06/03/2011
Site name: WINDSOR MARKETING GROUP INC
Classification: Not a generator, verified

. Waste code: D001
. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

. Waste code: D002
. Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Date form received by agency: 12/07/1988
Site name: WINDSOR MARKETING GROUP INC
Classification: Small Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

. Waste code: D002
. Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS

WINDSOR MARKETING GROUP INC (Continued) **1000192705**

USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Facility Has Received Notices of Violations:

Regulation violated:	FR - 265.171
Area of violation:	Generators - Pre-transport
Date violation determined:	09/09/2002
Date achieved compliance:	03/07/2005
Violation lead agency:	State
Enforcement action:	FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date:	04/09/2003
Enf. disposition status:	Not reported
Enf. disp. status date:	Not reported
Enforcement lead agency:	State
Proposed penalty amount:	Not reported
Final penalty amount:	9090
Paid penalty amount:	Not reported

Regulation violated:	FR - 270.1 (c)
Area of violation:	TSD - General
Date violation determined:	09/09/2002
Date achieved compliance:	03/07/2005
Violation lead agency:	State
Enforcement action:	FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date:	04/09/2003
Enf. disposition status:	Not reported
Enf. disp. status date:	Not reported
Enforcement lead agency:	State
Proposed penalty amount:	Not reported
Final penalty amount:	9090
Paid penalty amount:	Not reported

Regulation violated:	FR - 265.16(c)
Area of violation:	Generators - Pre-transport
Date violation determined:	08/15/2001
Date achieved compliance:	03/07/2005
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	11/07/2001
Enf. disposition status:	Not reported
Enf. disp. status date:	Not reported
Enforcement lead agency:	State
Proposed penalty amount:	Not reported
Final penalty amount:	Not reported
Paid penalty amount:	Not reported

Regulation violated:	FR - 265.50-265.56
Area of violation:	Generators - Pre-transport
Date violation determined:	08/15/2001
Date achieved compliance:	03/07/2005
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	11/07/2001
Enf. disposition status:	Not reported
Enf. disp. status date:	Not reported
Enforcement lead agency:	State

WINDSOR MARKETING GROUP INC (Continued) **1000192705**

Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 22a-449(c)-102(a)(2)(C)
Area of violation: Generators - Pre-transport
Date violation determined: 08/15/2001
Date achieved compliance: 03/07/2005
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/07/2001
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 265.15(d)
Area of violation: Generators - Pre-transport
Date violation determined: 08/15/2001
Date achieved compliance: 03/07/2005
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 04/09/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 9090
Paid penalty amount: Not reported

Regulation violated: FR - 265.173(a)
Area of violation: Generators - Pre-transport
Date violation determined: 08/15/2001
Date achieved compliance: 03/07/2005
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/07/2001
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 265.15(b)(1)
Area of violation: Generators - Pre-transport
Date violation determined: 08/15/2001
Date achieved compliance: 03/07/2005
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/07/2001
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported

WINDSOR MARKETING GROUP INC (Continued) **1000192705**

Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 265.16(d)(2)
Area of violation: Generators - Pre-transport
Date violation determined: 08/15/2001
Date achieved compliance: 03/07/2005
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/07/2001
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 265.16(d)(2)
Area of violation: Generators - Pre-transport
Date violation determined: 08/15/2001
Date achieved compliance: 03/07/2005
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 04/09/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 9090
Paid penalty amount: Not reported

Regulation violated: FR - 265.173(a)
Area of violation: Generators - Pre-transport
Date violation determined: 08/15/2001
Date achieved compliance: 03/07/2005
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 04/09/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 9090
Paid penalty amount: Not reported

Regulation violated: FR - 265.35
Area of violation: Generators - Pre-transport
Date violation determined: 08/15/2001
Date achieved compliance: 03/07/2005
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/07/2001
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported

WINDSOR MARKETING GROUP INC (Continued) **1000192705**

Paid penalty amount: Not reported

Regulation violated: FR - 265.16(d)(1)
Area of violation: Generators - Pre-transport
Date violation determined: 08/15/2001
Date achieved compliance: 03/07/2005
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 04/09/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 9090
Paid penalty amount: Not reported

Regulation violated: FR - 265.35
Area of violation: Generators - Pre-transport
Date violation determined: 08/15/2001
Date achieved compliance: 03/07/2005
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 04/09/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 9090
Paid penalty amount: Not reported

Regulation violated: FR - 265.17
Area of violation: Generators - General
Date violation determined: 08/15/2001
Date achieved compliance: 03/07/2005
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 04/09/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 9090
Paid penalty amount: Not reported

Regulation violated: FR - 265.50-265.56
Area of violation: Generators - Pre-transport
Date violation determined: 08/15/2001
Date achieved compliance: 03/07/2005
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 04/09/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 9090
Paid penalty amount: Not reported

WINDSOR MARKETING GROUP INC (Continued) **1000192705**

Regulation violated: FR - 265.16(c)
Area of violation: Generators - Pre-transport
Date violation determined: 08/15/2001
Date achieved compliance: 03/07/2005
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 04/09/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 9090
Paid penalty amount: Not reported

Regulation violated: FR - 265.15(b)(1)
Area of violation: Generators - Pre-transport
Date violation determined: 08/15/2001
Date achieved compliance: 03/07/2005
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 04/09/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 9090
Paid penalty amount: Not reported

Regulation violated: FR - 262.34(a)(3)
Area of violation: Generators - Pre-transport
Date violation determined: 08/15/2001
Date achieved compliance: 03/07/2005
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/07/2001
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 265.16(d)(1)
Area of violation: Generators - Pre-transport
Date violation determined: 08/15/2001
Date achieved compliance: 03/07/2005
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/07/2001
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 262.34(a)(2)

WINDSOR MARKETING GROUP INC (Continued) **1000192705**

Area of violation: Generators - Pre-transport
Date violation determined: 08/15/2001
Date achieved compliance: 03/07/2005
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 04/09/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 9090
Paid penalty amount: Not reported

Regulation violated: FR - 262.34(a)(2)
Area of violation: Generators - Pre-transport
Date violation determined: 08/15/2001
Date achieved compliance: 03/07/2005
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/07/2001
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 265.17
Area of violation: Generators - General
Date violation determined: 08/15/2001
Date achieved compliance: 03/07/2005
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/07/2001
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 22a-449(c)-102(a)(2)(C)
Area of violation: Generators - Pre-transport
Date violation determined: 08/15/2001
Date achieved compliance: 03/07/2005
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 04/09/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 9090
Paid penalty amount: Not reported

Regulation violated: FR - 265.15(d)
Area of violation: Generators - Pre-transport

WINDSOR MARKETING GROUP INC (Continued) **1000192705**

Date violation determined: 08/15/2001
Date achieved compliance: 03/07/2005
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/07/2001
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 262.34(a)(3)
Area of violation: Generators - Pre-transport
Date violation determined: 08/15/2001
Date achieved compliance: 03/07/2005
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 04/09/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 9090
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 01/28/2008
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/09/2002
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: TSD - General
Date achieved compliance: 03/07/2005
Evaluation lead agency: State

Evaluation date: 09/09/2002
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Generators - Pre-transport
Date achieved compliance: 03/07/2005
Evaluation lead agency: State

Evaluation date: 08/15/2001
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 03/07/2005
Evaluation lead agency: State

Evaluation date: 08/15/2001
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 03/07/2005
Evaluation lead agency: State

WINDSOR MARKETING GROUP INC (Continued) **1000192705**

FINDS:

Registry ID: 110043631317

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000192705
Registry ID:	110043631317
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110043631317

NJ MANIFEST:

EPA Id:	CTD131755209
Mail Address:	Not reported
Mail City/State/Zip:	Not reported
Facility Phone:	2036275927
Emergency Phone:	2036275927
Contact:	Not reported
Comments:	Not reported
SIC Code:	Not reported
County:	00
Municipal:	00
Previous EPA Id:	Not reported
Gen Flag:	X
Trans Flag:	Not reported
TSDF Flag:	Not reported
Name Change:	Not reported
Date Change:	000000

Manifest:

Manifest Number:	001516190SKS
EPA ID:	CTD131755209
Date Shipped:	10/23/2008
TSDF EPA ID:	NJD002182897
Transporter EPA ID:	TXR000050930
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	10/23/2008
Date Trans2 Transported Waste:	Not reported

WINDSOR MARKETING GROUP INC (Continued) **1000192705**

Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	10/31/2008
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	No
Reason Load Was Rejected:	Not reported

Waste:

Manifest Year:	Not reported
Waste Code:	F003
Hand Code:	H061
Quantity:	300 P

Manifest Number:	003738639FLE
EPA ID:	CTD131755209
Date Shipped:	8/30/2012
TSDF EPA ID:	NJD002182897
Transporter EPA ID:	TXR000050930
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	Not reported
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	Not reported
TSDF EPA Facility Name:	Not reported

WINDSOR MARKETING GROUP INC (Continued) **1000192705**

QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	Not reported
Reason Load Was Rejected:	Not reported

Waste:

Manifest Year:	Not reported
Waste Code:	D001
Hand Code:	Not reported
Quantity:	900.00 Pounds

Manifest Number:	003818668FLE
EPA ID:	CTD131755209
Date Shipped:	12/22/2010
TSDF EPA ID:	NJD002182897
Transporter EPA ID:	TXR000050930
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	12/22/2010
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	01/06/2011
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported

WINDSOR MARKETING GROUP INC (Continued) **1000192705**

Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	No
Reason Load Was Rejected:	Not reported

Waste:

Manifest Year:	Not reported
Waste Code:	D001
Hand Code:	H141
Quantity:	800 P

Manifest Number:	NJA5039723
EPA ID:	CTD131755209
Date Shipped:	08/27/2004
TSDF EPA ID:	NJR000022442
Transporter EPA ID:	TXR000050930
Transporter 2 EPA ID:	MOR000505347
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	08/27/2004
Date Trans2 Transported Waste:	09/08/2004
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	09/08/2004
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	10200422
Was Load Rejected:	No
Reason Load Was Rejected:	Not reported

Manifest Number:	001777413SKS
EPA ID:	CTD131755209
Date Shipped:	05/15/2009
TSDF EPA ID:	NJD002182897
Transporter EPA ID:	TXR000050930

WINDSOR MARKETING GROUP INC (Continued) **1000192705**

Transporter 2 EPA ID:	MOD095038998
Transporter 3 EPA ID:	TXR000050930
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	05/15/2009
Date Trans2 Transported Waste:	05/21/2009
Date Trans3 Transported Waste:	05/22/2009
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	05/29/2009
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	No
Reason Load Was Rejected:	Not reported

Waste:

Manifest Year:	Not reported
Waste Code:	F003
Hand Code:	H061
Quantity:	300 P

Manifest Number:	001056746SKS
EPA ID:	CTD131755209
Date Shipped:	04/03/2008
TSDF EPA ID:	NJD002182897
Transporter EPA ID:	TXR000050930
Transporter 2 EPA ID:	NJD071629976
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	04/03/2008

WINDSOR MARKETING GROUP INC (Continued) **1000192705**

Date Trans2 Transported Waste:	04/11/2008
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	04/11/2008
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	No
Reason Load Was Rejected:	Not reported

Waste:

Manifest Year:	Not reported
Waste Code:	F003
Hand Code:	H061
Quantity:	1200 P

Manifest Number:	002845215SKS
EPA ID:	CTD131755209
Date Shipped:	3/31/2011
TSDF EPA ID:	NJD002182897
Transporter EPA ID:	TXR000050930
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	Not reported
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	Not reported

WINDSOR MARKETING GROUP INC (Continued) **1000192705**

TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	Not reported
Reason Load Was Rejected:	Not reported

Waste:

Manifest Year:	Not reported
Waste Code:	D001
Hand Code:	H141
Quantity:	1,200.00 Pounds
Manifest Year:	Not reported
Waste Code:	D001
Hand Code:	H141
Quantity:	300.00 Pounds
Manifest Number:	003217782SKS
EPA ID:	CTD131755209
Date Shipped:	4/17/2012
TSDF EPA ID:	NJD002182897
Transporter EPA ID:	TXR000050930
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	Not reported
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	Not reported
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported

WINDSOR MARKETING GROUP INC (Continued) **1000192705**

Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	Not reported
Reason Load Was Rejected:	Not reported

Waste:

Manifest Year:	Not reported
Waste Code:	D001
Hand Code:	Not reported
Quantity:	800.00 Pounds
Manifest Year:	Not reported
Waste Code:	D001 D005
Hand Code:	Not reported
Quantity:	700.00 Pounds

Manifest Number:	003738827FLE
EPA ID:	CTD131755209
Date Shipped:	10/27/2011
TSDF EPA ID:	NJD002182897
Transporter EPA ID:	TXR000050930
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	Not reported
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	Not reported
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported

WINDSOR MARKETING GROUP INC (Continued) **1000192705**

Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	Not reported
Reason Load Was Rejected:	Not reported

Waste:

Manifest Year:	Not reported
Waste Code:	D001
Hand Code:	H141
Quantity:	350.00 Pounds

Manifest Number:	003688519FLE
EPA ID:	CTD131755209
Date Shipped:	6/9/2011
TSDF EPA ID:	NJD002182897
Transporter EPA ID:	TXR000050930
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	Not reported
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	Not reported
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	Not reported
Reason Load Was Rejected:	Not reported

Waste:

Manifest Year:	Not reported
Waste Code:	D001
Hand Code:	H141

WINDSOR MARKETING GROUP INC (Continued) **1000192705**

Quantity:	1,050.00 gallons
Manifest Year:	Not reported
Waste Code:	D001
Hand Code:	H141
Quantity:	350.00 gallons
Manifest Number:	001249766SKS
EPA ID:	CTD131755209
Date Shipped:	07/29/2008
TSDF EPA ID:	NJD002182897
Transporter EPA ID:	TXR000050930
Transporter 2 EPA ID:	NJD071629976
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	07/29/2008
Date Trans2 Transported Waste:	08/13/2008
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	08/13/2008
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	No
Reason Load Was Rejected:	Not reported

Waste:

Manifest Year:	Not reported
Waste Code:	F003
Hand Code:	H061
Quantity:	916 P
Manifest Number:	000528697SKS
EPA ID:	CTD131755209

WINDSOR MARKETING GROUP INC (Continued) **1000192705**

Date Shipped:	06/13/2008
TSDF EPA ID:	NJD002182897
Transporter EPA ID:	TXR000050930
Transporter 2 EPA ID:	NJD071629976
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	06/13/2008
Date Trans2 Transported Waste:	06/25/2008
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	06/25/2008
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	No
Reason Load Was Rejected:	Not reported

Waste:

Manifest Year:	Not reported
Waste Code:	F003
Hand Code:	H061
Quantity:	916 P

Manifest Number:	001714646SKS
EPA ID:	CTD131755209
Date Shipped:	03/05/2009
TSDF EPA ID:	NJD002182897
Transporter EPA ID:	TXR000050930
Transporter 2 EPA ID:	NJD071629976
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported

WINDSOR MARKETING GROUP INC (Continued) **1000192705**

Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	03/05/2009
Date Trans2 Transported Waste:	03/13/2009
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	03/13/2009
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	No
Reason Load Was Rejected:	Not reported

Waste:

Manifest Year:	Not reported
Waste Code:	F003
Hand Code:	H061
Quantity:	400 P

Manifest Number:	003818104FLE
EPA ID:	CTD131755209
Date Shipped:	11/08/2010
TSDF EPA ID:	NJD002182897
Transporter EPA ID:	TXR000050930
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	11/08/2010
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported

WINDSOR MARKETING GROUP INC (Continued) **1000192705**

Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	11/15/2010
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	No
Reason Load Was Rejected:	Not reported

Waste:

Manifest Year:	Not reported
Waste Code:	D001
Hand Code:	H141
Quantity:	800 P

Manifest Number:	001714468SKS
EPA ID:	CTD131755209
Date Shipped:	02/19/2009
TSDF EPA ID:	NJD002182897
Transporter EPA ID:	TXR000050930
Transporter 2 EPA ID:	NJD071629976
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	02/19/2009
Date Trans2 Transported Waste:	02/27/2009
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	02/27/2009
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported

WINDSOR MARKETING GROUP INC (Continued) **1000192705**

Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	No
Reason Load Was Rejected:	Not reported

Waste:

Manifest Year:	Not reported
Waste Code:	F003
Hand Code:	H061
Quantity:	300 P

Manifest Number:	000611322SKS
EPA ID:	CTD131755209
Date Shipped:	08/16/2007
TSDF EPA ID:	NJD002182897
Transporter EPA ID:	TXR000050930
Transporter 2 EPA ID:	NJD071629976
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	08/16/2007
Date Trans2 Transported Waste:	08/22/2007
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	08/30/2007
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	No
Reason Load Was Rejected:	Not reported

Waste:

WINDSOR MARKETING GROUP INC (Continued) **1000192705**

Manifest Year:	Not reported
Waste Code:	F003
Hand Code:	H06
Quantity:	400 P

Manifest Number:	002866562SKS
EPA ID:	CTD131755209
Date Shipped:	5/21/2011
TSDF EPA ID:	NJD002182897
Transporter EPA ID:	TXR000050930
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	Not reported
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	Not reported
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	Not reported
Reason Load Was Rejected:	Not reported

Waste:

Manifest Year:	Not reported
Waste Code:	D002
Hand Code:	H141
Quantity:	1,200.00 Pounds

Manifest Number:	002868923SKS
EPA ID:	CTD131755209
Date Shipped:	7/19/2011
TSDF EPA ID:	NJD002182897

WINDSOR MARKETING GROUP INC (Continued) **1000192705**

Transporter EPA ID:	TXR000050930
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	Not reported
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	Not reported
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	Not reported
Reason Load Was Rejected:	Not reported

Waste:

Manifest Year:	Not reported
Waste Code:	D001
Hand Code:	H141
Quantity:	800.00 Pounds
Manifest Year:	Not reported
Waste Code:	D001
Hand Code:	H141
Quantity:	400.00 Pounds
Manifest Number:	001206712SKS
EPA ID:	CTD131755209
Date Shipped:	05/07/2008
TSDF EPA ID:	NJD002182897
Transporter EPA ID:	TXR000050930
Transporter 2 EPA ID:	NJD071629976
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported

WINDSOR MARKETING GROUP INC (Continued) **1000192705**

Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	05/07/2008
Date Trans2 Transported Waste:	05/20/2008
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	05/20/2008
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	No
Reason Load Was Rejected:	Not reported

Waste:

Manifest Year:	Not reported
Waste Code:	F003
Hand Code:	H061
Quantity:	600 P

Manifest Number:	002682008SKS
EPA ID:	CTD131755209
Date Shipped:	1/24/2012
TSDF EPA ID:	NJD002182897
Transporter EPA ID:	TXR000050930
Transporter 2 EPA ID:	Not reported
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	Not reported
Date Trans2 Transported Waste:	Not reported
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported

WINDSOR MARKETING GROUP INC (Continued) **1000192705**

Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	Not reported
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	Not reported
Reason Load Was Rejected:	Not reported

Waste:

Manifest Year:	Not reported
Waste Code:	D001
Hand Code:	Not reported
Quantity:	800.00 Pounds

NY MANIFEST:

Country:	USA
EPA ID:	CTD131755209
Facility Status:	Not reported
Location Address 1:	2 INDUSTRIAL ROAD
Code:	BP
Location Address 2:	Not reported
Total Tanks:	Not reported
Location City:	WINDSOR LOCKS
Location State:	CT
Location Zip:	06096
Location Zip 4:	Not reported

NY MANIFEST:

EPAID:	CTD131755209
Mailing Name:	WINDSOR MARKETING
Mailing Contact:	KEVIN H GINGRAS
Mailing Address 1:	2 INDUSTRIAL ROAD
Mailing Address 2:	Not reported
Mailing City:	WINDSOR LOCKS
Mailing State:	CT
Mailing Zip:	06096
Mailing Zip 4:	Not reported
Mailing Country:	USA
Mailing Phone:	8606275927

NY MANIFEST:

WINDSOR MARKETING GROUP INC (Continued) **1000192705**

Document ID:	NYG1143675
Manifest Status:	Not reported
seq:	01
Year:	1999
Trans1 State ID:	NJ502TTB
Trans2 State ID:	Not reported
Generator Ship Date:	03/16/1999
Trans1 Recv Date:	03/16/1999
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	03/22/1999
Part A Recv Date:	Not reported
Part B Recv Date:	Not reported
Generator EPA ID:	CTD131755209
Trans1 EPA ID:	NJD046555033
Trans2 EPA ID:	Not reported
TSDF ID 1:	NYD045604964
TSDF ID 2:	Not reported
Manifest Tracking Number:	Not reported
Import Indicator:	Not reported
Export Indicator:	Not reported
Discr Quantity Indicator:	Not reported
Discr Type Indicator:	Not reported
Discr Residue Indicator:	Not reported
Discr Partial Reject Indicator:	Not reported
Discr Full Reject Indicator:	Not reported
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	Not reported
Waste Code:	D011 - SILVER 5.0 MG/L TCLP
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00315
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	021
Container Type:	DF - Fiberboard or plastic drums (glass)
Handling Method:	R Material recovery of more than 75 percent of the total material.
Specific Gravity:	01.00

Click this hyperlink while viewing on your computer to access
-1 additional NY MANIFEST: record(s) in the EDR Site Report.

F24 **WINDSOR MARKETING** **CT MANIFEST** **S109736006**
ESE **2 INDUSTRIAL RD** **N/A**
< 1/8 **WINDSOR LOCKS, CT 06096**
0.051 mi.
267 ft. **Site 3 of 6 in cluster F**

Relative:
Higher

Actual:
173 ft.

CT MANIFEST:

EPA ID:	CTP000005888
Years:	1987

Details:

Year:	1987

WINDSOR MARKETING (Continued) **S109736006**

EPA ID:	CTP000005888
Manifest Id:	MAC219777
TSDF EPA ID:	MAD000604447
TSDF Name:	NORTHEAST SOLVENTS CORP
TSDF Address:	300 CANAL ST
TSDF City,State,Zip:	LAWRENCE, MA 01845
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	MAD981202336
Transporter Name:	OIL RECOVERY CORP
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	2 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	N
Date Shipped:	10/08/1987
Date Received:	10/09/1987
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	WASTE CORROSIVE LIQUID NOS
Number of Containers:	005
Container Type:	DM
Quantity:	1250
Weight/Volume:	P
Batch Number:	999999
EPA Waste Codes:	D002
Copies:	2
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	MAC2197771

Year:	1987
EPA ID:	CTP000005888
Manifest Id:	MAC219777
TSDF EPA ID:	MAD000604447
TSDF Name:	NORTHEAST SOLVENTS CORP
TSDF Address:	300 CANAL ST

WINDSOR MARKETING (Continued) **S109736006**

TSDF City,State,Zip:	LAWRENCE, MA 01845
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	MAD981202336
Transporter Name:	OIL RECOVERY CORP
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	2 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	N
Date Shipped:	10/08/1987
Date Received:	10/09/1987
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	3
US Dot Description:	WASTE FLAMMABLE LIQUID NOS
Number of Containers:	001
Container Type:	DM
Quantity:	250
Weight/Volume:	P
Batch Number:	999999
EPA Waste Codes:	D001
Copies:	2
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	MAC2197773
Year:	1987
EPA ID:	CTP000005888
Manifest Id:	MAC219777
TSDF EPA ID:	MAD000604447
TSDF Name:	NORTHEAST SOLVENTS CORP
TSDF Address:	300 CANAL ST
TSDF City,State,Zip:	LAWRENCE, MA 01845
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	MAD981202336

WINDSOR MARKETING (Continued) **S109736006**

Transporter Name:	OIL RECOVERY CORP
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	2 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	N
Date Shipped:	10/08/1987
Date Received:	10/09/1987
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	2
US Dot Description:	WASTE POISON B LIQUID NOS
Number of Containers:	002
Container Type:	DM
Quantity:	250
Weight/Volume:	P
Batch Number:	999999
EPA Waste Codes:	M099
Copies:	2
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	MAC2197772

Details as of 2013:

Year:	1987
EPAID:	CTP000005888
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036275927
Special Handling:	Y
Last Modified Date:	04/27/2004
Last Modified By:	IG

Year:	1987
EPAID:	CTP000005888
TSDF Telephone:	Not reported

WINDSOR MARKETING (Continued) **S109736006**

Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036275927
Special Handling:	Y
Last Modified Date:	04/27/2004
Last Modified By:	IG

Waste as of 2013:

Year:	1987
Manifest ID:	MAC219777
Waste Occurrence:	1
UNNA:	1760
Hazard Class:	CORROSIVE
US Dot Description:	WASTE CORROSIVE LIQUID NOS
Number of Containers:	005
Container Type:	DM
Quantity:	1250
Weight/Volume:	P
Additional Description:	Y
Handling Code:	S01
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Year:	1987
Manifest ID:	MAC219777
Waste Occurrence:	3
UNNA:	1993
Hazard Class:	FLAMMABLE
US Dot Description:	WASTE FLAMMABLE LIQUID NOS
Number of Containers:	001
Container Type:	DM
Quantity:	250
Weight/Volume:	P
Additional Description:	N
Handling Code:	S01
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Year:	1987
Manifest ID:	MAC219777
Waste Occurrence:	2
UNNA:	2810
Hazard Class:	POISON B
US Dot Description:	WASTE POISON B LIQUID NOS
Number of Containers:	002
Container Type:	DM
Quantity:	250
Weight/Volume:	P
Additional Description:	Y
Handling Code:	S01
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

WINDSOR MARKETING (Continued) **S109736006**

Year:	1987
Manifest ID:	MAC219777
Waste Occurrence:	1
EPA Waste Code:	D002
Recycled Waste?:	False
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Year:	1987
Manifest ID:	MAC219777
Waste Occurrence:	3
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Year:	1987
Manifest ID:	MAC219777
Waste Occurrence:	2
EPA Waste Code:	M099
Recycled Waste?:	False
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

F25 **WINDSOR MARKETING** **CT MANIFEST** **S109729491**
ESE **2 INDUSTRIAL RD** **N/A**
< 1/8 **WINDSOR LOCKS, CT 06096**
0.051 mi.
267 ft. **Site 4 of 6 in cluster F**

Relative:
Higher

Actual:
173 ft.

CT MANIFEST:

EPA ID:	CTD131755209
Years:	2011, 2010, 2008, 2007, 2006, 2005, 2004, 2003, 2002, 2001, 2000, 1999, 1998

Details:

Year:	2011
EPA ID:	CTD131755209
Manifest Id:	002845215SKS
TSDF EPA ID:	NJD002182897
TSDF Name:	SAFETY-KLEEN SYSTEMS, INC.
TSDF Address:	1200 SYLVAN STREET
TSDF City,State,Zip:	LINDEN, NJ 07036
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	TXR000050930
Transporter Name:	SAFETY-KLEEN SYSTEMS, INC.
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT

WINDSOR MARKETING (Continued) **S109729491**

Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	2 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Not reported
Date Shipped:	03/31/2011
Date Received:	04/05/2011
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	2
US Dot Description:	WASTE OXIDIZING LIQUID, N.O.S.
Number of Containers:	003
Container Type:	DM
Quantity:	1200
Weight/Volume:	P
Batch Number:	Not reported
EPA Waste Codes:	D001
Copies:	Not reported
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	002845215SKS2

Year:	2011
EPA ID:	CTD131755209
Manifest Id:	002845215SKS
TSDF EPA ID:	NJD002182897
TSDF Name:	SAFETY-KLEEN SYSTEMS, INC.
TSDF Address:	1200 SYLVAN STREET
TSDF City,State,Zip:	LINDEN, NJ 07036
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	TXR000050930
Transporter Name:	SAFETY-KLEEN SYSTEMS, INC.
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	2 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported

WINDSOR MARKETING (Continued) **S109729491**

Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Not reported
Date Shipped:	03/31/2011
Date Received:	04/05/2011
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	RQ UN1210 WASTE PRINTING INK RELATED
Number of Containers:	001
Container Type:	DM
Quantity:	300
Weight/Volume:	P
Batch Number:	Not reported
EPA Waste Codes:	D001
Copies:	Not reported
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	002845215SKS1

Details as of 2013:

Year:	2011
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	8606275927
Special Handling:	Not reported
Last Modified Date:	04/19/2011
Last Modified By:	DPW

Waste as of 2013:

Year:	2011
Manifest ID:	002845215SKS
Waste Occurrence:	2
UNNA:	3139
Hazard Class:	5.1
US Dot Description:	WASTE OXIDIZING LIQUID, N.O.S.
Number of Containers:	003
Container Type:	DM
Quantity:	1200
Weight/Volume:	P
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2011-04-19 00:00:00
Last Modified By:	DPW

Year:	2011

WINDSOR MARKETING (Continued) **S109729491**

Manifest ID:	002845215SKS
Waste Occurrence:	1
UNNA:	1210
Hazard Class:	3
US Dot Description:	RQ UN1210 WASTE PRINTING INK RELATED
Number of Containers:	001
Container Type:	DM
Quantity:	300
Weight/Volume:	P
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2011-04-19 00:00:00
Last Modified By:	DPW

Waste Code as of 2013:

Year:	2011
Manifest ID:	002845215SKS
Waste Occurrence:	2
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2011-04-19 00:00:00
Last Modified By:	DPW

Year:	2011
Manifest ID:	002845215SKS
Waste Occurrence:	1
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2011-04-19 00:00:00
Last Modified By:	DPW

Details:

Year:	2010
EPA ID:	CTD131755209
Manifest Id:	003818104fle
TSDF EPA ID:	NJD002182897
TSDF Name:	SAFETY-KLEEN SYSTEMS, INC.
TSDF Address:	1200 SYLVAN STREET
TSDF City,State,Zip:	LINDEN, NJ 07036
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	TXR000050930
Transporter Name:	SAFETY-KLEEN SYSTEMS, INC.
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported

WINDSOR MARKETING (Continued) **S109729491**

Generator Mailing Address:	2 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Not reported
Date Shipped:	11/08/2010
Date Received:	11/15/2010
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	RQ UN1210 WASTE PRINTING INK RELATED
Number of Containers:	002
Container Type:	DM
Quantity:	800
Weight/Volume:	P
Batch Number:	Not reported
EPA Waste Codes:	D001
Copies:	Not reported
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	003818104fle1

Details as of 2013:

Year:	2010
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	Not reported
Special Handling:	Not reported
Last Modified Date:	01/11/2011
Last Modified By:	DPW

Waste as of 2013:

Year:	2010
Manifest ID:	003818104fle
Waste Occurrence:	1
UNNA:	1210
Hazard Class:	3
US Dot Description:	RQ UN1210 WASTE PRINTING INK RELATED
Number of Containers:	002
Container Type:	DM
Quantity:	800
Weight/Volume:	P
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2011-01-11 00:00:00

WINDSOR MARKETING (Continued) **S109729491**

Last Modified By: DPW

Waste Code as of 2013:

Year:	2010
Manifest ID:	003818104fle
Waste Occurrence:	1
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2011-01-11 00:00:00
Last Modified By:	DPW

Details:

Year:	2008
EPA ID:	CTD131755209
Manifest Id:	001207699SKS
TSDF EPA ID:	KYD053348108
TSDF Name:	SAFETY-KLEEN SYSTEMS, INC.
TSDF Address:	3700 LAGRANGE ROAD
TSDF City,State,Zip:	SMITHFIELD, KY 40068
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	TXR000050930
Transporter Name:	SAFETY-KLEEN SYSTEMS, INC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	08/19/2008
Trans 2 EPA ID:	NJD071629976
Trans 2 Name:	S J TRANSPORTATION CO INC
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	2 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Not reported
Date Shipped:	08/14/2008
Date Received:	08/20/2008
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	2
US Dot Description:	RQ WASTE FLAMMABLE LIQUIDS, N.O.S.
Number of Containers:	002
Container Type:	DM
Quantity:	916
Weight/Volume:	P
Batch Number:	1022, 1054
EPA Waste Codes:	D001, F003
Copies:	1, 6

WINDSOR MARKETING (Continued) **S109729491**

Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	001207699SKS2

Year:	2008
EPA ID:	CTD131755209
Manifest Id:	001207699SKS
TSDF EPA ID:	KYD053348108
TSDF Name:	SAFETY-KLEEN SYSTEMS, INC.
TSDF Address:	3700 LAGRANGE ROAD
TSDF City,State,Zip:	SMITHFIELD, KY 40068
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	TXR000050930
Transporter Name:	SAFETY-KLEEN SYSTEMS, INC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	08/19/2008
Trans 2 EPA ID:	NJD071629976
Trans 2 Name:	S J TRANSPORTATION CO INC
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	2 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Not reported
Date Shipped:	08/14/2008
Date Received:	08/20/2008
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	RQ UN1210 WASTE PRINTING INK RELATED
Number of Containers:	001
Container Type:	DM
Quantity:	458
Weight/Volume:	P
Batch Number:	1022, 1054
EPA Waste Codes:	D001, D005
Copies:	1, 6
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported

WINDSOR MARKETING (Continued) **S109729491**

Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	001207699SKS1

Details as of 2013:

Year:	2008
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	8606275927
Special Handling:	Not reported
Last Modified Date:	05/11/2012
Last Modified By:	RD

Waste as of 2013:

Year:	2008
Manifest ID:	001207699SKS
Waste Occurrence:	2
UNNA:	1993
Hazard Class:	3
US Dot Description:	RQ WASTE FLAMMABLE LIQUIDS, N.O.S.
Number of Containers:	002
Container Type:	DM
Quantity:	916
Weight/Volume:	P
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2008-10-17 00:00:00
Last Modified By:	DPW

Year:	2008
Manifest ID:	001207699SKS
Waste Occurrence:	1
UNNA:	1210
Hazard Class:	3
US Dot Description:	RQ UN1210 WASTE PRINTING INK RELATED
Number of Containers:	001
Container Type:	DM
Quantity:	458
Weight/Volume:	P
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2008-10-17 00:00:00
Last Modified By:	DPW

Waste Code as of 2013:

Year:	2008
Manifest ID:	001207699SKS
Waste Occurrence:	1
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2008-10-17 00:00:00
Last Modified By:	DPW

WINDSOR MARKETING (Continued) **S109729491**

Year:	2008
Manifest ID:	001207699SKS
Waste Occurrence:	2
EPA Waste Code:	F003
Recycled Waste?:	False
Last Modified Date:	2008-10-17 00:00:00
Last Modified By:	DPW

Year:	2008
Manifest ID:	001207699SKS
Waste Occurrence:	2
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2012-01-26 00:00:00
Last Modified By:	IR

Year:	2008
Manifest ID:	001207699SKS
Waste Occurrence:	1
EPA Waste Code:	D005
Recycled Waste?:	False
Last Modified Date:	2012-01-26 00:00:00
Last Modified By:	IR

Details:

Year:	2007
EPA ID:	CTD131755209
Manifest Id:	000291091SKS
TSDF EPA ID:	KYD053348108
TSDF Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Address:	3700 LAGRANGE RD
TSDF City,State,Zip:	SMITHFIELD, KY 40068
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	TXR000050930
Transporter Name:	SAFETY-KLEEN SYSTEMS INC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	04/30/2007
Trans 2 EPA ID:	NJD071629976
Trans 2 Name:	S J TRANSPORTATION CO INC
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	2 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Not reported
Date Shipped:	04/16/2007
Date Received:	05/01/2007

WINDSOR MARKETING (Continued) **S109729491**

Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	2
US Dot Description:	HAZARDOUS WASTE, LIQUID, N.O.S.
Number of Containers:	1
Container Type:	DM
Quantity:	350
Weight/Volume:	P
Batch Number:	118, 644
EPA Waste Codes:	D018
Copies:	1, 6
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	000291091SKS2

Year:	2007
EPA ID:	CTD131755209
Manifest Id:	000291091SKS
TSDF EPA ID:	KYD053348108
TSDF Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Address:	3700 LAGRANGE RD
TSDF City,State,Zip:	SMITHFIELD, KY 40068
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	TXR000050930
Transporter Name:	SAFETY-KLEEN SYSTEMS INC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	04/30/2007
Trans 2 EPA ID:	NJD071629976
Trans 2 Name:	S J TRANSPORTATION CO INC
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	2 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Not reported
Date Shipped:	04/16/2007
Date Received:	05/01/2007
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	RQ WASTE PRINTING INK RELATED MATERIAL,

WINDSOR MARKETING (Continued) **S109729491**

Number of Containers:	002
Container Type:	DM
Quantity:	700
Weight/Volume:	P
Batch Number:	118, 644
EPA Waste Codes:	F003
Copies:	1, 6
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	000291091SKS1

Details as of 2013:

Year:	2007
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	8606275927
Special Handling:	Not reported
Last Modified Date:	04/16/2009
Last Modified By:	JEB

Waste as of 2013:

Year:	2007
Manifest ID:	000291091SKS
Waste Occurrence:	1
UNNA:	1210
Hazard Class:	3
US Dot Description:	RQ WASTE PRINTING INK RELATED MATERIAL,
Number of Containers:	002
Container Type:	DM
Quantity:	700
Weight/Volume:	P
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2007-07-19 00:00:00
Last Modified By:	DPW

Year:	2007
Manifest ID:	000291091SKS
Waste Occurrence:	2
UNNA:	3082
Hazard Class:	9
US Dot Description:	HAZARDOUS WASTE, LIQUID, N.O.S.
Number of Containers:	1
Container Type:	DM
Quantity:	350
Weight/Volume:	P
Additional Description:	Not reported

WINDSOR MARKETING (Continued) **S109729491**

Handling Code:	Not reported
Last Modified Date:	2007-07-19 00:00:00
Last Modified By:	DPW
Year:	2007
Manifest ID:	000291091SKS
Waste Occurrence:	3
UNNA:	1993
Hazard Class:	3
US Dot Description:	COMBUSTIBLE LIQUID, N.O.S.
Number of Containers:	1
Container Type:	DM
Quantity:	471
Weight/Volume:	P
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2007-07-19 00:00:00
Last Modified By:	DPW
Year:	2003
Manifest ID:	000291091SKS
Waste Occurrence:	1
UNNA:	1210
Hazard Class:	3
US Dot Description:	RQ WASTE PRINTING INK RELATED MATERIAL,
Number of Containers:	002
Container Type:	DM
Quantity:	700
Weight/Volume:	P
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2007-07-19 00:00:00
Last Modified By:	DPW
Year:	2003
Manifest ID:	000291091SKS
Waste Occurrence:	2
UNNA:	3082
Hazard Class:	9
US Dot Description:	HAZARDOUS WASTE, LIQUID, N.O.S.
Number of Containers:	001
Container Type:	DM
Quantity:	350
Weight/Volume:	P
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2007-07-19 00:00:00
Last Modified By:	DPW
Year:	2003
Manifest ID:	000291091SKS
Waste Occurrence:	3
UNNA:	1993
Hazard Class:	3
US Dot Description:	COMBUSTIBLE LIQUID, N.O.S.
Number of Containers:	001
Container Type:	DM

WINDSOR MARKETING (Continued) **S109729491**

Quantity:	471
Weight/Volume:	P
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2007-07-19 00:00:00
Last Modified By:	DPW

Waste Code as of 2013:

Year:	2007
Manifest ID:	000291091SKS
Waste Occurrence:	2
EPA Waste Code:	D018
Recycled Waste?:	False
Last Modified Date:	2007-07-19 00:00:00
Last Modified By:	DPW

Year:	2007
Manifest ID:	000291091SKS
Waste Occurrence:	1
EPA Waste Code:	F003
Recycled Waste?:	False
Last Modified Date:	2007-07-19 00:00:00
Last Modified By:	DPW

Details:

Year:	2006
EPA ID:	CTD131755209
Manifest Id:	CTF3004769
TSDF EPA ID:	KYD053348108
TSDF Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Address:	3700 LAGRANGE RD
TSDF City,State,Zip:	SMITHFIELD, KY 40068
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	TXR000050930
Transporter Name:	SAFETY-KLEEN SYSTEMS INC
Transporter Address:	Not reported
Transporter City,State,Zip:	TX
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	07/26/2006
Trans 2 EPA ID:	MOD095038998
Trans 2 Name:	BED ROCK INC.DBA TSMT CO
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	2 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Not reported
Date Shipped:	07/13/2006

WINDSOR MARKETING (Continued) **S109729491**

Date Received:	07/29/2006
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	2
US Dot Description:	RQ WASTE FLAMMABLE LIQUIDS, N.O.S.
Number of Containers:	001
Container Type:	DM
Quantity:	400
Weight/Volume:	P
Batch Number:	207
EPA Waste Codes:	D001
Copies:	7
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	CTF30047692

Year:	2006
EPA ID:	CTD131755209
Manifest Id:	CTF3004769
TSDF EPA ID:	KYD053348108
TSDF Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Address:	3700 LAGRANGE RD
TSDF City,State,Zip:	SMITHFIELD, KY 40068
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	TXR000050930
Transporter Name:	SAFETY-KLEEN SYSTEMS INC
Transporter Address:	Not reported
Transporter City,State,Zip:	TX
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	07/26/2006
Trans 2 EPA ID:	MOD095038998
Trans 2 Name:	BED ROCK INC.DBA TSMT CO
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	2 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Not reported
Date Shipped:	07/13/2006
Date Received:	07/29/2006
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1

WINDSOR MARKETING (Continued) **S109729491**

US Dot Description:	RQ WASTE PRINTING INK RELATED MATERIAL,
Number of Containers:	001
Container Type:	DM
Quantity:	400
Weight/Volume:	P
Batch Number:	207
EPA Waste Codes:	F003
Copies:	7
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	CTF30047691

Details as of 2013:

Year:	2006
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	8606275927
Special Handling:	Not reported
Last Modified Date:	08/20/2007
Last Modified By:	JEB

Year:	2006
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	8606275927
Special Handling:	Not reported
Last Modified Date:	08/20/2007
Last Modified By:	JEB

Waste as of 2013:

Year:	2006
Manifest ID:	CTF3004769
Waste Occurrence:	2
UNNA:	1993
Hazard Class:	3
US Dot Description:	RQ WASTE FLAMMABLE LIQUIDS, N.O.S.
Number of Containers:	001
Container Type:	DM
Quantity:	400
Weight/Volume:	P
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2006-10-19 00:00:00

WINDSOR MARKETING (Continued) **S109729491**

Last Modified By:	DPW

Year:	2006
Manifest ID:	CTF3004769
Waste Occurrence:	1
UNNA:	1210
Hazard Class:	3
US Dot Description:	RQ WASTE PRINTING INK RELATED MATERIAL,
Number of Containers:	001
Container Type:	DM
Quantity:	400
Weight/Volume:	P
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2006-10-19 00:00:00
Last Modified By:	DPW

Waste Code as of 2013:

Year:	2006
Manifest ID:	CTF3004769
Waste Occurrence:	2
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2006-10-19 00:00:00
Last Modified By:	DPW

Year:	2006
Manifest ID:	CTF3004769
Waste Occurrence:	1
EPA Waste Code:	F003
Recycled Waste?:	False
Last Modified Date:	2006-10-19 00:00:00
Last Modified By:	DPW

Details:

Year:	2005
EPA ID:	CTD131755209
Manifest Id:	CTF1242674
TSDF EPA ID:	KYD053348108
TSDF Name:	SAFETY-KLEEN SYSTEMS, INC.
TSDF Address:	3700 LAGRANGE ROAD
TSDF City,State,Zip:	SMITHFIELD, KY 40068
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	TXR000050930
Transporter Name:	SAFETY-KLEEN SYSTEMS, INC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	12/12/2005
Trans 2 EPA ID:	MOD095038998
Trans 2 Name:	BED ROCK INC.DBA TRI STATE MOTOR TRANSIT
Trans 2 Address:	Not reported

WINDSOR MARKETING (Continued) **S109729491**

Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	2 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Not reported
Date Shipped:	12/08/2005
Date Received:	12/21/2005
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	RQ WASTE FLAMMABLE LIQUIDS, N.O.S.
Number of Containers:	002
Container Type:	DM
Quantity:	922
Weight/Volume:	P
Batch Number:	183, 183
EPA Waste Codes:	D001
Copies:	2, 7
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	CTF12426741

Details as of 2013:

Year:	2005
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	8606275927
Special Handling:	Not reported
Last Modified Date:	02/15/2006
Last Modified By:	DMG

Year:	2005
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	8606275927
Special Handling:	Not reported
Last Modified Date:	02/15/2006
Last Modified By:	DMG

WINDSOR MARKETING (Continued) **S109729491**

Waste as of 2013:

Year:	2005
Manifest ID:	CTF1242674
Waste Occurrence:	1
UNNA:	1993
Hazard Class:	3
US Dot Description:	RQ WASTE FLAMMABLE LIQUIDS, N.O.S.
Number of Containers:	002
Container Type:	DM
Quantity:	922
Weight/Volume:	P
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2006-01-18 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	2005
Manifest ID:	CTF1242674
Waste Occurrence:	1
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2006-01-18 00:00:00
Last Modified By:	IG

Details:

Year:	2004
EPA ID:	CTD131755209
Manifest Id:	CTF1053164
TSDF EPA ID:	KYD053348108
TSDF Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Address:	3700 LAGRANGE RD
TSDF City,State,Zip:	SMITHFIELD, KY 40068
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	TXR000050930
Transporter Name:	SAFETY-KLEEN SYSTEMS INC
Transporter Address:	Not reported
Transporter City,State,Zip:	TX
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	05/05/2004
Trans 2 EPA ID:	NJD071629976
Trans 2 Name:	S J TRANSPORTATION CO INC
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	2 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Not reported

WINDSOR MARKETING (Continued) **S109729491**

Date Shipped:	04/29/2004
Date Received:	05/11/2004
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	RQ WASTE FLAMMABLE LIQUIDS, N.O.S.
Number of Containers:	001
Container Type:	DM
Quantity:	461
Weight/Volume:	P
Batch Number:	45, 75
EPA Waste Codes:	D001
Copies:	2, 7
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	CTF10531641

Details as of 2013:

Year:	2004
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	8606275927
Special Handling:	Not reported
Last Modified Date:	02/02/2006
Last Modified By:	Not reported

Year:	2004
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	8606275927
Special Handling:	Not reported
Last Modified Date:	02/02/2006
Last Modified By:	Not reported

Waste as of 2013:

Year:	2004
Manifest ID:	CTF1053164
Waste Occurrence:	1
UNNA:	1993
Hazard Class:	3
US Dot Description:	RQ WASTE FLAMMABLE LIQUIDS, N.O.S.
Number of Containers:	001

WINDSOR MARKETING (Continued) **S109729491**

Container Type:	DM
Quantity:	461
Weight/Volume:	P
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2004-07-30 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	2004
Manifest ID:	CTF1053164
Waste Occurrence:	1
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2004-07-30 00:00:00
Last Modified By:	IG

Details:

Year:	2003
EPA ID:	CTD131755209
Manifest Id:	CTF1077347
TSDF EPA ID:	KYD053348108
TSDF Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Address:	3700 LAGRANGE RD
TSDF City,State,Zip:	SMITHFIELD, KY 40068
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	TXR000050930
Transporter Name:	SAFETY-KLEEN SYS INC
Transporter Address:	5400 LEGACY DR
Transporter City,State,Zip:	PLANO, TX
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	07/08/2003
Trans 2 EPA ID:	NJD071629976
Trans 2 Name:	S J TRANSPORTATION CO INC
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	2 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Not reported
Date Shipped:	07/02/2003
Date Received:	07/11/2003
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	RQ WASTE FLAMMABLE LIQUIDS, N.O.S.
Number of Containers:	004

WINDSOR MARKETING (Continued) **S109729491**

Container Type:	DM
Quantity:	1600
Weight/Volume:	P
Batch Number:	5518
EPA Waste Codes:	D001
Copies:	2
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	CTF10773471

Details as of 2013:

Year:	2003
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	8606275927
Special Handling:	Not reported
Last Modified Date:	05/26/2004
Last Modified By:	IG

Year:	2003
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	8606275927
Special Handling:	Not reported
Last Modified Date:	05/26/2004
Last Modified By:	IG

Waste Code as of 2013:

Year:	2003
Manifest ID:	CTF1077347
Waste Occurrence:	1
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2004-05-26 00:00:00
Last Modified By:	IG

Details:

Year:	2002
EPA ID:	CTD131755209
Manifest Id:	CTF0716653
TSDF EPA ID:	KYD053348108
TSDF Name:	SAFETY-KLEEN SYSTEMS INC

WINDSOR MARKETING (Continued) **S109729491**

TSDF Address:	3700 LAGRANGE RD
TSDF City,State,Zip:	SMITHFIELD, KY 40068
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	SCR000075150
Transporter Name:	SAFETY-KLEEN SYSTEMS INC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	02/19/2002
Trans 2 EPA ID:	MOD095038998
Trans 2 Name:	TRI STATE MOTOR TRANSIT CO
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	2 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Not reported
Date Shipped:	02/12/2002
Date Received:	02/20/2002
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	RQ WASTE FLAMMABLE LIQUIDS, N.O.S.
Number of Containers:	006
Container Type:	DM
Quantity:	2766
Weight/Volume:	P
Batch Number:	4906, 4906
EPA Waste Codes:	D001
Copies:	2, 7
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	CTF07166531

Details as of 2013:

Year:	2002
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	8606275927
Special Handling:	Not reported

WINDSOR MARKETING (Continued) **S109729491**

Last Modified Date:	04/27/2004
Last Modified By:	IG

Year:	2002
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	8606275927
Special Handling:	Not reported
Last Modified Date:	04/27/2004
Last Modified By:	IG

Year:	2002
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	8606275927
Special Handling:	Not reported
Last Modified Date:	04/27/2004
Last Modified By:	IG

Waste as of 2013:

Year:	2002
Manifest ID:	CTF0716653
Waste Occurrence:	1
UNNA:	1993
Hazard Class:	3
US Dot Description:	RQ WASTE FLAMMABLE LIQUIDS, N.O.S.
Number of Containers:	006
Container Type:	DM
Quantity:	2766
Weight/Volume:	P
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	2002
Manifest ID:	CTF0716653
Waste Occurrence:	1
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Details:

Year:	2002
EPA ID:	CTD131755209

WINDSOR MARKETING (Continued) **S109729491**

Manifest Id:	MAQ216542
TSDF EPA ID:	MAD096287354
TSDF Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Address:	224 EAST MAIN ST
TSDF City,State,Zip:	W BROOKFIELD, MA 01585
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	SCR000075150
Transporter Name:	SAFETY-KLEEN SYSTEMS INC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	2 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Not reported
Date Shipped:	08/22/2002
Date Received:	08/23/2002
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	RQ HAZARDOUS WASTE, LIQUID, N.O.S.
Number of Containers:	001
Container Type:	DF
Quantity:	80
Weight/Volume:	P
Batch Number:	Not reported
EPA Waste Codes:	D011
Copies:	Not reported
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	MAQ2165421

Details as of 2013:

Year:	2002
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported

WINDSOR MARKETING (Continued) **S109729491**

Generator Mailing Country:	USA
Telephone:	8606275927
Special Handling:	Not reported
Last Modified Date:	04/27/2004
Last Modified By:	IG

Year:	2002
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	8606275927
Special Handling:	Not reported
Last Modified Date:	04/27/2004
Last Modified By:	IG

Year:	2002
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	8606275927
Special Handling:	Not reported
Last Modified Date:	04/27/2004
Last Modified By:	IG

Waste as of 2013:

Year:	2002
Manifest ID:	MAQ216542
Waste Occurrence:	1
UNNA:	3082
Hazard Class:	9
US Dot Description:	RQ HAZARDOUS WASTE, LIQUID, N.O.S.
Number of Containers:	001
Container Type:	DF
Quantity:	80
Weight/Volume:	P
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	2002
Manifest ID:	MAQ216542
Waste Occurrence:	1
EPA Waste Code:	D011
Recycled Waste?:	False
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

WINDSOR MARKETING (Continued) **S109729491**

Click this hyperlink while viewing on your computer to access
8 additional CT MANIFEST: record(s) in the EDR Site Report.

Details:

Year:	2001
EPA ID:	CTD131755209
Manifest Id:	MAM934043
TSDF EPA ID:	MAD096287354
TSDF Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Address:	224 EAST MAIN ST
TSDF City,State,Zip:	W BROOKFIELD, MA 01585
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	SCR000075150
Transporter Name:	SAFETY-KLEEN SYSTEMS INC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	2 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Not reported
Date Shipped:	03/27/2001
Date Received:	03/28/2001
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	WASTE COMBUSTIBLE LIQUID, N.O.S.
Number of Containers:	003
Container Type:	DM
Quantity:	72
Weight/Volume:	G
Batch Number:	4229, 4250
EPA Waste Codes:	D001
Copies:	2, 7
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	MAM9340431

WINDSOR MARKETING (Continued) **S109729491**

Details as of 2013:

Year:	2001
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	8606275927
Special Handling:	Not reported
Last Modified Date:	04/27/2004
Last Modified By:	IG

Year:	2001
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	8606275927
Special Handling:	Not reported
Last Modified Date:	04/27/2004
Last Modified By:	IG

Year:	2001
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	8606275927
Special Handling:	Not reported
Last Modified Date:	04/27/2004
Last Modified By:	IG

Waste as of 2013:

Year:	2001
Manifest ID:	MAM934043
Waste Occurrence:	1
UNNA:	1993
Hazard Class:	3
US Dot Description:	WASTE COMBUSTIBLE LIQUID, N.O.S.
Number of Containers:	003
Container Type:	DM
Quantity:	72
Weight/Volume:	G
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	2001
Manifest ID:	MAM934043

WINDSOR MARKETING (Continued) **S109729491**

Waste Occurrence:	1
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Click this hyperlink while viewing on your computer to access
8 additional CT MANIFEST: record(s) in the EDR Site Report.

F26 **WINDSOR MARKETING GROUP INC** **CT MANIFEST** **S109729492**
ESE **2 INDUSTRIAL RD** **N/A**
< 1/8 **WINDSOR LOCKS, CT 06096**
0.051 mi.
267 ft. **Site 5 of 6 in cluster F**

Relative:
Higher

Actual:
173 ft.

CT MANIFEST:

EPA ID:	CTD131755209
Years:	2006, 2005, 2004, 2003, 2002, 2001, 1999, 1998, 1997, 1996, 1995, 1994, 1993, 1992, 1991, 1990, 1989

Details:

Year:	Not reported
EPA ID:	CTD131755209
Manifest Id:	CTF1063993
TSDF EPA ID:	KYD053348108
TSDF Name:	SAFETY-KLEEN CORP
TSDF Address:	3700 LAGRANGE RD
TSDF City,State,Zip:	SMITHFIELD, KY 40068-
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	TXR000050930
Transporter Name:	SAFETY-KLEEN SYSTEMS INC (KELLER)
Transporter Address:	7273 US HWY 45
Transporter City,State,Zip:	NEENAH, WI 54956
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	2 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Not reported
Date Shipped:	Not reported
Date Received:	Not reported
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	FLAMMABLE LIQUIDS, N.O.S.

WINDSOR MARKETING GROUP INC (Continued) **S109729492**

Number of Containers:	001
Container Type:	DM
Quantity:	462
Weight/Volume:	P
Batch Number:	636, 636
EPA Waste Codes:	D001
Copies:	2, 7
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	CTF10639931

Details as of 2013:

Year:	2004
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	(800)558-5011
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036275927
Special Handling:	Not reported
Last Modified Date:	09/02/2005
Last Modified By:	DMG

Year:	2004
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	(800)558-5011
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036275927
Special Handling:	Not reported
Last Modified Date:	09/02/2005
Last Modified By:	DMG

Waste as of 2013:

Year:	2004
Manifest ID:	CTF1063993
Waste Occurrence:	1
UNNA:	1993
Hazard Class:	3
US Dot Description:	FLAMMABLE LIQUIDS, N.O.S.
Number of Containers:	001
Container Type:	DM
Quantity:	462
Weight/Volume:	P
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2005-09-02 00:00:00
Last Modified By:	DMG

WINDSOR MARKETING GROUP INC (Continued) **S109729492**

Waste Code as of 2013:

Year:	2004
Manifest ID:	CTF1063993
Waste Occurrence:	1
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2005-09-02 00:00:00
Last Modified By:	DMG

Details:

Year:	2006
EPA ID:	CTD131755209
Manifest Id:	000214584cex
TSDF EPA ID:	ILD980613913
TSDF Name:	SAFETY-KLEEN CORP
TSDF Address:	633 E 138TH ST
TSDF City,State,Zip:	DOLTON, IL
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	TXR000050930
Transporter Name:	SAFETY-KLEEN SYSTEMS INC C/O JJ KELLER & ASSOC
Transporter Address:	3003 W BREEZEWOOD LA PO BOX 368
Transporter City,State,Zip:	NEENAH, WI 54957-
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	2 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Not reported
Date Shipped:	10/05/2006
Date Received:	10/20/2006
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	OXIDIZING LIQUID, CORROSIVE, N.O.S.
Number of Containers:	1
Container Type:	DF
Quantity:	400
Weight/Volume:	P
Batch Number:	500, 537
EPA Waste Codes:	D001
Copies:	1, 6
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported

WINDSOR MARKETING GROUP INC (Continued) **S109729492**

Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	000214584cex1

Details as of 2013:

Year:	2006
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	(800)558-5011
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036275927
Special Handling:	Not reported
Last Modified Date:	02/13/2009
Last Modified By:	JEB

Year:	2006
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	(800)558-5011
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036275927
Special Handling:	Not reported
Last Modified Date:	02/13/2009
Last Modified By:	JEB

Waste as of 2013:

Year:	2006
Manifest ID:	000214584cex
Waste Occurrence:	1
UNNA:	3098
Hazard Class:	5.1
US Dot Description:	OXIDIZING LIQUID, CORROSIVE, N.O.S.
Number of Containers:	1
Container Type:	DF
Quantity:	400
Weight/Volume:	P
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2008-02-26 00:00:00
Last Modified By:	JEB

Waste Code as of 2013:

Year:	2006
Manifest ID:	000214584cex
Waste Occurrence:	1
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2008-02-26 00:00:00
Last Modified By:	JEB

WINDSOR MARKETING GROUP INC (Continued) **S109729492**

Details:

Year:	2005
EPA ID:	CTD131755209
Manifest Id:	IL11580494
TSDF EPA ID:	ILD980613913
TSDF Name:	SAFETY KLEEN CORP (DOLTON IL)
TSDF Address:	Not reported
TSDF City,State,Zip:	DOLTON, IL
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	TXR000050930
Transporter Name:	SAFETY-KLEEN SYSTEMS C/O JJ KELLER & ASSOC
Transporter Address:	3003 W BREEZEWOOD LA PO BOX 368
Transporter City,State,Zip:	NEENAH, WI 54957-
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	2 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Not reported
Date Shipped:	02/04/2005
Date Received:	Not reported
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	OXIDIZING LIQUID, N.O.S.
Number of Containers:	1
Container Type:	DM
Quantity:	385
Weight/Volume:	P
Batch Number:	1036
EPA Waste Codes:	D001
Copies:	6
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	IL115804941

Details as of 2013:

Year:	2005
EPAID:	CTD131755209

WINDSOR MARKETING GROUP INC (Continued) **S109729492**

TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	(800)558-5011
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036275927
Special Handling:	Not reported
Last Modified Date:	07/14/2011
Last Modified By:	DPW

Year:	2005
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	(800)558-5011
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036275927
Special Handling:	Not reported
Last Modified Date:	07/14/2011
Last Modified By:	DPW

Waste as of 2013:

Year:	2005
Manifest ID:	IL11580494
Waste Occurrence:	1
UNNA:	Not reported
Hazard Class:	5.1
US Dot Description:	OXIDIZING LIQUID, N.O.S.
Number of Containers:	1
Container Type:	DM
Quantity:	385
Weight/Volume:	P
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2011-07-14 00:00:00
Last Modified By:	DPW

Waste Code as of 2013:

Year:	2005
Manifest ID:	IL11580494
Waste Occurrence:	1
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2011-07-14 00:00:00
Last Modified By:	DPW

Details:

Year:	2004
EPA ID:	CTD131755209
Manifest Id:	CTF1161672
TSDF EPA ID:	KYD053348108
TSDF Name:	SAFETY-KLEEN CORP
TSDF Address:	3700 LAGRANGE RD
TSDF City,State,Zip:	SMITHFIELD, KY

WINDSOR MARKETING GROUP INC (Continued) **S109729492**

TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	TXR000050930
Transporter Name:	SAFETY-KLEEN SYSTEMS INC (KELLER)
Transporter Address:	7273 US HWY 45
Transporter City,State,Zip:	NEENAH, WI 54956
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	2 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Not reported
Date Shipped:	08/27/2004
Date Received:	09/01/2004
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	FLAMMABLE LIQUIDS, N.O.S.
Number of Containers:	001
Container Type:	DM
Quantity:	460
Weight/Volume:	P
Batch Number:	704, 884
EPA Waste Codes:	D001
Copies:	2, 7
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	CTF11616721

Details as of 2013:

Year:	2004
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	(800)558-5011
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036275927
Special Handling:	Not reported
Last Modified Date:	03/22/2007
Last Modified By:	JEB

WINDSOR MARKETING GROUP INC (Continued) **S109729492**

Year:	2004
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	(800)558-5011
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036275927
Special Handling:	Not reported
Last Modified Date:	03/22/2007
Last Modified By:	JEB

Waste as of 2013:

Year:	2004
Manifest ID:	CTF1161672
Waste Occurrence:	1
UNNA:	1993
Hazard Class:	3
US Dot Description:	FLAMMABLE LIQUIDS, N.O.S.
Number of Containers:	001
Container Type:	DM
Quantity:	460
Weight/Volume:	P
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2005-10-04 00:00:00
Last Modified By:	DMG

Waste Code as of 2013:

Year:	2004
Manifest ID:	CTF1161672
Waste Occurrence:	1
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2005-10-04 00:00:00
Last Modified By:	DMG

Details:

Year:	2003
EPA ID:	CTD131755209
Manifest Id:	CTF1193526
TSDF EPA ID:	IND000646943
TSDF Name:	POLLUTION CONTROL INDS (PCI)
TSDF Address:	4343 KENNEDY DR
TSDF City,State,Zip:	EAST CHICAGO, IN 46312
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	MAD985269323
Transporter Name:	ENVIRO-SAFE CORP
Transporter Address:	14B JAN SEBASTIAN DR
Transporter City,State,Zip:	SANDWICH, MA 02563
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	10/01/2003

WINDSOR MARKETING GROUP INC (Continued) **S109729492**

Trans 2 EPA ID:	OHD009865825
Trans 2 Name:	DART TRUCKING CO INC
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	2 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	N
Date Shipped:	09/30/2003
Date Received:	10/03/2003
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	PAINT RELATED MATERIAL, PAINT
Number of Containers:	001
Container Type:	DM
Quantity:	5
Weight/Volume:	G
Batch Number:	5619, 5619
EPA Waste Codes:	D001
Copies:	2, 7
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	CTF11935261
Year:	2003
EPA ID:	CTD131755209
Manifest Id:	CTF1193526
TSDF EPA ID:	IND000646943
TSDF Name:	POLLUTION CONTROL INDS (PCI)
TSDF Address:	4343 KENNEDY DR
TSDF City,State,Zip:	EAST CHICAGO, IN 46312
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	MAD985269323
Transporter Name:	ENVIRO-SAFE CORP
Transporter Address:	14B JAN SEBASTIAN DR
Transporter City,State,Zip:	SANDWICH, MA 02563
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	10/01/2003
Trans 2 EPA ID:	OHD009865825
Trans 2 Name:	DART TRUCKING CO INC
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA

WINDSOR MARKETING GROUP INC (Continued) **S109729492**

Trans 2 Phone:	Not reported
Generator Mailing Address:	2 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	N
Date Shipped:	09/30/2003
Date Received:	10/03/2003
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	4
US Dot Description:	ISOPROPYL ALCOHOLS MIXTURE, ISOPROPANOL
Number of Containers:	001
Container Type:	DM
Quantity:	4
Weight/Volume:	G
Batch Number:	5619, 5619
EPA Waste Codes:	D001
Copies:	2, 7
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	CTF11935264

Year:	2003
EPA ID:	CTD131755209
Manifest Id:	CTF1193526
TSDF EPA ID:	IND000646943
TSDF Name:	POLLUTION CONTROL INDS (PCI)
TSDF Address:	4343 KENNEDY DR
TSDF City,State,Zip:	EAST CHICAGO, IN 46312
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	MAD985269323
Transporter Name:	ENVIRO-SAFE CORP
Transporter Address:	14B JAN SEBASTIAN DR
Transporter City,State,Zip:	SANDWICH, MA 02563
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	10/01/2003
Trans 2 EPA ID:	OHD009865825
Trans 2 Name:	DART TRUCKING CO INC
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	2 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported

WINDSOR MARKETING GROUP INC (Continued) **S109729492**

Special Handling:	Not reported
Discrepancies:	N
Date Shipped:	09/30/2003
Date Received:	10/03/2003
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	3
US Dot Description:	RESIN SOLUTION
Number of Containers:	004
Container Type:	DM
Quantity:	20
Weight/Volume:	G
Batch Number:	5619, 5619
EPA Waste Codes:	D001
Copies:	2, 7
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	CTF11935263

Year:	2003
EPA ID:	CTD131755209
Manifest Id:	CTF1193526
TSDF EPA ID:	IND000646943
TSDF Name:	POLLUTION CONTROL INDS (PCI)
TSDF Address:	4343 KENNEDY DR
TSDF City,State,Zip:	EAST CHICAGO, IN 46312
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	MAD985269323
Transporter Name:	ENVIRO-SAFE CORP
Transporter Address:	14B JAN SEBASTIAN DR
Transporter City,State,Zip:	SANDWICH, MA 02563
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	10/01/2003
Trans 2 EPA ID:	OHD009865825
Trans 2 Name:	DART TRUCKING CO INC
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	2 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	N
Date Shipped:	09/30/2003
Date Received:	10/03/2003
Last modified date:	Not reported

WINDSOR MARKETING GROUP INC (Continued) **S109729492**

Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	2
US Dot Description:	ISOPROPYL ALCOHOLS MIXTURE, ISOPROPANOL
Number of Containers:	002
Container Type:	DF
Quantity:	10
Weight/Volume:	G
Batch Number:	5619, 5619
EPA Waste Codes:	D001
Copies:	2, 7
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	CTF11935262

Details as of 2013:

Year:	2003
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036275927
Special Handling:	Not reported
Last Modified Date:	05/26/2004
Last Modified By:	IG

Year:	2003
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036275927
Special Handling:	Not reported
Last Modified Date:	05/26/2004
Last Modified By:	IG

Waste Code as of 2013:

Year:	2003
Manifest ID:	CTF1193526
Waste Occurrence:	1
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2004-05-26 00:00:00
Last Modified By:	IG

Year:	2003
Manifest ID:	CTF1193526

WINDSOR MARKETING GROUP INC (Continued) **S109729492**

Waste Occurrence:	4
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2004-05-26 00:00:00
Last Modified By:	IG

Year:	2003
Manifest ID:	CTF1193526
Waste Occurrence:	3
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2004-05-26 00:00:00
Last Modified By:	IG

Year:	2003
Manifest ID:	CTF1193526
Waste Occurrence:	2
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2004-05-26 00:00:00
Last Modified By:	IG

Details:

Year:	2002
EPA ID:	CTD131755209
Manifest Id:	ctf1074186
TSDF EPA ID:	KYD053348108
TSDF Name:	SAFETY-KLEEN CORP
TSDF Address:	3700 LAGRANGE RD
TSDF City,State,Zip:	SMITHFIELD, KY 40068
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	scr000075150
Transporter Name:	safety-kleen
Transporter Address:	1301 gervais st
Transporter City,State,Zip:	columbia, sc
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	2 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Not reported
Date Shipped:	12/27/2002
Date Received:	01/14/2003
Last modified date:	Not reported
Last modified by:	Not reported

WINDSOR MARKETING GROUP INC (Continued) **S109729492**

Comments:	Not reported
Waste Occurence:	1
US Dot Description:	FLAMMABLE LIQUIDS, N.O.S.
Number of Containers:	2
Container Type:	DM
Quantity:	922
Weight/Volume:	P
Batch Number:	5654, 5654
EPA Waste Codes:	D001
Copies:	2, 7
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	ctf10741861

Details as of 2013:

Year:	2002
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036275927
Special Handling:	Not reported
Last Modified Date:	10/12/2006
Last Modified By:	JEB

Year:	2002
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036275927
Special Handling:	Not reported
Last Modified Date:	10/12/2006
Last Modified By:	JEB

Year:	2002
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036275927
Special Handling:	Not reported
Last Modified Date:	10/12/2006
Last Modified By:	JEB

WINDSOR MARKETING GROUP INC (Continued) **S109729492**

Waste as of 2013:

Year:	2002
Manifest ID:	ctf1074186
Waste Occurrence:	1
UNNA:	1993
Hazard Class:	3
US Dot Description:	FLAMMABLE LIQUIDS, N.O.S.
Number of Containers:	2
Container Type:	DM
Quantity:	922
Weight/Volume:	P
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2006-10-12 00:00:00
Last Modified By:	JEB

Waste Code as of 2013:

Year:	2002
Manifest ID:	ctf1074186
Waste Occurrence:	1
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2006-10-12 00:00:00
Last Modified By:	JEB

Details:

Year:	2001
EPA ID:	CTD131755209
Manifest Id:	MAM964056
TSDF EPA ID:	MAD096287354
TSDF Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Address:	224 EAST MAIN ST
TSDF City,State,Zip:	W BROOKFIELD, MA 01585
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	SCR000075150
Transporter Name:	SAFETY-KLEEN SYSTEMS INC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	2 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Not reported

WINDSOR MARKETING GROUP INC (Continued) **S109729492**

Date Shipped:	06/04/2001
Date Received:	06/04/2001
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	RQ HAZARDOUS WASTE, LIQUID, N.O.S.
Number of Containers:	017
Container Type:	DF
Quantity:	2040
Weight/Volume:	P
Batch Number:	4408, 4408
EPA Waste Codes:	D011
Copies:	2, 7
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	MAM9640561

Details as of 2013:

Year:	2001
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	8606275927
Special Handling:	Not reported
Last Modified Date:	04/27/2004
Last Modified By:	IG

Year:	2001
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	8606275927
Special Handling:	Not reported
Last Modified Date:	04/27/2004
Last Modified By:	IG

Year:	2001
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	8606275927
Special Handling:	Not reported

WINDSOR MARKETING GROUP INC (Continued) **S109729492**

Last Modified Date:	04/27/2004
Last Modified By:	IG

Waste as of 2013:

Year:	2001
Manifest ID:	MAM964056
Waste Occurrence:	1
UNNA:	3082
Hazard Class:	9
US Dot Description:	RQ HAZARDOUS WASTE, LIQUID, N.O.S.
Number of Containers:	017
Container Type:	DF
Quantity:	2040
Weight/Volume:	P
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	2001
Manifest ID:	MAM964056
Waste Occurrence:	1
EPA Waste Code:	D011
Recycled Waste?:	False
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Details:

Year:	1999
EPA ID:	CTD131755209
Manifest Id:	MAM057401
TSDF EPA ID:	MAD096287354
TSDF Name:	SAFETY KLEEN SYSTEMS INC
TSDF Address:	224 E MAIN ST
TSDF City,State,Zip:	WEST BROOKFIELD, MA 01585
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	ILD984908202
Transporter Name:	SAFETY-KLEEN CORP
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	2 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported

WINDSOR MARKETING GROUP INC (Continued) **S109729492**

Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	N
Date Shipped:	11/15/1999
Date Received:	11/18/1999
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	env. Hazardous substance liquid nos
Number of Containers:	021
Container Type:	DF
Quantity:	2100
Weight/Volume:	P
Batch Number:	3244, 3271
EPA Waste Codes:	D011
Copies:	2, 7
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	MAM0574011

Details as of 2013:

Year:	1999
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036275927
Special Handling:	Not reported
Last Modified Date:	04/26/2004
Last Modified By:	IG

Year:	1999
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036275927
Special Handling:	Not reported
Last Modified Date:	04/26/2004
Last Modified By:	IG

Year:	1999
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported

WINDSOR MARKETING GROUP INC (Continued) **S109729492**

Generator Mailing Country:	USA
Telephone:	2036275927
Special Handling:	Not reported
Last Modified Date:	04/26/2004
Last Modified By:	IG

Waste as of 2013:

Year:	1999
Manifest ID:	MAM057401
Waste Occurrence:	1
UNNA:	3082
Hazard Class:	9
US Dot Description:	env. Hazardous substance liquid nos
Number of Containers:	021
Container Type:	DF
Quantity:	2100
Weight/Volume:	P
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2004-04-26 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	1999
Manifest ID:	MAM057401
Waste Occurrence:	1
EPA Waste Code:	D011
Recycled Waste?:	False
Last Modified Date:	2004-04-26 00:00:00
Last Modified By:	IG

Details:

Year:	1998
EPA ID:	CTD131755209
Manifest Id:	NYG1210707
TSDF EPA ID:	NYD045604964
TSDF Name:	EI DUPONT DENEMOURS & CO
TSDF Address:	69 SENECE AVE
TSDF City,State,Zip:	ROCHESTER, NY
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	NJD046555033
Transporter Name:	LACY'S EXPRESS INC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported

WINDSOR MARKETING GROUP INC (Continued) **S109729492**

Generator Mailing Address:	2 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Not reported
Date Shipped:	11/24/1998
Date Received:	Not reported
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	corrosive liquid nos
Number of Containers:	024
Container Type:	DF
Quantity:	360
Weight/Volume:	G
Batch Number:	2370
EPA Waste Codes:	D002
Copies:	7
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	NYG12107071

Details as of 2013:

Year:	1998
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036275927
Special Handling:	Not reported
Last Modified Date:	04/26/2004
Last Modified By:	IG

Year:	1998
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036275927
Special Handling:	Not reported
Last Modified Date:	04/26/2004
Last Modified By:	IG

Year:	1998
EPAID:	CTD131755209
TSDF Telephone:	Not reported

WINDSOR MARKETING GROUP INC (Continued) **S109729492**

Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036275927
Special Handling:	Not reported
Last Modified Date:	04/26/2004
Last Modified By:	IG

Waste as of 2013:

Year:	1998
Manifest ID:	NYG1210707
Waste Occurrence:	1
UNNA:	1760
Hazard Class:	8
US Dot Description:	corrosive liquid nos
Number of Containers:	024
Container Type:	DF
Quantity:	360
Weight/Volume:	G
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2004-04-26 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	1998
Manifest ID:	NYG1210707
Waste Occurrence:	1
EPA Waste Code:	D002
Recycled Waste?:	False
Last Modified Date:	2004-04-26 00:00:00
Last Modified By:	IG

Details:

Year:	1997
EPA ID:	CTD131755209
Manifest Id:	CTF0614323
TSDF EPA ID:	CTD000845982
TSDF Name:	SAFETY-KLEEN CORP
TSDF Address:	24 BRIXTON ST
TSDF City,State,Zip:	WEST HARTFORD, CT 06110
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	ILD984908202
Transporter Name:	SAFETY-KLEEN CORP
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported

WINDSOR MARKETING GROUP INC (Continued) **S109729492**

Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	2 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Not reported
Date Shipped:	03/11/1997
Date Received:	03/11/1997
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	RQ WASTE COMBUSTIBLE LIQUID,N.O.S.
Number of Containers:	005
Container Type:	DM
Quantity:	76
Weight/Volume:	G
Batch Number:	1381, 1381, 2038, 2038
EPA Waste Codes:	D001
Copies:	1, 2, 6, 7
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	CTF06143231

Details as of 2013:

Year:	1997
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	8606275927
Special Handling:	Not reported
Last Modified Date:	04/26/2004
Last Modified By:	IG

Waste as of 2013:

Year:	1997
Manifest ID:	CTF0614323
Waste Occurrence:	1
UNNA:	1993
Hazard Class:	3
US Dot Description:	RQ WASTE COMBUSTIBLE LIQUID,N.O.S.
Number of Containers:	005
Container Type:	DM
Quantity:	76
Weight/Volume:	G

WINDSOR MARKETING GROUP INC (Continued) **S109729492**

Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2004-04-26 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	1997
Manifest ID:	CTF0614323
Waste Occurrence:	1
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2004-04-26 00:00:00
Last Modified By:	IG

Click this hyperlink while viewing on your computer to access
8 additional CT MANIFEST: record(s) in the EDR Site Report.

Details:

Year:	1996
EPA ID:	CTD131755209
Manifest Id:	CTF0500299
TSDF EPA ID:	CTD000845982
TSDF Name:	SAFETY KLEEN SYSTEMS INC
TSDF Address:	24 BRIXTON ST
TSDF City,State,Zip:	WEST HARTFORD, CT 06110
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	ILD984908202
Transporter Name:	SAFETY KLEEN SYSTEMS INC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	2 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Not reported
Date Shipped:	10/17/1996
Date Received:	10/17/1996
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	RQ WASTE COMBUSTIBLE LIQUID,N.O.S.
Number of Containers:	004

WINDSOR MARKETING GROUP INC (Continued) **S109729492**

Container Type:	DM
Quantity:	63
Weight/Volume:	G
Batch Number:	831, 831, 856, 856
EPA Waste Codes:	VARY
Copies:	1, 2, 6, 7
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	CTF05002991

Details as of 2013:

Year:	1996
EPAID:	CTD131755209
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036275927
Special Handling:	Not reported
Last Modified Date:	04/26/2004
Last Modified By:	IG

Waste as of 2013:

Year:	1996
Manifest ID:	CTF0500299
Waste Occurrence:	1
UNNA:	1993
Hazard Class:	3
US Dot Description:	RQ WASTE COMBUSTIBLE LIQUID,N.O.S.
Number of Containers:	004
Container Type:	DM
Quantity:	63
Weight/Volume:	G
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2004-04-26 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	1996
Manifest ID:	CTF0500299
Waste Occurrence:	1
EPA Waste Code:	VARY
Recycled Waste?:	False
Last Modified Date:	2004-04-26 00:00:00
Last Modified By:	IG

WINDSOR MARKETING GROUP INC (Continued) **S109729492**

Click this hyperlink while viewing on your computer to access
8 additional CT MANIFEST: record(s) in the EDR Site Report.

F27 **WINDSOR MARKETING GROUP** **CT MANIFEST** **S121136645**
ESE **2 INDUSTRIAL RD** **N/A**
< 1/8 **WINDSOR LOCKS, CT 06096**
0.051 mi.
267 ft. **Site 6 of 6 in cluster F**

Relative:
Higher

Actual:
173 ft.

CT MANIFEST:

EPA ID:	CTP000005888
Years:	1987

Details:

Year:	1987
EPA ID:	CTP000005888
Manifest Id:	MAC002362
TSDF EPA ID:	MAD000604447
TSDF Name:	NORTHEAST SOLVENTS CORP
TSDF Address:	300 CANAL ST
TSDF City,State,Zip:	LAWRENCE, MA 01845
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	MAD981202336
Transporter Name:	OIL RECOVERY CORP
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	2 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	N
Date Shipped:	01/07/1987
Date Received:	01/09/1987
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	HAZARDOUS WASTE LIQUID NOS
Number of Containers:	002
Container Type:	DM
Quantity:	110
Weight/Volume:	G
Batch Number:	999999
EPA Waste Codes:	M099
Copies:	2
Alt Fac EPA:	Not reported

WINDSOR MARKETING GROUP (Continued) **S121136645**

Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	MAC0023621

Details as of 2013:

Year:	1987
EPAID:	CTP000005888
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036275927
Special Handling:	N
Last Modified Date:	04/27/2004
Last Modified By:	IG

Year:	1987
EPAID:	CTP000005888
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036275927
Special Handling:	N
Last Modified Date:	04/27/2004
Last Modified By:	IG

Waste as of 2013:

Year:	1987
Manifest ID:	MAC002362
Waste Occurrence:	1
UNNA:	9189
Hazard Class:	ORM-E
US Dot Description:	HAZARDOUS WASTE LIQUID NOS
Number of Containers:	002
Container Type:	DM
Quantity:	110
Weight/Volume:	G
Additional Description:	Y
Handling Code:	S01
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	1987
Manifest ID:	MAC002362
Waste Occurrence:	1
EPA Waste Code:	M099
Recycled Waste?:	False
Last Modified Date:	2004-04-27 00:00:00

WINDSOR MARKETING GROUP (Continued) **S121136645**

Last Modified By: IG

28
SSE
< 1/8
0.072 mi.
381 ft.

BRADLEY MILITARY AF **FUDS** **1010309668**
N/A

WINDSOR LOCKS, CT

Relative:
Higher

Actual:
179 ft.

FUDS:

EPA Region:	01
Congressional District:	01
FUDS Number:	D01CT0085
State:	CT
Facility Name:	BRADLEY MILITARY AF
Fiscal Year:	2013
City:	WINDSOR LOCKS
Federal Facility ID:	CT9799F1750
Telephone:	978-318-8238
INST ID:	57623
County:	HARTFORD
RAB:	Not reported
CORPS_DIST:	New England District (NAE)
NPL Status:	Not Listed
CTC:	1694.5
Current Owner:	State Government
Future Prog:	Not reported
Description:	The Army constructed an airfield at the site in 1941 designating it as Bradley Military Airfield for the training of pilots and Army Air Corps personnel. Construction included runways, taxiways, living quarters, a 20 mile road system, a water and sewage system, fuel farm, and other military buildings. The State of CT uses the site as an international public airport.
Current Program:	Not reported
History:	Bradley International Airport formerly Bradley Military Field consisted of 1609.1 acres leased from of the State of Connecticut beginning 4/30/1941. This constituted the runways and bulk of the installation area. During the period 1941 to 1943 the Government made further acquisitions totaling 376.105 acres fee by purchase and condemnation an additional 95.7 acres lease for total of 1704.8 acres lease 54.54 acres easement 2.47 acres permit and license for 0.08 acre. At the end of WWII Bradley Field was closed and accountability was assumed by the War Assets Administration 9/13/1947. Surrendered to the State of CT by deed dated 10/15/1948 for commercial airport purposes and as training field for Air National Guard units. 1667.7 acres leasehold interests and the improvements thereon including the subject tank farm 131.80 acres fee 38.66 acres easement and 2.55 acres lesser interests. By deeds dated 9/9/1954, 3/25/1954, and 4/24/1957 the United States conveyed to the State of CT total of 244.31 acres fee as well as smaller easement and leasehold interests. The State of Connecticut is the current owner of the site.
Latitude Degree:	41
Latitude Minute:	56
Latitude Second:	27
Latitude Direction:	N
Longitude Degree:	-72
Longitude Minute:	40
Longitude Second:	20

BRADLEY MILITARY AF (Continued) **1010309668**

Longitude Direction: E

G29 ESE < 1/8 0.124 mi. 654 ft. **WINDSOR MARKETING ROUP** **CT MANIFEST** **S109747621**
6 INDUSTRIAL RD **N/A**
WINDSOR LOCKS, CT 06096

Site 1 of 2 in cluster G

Relative: Lower

Actual: 168 ft.

CT MANIFEST:

EPA ID:	CTP000019476
Years:	2002, 2001, 2000, 1999, 1998, 1997

Details:

Year:	2002
EPA ID:	CTP000019476
Manifest Id:	ctf0716740
TSDF EPA ID:	KYD053348108
TSDF Name:	SAFETY-KLEEN CORP
TSDF Address:	3700 LAGRANGE RD
TSDF City,State,Zip:	SMITHFIELD, KY 40068
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	scr000075150
Transporter Name:	safety-kleen
Transporter Address:	1301 gervais st
Transporter City,State,Zip:	columbia, sc
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	6 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR LOCKS, CT
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Not reported
Date Shipped:	09/10/2002
Date Received:	Not reported
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	FLAMMABLE LIQUIDS, TOXIC, N.O.S.
Number of Containers:	2
Container Type:	DM
Quantity:	760
Weight/Volume:	P
Batch Number:	5653
EPA Waste Codes:	D001
Copies:	7
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported

WINDSOR MARKETING ROUP (Continued) **S109747621**

Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	ctf07167401

Details as of 2013:

Year:	2002
EPAID:	CTP000019476
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	Not reported
Special Handling:	Not reported
Last Modified Date:	10/11/2006
Last Modified By:	JEB

Waste as of 2013:

Year:	2002
Manifest ID:	ctf0716740
Waste Occurrence:	1
UNNA:	1992
Hazard Class:	3
US Dot Description:	FLAMMABLE LIQUIDS, TOXIC, N.O.S.
Number of Containers:	2
Container Type:	DM
Quantity:	760
Weight/Volume:	P
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2006-10-11 00:00:00
Last Modified By:	JEB

Waste Code as of 2013:

Year:	2002
Manifest ID:	ctf0716740
Waste Occurrence:	1
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2006-10-11 00:00:00
Last Modified By:	JEB

Details:

Year:	2001
EPA ID:	CTP000019476
Manifest Id:	NJA3229919
TSDF EPA ID:	NJD002182897
TSDF Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Address:	1200 SYLVAN ST
TSDF City,State,Zip:	LINDEN, NJ 07036
TSDF Country:	USA

WINDSOR MARKETING ROUP (Continued) **S109747621**

TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	SCR000075150
Transporter Name:	SAFETY-KLEEN SYSTEMS INC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	02/27/2001
Trans 2 EPA ID:	SCR000074591
Trans 2 Name:	SAFETY-KLEEN (TG) INC
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	6 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Not reported
Date Shipped:	02/22/2001
Date Received:	03/02/2001
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	RQ WASTE FLAMMABLE LIQUIDS,TOXIC,N.O.S.
Number of Containers:	003
Container Type:	DM
Quantity:	1149
Weight/Volume:	P
Batch Number:	4250, 4250
EPA Waste Codes:	D001
Copies:	2, 7
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	NJA32299191

Details as of 2013:

Year:	2001
EPAID:	CTP000019476
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	8606275927
Special Handling:	Not reported
Last Modified Date:	04/27/2004
Last Modified By:	IG

WINDSOR MARKETING ROUP (Continued) **S109747621**

Waste as of 2013:

Year:	2001
Manifest ID:	NJA3229919
Waste Occurrence:	2
UNNA:	0000
Hazard Class:	0
US Dot Description:	NON REGULATED LIQUID
Number of Containers:	001
Container Type:	DM
Quantity:	447
Weight/Volume:	P
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Year:	2001
Manifest ID:	NJA3229919
Waste Occurrence:	1
UNNA:	1992
Hazard Class:	3
US Dot Description:	RQ WASTE FLAMMABLE LIQUIDS,TOXIC,N.O.S.
Number of Containers:	003
Container Type:	DM
Quantity:	1149
Weight/Volume:	P
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	2001
Manifest ID:	NJA3229919
Waste Occurrence:	1
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Details:

Year:	2000
EPA ID:	CTP000019476
Manifest Id:	NJA3027371
TSDF EPA ID:	NJD002182897
TSDF Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Address:	1200 SYLVAN ST
TSDF City,State,Zip:	LINDEN, NJ 07036
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	ILD984908202
Transporter Name:	SAFETY-KLEEN SYSTEMS INC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT

WINDSOR MARKETING ROUP (Continued) **S109747621**

Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	03/21/2000
Trans 2 EPA ID:	SCR000074591
Trans 2 Name:	SAFETY-KLEEN (TG) INC
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	6 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Not reported
Date Shipped:	03/16/2000
Date Received:	03/27/2000
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	RQ WASTE FLAMMABLE LIQUIDS, N.O.S.
Number of Containers:	003
Container Type:	DM
Quantity:	1155
Weight/Volume:	P
Batch Number:	3454, 3470
EPA Waste Codes:	D001
Copies:	2, 7
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	NJA30273711

Details as of 2013:

Year:	2000
EPAID:	CTP000019476
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	8606275927
Special Handling:	Not reported
Last Modified Date:	04/27/2004
Last Modified By:	IG

Waste as of 2013:

Year:	2000
Manifest ID:	NJA3027371
Waste Occurrence:	1
UNNA:	1993

WINDSOR MARKETING ROUP (Continued) **S109747621**

Hazard Class:	3
US Dot Description:	RQ WASTE FLAMMABLE LIQUIDS, N.O.S.
Number of Containers:	003
Container Type:	DM
Quantity:	1155
Weight/Volume:	P
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	2000
Manifest ID:	NJA3027371
Waste Occurrence:	1
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Details:

Year:	1999
EPA ID:	CTP000019476
Manifest Id:	NJA3047222
TSDF EPA ID:	NJD002182897
TSDF Name:	SAFETY-KLEEN SYSTEMS INC
TSDF Address:	1200 SYLVAN ST
TSDF City,State,Zip:	LINDEN, NJ 07036
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	ILD984908202
Transporter Name:	SAFETY-KLEEN SYSTEMS INC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	05/28/1999
Trans 2 EPA ID:	SCD987574647
Trans 2 Name:	SAFETY-KLEEN (TG), INC.
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	6 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Not reported
Date Shipped:	05/25/1999
Date Received:	06/03/1999
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported

WINDSOR MARKETING ROUP (Continued) **S109747621**

Waste Occurence:	1
US Dot Description:	RQ WASTE FLAMMABLE LIQUIDS, N.O.S.
Number of Containers:	001
Container Type:	DM
Quantity:	360
Weight/Volume:	P
Batch Number:	2867, 2867
EPA Waste Codes:	D001
Copies:	2, 7
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	NJA30472221

Details as of 2013:

Year:	1999
EPAID:	CTP000019476
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	8606275927
Special Handling:	Not reported
Last Modified Date:	04/26/2004
Last Modified By:	IG

Waste as of 2013:

Year:	1999
Manifest ID:	NJA3047222
Waste Occurrence:	1
UNNA:	1993
Hazard Class:	3
US Dot Description:	RQ WASTE FLAMMABLE LIQUIDS, N.O.S.
Number of Containers:	001
Container Type:	DM
Quantity:	360
Weight/Volume:	P
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2004-04-26 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	1999
Manifest ID:	NJA3047222
Waste Occurrence:	1
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2004-04-26 00:00:00
Last Modified By:	IG

WINDSOR MARKETING ROUP (Continued) **S109747621**

Details:

Year:	1998
EPA ID:	CTP000019476
Manifest Id:	CTF0669623
TSDF EPA ID:	CTD000845982
TSDF Name:	SAFETY-KLEEN CORP
TSDF Address:	24 BRIXTON ST
TSDF City,State,Zip:	WEST HARTFORD, CT 06110
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	ILD984908202
Transporter Name:	SAFETY KLEEN CORP
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	6 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Not reported
Date Shipped:	02/06/1998
Date Received:	02/06/1998
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	RQ WASTE FLAMMABLE LIQUIDS, N.O.S.
Number of Containers:	001
Container Type:	DM
Quantity:	353
Weight/Volume:	P
Batch Number:	1487, 1487, 1487, 1487
EPA Waste Codes:	D001
Copies:	1, 2, 6, 7
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	CTF06696231

Details as of 2013:

Year:	1998
EPAID:	CTP000019476

WINDSOR MARKETING ROUP (Continued) **S109747621**

TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	8606275927
Special Handling:	Not reported
Last Modified Date:	04/26/2004
Last Modified By:	IG

Year:	1998
EPAID:	CTP000019476
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	8606275927
Special Handling:	Not reported
Last Modified Date:	04/26/2004
Last Modified By:	IG

Waste as of 2013:

Year:	1998
Manifest ID:	CTF0669623
Waste Occurrence:	1
UNNA:	1993
Hazard Class:	3
US Dot Description:	RQ WASTE FLAMMABLE LIQUIDS, N.O.S.
Number of Containers:	001
Container Type:	DM
Quantity:	353
Weight/Volume:	P
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2004-04-26 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	1998
Manifest ID:	CTF0669623
Waste Occurrence:	1
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2004-04-26 00:00:00
Last Modified By:	IG

Details:

Year:	1998
EPA ID:	CTP000019476
Manifest Id:	CTF0714106
TSDF EPA ID:	KYD053348108
TSDF Name:	SAFETY-KLEEN CORP
TSDF Address:	STATE HIGHWAY 146
TSDF City,State,Zip:	NEW CASTLE, KY 40050

WINDSOR MARKETING ROUP (Continued) **S109747621**

TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	ILD984908202
Transporter Name:	SAFETY-KLEEN CORP
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	11/30/1998
Trans 2 EPA ID:	SCD987574647
Trans 2 Name:	LAIDLAW ENVIRONMENTAL SERVICES (TRANSPORTER)
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	6 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Y
Date Shipped:	11/24/1998
Date Received:	12/08/1998
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	FLAMMABLE LIQUID N.O.S.
Number of Containers:	001
Container Type:	DM
Quantity:	360
Weight/Volume:	P
Batch Number:	2435, 2435, 2435
EPA Waste Codes:	D001
Copies:	2, 6, 7
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	CTF07141061

Details as of 2013:

Year:	1998
EPAID:	CTP000019476
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	Not reported
Special Handling:	Not reported
Last Modified Date:	04/26/2004
Last Modified By:	IG

WINDSOR MARKETING ROUP (Continued) **S109747621**

Year:	1998
EPAID:	CTP000019476
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	Not reported
Special Handling:	Not reported
Last Modified Date:	04/26/2004
Last Modified By:	IG

Waste as of 2013:

Year:	1998
Manifest ID:	CTF0714106
Waste Occurrence:	1
UNNA:	1993
Hazard Class:	3
US Dot Description:	FLAMMABLE LIQUID N.O.S.
Number of Containers:	001
Container Type:	DM
Quantity:	360
Weight/Volume:	P
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2004-04-26 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	1998
Manifest ID:	CTF0714106
Waste Occurrence:	1
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2004-04-26 00:00:00
Last Modified By:	IG

Details:

Year:	1997
EPA ID:	CTP000019476
Manifest Id:	CTF0624562
TSDF EPA ID:	CTD001156009
TSDF Name:	SAFETY-KLEEN CORP
TSDF Address:	39 COMMUNITY AVE EXT
TSDF City,State,Zip:	PLAINFIELD, CT 06374
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	ILD984908202
Transporter Name:	SAFETY-KLEEN CORP
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported

WINDSOR MARKETING ROUP (Continued) **S109747621**

Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	6 INDUSTRIAL RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Not reported
Date Shipped:	01/24/1997
Date Received:	01/27/1997
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	2
US Dot Description:	RQ WASTE FLAMMABLE LIQUIDS, N.O.S.
Number of Containers:	001
Container Type:	DF
Quantity:	444
Weight/Volume:	P
Batch Number:	1342, 1342
EPA Waste Codes:	F001
Copies:	1, 2
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	CTF06245622

Details as of 2013:

Year:	1997
EPAID:	CTP000019476
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	8606275927
Special Handling:	Not reported
Last Modified Date:	04/26/2004
Last Modified By:	IG

Waste as of 2013:

Year:	1997
Manifest ID:	CTF0624562
Waste Occurrence:	2
UNNA:	1993
Hazard Class:	3
US Dot Description:	RQ WASTE FLAMMABLE LIQUIDS, N.O.S.
Number of Containers:	001

WINDSOR MARKETING ROUP (Continued) **S109747621**

Container Type:	DF
Quantity:	444
Weight/Volume:	P
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2004-04-26 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	1997
Manifest ID:	CTF0624562
Waste Occurrence:	2
EPA Waste Code:	F001
Recycled Waste?:	False
Last Modified Date:	2004-04-26 00:00:00
Last Modified By:	IG

G30 **HAMILTON TEST SYSTEMS** **RCRA NonGen / NLR** **1000686912**
ESE **8 INDUSTRIAL RD** **FINDS** **CTD000841197**
< 1/8 **WINDSOR LOCKS, CT 06096** **ECHO**
0.124 mi.
656 ft. **Site 2 of 2 in cluster G**

Relative:
Lower

Actual:
168 ft.

RCRA NonGen / NLR:

Date form received by agency:	08/18/1980
Facility name:	HAMILTON TEST SYSTEMS
Facility address:	8 INDUSTRIAL RD WINDSOR LOCKS, CT 06096
EPA ID:	CTD000841197
Mailing address:	HAMILTON STANDARD DIV UTC WINDSOR LOCKS, CT 06070
Contact:	RICHARD RYAN
Contact address:	HAMILTON STANDARD DIV UTC WINDSOR LOCKS, CT 06070
Contact country:	US
Contact telephone:	203-623-1621
Contact email:	Not reported
EPA Region:	01
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	UNITED TECHNOLGIES CORP
Owner/operator address:	HAMILTON STANDARD DIV UTC WINDSOR LOCKS, CT 06096
Owner/operator country:	Not reported
Owner/operator telephone:	203-623-1621
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

HAMILTON TEST SYSTEMS (Continued) **1000686912**

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Violation Status: No violations found

FINDS:

Registry ID: 110003006773

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000686912
Registry ID:	110003006773
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110003006773

H31 **EDDIES BRADLEY AUTO BODY & SALES** **CT PROPERTY** **S109731926**
East **42 KING SPRING RD** **CT MANIFEST** **N/A**
1/8-1/4 **WINDSOR LOCKS, CT 06096**
0.143 mi.
756 ft. **Site 1 of 6 in cluster H**

Relative:
Lower

Actual:
168 ft.

CT Property:

Seller Name:	Adolf J. Habermeier
Buyer Name:	Regional Capital Management, LLC
Certifying Party:	Adolf J. Habermeier
Certifying Attention Person:	Adolf J. Habermeier
Title Of Certifying Person:	Not reported
Certifying Person Address:	23 Farms Road
Certifying Person City,St,Zip:	Broad Brook, CT 06016
Property Transfer Forms:	Form III (DEP-PERD-PTP-203) when a discharge, spillage, uncontrolled loss, seepage or filtration of hazardous waste has occurred at the parcel that has not been fully remediated or the environmental

EDDIES BRADLEY AUTO BODY & SALES (Continued) **S109731926**

	conditions at the parcel are unknown. The person signing the Form III certification agrees to investigate and remediate the site in accordance with the remediation standards. The statute does not require completion of remediation before the parcel is transferred. Any person submitting a Form III shall simultaneously submit a completed Environmental Condition Assessment Form (ECAF)(DEP-PERD-PTP-200).
Date Recieved:	04/02/2015
Ackn Date:	05/11/2015
Determination Date:	05/11/2015
LEP Verified/DEP Approval Date:	Not reported
Rem Id:	12232
Remediation Location Id:	9437
Date Entered:	04/09/2015
Program:	Property Transfer Program
GAO Site:	False
Staff Full Name:	Robert Robinson
Super/Date:	05/13/2015
Stage Of Project:	Not reported
RP Level Of Activity:	Not reported
RP Needed Level Of Activity:	Not reported
Staff Level Of Activity:	Not reported
Staff Needed Level Of Activity:	Not reported
Public Intrest:	Not reported
PRP Cooperation:	Not reported
Enforcement Status:	Not reported
Level Of Complexity:	Not reported
Complex Eng Or Sci:	False
Complex Due To Public Involvement:	False
Politically Complex:	False
Complex Enforcement:	False
Coordination With Other Bureaus:	False
EPA Involvement:	False
Staff Prefrence:	Not reported
Readiness For Transfer:	Not reported
Project Transfer Time:	Not reported
Transfer Comments:	Not reported
Staff As Of July 2000:	Not reported
Initial Staff:	Not reported
Type Of Transfer:	real estate
Salutation:	Mr. Habermeier
Relationship To Transfer:	transferor
Audit Date:	Not reported
Verif Type:	Not reported
Audit Outcome:	Not reported
GW:	GA
Basin:	Not reported
1st Payment:	3000
Pay Tag1:	3420
2nd Payment:	Not reported
Pay Tag2:	Not reported
RTN:	Not reported
Revised:	Not reported
ECAF Received:	Not reported
Old Determination Date:	Not reported
Redeterminationdate:	Not reported
Previous Determination:	Not reported

EDDIES BRADLEY AUTO BODY & SALES (Continued) **S109731926**

Monitoringoption:	Not reported
Postremedialmonitoring:	Not reported
Schedule Of I/R:	Not reported
Schedule Overdue:	Not reported
Aprvl Sched:	Not reported
Yr 1 Report:	Not reported
Yr 2 Report:	Not reported
Report Overdue:	Not reported
Ext Aprvl Sched:	Not reported
License #:	Not reported
Project Phase:	Not reported
PT Comments:	Not reported
EPA Id Number:	Not reported
GW Class:	Not reported
SW Class:	Not reported
AO/C0:	Not reported
Water Lead(Y Or N):	Not reported
Priority:	Not reported
Project Status(A, I Or D):	Not reported
Last Updated:	Not reported
SR Comments:	Not reported
Priority Or Work-Load:	Not reported
Status:	Not reported
Notes:	Not reported
Special Project Name:	Not reported
Special Project Comments:	Not reported
DOT Project:	Not reported
Pt Counter:	0
Project Complete:	False
Project Inactive:	False
Int Deposit #:	Not reported
Deposit #:	Not reported
Spill Case #:	Not reported
Diversion Id:	0
Public Notice:	Not reported
RAP Received:	Not reported
RAP Approved:	Not reported
Compliance Category:	Not reported
Delete Record:	False
ECAF Reviewed By:	Rob Robinson
Not Locatable:	False
Primary Address:	False
AKA Site Name:	False
Primary Site Name:	False
AKA Site Address:	False
Lead:	LEP

CT MANIFEST:

EPA ID:	CTD982715393
Years:	2007, 2006, 2005, 2004, 2003, 2002, 2001, 2000, 1999, 1998, 1997, 1996, 1995, 1994, 1993, 1992, 1991

Details:

Year:	2007
EPA ID:	CTD982715393
Manifest Id:	000141011VES
TSDF EPA ID:	CTD021816889

EDDIES BRADLEY AUTO BODY & SALES (Continued) **S109731926**

TSDF Name:	UNITED OIL RECOVERY INC
TSDF Address:	136 GRACEY AVE
TSDF City,State,Zip:	MERIDEN, CT 06451
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	NJD080631369
Transporter Name:	VEOLIA ES TECHNICAL SOLUTIONS LLC
Transporter Address:	1 EDEN LANE
Transporter City,State,Zip:	FLANDERS, NJ 07836
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	42 KING SPRING RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Not reported
Date Shipped:	08/20/2007
Date Received:	08/28/2007
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	FLAMMABLE LIQUIDS, N.O.S.
Number of Containers:	1
Container Type:	TT
Quantity:	110
Weight/Volume:	G
Batch Number:	217
EPA Waste Codes:	F001
Copies:	1
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	000141011VES1

Details as of 2013:

Year:	2007
EPAID:	CTD982715393
TSDF Telephone:	(203)238-6745
Transporter Country:	USA
Transporter Telephone:	(973)691-7321
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	8606275168

EDDIES BRADLEY AUTO BODY & SALES (Continued) **S109731926**

Special Handling:	Not reported
Last Modified Date:	09/03/2008
Last Modified By:	JEB

Details:

Year:	2006
EPA ID:	CTD982715393
Manifest Id:	000041123ves
TSDF EPA ID:	CTD021816889
TSDF Name:	UNITED OIL RECOVERY INC
TSDF Address:	136 GRACEY AVE
TSDF City,State,Zip:	MERIDEN, CT 06451
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	NJD080631369
Transporter Name:	VEOLIA ES TECHNICAL SOLUTIONS LLC
Transporter Address:	1 EDEN LANE
Transporter City,State,Zip:	FLANDERS, NJ 07836
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	42 KING SPRING RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Not reported
Date Shipped:	09/19/2006
Date Received:	09/19/2006
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	FLAMMABLE LIQUIDS, N.O.S.
Number of Containers:	001
Container Type:	TT
Quantity:	110
Weight/Volume:	G
Batch Number:	453
EPA Waste Codes:	F001
Copies:	2
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	000041123ves1

EDDIES BRADLEY AUTO BODY & SALES (Continued) **S109731926**

Details as of 2013:

Year:	2006
EPAID:	CTD982715393
TSDF Telephone:	(203)238-6745
Transporter Country:	USA
Transporter Telephone:	(973)691-7321
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	8606275168
Special Handling:	Not reported
Last Modified Date:	01/29/2008
Last Modified By:	DMG

Waste as of 2013:

Year:	2006
Manifest ID:	000041123ves
Waste Occurrence:	1
UNNA:	1993
Hazard Class:	3
US Dot Description:	FLAMMABLE LIQUIDS, N.O.S.
Number of Containers:	001
Container Type:	TT
Quantity:	110
Weight/Volume:	G
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2008-01-29 00:00:00
Last Modified By:	DMG

Waste Code as of 2013:

Year:	2006
Manifest ID:	000041123ves
Waste Occurrence:	1
EPA Waste Code:	F001
Recycled Waste?:	False
Last Modified Date:	2008-01-29 00:00:00
Last Modified By:	DMG

Details:

Year:	2005
EPA ID:	CTD982715393
Manifest Id:	CTF1177929
TSDF EPA ID:	CTD021816889
TSDF Name:	UNITED OIL RECOVERY, INC.
TSDF Address:	136 GRACEY AVENUE
TSDF City,State,Zip:	MERIDEN, CT 06451
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	NJD080631369
Transporter Name:	VEOLIA ES TECHNICAL SOLUTIONS LLC
Transporter Address:	1 EDEN LANE
Transporter City,State,Zip:	FLANDERS, NJ 07836
Transporter Country:	USA

EDDIES BRADLEY AUTO BODY & SALES (Continued) **S109731926**

Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	42 KING SPRING RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Not reported
Date Shipped:	11/22/2005
Date Received:	11/22/2005
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	FLAMMABLE LIQUIDS, N.O.S.
Number of Containers:	1
Container Type:	TT
Quantity:	125
Weight/Volume:	G
Batch Number:	454, 467, 467, 474
EPA Waste Codes:	F003
Copies:	1, 2, 6, 7
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	CTF11779291

Details as of 2013:

Year:	2005
EPAID:	CTD982715393
TSDF Telephone:	(203)238-6745
Transporter Country:	USA
Transporter Telephone:	(973)691-7321
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	8606275168
Special Handling:	Not reported
Last Modified Date:	08/24/2006
Last Modified By:	DMG

Waste as of 2013:

Year:	2005
Manifest ID:	CTF1177929
Waste Occurrence:	1
UNNA:	1993
Hazard Class:	3

EDDIES BRADLEY AUTO BODY & SALES (Continued) **S109731926**

US Dot Description:	FLAMMABLE LIQUIDS, N.O.S.
Number of Containers:	1
Container Type:	TT
Quantity:	125
Weight/Volume:	G
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2006-08-15 00:00:00
Last Modified By:	CYF

Waste Code as of 2013:

Year:	2005
Manifest ID:	CTF1177929
Waste Occurrence:	1
EPA Waste Code:	F003
Recycled Waste?:	False
Last Modified Date:	2006-08-15 00:00:00
Last Modified By:	CYF

Details:

Year:	2004
EPA ID:	CTD982715393
Manifest Id:	ctf1178201
TSDF EPA ID:	CTD021816889
TSDF Name:	UNITED OIL RECOVERY INC
TSDF Address:	14 WEST MAIN ST
TSDF City,State,Zip:	MERIDEN, CT 06451
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	NJD080631369
Transporter Name:	ONYX ENVIRONMENTAL SERVICES LLC
Transporter Address:	1 EDEN LANE
Transporter City,State,Zip:	FLANDERS, NJ 07836
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	42 KING SPRING RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Not reported
Date Shipped:	12/23/2004
Date Received:	12/28/2004
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1

EDDIES BRADLEY AUTO BODY & SALES (Continued) **S109731926**

US Dot Description:	FLAMMABLE LIQUIDS, CORROSIVE, N.O.S.
Number of Containers:	1
Container Type:	TT
Quantity:	80
Weight/Volume:	G
Batch Number:	308, 308, 738, 869
EPA Waste Codes:	F003
Copies:	1, 2, 6, 7
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	ctf11782011

Details as of 2013:

Year:	2004
EPAID:	CTD982715393
TSDF Telephone:	(203)238-6745
Transporter Country:	USA
Transporter Telephone:	(973)691-7321
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	8606275168
Special Handling:	Not reported
Last Modified Date:	11/17/2006
Last Modified By:	JEB

Waste as of 2013:

Year:	2004
Manifest ID:	ctf1178201
Waste Occurrence:	1
UNNA:	1993
Hazard Class:	3
US Dot Description:	FLAMMABLE LIQUIDS, CORROSIVE, N.O.S.
Number of Containers:	1
Container Type:	TT
Quantity:	80
Weight/Volume:	G
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2005-04-26 00:00:00
Last Modified By:	JEB

Waste Code as of 2013:

Year:	2004
Manifest ID:	ctf1178201
Waste Occurrence:	1
EPA Waste Code:	F003
Recycled Waste?:	False
Last Modified Date:	2005-04-26 00:00:00
Last Modified By:	JEB

EDDIES BRADLEY AUTO BODY & SALES (Continued) **S109731926**

Details:

Year:	2003
EPA ID:	CTD982715393
Manifest Id:	MAM187973
TSDF EPA ID:	MAD053452637
TSDF Name:	CLEAN HARBORS OF BRAINTREE INC
TSDF Address:	1 HILL AVE
TSDF City,State,Zip:	BRAINTREE, MA 02184
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	NJD080631369
Transporter Name:	ONYX ENVIRONMENTAL SVS
Transporter Address:	1 EDEN LN
Transporter City,State,Zip:	FLANDERS, NJ 07836
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	42 KING SPRING RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	N
Date Shipped:	03/10/2003
Date Received:	03/12/2003
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	FLAMMABLE LIQUID N.O.S.
Number of Containers:	001
Container Type:	TT
Quantity:	55
Weight/Volume:	G
Batch Number:	5334, 5334
EPA Waste Codes:	F003
Copies:	2, 7
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	MAM1879731

Details as of 2013:

Year:	2003
EPAID:	CTD982715393

EDDIES BRADLEY AUTO BODY & SALES (Continued) **S109731926**

TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	Not reported
Special Handling:	Not reported
Last Modified Date:	04/27/2004
Last Modified By:	IG

Waste Code as of 2013:

Year:	2003
Manifest ID:	MAM187973
Waste Occurrence:	1
EPA Waste Code:	F003
Recycled Waste?:	False
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Details:

Year:	2002
EPA ID:	CTD982715393
Manifest Id:	MAM169063
TSDF EPA ID:	MAD053452637
TSDF Name:	CLEAN HARBORS OF BRAINTREE INC
TSDF Address:	1 HILL AVE
TSDF City,State,Zip:	BRAINTREE, MA 02184
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	NJD080631369
Transporter Name:	ONYX ENVIRONMENTAL SERVICE LLC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	42 KING SPRING RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	N
Date Shipped:	03/08/2002
Date Received:	03/13/2002
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1

EDDIES BRADLEY AUTO BODY & SALES (Continued) **S109731926**

US Dot Description:	FLAMMABLE LIQUID N.O.S.
Number of Containers:	001
Container Type:	TT
Quantity:	90
Weight/Volume:	G
Batch Number:	4952, 4952
EPA Waste Codes:	F003
Copies:	2, 7
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	MAM1690631

Details as of 2013:

Year:	2002
EPAID:	CTD982715393
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	Not reported
Special Handling:	Not reported
Last Modified Date:	04/27/2004
Last Modified By:	IG

Waste as of 2013:

Year:	2002
Manifest ID:	MAM169063
Waste Occurrence:	1
UNNA:	1993
Hazard Class:	3
US Dot Description:	FLAMMABLE LIQUID N.O.S.
Number of Containers:	001
Container Type:	TT
Quantity:	90
Weight/Volume:	G
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	2002
Manifest ID:	MAM169063
Waste Occurrence:	1
EPA Waste Code:	F003
Recycled Waste?:	False
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

EDDIES BRADLEY AUTO BODY & SALES (Continued) **S109731926**

Details:

Year:	2001
EPA ID:	CTD982715393
Manifest Id:	MAM139538
TSDF EPA ID:	MAD053452637
TSDF Name:	CLEAN HARBORS OF BRAINTREE INC
TSDF Address:	1 HILL AVE
TSDF City,State,Zip:	BRAINTREE, MA 02184
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	NJD080631369
Transporter Name:	ONYX ENVIRONMENTAL SERVICE LLC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	42 KING SPRING RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	N
Date Shipped:	02/02/2001
Date Received:	02/07/2001
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	FLAMMABLE LIQUID N.O.S.
Number of Containers:	001
Container Type:	TT
Quantity:	65
Weight/Volume:	G
Batch Number:	4149, 4255
EPA Waste Codes:	D001
Copies:	2, 7
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	MAM1395381

Details as of 2013:

Year:	2001
EPAID:	CTD982715393

EDDIES BRADLEY AUTO BODY & SALES (Continued) **S109731926**

TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	Not reported
Special Handling:	Not reported
Last Modified Date:	04/27/2004
Last Modified By:	IG

Waste as of 2013:

Year:	2001
Manifest ID:	MAM139538
Waste Occurrence:	1
UNNA:	1993
Hazard Class:	3
US Dot Description:	FLAMMABLE LIQUID N.O.S.
Number of Containers:	001
Container Type:	TT
Quantity:	65
Weight/Volume:	G
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	2001
Manifest ID:	MAM139538
Waste Occurrence:	1
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Details:

Year:	2000
EPA ID:	CTD982715393
Manifest Id:	MAM111290
TSDF EPA ID:	MAD053452637
TSDF Name:	CLEAN HARBORS OF BRAINTREE INC
TSDF Address:	385 QUINCY AVE
TSDF City,State,Zip:	BRAINTREE, MA 02184
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	NJD080631369
Transporter Name:	ONYX ENVIRONMENTAL SERVICE LLC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported

EDDIES BRADLEY AUTO BODY & SALES (Continued) **S109731926**

Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	42 KING SPRING RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	N
Date Shipped:	02/24/2000
Date Received:	02/28/2000
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	FLAMMABLE LIQUID N.O.S.
Number of Containers:	001
Container Type:	TT
Quantity:	130
Weight/Volume:	G
Batch Number:	3414, 3414
EPA Waste Codes:	D001
Copies:	2, 7
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	MAM1112901

Details as of 2013:

Year:	2000
EPAID:	CTD982715393
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	Not reported
Special Handling:	Not reported
Last Modified Date:	04/27/2004
Last Modified By:	IG

Waste as of 2013:

Year:	2000
Manifest ID:	MAM111290
Waste Occurrence:	1
UNNA:	1993
Hazard Class:	3
US Dot Description:	FLAMMABLE LIQUID N.O.S.
Number of Containers:	001
Container Type:	TT
Quantity:	130

EDDIES BRADLEY AUTO BODY & SALES (Continued) **S109731926**

Weight/Volume:	G
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	2000
Manifest ID:	MAM111290
Waste Occurrence:	1
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Details:

Year:	1999
EPA ID:	CTD982715393
Manifest Id:	CTF0511840
TSDF EPA ID:	CTD021816889
TSDF Name:	UNITED OIL RECOVERY DBA ADV LIQ REC
TSDF Address:	136 GRACEY AVE
TSDF City,State,Zip:	MERIDEN, CT 06451
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	ILD099202681
Transporter Name:	CHEMICAL WASTE MANAGEMENT INC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	42 KING SPRING RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	N
Date Shipped:	08/05/1999
Date Received:	08/11/1999
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	FLAMMABLE LIQUID N.O.S.
Number of Containers:	001
Container Type:	TT
Quantity:	165

EDDIES BRADLEY AUTO BODY & SALES (Continued) **S109731926**

Weight/Volume:	G
Batch Number:	3027, 3027, 3027, 3027
EPA Waste Codes:	D001
Copies:	1, 2, 6, 7
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	CTF05118401

Details as of 2013:

Year:	1999
EPAID:	CTD982715393
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	Not reported
Special Handling:	Not reported
Last Modified Date:	04/26/2004
Last Modified By:	IG

Waste as of 2013:

Year:	1999
Manifest ID:	CTF0511840
Waste Occurrence:	1
UNNA:	1993
Hazard Class:	3
US Dot Description:	FLAMMABLE LIQUID N.O.S.
Number of Containers:	001
Container Type:	TT
Quantity:	165
Weight/Volume:	G
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2004-04-26 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	1999
Manifest ID:	CTF0511840
Waste Occurrence:	1
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2004-04-26 00:00:00
Last Modified By:	IG

Details:

Year:	1998
EPA ID:	CTD982715393

EDDIES BRADLEY AUTO BODY & SALES (Continued) **S109731926**

Manifest Id:	MAK049578
TSDF EPA ID:	MAD053452637
TSDF Name:	CLEAN HARBORS OF BRAINTREE INC
TSDF Address:	385 QUINCY AVE
TSDF City,State,Zip:	BRAINTREE, MA 02184
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	NJD080631369
Transporter Name:	ADVANCED ENVIRONMENTAL TECHNICAL SERVICE
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	42 KING SPRING RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	N
Date Shipped:	10/30/1998
Date Received:	11/06/1998
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	FLAMMABLE LIQUID N.O.S.
Number of Containers:	001
Container Type:	TT
Quantity:	135
Weight/Volume:	G
Batch Number:	2312, 2374
EPA Waste Codes:	D001
Copies:	2, 7
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	MAK0495781

Details as of 2013:

Year:	1998
EPAID:	CTD982715393
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported

EDDIES BRADLEY AUTO BODY & SALES (Continued) **S109731926**

Generator Mailing Country:	USA
Telephone:	Not reported
Special Handling:	Not reported
Last Modified Date:	04/26/2004
Last Modified By:	IG

Year:	1998
EPAID:	CTD982715393
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	Not reported
Special Handling:	Not reported
Last Modified Date:	04/26/2004
Last Modified By:	IG

Waste as of 2013:

Year:	1998
Manifest ID:	MAK049578
Waste Occurrence:	1
UNNA:	1993
Hazard Class:	3
US Dot Description:	FLAMMABLE LIQUID N.O.S.
Number of Containers:	001
Container Type:	TT
Quantity:	135
Weight/Volume:	G
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2004-04-26 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	1998
Manifest ID:	MAK049578
Waste Occurrence:	1
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2004-04-26 00:00:00
Last Modified By:	IG

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8 additional CT MANIFEST: record(s) in the EDR Site Report.

Details:

Year:	1997
EPA ID:	CTD982715393
Manifest Id:	MAK030059
TSDF EPA ID:	MAD053452637
TSDF Name:	CLEAN HARBORS OF BRAINTREE INC
TSDF Address:	385 QUINCY AVE
TSDF City,State,Zip:	BRAINTREE, MA 02184
TSDF Country:	USA

EDDIES BRADLEY AUTO BODY & SALES (Continued) **S109731926**

TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	NJD080631369
Transporter Name:	ADVANCED ENV TECH SERVICES
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	42 KING SPRING RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Not reported
Date Shipped:	12/26/1997
Date Received:	12/31/1997
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	FLAMMABLE LIQUID N.O.S.
Number of Containers:	001
Container Type:	TT
Quantity:	100
Weight/Volume:	G
Batch Number:	1702, 1709
EPA Waste Codes:	D001
Copies:	2, 7
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	MAK0300591

Details as of 2013:

Year:	1997
EPAID:	CTD982715393
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	Not reported
Special Handling:	Not reported
Last Modified Date:	04/26/2004
Last Modified By:	IG

EDDIES BRADLEY AUTO BODY & SALES (Continued) **S109731926**

Waste as of 2013:

Year:	1997
Manifest ID:	MAK030059
Waste Occurrence:	1
UNNA:	1993
Hazard Class:	3
US Dot Description:	FLAMMABLE LIQUID N.O.S.
Number of Containers:	001
Container Type:	TT
Quantity:	100
Weight/Volume:	G
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2004-04-26 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	1997
Manifest ID:	MAK030059
Waste Occurrence:	1
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2004-04-26 00:00:00
Last Modified By:	IG

Click this hyperlink while viewing on your computer to access
8 additional CT MANIFEST: record(s) in the EDR Site Report.

H32 **E FLAMMABLE LIQUID NOSY & SALES** **CT MANIFEST** **S109731925**
East **42 KING SPRING RD** **N/A**
1/8-1/4 **WINDSOR LOCKS, CT 06096**
0.143 mi.
756 ft. **Site 2 of 6 in cluster H**

Relative:
Lower

Actual:
168 ft.

CT MANIFEST:

EPA ID:	CTD982715393
Years:	1995, 1989

Details:

Year:	1995
EPA ID:	CTD982715393
Manifest Id:	CTF0415914
TSDF EPA ID:	CTD072138969
TSDF Name:	ENVIRONMENTAL WASTE RESOURCES
TSDF Address:	130 FREIGHT ST
TSDF City,State,Zip:	WATERBURY, CT 06725
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	ILD099202681
Transporter Name:	CHEMICAL WASTE MANAGEMENT INC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported

E FLAMMABLE LIQUID NOSY & SALES (Continued) **S109731925**

Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	42 KING SPRING RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Not reported
Date Shipped:	04/07/1995
Date Received:	04/07/1995
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	WASTE FLAMMABLE LIQUID, NOS
Number of Containers:	001
Container Type:	TT
Quantity:	25
Weight/Volume:	G
Batch Number:	146
EPA Waste Codes:	D001
Copies:	1
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	CTF04159141

Details as of 2013:

Year:	1995
EPAID:	CTD982715393
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	Not reported
Special Handling:	Not reported
Last Modified Date:	04/26/2004
Last Modified By:	IG

Year:	1995
EPAID:	CTD982715393
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	Not reported
Special Handling:	Not reported

E FLAMMABLE LIQUID NOSY & SALES (Continued) **S109731925**

Last Modified Date:	04/26/2004
Last Modified By:	IG

Waste as of 2013:

Year:	1995
Manifest ID:	CTF0415914
Waste Occurrence:	1
UNNA:	1993
Hazard Class:	3
US Dot Description:	WASTE FLAMMABLE LIQUID, NOS
Number of Containers:	001
Container Type:	TT
Quantity:	25
Weight/Volume:	G
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2004-04-26 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	1995
Manifest ID:	CTF0415914
Waste Occurrence:	1
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2004-04-26 00:00:00
Last Modified By:	IG

Details:

Year:	1989
EPA ID:	CTD982715393
Manifest Id:	CTC0243646
TSDF EPA ID:	CTD072138969
TSDF Name:	ENVIRONMENTAL WASTE RESOURCES INC
TSDF Address:	130 FREIGHT ST
TSDF City,State,Zip:	WATERBURY, CT 06702
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	ILD099202681
Transporter Name:	CHEMICAL WASTE MANAGEMENT INC (TRANSPORTER)
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	42 KING SPRING RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported

E FLAMMABLE LIQUID NOSY & SALES (Continued) **S109731925**

Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	N
Date Shipped:	06/12/1989
Date Received:	06/12/1989
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	WASTE PAINT RELATED MATERIAL
Number of Containers:	001
Container Type:	TT
Quantity:	195
Weight/Volume:	G
Batch Number:	999999
EPA Waste Codes:	D001
Copies:	1
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	CTC02436461

Details as of 2013:

Year:	1989
EPAID:	CTD982715393
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036275168
Special Handling:	Y
Last Modified Date:	04/27/2004
Last Modified By:	IG

Year:	1989
EPAID:	CTD982715393
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036275168
Special Handling:	Y
Last Modified Date:	04/27/2004
Last Modified By:	IG

Waste as of 2013:

Year:	1989
Manifest ID:	CTC0243646
Waste Occurrence:	1
UNNA:	1263

E FLAMMABLE LIQUID NOSY & SALES (Continued) **S109731925**

Hazard Class:	FLAMMABLE
US Dot Description:	WASTE PAINT RELATED MATERIAL
Number of Containers:	001
Container Type:	TT
Quantity:	195
Weight/Volume:	G
Additional Description:	Y
Handling Code:	T01
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	1989
Manifest ID:	CTC0243646
Waste Occurrence:	1
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

H33
East
1/8-1/4
0.143 mi.
756 ft.

EDDIES BRADLEY AB &
42 KING SPRING RD
WINDSOR LOCKS, CT 06096

CT MANIFEST **S109738799**
N/A

Site 3 of 6 in cluster H

Relative:
Lower

Actual:
168 ft.

CT MANIFEST:

EPA ID:	CTP000009450
Years:	1991, 1990

Details:

Year:	1991
EPA ID:	CTP000009450
Manifest Id:	MAF342925
TSDF EPA ID:	MAD053452637
TSDF Name:	CLEAN HARBORS INC OF BRAINTREE
TSDF Address:	385 QUINCY AVE
TSDF City,State,Zip:	BRAINTREE, MA 02184
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	ILD099202681
Transporter Name:	CHEMICAL WASTE MGT INC (TRANSPORTER)
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	42 KING SPRING RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported

EDDIES BRADLEY AB & (Continued) **S109738799**

Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	N
Date Shipped:	07/10/1991
Date Received:	07/12/1991
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	WASTE FLAMMABLE LIQUID, NOS
Number of Containers:	001
Container Type:	TT
Quantity:	100
Weight/Volume:	G
Batch Number:	999999
EPA Waste Codes:	D001
Copies:	2
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	MAF3429251

Details as of 2013:

Year:	1991
EPAID:	CTP000009450
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036275168
Special Handling:	Y
Last Modified Date:	04/27/2004
Last Modified By:	IG

Waste as of 2013:

Year:	1991
Manifest ID:	MAF342925
Waste Occurrence:	1
UNNA:	1993
Hazard Class:	FLAMMABLE
US Dot Description:	WASTE FLAMMABLE LIQUID, NOS
Number of Containers:	001
Container Type:	TT
Quantity:	100
Weight/Volume:	G
Additional Description:	Y
Handling Code:	S02
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

EDDIES BRADLEY AB & (Continued) **S109738799**

Waste Code as of 2013:

Year:	1991
Manifest ID:	MAF342925
Waste Occurrence:	1
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Details:

Year:	1990
EPA ID:	CTP000009450
Manifest Id:	MAF033074
TSDF EPA ID:	MAD053452637
TSDF Name:	CLEAN HARBORS INC OF BRAINTREE
TSDF Address:	385 QUINCY AVE
TSDF City,State,Zip:	BRAINTREE, MA 02184
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	ILD099202681
Transporter Name:	CHEMICAL WASTE MGT INC (TRANSPORTER)
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	42 KING SPRING RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	N
Date Shipped:	11/19/1990
Date Received:	11/27/1990
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	WASTE FLAMMABLE LIQUID, NOS
Number of Containers:	001
Container Type:	TT
Quantity:	130
Weight/Volume:	G
Batch Number:	999999
EPA Waste Codes:	D001
Copies:	2
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported

EDDIES BRADLEY AB & (Continued) **S109738799**

Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	MAF0330741

Details as of 2013:

Year:	1990
EPAID:	CTP000009450
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036275168
Special Handling:	Y
Last Modified Date:	04/27/2004
Last Modified By:	IG

Waste as of 2013:

Year:	1990
Manifest ID:	MAF033074
Waste Occurrence:	1
UNNA:	1993
Hazard Class:	FLAMMABLE
US Dot Description:	WASTE FLAMMABLE LIQUID, NOS
Number of Containers:	001
Container Type:	TT
Quantity:	130
Weight/Volume:	G
Additional Description:	Y
Handling Code:	S02
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	1990
Manifest ID:	MAF033074
Waste Occurrence:	1
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

H34 **EDDIES BRADLEY AUTO BODY & SALES** **RCRA-SQG** **1000249442**
East **42 KING SPRING RD** **FINDS** **CTD982715393**
1/8-1/4 **WINDSOR LOCKS, CT 06096** **ECHO**
0.143 mi. **NJ MANIFEST**
756 ft. **Site 4 of 6 in cluster H**

Relative:
Lower

Actual:
168 ft.

RCRA-SQG:

Date form received by agency:	05/11/1989
Facility name:	EDDIES BRADLEY AUTO BODY & SALES
Facility address:	42 KING SPRING RD

EDDIES BRADLEY AUTO BODY & SALES (Continued) **1000249442**

	WINDSOR LOCKS, CT 06096
EPA ID:	CTD982715393
Mailing address:	KING SPRING RD WINDSOR LOCKS, CT 06096
Contact:	EDDIE HABERMEIER
Contact address:	42 KING SPRING RD WINDSOR LOCKS, CT 06096
Contact country:	US
Contact telephone:	860-627-5168
Contact email:	Not reported
EPA Region:	01
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	HABERMEIER ADOLF-J
Owner/operator address:	938 HILL ST SUFFIELD, CT 06078
Owner/operator country:	Not reported
Owner/operator telephone:	860-668-6496
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

. Waste code: D000
. Waste name: Not Defined

. Waste code: D001
. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE

EDDIES BRADLEY AUTO BODY & SALES (Continued) **1000249442**

FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

FINDS:

Registry ID: 110002485169

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000249442
Registry ID: 110002485169
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110002485169

NJ MANIFEST:
EPA Id: CTD982715393
Mail Address: KING SPRING RD
Mail City/State/Zip: WINDSOR LOCKS, CT 06096
Facility Phone: Not reported
Emergency Phone: Not reported
Contact: EDDIE HABERMEIER
Comments: Not reported

EDDIES BRADLEY AUTO BODY & SALES (Continued) **1000249442**

SIC Code:	Not reported
County:	CT003
Municipal:	Not reported
Previous EPA Id:	Not reported
Gen Flag:	Not reported
Trans Flag:	Not reported
TSDF Flag:	Not reported
Name Change:	Not reported
Date Change:	Not reported

Manifest:

Manifest Number:	000368406VES
EPA ID:	CTD982715393
Date Shipped:	08/17/2009
TSDF EPA ID:	NJD002454544
Transporter EPA ID:	NJD080631369
Transporter 2 EPA ID:	NJD054126164
Transporter 3 EPA ID:	Not reported
Transporter 4 EPA ID:	Not reported
Transporter 5 EPA ID:	Not reported
Transporter 6 EPA ID:	Not reported
Transporter 7 EPA ID:	Not reported
Transporter 8 EPA ID:	Not reported
Transporter 9 EPA ID:	Not reported
Transporter 10 EPA ID:	Not reported
Date Trans1 Transported Waste:	08/17/2009
Date Trans2 Transported Waste:	08/19/2009
Date Trans3 Transported Waste:	Not reported
Date Trans4 Transported Waste:	Not reported
Date Trans5 Transported Waste:	Not reported
Date Trans6 Transported Waste:	Not reported
Date Trans7 Transported Waste:	Not reported
Date Trans8 Transported Waste:	Not reported
Date Trans9 Transported Waste:	Not reported
Date Trans10 Transported Waste:	Not reported
Date TSDF Received Waste:	08/20/2009
TSDF EPA Facility Name:	Not reported
QTY Units:	Not reported
Transporter SEQ ID:	Not reported
Transporter-1 Date:	Not reported
Waste SEQ ID:	Not reported
Waste Type Code 2:	Not reported
Waste Type Code 3:	Not reported
Waste Type Code 4:	Not reported
Waste Type Code 5:	Not reported
Waste Type Code 6:	Not reported
Date Accepted:	Not reported
Manifest Discrepancy Type:	Not reported
Data Entry Number:	Not reported
Was Load Rejected:	WINDSOR LOCKS, CT 06096
Reason Load Was Rejected:	Not reported

Waste:

Manifest Year:	Not reported
Waste Code:	F001
Hand Code:	H061
Quantity:	800 P

H35 East 1/8-1/4 0.143 mi. 756 ft. | **EDDIES BRADLEY AUTO BODY**
42 KING RD
WINDSOR LOCKS, CT 06096

Site 5 of 6 in cluster H

CT MANIFEST | **S113475205**
N/A

Relative: Lower

Actual: 168 ft.

CT MANIFEST:

EPA ID:	CTD982715393
Years:	1991, 1990, 1989

Details:

Year:	1991
EPA ID:	CTD982715393
Manifest Id:	MAF316263
TSDF EPA ID:	MAD053452637
TSDF Name:	CLEAN HARBORS INC OF BRAINTREE
TSDF Address:	385 QUINCY AVE
TSDF City,State,Zip:	BRAINTREE, MA 02184
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	ILD099202681
Transporter Name:	CHEMICAL WASTE MGT INC (TRANSPORTER)
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	42 KING RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	N
Date Shipped:	03/08/1991
Date Received:	Not reported
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	WASTE FLAMMABLE LIQUID, NOS
Number of Containers:	001
Container Type:	TT
Quantity:	165
Weight/Volume:	G
Batch Number:	Not reported
EPA Waste Codes:	D001
Copies:	Not reported
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported

EDDIES BRADLEY AUTO BODY (Continued) **S113475205**

Alt Fac Date:	Not reported
Unique Key:	MAF3162631

Details as of 2013:

Year:	1991
EPAID:	CTD982715393
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036275168
Special Handling:	Y
Last Modified Date:	04/27/2004
Last Modified By:	IG

Year:	1991
EPAID:	CTD982715393
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036275168
Special Handling:	Y
Last Modified Date:	04/27/2004
Last Modified By:	IG

Waste as of 2013:

Year:	1991
Manifest ID:	MAF316263
Waste Occurrence:	1
UNNA:	1993
Hazard Class:	FLAMMABLE
US Dot Description:	WASTE FLAMMABLE LIQUID, NOS
Number of Containers:	001
Container Type:	TT
Quantity:	165
Weight/Volume:	G
Additional Description:	Y
Handling Code:	Not reported
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	1991
Manifest ID:	MAF316263
Waste Occurrence:	1
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Details:

EDDIES BRADLEY AUTO BODY (Continued) **S113475205**

Year:	1990
EPA ID:	CTD982715393
Manifest Id:	CTC0258171
TSDF EPA ID:	CTD072138969
TSDF Name:	ENVIRONMENTAL WASTE RESOURCES INC
TSDF Address:	130 FREIGHT ST
TSDF City,State,Zip:	WATERBURY, CT 06702
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	ILD099202681
Transporter Name:	CHEMICAL WASTE MGT INC (TRANSPORTER)
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	42 KING RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Y
Date Shipped:	03/12/1990
Date Received:	03/12/1990
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	WASTE FLAMMABLE LIQUID, NOS
Number of Containers:	001
Container Type:	TT
Quantity:	130
Weight/Volume:	G
Batch Number:	999999
EPA Waste Codes:	D001
Copies:	1
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	CTC02581711

Details as of 2013:

Year:	1990
EPAID:	CTD982715393
TSDF Telephone:	Not reported
Transporter Country:	USA

EDDIES BRADLEY AUTO BODY (Continued) **S113475205**

Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036275168
Special Handling:	Y
Last Modified Date:	04/27/2004
Last Modified By:	IG

Waste as of 2013:

Year:	1990
Manifest ID:	CTC0258171
Waste Occurrence:	1
UNNA:	1993
Hazard Class:	FLAMMABLE
US Dot Description:	WASTE FLAMMABLE LIQUID, NOS
Number of Containers:	001
Container Type:	TT
Quantity:	130
Weight/Volume:	G
Additional Description:	Y
Handling Code:	T01
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	1990
Manifest ID:	CTC0258171
Waste Occurrence:	1
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Details:

Year:	1989
EPA ID:	CTD982715393
Manifest Id:	CTC0257410
TSDF EPA ID:	CTD072138969
TSDF Name:	ENVIRONMENTAL WASTE RESOURCES INC
TSDF Address:	130 FREIGHT ST
TSDF City,State,Zip:	WATERBURY, CT 06702
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	ILD099202681
Transporter Name:	CHEMICAL WASTE MANAGEMENT INC (TRANSPORTER)
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT

EDDIES BRADLEY AUTO BODY (Continued) **S113475205**

Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	42 KING RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	N
Date Shipped:	10/11/1989
Date Received:	10/12/1989
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	WASTE PAINT RELATED MATERIAL, LIQUID
Number of Containers:	001
Container Type:	TT
Quantity:	85
Weight/Volume:	G
Batch Number:	999999
EPA Waste Codes:	D001
Copies:	1
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	CTC02574101

Details as of 2013:

Year:	1989
EPAID:	CTD982715393
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036275168
Special Handling:	Y
Last Modified Date:	04/27/2004
Last Modified By:	IG

Year:	1989
EPAID:	CTD982715393
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036275168
Special Handling:	Y
Last Modified Date:	04/27/2004
Last Modified By:	IG

EDDIES BRADLEY AUTO BODY (Continued) **S113475205**

Waste as of 2013:

Year:	1989
Manifest ID:	CTC0257410
Waste Occurrence:	1
UNNA:	1263
Hazard Class:	FLAMMABLE
US Dot Description:	WASTE PAINT RELATED MATERIAL, LIQUID
Number of Containers:	001
Container Type:	TT
Quantity:	85
Weight/Volume:	G
Additional Description:	Y
Handling Code:	T01
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	1989
Manifest ID:	CTC0257410
Waste Occurrence:	1
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

36
NE
1/8-1/4
0.147 mi.
777 ft.

EXECUTIVE VALET PARKING **CT UST** **U004009651**
1353 SOUTH ST **N/A**
SUFFIELD, CT 06078

Relative:
Higher

Actual:
182 ft.

UST:

Facility ID:	139-7590
Facility Address 2:	Not reported
Substance:	Gasoline
Last Use Date:	01/01/2002
Tank ID:	A1
Closure Status:	Tank was Removed From Ground
Compartment ID:	a
Tank Status:	Permanently Closed
Secondary Material:	Not reported
Tank Material:	Coated & Cathodically Protected Steel (sti-P3)
Capacity:	2000
Install Date:	08/01/1987
Overfill Installed:	Not reported
Pipe Material:	Bare Steel
Pipe Mode Description:	Not reported
Spill Installed:	Not reported
Latitude:	41.948453
Longitude:	-72.668587
Tank Latitude:	Not reported
Tank Longitude:	Not reported

Contact:

Facility ID:	139-7590
Owner Name:	Rich Carlon

EXECUTIVE VALET PARKING (Continued) **U004009651**

Owner Address:	Not reported
Owner Address 2:	Not reported
Owner Phone:	Not reported
Owner Phone Ext:	Not reported
Owner City/State/Zip:	Not reported
Affiliation Type:	Operator
Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	139-7590
Owner Name:	DON FLYNN
Owner Address:	1353 SOUTH ST
Owner Address 2:	Not reported
Owner Phone:	(203) 668-5272
Owner Phone Ext:	Not reported
Owner City/State/Zip:	SUFFIELD, CT 060782528
Affiliation Type:	Owner
Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	139-7590
Owner Name:	DON FLYNN
Owner Address:	1353 SOUTH ST
Owner Address 2:	Not reported
Owner Phone:	Not reported
Owner Phone Ext:	Not reported
Owner City/State/Zip:	SUFFIELD, CT 060782528
Affiliation Type:	Registrant
Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	Not reported

H37 **EDDIES BRADLEY AUTO SVC** **CT MANIFEST** **S121135727**
East **42 KING SPRING RD** **N/A**
1/8-1/4 **WINDSOR LOCKS, CT 06096**
0.179 mi.
947 ft. **Site 6 of 6 in cluster H**

Relative:
Lower

Actual:
163 ft.

CT MANIFEST:

EPA ID:	CTD982715393
Years:	1998

Details:

Year:	1998
EPA ID:	CTD982715393
Manifest Id:	CTF0686405
TSDF EPA ID:	CTD000845982
TSDF Name:	SAFETY-KLEEN CORP
TSDF Address:	24 BRIXTON ST
TSDF City,State,Zip:	WEST HARTFORD, CT 06110
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	ILD984908202
Transporter Name:	SAFETY KLEEN CORP

EDDIES BRADLEY AUTO SVC (Continued) **S121135727**

Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	42 KING SPRING RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Not reported
Date Shipped:	02/25/1998
Date Received:	02/25/1998
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	WASTE PAINT RELATED MATERIAL
Number of Containers:	001
Container Type:	DM
Quantity:	36
Weight/Volume:	P
Batch Number:	1483, 1483
EPA Waste Codes:	F005
Copies:	1, 2
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	CTF06864051

Details as of 2013:

Year:	1998
EPAID:	CTD982715393
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	8606275168
Special Handling:	Not reported
Last Modified Date:	04/26/2004
Last Modified By:	IG

Year:	1998
EPAID:	CTD982715393
TSDF Telephone:	Not reported
Transporter Country:	USA

EDDIES BRADLEY AUTO SVC (Continued) **S121135727**

Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	8606275168
Special Handling:	Not reported
Last Modified Date:	04/26/2004
Last Modified By:	IG

Waste as of 2013:

Year:	1998
Manifest ID:	CTF0686405
Waste Occurrence:	1
UNNA:	1263
Hazard Class:	3
US Dot Description:	WASTE PAINT RELATED MATERIAL
Number of Containers:	001
Container Type:	DM
Quantity:	36
Weight/Volume:	P
Additional Description:	Not reported
Handling Code:	Not reported
Last Modified Date:	2004-04-26 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	1998
Manifest ID:	CTF0686405
Waste Occurrence:	1
EPA Waste Code:	F005
Recycled Waste?:	False
Last Modified Date:	2004-04-26 00:00:00
Last Modified By:	IG

I38 **STANDARD AUTO BODY INC** **CT MANIFEST** **S109720485**
East **45 KING SPRING RD** **N/A**
1/8-1/4 **WINDSOR LOCKS, CT 06096**
0.198 mi.
1046 ft. **Site 1 of 7 in cluster I**

Relative:
Lower

Actual:
162 ft.

CT MANIFEST:

EPA ID:	CTD047710447
Years:	1986, 1985

Details:

Year:	1986
EPA ID:	CTD047710447
Manifest Id:	CTB0033406
TSDF EPA ID:	CTD072138969
TSDF Name:	ENVIRONMENTAL WASTE RESOURCES INC
TSDF Address:	130 FREIGHT ST
TSDF City,State,Zip:	WATERBURY, CT 06702
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	VAD980831580
Transporter Name:	HAZCO INTERNATIONAL INC

STANDARD AUTO BODY INC (Continued) **S109720485**

Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	45 KING SPRING RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	N
Date Shipped:	05/16/1986
Date Received:	05/19/1986
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	WASTE PAINT-RELATED MATERIAL
Number of Containers:	001
Container Type:	TT
Quantity:	40
Weight/Volume:	G
Batch Number:	999999
EPA Waste Codes:	F003
Copies:	1
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	CTB00334061

Details as of 2013:

Year:	1986
EPAID:	CTD047710447
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036237311
Special Handling:	Y
Last Modified Date:	04/27/2004
Last Modified By:	IG

Waste as of 2013:

Year:	1986
Manifest ID:	CTB0033406

STANDARD AUTO BODY INC (Continued) **S109720485**

Waste Occurrence:	1
UNNA:	1263
Hazard Class:	FLAMMABLE
US Dot Description:	WASTE PAINT-RELATED MATERIAL
Number of Containers:	001
Container Type:	TT
Quantity:	40
Weight/Volume:	G
Additional Description:	Y
Handling Code:	T01
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	1986
Manifest ID:	CTB0033406
Waste Occurrence:	1
EPA Waste Code:	F003
Recycled Waste?:	False
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Details:

Year:	1985
EPA ID:	CT$000014730
Manifest Id:	CTA0056994
TSDF EPA ID:	CTD072138969
TSDF Name:	ENVIRONMENTAL WASTE RESOURCES INC
TSDF Address:	130 FREIGHT ST
TSDF City,State,Zip:	WATERBURY, CT 06702
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	VAD980831580
Transporter Name:	HAZCO INTERNATIONAL, INC.
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	45 KING SPRING RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	Y
Date Shipped:	04/18/1985
Date Received:	04/18/1985
Last modified date:	Not reported

STANDARD AUTO BODY INC (Continued) **S109720485**

Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	WASTE PAINT RELATED LIQUID, MATERIAL
Number of Containers:	001
Container Type:	TT
Quantity:	137
Weight/Volume:	G
Batch Number:	999999
EPA Waste Codes:	D001
Copies:	1
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	CTA00569941

Details as of 2013:

Year:	1985
EPAID:	CT$000014730
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036237311
Special Handling:	N
Last Modified Date:	04/27/2004
Last Modified By:	IG

Waste as of 2013:

Year:	1985
Manifest ID:	CTA0056994
Waste Occurrence:	1
UNNA:	1263
Hazard Class:	FLAMMABLE
US Dot Description:	WASTE PAINT RELATED LIQUID, MATERIAL
Number of Containers:	001
Container Type:	TT
Quantity:	137
Weight/Volume:	G
Additional Description:	Not reported
Handling Code:	T01
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	1985
Manifest ID:	CTA0056994
Waste Occurrence:	1
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2004-04-27 00:00:00

STANDARD AUTO BODY INC (Continued) **S109720485**

Last Modified By: IG

I39 East 1/8-1/4 0.198 mi. 1046 ft.

STANDARD AUTO BODY, INC.
45 KING SPRING RD
WINDSOR LOCKS, CT 06096

RCRA-CESQG FINDS ECHO

1004680941 CTD047710447

Site 2 of 7 in cluster I

Relative: Lower

Actual: 162 ft.

RCRA-CESQG:

Date form received by agency:	03/03/1986
Facility name:	STANDARD AUTO BODY INC
Facility address:	45 KING SPRING RD WINDSOR LOCKS, CT 06096
EPA ID:	CTD047710447
Mailing address:	KING SPRING RD WINDSOR LOCKS, CT 06096
Contact:	JAY HOLLEY
Contact address:	45 KING SPRING RD WINDSOR LOCKS, CT 06096
Contact country:	US
Contact telephone:	203-623-7311
Contact email:	Not reported
EPA Region:	01
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	JAY HOLLEY
Owner/operator address:	OWNERSTREET OWNERCITY, CT 99999
Owner/operator country:	Not reported
Owner/operator telephone:	203-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No

STANDARD AUTO BODY, INC. (Continued) **1004680941**

Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

. Waste code: D001
. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

FINDS:

Registry ID: 110003015086

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Connecticut Site Information Management System (SIMS) is part of a suite of web-based applications designed to allow the Connecticut Department of Environmental Protection (DEP) staff to harmonize environmental interest information from disparate systems in a single agency-wide data repository (known as CFI). SIMS provides tools for identifying and resolving duplicate data, querying data (using both tabular and geospatial methods), and viewing/maintaining documents associated to the data.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1004680941
Registry ID:	110003015086
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110003015086

I40 East 1/8-1/4 0.205 mi. 1081 ft. | **QUIK TURN MACHINE**
68 KING SPRING RD
WINDSOR LOCKS, CT 06096 | **CT MANIFEST** | **S109720932**
N/A

Site 3 of 7 in cluster I

Relative: Lower

Actual: 165 ft.

CT MANIFEST:

EPA ID:	CT$000022440
Years:	1989

Details:

Year:	1989
EPA ID:	CT$000022440
Manifest Id:	CTC0239015
TSDF EPA ID:	CTD021816889
TSDF Name:	UNITED OIL RECOVERY INC
TSDF Address:	136 GRACEY AVE
TSDF City,State,Zip:	MERIDEN, CT 06450
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	CTD021816889
Transporter Name:	UNITED OIL RECOVERY INC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	68 KING SPRING RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	N
Date Shipped:	08/08/1989
Date Received:	Not reported
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	WASTE OIL, NOS LIQUID
Number of Containers:	001
Container Type:	TT
Quantity:	150
Weight/Volume:	G
Batch Number:	Not reported
EPA Waste Codes:	F001
Copies:	Not reported
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported

QUIK TURN MACHINE (Continued) **S109720932**

Alt Fac Date:	Not reported
Unique Key:	CTC02390151

Details as of 2013:

Year:	1989
EPAID:	CT$000022440
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036232569
Special Handling:	N
Last Modified Date:	04/27/2004
Last Modified By:	IG

Waste as of 2013:

Year:	1989
Manifest ID:	CTC0239015
Waste Occurrence:	1
UNNA:	1270
Hazard Class:	COMBUSTIBL
US Dot Description:	WASTE OIL, NOS LIQUID
Number of Containers:	001
Container Type:	TT
Quantity:	150
Weight/Volume:	G
Additional Description:	Y
Handling Code:	Not reported
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	1989
Manifest ID:	CTC0239015
Waste Occurrence:	1
EPA Waste Code:	F001
Recycled Waste?:	False
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

I41 **DICKS BULLDOZING INC.** **CT UST** **U002021879**
East **70 KING SPRING RD** **N/A**
1/8-1/4 **WINDSOR LOCKS, CT 06096**
0.212 mi.
1121 ft. **Site 4 of 7 in cluster I**

Relative:
Lower

Actual:
167 ft.

UST:

Facility ID:	165-9626
Facility Address 2:	Not reported
Substance:	Gasoline
Last Use Date:	Not reported
Tank ID:	A-1
Closure Status:	Tank was Removed From Ground
Compartment ID:	a

DICKS BULLDOZING INC. (Continued) **U002021879**

Tank Status:	Permanently Closed
Secondary Material:	Not reported
Tank Material:	Asphalt Coated or Bare Steel
Capacity:	1000
Install Date:	01/01/1950
Overfill Installed:	Not reported
Pipe Material:	Not reported
Pipe Mode Description:	Not reported
Spill Installed:	Not reported
Latitude:	41.944085
Longitude:	-72.665183
Tank Latitude:	Not reported
Tank Longitude:	Not reported

Contact:

Facility ID:	165-9626
Owner Name:	HARRY BRIGGS
Owner Address:	70 KING SPRING RD
Owner Address 2:	Not reported
Owner Phone:	Not reported
Owner Phone Ext:	Not reported
Owner City/State/Zip:	WINDSOR LOCKS, CT 060961151
Affiliation Type:	Owner
Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	165-9626
Owner Name:	HARRY BRIGGS
Owner Address:	70 KING SPRING RD
Owner Address 2:	Not reported
Owner Phone:	Not reported
Owner Phone Ext:	Not reported
Owner City/State/Zip:	WINDSOR LOCKS, CT 060961151
Affiliation Type:	Registrant
Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	165-9626
Facility Address 2:	Not reported
Substance:	Heating Oil(on-site consumption)
Last Use Date:	Not reported
Tank ID:	A-2
Closure Status:	Tank was Removed From Ground
Compartment ID:	a
Tank Status:	Permanently Closed
Secondary Material:	Not reported
Tank Material:	Asphalt Coated or Bare Steel
Capacity:	2000
Install Date:	01/01/1950
Overfill Installed:	Not reported
Pipe Material:	Not reported
Pipe Mode Description:	Not reported
Spill Installed:	Not reported
Latitude:	41.944085
Longitude:	-72.665183

DICKS BULLDOZING INC. (Continued) **U002021879**

Tank Latitude:	Not reported
Tank Longitude:	Not reported

Contact:

Facility ID:	165-9626
Owner Name:	HARRY BRIGGS
Owner Address:	70 KING SPRING RD
Owner Address 2:	Not reported
Owner Phone:	Not reported
Owner Phone Ext:	Not reported
Owner City/State/Zip:	WINDSOR LOCKS, CT 060961151
Affiliation Type:	Owner
Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	165-9626
Owner Name:	HARRY BRIGGS
Owner Address:	70 KING SPRING RD
Owner Address 2:	Not reported
Owner Phone:	Not reported
Owner Phone Ext:	Not reported
Owner City/State/Zip:	WINDSOR LOCKS, CT 060961151
Affiliation Type:	Registrant
Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	165-9626
Facility Address 2:	Not reported
Substance:	Used Oil
Last Use Date:	Not reported
Tank ID:	B-1
Closure Status:	Tank was Removed From Ground
Compartment ID:	a
Tank Status:	Permanently Closed
Secondary Material:	Not reported
Tank Material:	Asphalt Coated or Bare Steel
Capacity:	250
Install Date:	05/01/1985
Overfill Installed:	Not reported
Pipe Material:	Not reported
Pipe Mode Description:	Not reported
Spill Installed:	Not reported
Latitude:	41.944085
Longitude:	-72.665183
Tank Latitude:	Not reported
Tank Longitude:	Not reported

Contact:

Facility ID:	165-9626
Owner Name:	HARRY BRIGGS
Owner Address:	70 KING SPRING RD
Owner Address 2:	Not reported
Owner Phone:	Not reported
Owner Phone Ext:	Not reported
Owner City/State/Zip:	WINDSOR LOCKS, CT 060961151

DICKS BULLDOZING INC. (Continued) **U002021879**

Affiliation Type:	Owner
Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	Not reported
Facility ID:	165-9626
Owner Name:	HARRY BRIGGS
Owner Address:	70 KING SPRING RD
Owner Address 2:	Not reported
Owner Phone:	Not reported
Owner Phone Ext:	Not reported
Owner City/State/Zip:	WINDSOR LOCKS, CT 060961151
Affiliation Type:	Registrant
Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	Not reported

I42 **CARCRAFT AUTO BODY** **CT MANIFEST** **S109736883**
East **70 KING SPRING RD** **N/A**
1/8-1/4 **WINDSOR LOCKS, CT 06096**
0.212 mi.
1121 ft. **Site 5 of 7 in cluster I**

Relative:
Lower

Actual:
167 ft.

CT MANIFEST:

EPA ID:	CTP000006933
Years:	1988

Details:

Year:	1988
EPA ID:	CTP000006933
Manifest Id:	CTC0118655
TSDF EPA ID:	CTD072138969
TSDF Name:	ENVIRONMENTAL WASTE RESOURCES INC
TSDF Address:	130 FREIGHT ST
TSDF City,State,Zip:	WATERBURY, CT 06702
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	VAD980831580
Transporter Name:	HAZCO INTERNATIONAL INC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	70 KING SPRING RD
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	N

CARCRAFT AUTO BODY (Continued) **S109736883**

Date Shipped:	01/22/1988
Date Received:	01/25/1988
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	WASTE PAINT RELATED MATERIAL, LIQUID
Number of Containers:	001
Container Type:	TT
Quantity:	65
Weight/Volume:	G
Batch Number:	999999
EPA Waste Codes:	F003
Copies:	1
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	CTC01186551

Details as of 2013:

Year:	1988
EPAID:	CTP000006933
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036233440
Special Handling:	Y
Last Modified Date:	04/27/2004
Last Modified By:	IG

Waste as of 2013:

Year:	1988
Manifest ID:	CTC0118655
Waste Occurrence:	1
UNNA:	1263
Hazard Class:	FLAMAMBLE
US Dot Description:	WASTE PAINT RELATED MATERIAL, LIQUID
Number of Containers:	001
Container Type:	TT
Quantity:	65
Weight/Volume:	G
Additional Description:	Y
Handling Code:	T01
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	1988
Manifest ID:	CTC0118655
Waste Occurrence:	1

CARCRAFT AUTO BODY (Continued) **S109736883**

EPA Waste Code:	F003
Recycled Waste?:	False
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

I43 East 1/8-1/4 0.212 mi. 1121 ft. **CARCRAFT AUTO BODY OF WINDSOR LL** **RCRA NonGen / NLR** **1000180704**
70 KING SPRING RD **CTD161337456**
WINDSOR LOCKS, CT 06096

Site 6 of 7 in cluster I

Relative: Lower

Actual: 167 ft.

RCRA NonGen / NLR:

Date form received by agency:	01/03/2002
Facility name:	CARCRAFT AUTO BODY OF WINDSOR LL
Facility address:	70 KING SPRING RD WINDSOR LOCKS, CT 06096
EPA ID:	CTD161337456
Mailing address:	PO BOX 902 EAST GRANBY, CT 06026
Contact:	JIM ROSSO
Contact address:	PO BOX 902 EAST GRANBY, CT 06026
Contact country:	US
Contact telephone:	203-623-3440
Contact email:	Not reported
EPA Region:	01
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	JIM ROSSI
Owner/operator address:	OWNERSTREET OWNERCITY, CT 99999
Owner/operator country:	Not reported
Owner/operator telephone:	203-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No

CARCRAFT AUTO BODY OF WINDSOR LL (Continued) **1000180704**

Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D000
. Waste name: Not Defined

. Waste code: D001
. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Historical Generators:
Date form received by agency: 05/26/1987
Site name: CARCRAFT AUTO BODY OF WINDSOR LL
Classification: Small Quantity Generator

Violation Status: No violations found

I44 **BRIGGS IND INC** **RCRA NonGen / NLR** **1000234574**
East **70 KING SPRING** **FINDS** **CTD983872805**
1/8-1/4 **WINDSOR LOCKS, CT 06069** **ECHO**
0.212 mi.
1121 ft. **Site 7 of 7 in cluster I**

Relative:
Lower

Actual:
167 ft.

RCRA NonGen / NLR:
Date form received by agency: 06/04/1990
Facility name: BRIGGS IND INC
Facility address: 70 KING SPRING
WINDSOR LOCKS, CT 06069
EPA ID: CTD983872805
Mailing address: KING SPRING
WINDSOR LOCKS, CT 06069

BRIGGS IND INC (Continued) **1000234574**

Contact: HARRY BRIGGS
Contact address: 70 KING SPRING
WINDSOR LOCKS, CT 06069
Contact country: US
Contact telephone: 203-623-6085
Contact email: Not reported
EPA Region: 01
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: HARRY BRIGGS
Owner/operator address: OWNERSTREET
OWNERCITY, CT
Owner/operator country: Not reported
Owner/operator telephone: 203-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: Yes
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110003021006

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Registry ID: 110005970583

BRIGGS IND INC (Continued) **1000234574**

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000234574
Registry ID:	110005970583
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110005970583

Envid:	1000234574
Registry ID:	110003021006
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110003021006

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45 **CAMP HARTEL** **CT SDADB** **S104255555**
SE **580 NORTH ST** **CT NPDES** **N/A**
1/8-1/4 **WINDSOR LOCKS, CT 06096** **CT SEH**
0.226 mi.
1194 ft.

Relative:
Lower

Actual:
170 ft.

Site Discovery and Assessment:

Facility ID:	2974
Rem Master ID:	3415
PTP Id:	Not reported
WPC Number:	Not reported
Postal District:	Not reported
Latitude:	41.9417
Longitude:	-72.6658
Lat/Long Determined By:	UNK
Ground Water Quality Classification:	GA
Surface Water Quality Classification:	A
Waste Type:	HYDRO/OIL
Disposal:	UST
Sample Data Available:	False
Updated By:	WINDISCH, S.
Update Program:	D&A
Updated:	5/2/2000
Date Created:	Not reported
Duplicate:	False

SDA Federal:

EPA CERCLIS Id:	Not reported
Number EPA RCRIS Id:	Not reported
Site on EPA's CERCLIS:	False
Site Archived from CERCLIS:	False
Archive Date:	Not reported
EPA's Removal at Site:	False
Deferred to another EPA Program:	False
EPA Env Priority Initiative Site:	False
Federal Facility:	False
Site on EPA's National Priority List:	False

CAMP HARTEL (Continued) **S104255555**

Part of an NPL site:	False
RCRA Generator Status:	SQG
RCRA Permit Status:	Not reported

SDA Referral:

Referral Id:	2787
Source of referral:	LOCAL GOV
Date Received:	5/21/1997
Staff Assigned:	Not reported
Remediation Program:	Not reported
Date dt_assigned:	Not reported
Remediation Complete Approved DEP/Verified by LEP:	Not reported
Outcome:	Not reported

SDA Remedial:

Remedial Id:	Not reported
PTP Id:	Not reported
Remediation Program:	Not reported
Remediation Program Entered:	Not reported
Staff Assigned:	Not reported
Remediation Program:	Not reported
Date dt_assign:	Not reported
Project Phase:	Not reported
Order issued:	Not reported
Order Number:	Not reported
Date order issued:	Not reported
Remedial Investigation Start:	Not reported
Remedial Investigation Completed:	Not reported
Remedial Design Start:	Not reported
Remedial Design complet:	Not reported
Remedial Action Start:	Not reported
Remedial Action Completed:	Not reported
Date Oper/ maintenance Started:	Not reported
GW monitoring:	Not reported
Remediation complete Approved DEP/Verified by LEP:	Not reported

SDA Orders:

Order Id:	Not reported
Order Number:	Not reported
Date order issued:	Not reported
Staff Assigned:	Not reported
Type of Order:	Not reported
Order Respondent:	Not reported
Admin Appeal Date:	Not reported
Date of Admin Appeal Ruling:	Not reported
Date of Admin Appeal Ruling:	Not reported
Date of Final Order:	Not reported
Date of Court Appeal:	Not reported
Date of Court Ruling:	Not reported
Date of Court Ruling:	Not reported
Date Order Modified:	Not reported
Date Referred to AG:	Not reported
Judgement:	Not reported
Date of AGR judgement:	Not reported
Penalty assessed:	Not reported
Order Complete:	Not reported
In compliance:	Not reported
Comments:	Not reported

CAMP HARTEL (Continued) **S104255555**

SDADB:

SDA Waste:

Waste Id:	11
Waste Type:	HYDRO/OIL
Description:	Hydrocarbons and/or Fuel Oil

NPDES:

Town Id:	Not reported
Company Name:	Not reported
Permit Number:	GRS000127
Permit Issued Date:	08/12/2011
Permit Expiration Date:	03/29/2018
Application Received Date:	Not reported
Affiliation Type:	Permittee
Permit EI Type:	Groundwater Remediation Wastewater To Surface Water-GP
App Id:	201106159
Site Address Description:	Not reported
Site Address Line 2:	Not reported
Permit Description:	Not reported
Status:	Expired
Affiliate Address Line 1:	90 BROOKFIELD ST
Affiliate Address Line 2:	Not reported
Affiliate City/State/Zip:	SOUTH WINDSOR, CT 06074-1202
Contact Name:	Brian L. Rich
Contact Title:	Senior Environmental Scientist
Contact EMail:	BLRich@e-s-i.com

Town Id:	Not reported
Company Name:	Not reported
Permit Number:	GVM001763
Permit Issued Date:	03/14/2016
Permit Expiration Date:	01/23/2021
Application Received Date:	Not reported
Affiliation Type:	Not reported
Permit EI Type:	Vehicle Maintenance Wastewater-GP
App Id:	201602906
Site Address Description:	Not reported
Site Address Line 2:	Not reported
Permit Description:	Construction of a combined support maintenance shop (CSMS).
Status:	Active
Affiliate Address Line 1:	Not reported
Affiliate Address Line 2:	Not reported
Affiliate City/State/Zip:	Not reported
Contact Name:	Not reported
Contact Title:	Not reported
Contact EMail:	Not reported

Town Id:	Not reported
Company Name:	Not reported
Permit Number:	GSI000289
Permit Issued Date:	03/22/2004
Permit Expiration Date:	10/01/2007
Application Received Date:	Not reported
Affiliation Type:	Permittee
Permit EI Type:	Stormwater Industrial Activities - GP

CAMP HARTEL (Continued) **S104255555**

App Id:	200400566
Site Address Description:	Not reported
Site Address Line 2:	Not reported
Permit Description:	RENEWAL STORMWATER ASSOCIATED WITH INDUSTRIAL ACTIVITIES-CAMP HARTELL, BLDGS P-1011, P-103 & P-105-RTE 75-WINDSOR LOCKS
Status:	Expired
Affiliate Address Line 1:	360 BROAD ST
Affiliate Address Line 2:	Not reported
Affiliate City/State/Zip:	HARTFORD, CT 06105-3706
Contact Name:	CAPTAIN THOMAS BORDNER
Contact Title:	Not reported
Contact EMail:	Not reported
Town Id:	Not reported
Company Name:	Not reported
Permit Number:	GSI000289
Permit Issued Date:	11/26/1997
Permit Expiration Date:	10/01/2002
Application Received Date:	Not reported
Affiliation Type:	Permittee
Permit EI Type:	Stormwater Industrial Activities - GP
App Id:	199703360
Site Address Description:	Not reported
Site Address Line 2:	Not reported
Permit Description:	RENEWAL INDUSTRIAL STORMWATER GP
Status:	Expired
Affiliate Address Line 1:	US PROPERTY AND FISCAL OFFI
Affiliate Address Line 2:	CAMP HARTELL
Affiliate City/State/Zip:	WINDSOR LOCKS, CT 06096-0455
Contact Name:	Not reported
Contact Title:	Not reported
Contact EMail:	Not reported
Town Id:	Not reported
Company Name:	Not reported
Permit Number:	GSI000289
Permit Issued Date:	11/26/1997
Permit Expiration Date:	10/01/2002
Application Received Date:	Not reported
Affiliation Type:	Permittee
Permit EI Type:	Stormwater Industrial Activities - GP
App Id:	199703360
Site Address Description:	Not reported
Site Address Line 2:	Not reported
Permit Description:	RENEWAL INDUSTRIAL STORMWATER GP
Status:	Expired
Affiliate Address Line 1:	360 BROAD ST
Affiliate Address Line 2:	NATIONAL GUARD ARMORY
Affiliate City/State/Zip:	HARTFORD, CT 06105-3706
Contact Name:	CPT RALPH F. HEDENBERG
Contact Title:	ENV PROT MGR
Contact EMail:	Not reported
Town Id:	Not reported
Company Name:	Not reported
Permit Number:	GSI000289
Permit Issued Date:	06/12/2009

CAMP HARTEL (Continued) **S104255555**

Permit Expiration Date:	10/01/2011
Application Received Date:	Not reported
Affiliation Type:	Permittee
Permit EI Type:	Stormwater Industrial Activities - GP
App Id:	200901810
Site Address Description:	Not reported
Site Address Line 2:	Not reported
Permit Description:	Camp Hartell Location Route 75 Windsor Locks, Ct 06096
Status:	Expired
Affiliate Address Line 1:	360 BROAD ST
Affiliate Address Line 2:	Not reported
Affiliate City/State/Zip:	HARTFORD, CT 06105-3706
Contact Name:	ROBERT DOLLAK
Contact Title:	Not reported
Contact EMail:	Not reported

Town Id:	Not reported
Company Name:	Not reported
Permit Number:	GSI000289
Permit Issued Date:	10/01/2011
Permit Expiration Date:	09/30/2018
Application Received Date:	Not reported
Affiliation Type:	Permittee
Permit EI Type:	Stormwater Industrial Activities - GP
App Id:	201104615
Site Address Description:	Not reported
Site Address Line 2:	Not reported
Permit Description:	Camp Hartell
Status:	Active
Affiliate Address Line 1:	360 BROAD ST
Affiliate Address Line 2:	CT. ARMY NATIONAL GUARD
Affiliate City/State/Zip:	HARTFORD, CT 06105-3706
Contact Name:	ROBERT DOLLAK
Contact Title:	Not reported
Contact EMail:	robert.f.dollak.mil@mail.mil

SEH:

Date Notified:	06/07/2011
Type Of Hazard:	Pollution detected in groundwater above standards may threaten a drinking water well.
Response:	DEEP directed the property owner to implement the abatement plan included with the hazard notification and to sample identified threatened drinking water wells
Actions:	The sampled wells did not have detectable concentrations of the target petroleum compounds.

J46 **BURLINGTON AIR EXPRESS** **CT MANIFEST** **S109737490**
SSE **319 ELLA GRASSO TPK** **N/A**
1/8-1/4 **WINDSOR LOCKS, CT 06096**
0.244 mi.
1288 ft. **Site 1 of 2 in cluster J**

Relative:
Higher

Actual:
181 ft.

CT MANIFEST:

EPA ID:	CTP000007718
Years:	1988

Details:

Year:	1988

BURLINGTON AIR EXPRESS (Continued) **S109737490**

EPA ID:	CTP000007718
Manifest Id:	CTC0158930
TSDF EPA ID:	MAD053452637
TSDF Name:	CLEAN HARBORS INC OF BRAINTREE
TSDF Address:	385 QUINCY AVE
TSDF City,State,Zip:	BRAINTREE, MA 02184
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	MAD039322250
Transporter Name:	CLEAN HARBORS INC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	319 ELLA GRASSO TPK
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	N
Date Shipped:	06/20/1988
Date Received:	06/20/1988
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	HAZ SUB SOLID NOS DEBRIS W/PENTACHLORON/
Number of Containers:	001
Container Type:	DM
Quantity:	50
Weight/Volume:	P
Batch Number:	999999
EPA Waste Codes:	U185
Copies:	2
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	CTC01589301

Details as of 2013:

Year:	1988
EPAID:	CTP000007718
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported

BURLINGTON AIR EXPRESS (Continued) **S109737490**

Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036234401
Special Handling:	Y
Last Modified Date:	04/27/2004
Last Modified By:	IG

Waste as of 2013:

Year:	1988
Manifest ID:	CTC0158930
Waste Occurrence:	1
UNNA:	9188
Hazard Class:	ORM-E
US Dot Description:	HAZ SUB SOLID NOS DEBRIS W/PENTACHLORON/
Number of Containers:	001
Container Type:	DM
Quantity:	50
Weight/Volume:	P
Additional Description:	Y
Handling Code:	S01
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	1988
Manifest ID:	CTC0158930
Waste Occurrence:	1
EPA Waste Code:	U185
Recycled Waste?:	False
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

J47 **ANDERSON NEWS** **CT UST** **U000087657**
SSE **319 ELLA GRASSO TPKE** **N/A**
1/8-1/4 **WINDSOR LOCKS, CT 06096**
0.244 mi.
1288 ft. **Site 2 of 2 in cluster J**

Relative:
Higher

Actual:
181 ft.

UST:

Facility ID:	165-10409
Facility Address 2:	Not reported
Substance:	Gasoline
Last Use Date:	Not reported
Tank ID:	A1
Closure Status:	Tank was Abandoned in Ground
Compartment ID:	a
Tank Status:	Permanently Closed
Secondary Material:	Not reported
Tank Material:	Asphalt Coated or Bare Steel
Capacity:	2000
Install Date:	01/01/1950
Overfill Installed:	Not reported
Pipe Material:	Not reported
Pipe Mode Description:	Not reported
Spill Installed:	Not reported
Latitude:	41.938831

ANDERSON NEWS (Continued) **U000087657**

Longitude:	-72.670625
Tank Latitude:	Not reported
Tank Longitude:	Not reported

Contact:

Facility ID:	165-10409
Owner Name:	ROTON ASSOCIATES
Owner Address:	33 CHARLES ST
Owner Address 2:	Not reported
Owner Phone:	(203) 634-3470
Owner Phone Ext:	Not reported
Owner City/State/Zip:	MERIDEN, CT 064505701
Affiliation Type:	Owner
Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	165-10409
Owner Name:	ROTON ASSOCIATES
Owner Address:	33 CHARLES ST
Owner Address 2:	Not reported
Owner Phone:	Not reported
Owner Phone Ext:	Not reported
Owner City/State/Zip:	MERIDEN, CT 064505701
Affiliation Type:	Registrant
Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	Not reported

Facility ID:	165-10409
Facility Address 2:	Not reported
Substance:	Heating Oil(on-site consumption)
Last Use Date:	Not reported
Tank ID:	B2
Closure Status:	Tank was Abandoned in Ground
Compartment ID:	a
Tank Status:	Permanently Closed
Secondary Material:	Not reported
Tank Material:	Asphalt Coated or Bare Steel
Capacity:	3000
Install Date:	01/01/1950
Overfill Installed:	Not reported
Pipe Material:	Not reported
Pipe Mode Description:	Not reported
Spill Installed:	Not reported
Latitude:	41.938831
Longitude:	-72.670625
Tank Latitude:	41.306640
Tank Longitude:	-72.904220

Contact:

Facility ID:	165-10409
Owner Name:	ROTON ASSOCIATES
Owner Address:	33 CHARLES ST
Owner Address 2:	Not reported
Owner Phone:	(203) 634-3470
Owner Phone Ext:	Not reported

ANDERSON NEWS (Continued) **U000087657**

Owner City/State/Zip:	MERIDEN, CT 064505701
Affiliation Type:	Owner
Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	Not reported
Facility ID:	165-10409
Owner Name:	ROTON ASSOCIATES
Owner Address:	33 CHARLES ST
Owner Address 2:	Not reported
Owner Phone:	Not reported
Owner Phone Ext:	Not reported
Owner City/State/Zip:	MERIDEN, CT 064505701
Affiliation Type:	Registrant
Contact Name:	Not reported
Contact Title:	Not reported
Contact Email:	Not reported

K48 **TREASURE CHEST-CROWN INDUSTRIAL PARK** **CT SDADB** **S104255559**
SSE **TURNPIKE AND CHOICE ROAD** **N/A**
1/4-1/2 **WINDSOR LOCKS, CT**
0.357 mi.
1887 ft. **Site 1 of 2 in cluster K**

Relative:
Higher

Actual:
187 ft.

Site Discovery and Assessment:

Facility ID:	1160
Rem Master ID:	1481
PTP Id:	Not reported
WPC Number:	Not reported
Postal District:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Lat/Long Determined By:	Not reported
Ground Water Quality Classification:	GA
Surface Water Quality Classification:	A
Waste Type:	Not reported
Disposal:	Not reported
Sample Data Available:	False
Updated By:	CZECZOTKA, J.
Update Program:	PTP
Updated:	2/14/1992
Date Created:	Not reported
Duplicate:	False

SDA Federal:

EPA CERCLIS Id:	Not reported
Number EPA RCRIS Id:	Not reported
Site on EPA's CERCLIS:	Not reported
Site Archived from CERCLIS:	Not reported
Archive Date:	Not reported
EPA's Removal at Site:	Not reported
Deferred to another EPA Program:	Not reported
EPA Env Priority Initiative Site:	Not reported
Federal Facility:	Not reported
Site on EPA's National Priority List:	Not reported
Part of an NPL site:	Not reported
RCRA Generator Status:	Not reported

TREASURE CHEST-CROWN INDUSTRIAL PARK (Continued) **S104255559**

RCRA Permit Status: Not reported

SDA Referral:
Referral Id: 1097
Source of referral: PTP
Date Received: 2/14/1992
Staff Assigned: CZECZOTKA, J.
Remediation Program: PTP
Date dt_assigned: Not reported
Remediation Complete Approved DEP/Verified by LEP: 2/14/1992
Outcome: PTP

SDA Remedial:
Remedial Id: 506
PTP Id: 2293
Remediation Program: III
Remediation Program Entered: Not reported
Staff Assigned: CZECZOTKA, J.
Remediation Program: PTP
Date dt_assign: Not reported
Project Phase: C
Order issued: False
Order Number: Not reported
Date order issued: Not reported
Remedial Investigation Start: Not reported
Remedial Investigation Completed: Not reported
Remedial Design Start: Not reported
Remedial Design complet: Not reported
Remedial Action Start: Not reported
Remedial Action Completed: Not reported
Date Oper/ maintenance Started: Not reported
GW monitoring: False
Remediation complete Approved DEP/Verified by LEP: 10/13/1993

SDA Orders:
Order Id: Not reported
Order Number: Not reported
Date order issued: Not reported
Staff Assigned: Not reported
Type of Order: Not reported
Order Respondent: Not reported
Admin Appeal Date: Not reported
Date of Admin Appeal Ruling: Not reported
Date of Admin Appeal Ruling: Not reported
Date of Final Order: Not reported
Date of Court Appeal: Not reported
Date of Court Ruling: Not reported
Date of Court Ruling: Not reported
Date Order Modified: Not reported
Date Referred to AG: Not reported
Judgement: Not reported
Date of AGR judgement: Not reported
Penalty assessed: Not reported
Order Complete: Not reported
In compliance: Not reported
Comments: Not reported

K49 SSE 1/4-1/2 0.357 mi. 1887 ft. | **TREASURE CHEST-CROWN IND PARK TURNPIKE & CHOICE ROAD WINDSOR LOCKS, CT 06096** | **CT PROPERTY CT CPCS** | **S110280719 N/A**

Site 2 of 2 in cluster K

Relative: Higher

Actual: 187 ft.

CT Property:

Seller Name:	Mutual Realty Financial
Buyer Name:	W.L.C. Windor Corp.
Certifying Party:	Not reported
Certifying Attention Person:	Not reported
Title Of Certifying Person:	Not reported
Certifying Person Address:	Not reported
Certifying Person City,St,Zip:	Not reported
Property Transfer Forms:	Form I (DEP-PERD-PTP-201) when no release of hazardous waste has occurred at the parcel being transferred.
Date Recieved:	06/14/1988
Ackn Date:	07/21/1988
Determination Date:	Not reported
LEP Verified/DEP Approval Date:	Not reported
Rem Id:	3425
Remediation Location Id:	5644
Date Entered:	Not reported
Program:	Property Transfer Program
GAO Site:	False
Staff Full Name:	Not reported
Super/Date:	Not reported
Stage Of Project:	Not reported
RP Level Of Activity:	Not reported
RP Needed Level Of Activity:	Not reported
Staff Level Of Activity:	Not reported
Staff Needed Level Of Activity:	Not reported
Public Intrest:	Not reported
PRP Cooperation:	Not reported
Enforcement Status:	Not reported
Level Of Complexity:	Not reported
Complex Eng Or Sci:	False
Complex Due To Public Involvement:	False
Politically Complex:	False
Complex Enforcement:	False
Coordination With Other Bureaus:	False
EPA Involvement:	False
Staff Prefrence:	Not reported
Readiness For Transfer:	Not reported
Project Transfer Time:	Not reported
Transfer Comments:	Not reported
Staff As Of July 2000:	Not reported
Initial Staff:	Not reported
Type Of Transfer:	Not reported
Salutation:	Not reported
Relationship To Transfer:	Not reported
Audit Date:	Not reported
Verif Type:	Not reported
Audit Outcome:	Not reported
GW:	Not reported
Basin:	Not reported
1st Payment:	0
Pay Tag1:	Not reported
2nd Payment:	Not reported

TREASURE CHEST-CROWN IND PARK (Continued) **S110280719**

Pay Tag2:	Not reported
RTN:	Not reported
Revised:	Not reported
ECAF Received:	Not reported
Old Determination Date:	Not reported
Redeterminationdate:	Not reported
Previous Determination:	Not reported
Monitoringoption:	Not reported
Postremedialmonitoring:	Not reported
Schedule Of I/R:	Not reported
Schedule Overdue:	Not reported
Aprvl Sched:	Not reported
Yr 1 Report:	Not reported
Yr 2 Report:	Not reported
Report Overdue:	Not reported
Ext Aprvl Sched:	Not reported
License #:	Not reported
Project Phase:	Not reported
PT Comments:	Not reported
EPA Id Number:	Not reported
GW Class:	Not reported
SW Class:	Not reported
AO/C0:	Not reported
Water Lead(Y Or N):	Not reported
Priority:	Not reported
Project Status(A, I Or D):	Not reported
Last Updated:	Not reported
SR Comments:	Not reported
Priority Or Work-Load:	Not reported
Status:	Not reported
Notes:	Not reported
Special Project Name:	Not reported
Special Project Comments:	Not reported
DOT Project:	Not reported
Pt Counter:	Not reported
Project Complete:	False
Project Inactive:	False
Int Deposit #:	Not reported
Deposit #:	Not reported
Spill Case #:	Not reported
Diversion Id:	Not reported
Public Notice:	Not reported
RAP Received:	Not reported
RAP Approved:	Not reported
Compliance Category:	Not reported
Delete Record:	False
ECAF Reviewed By:	Not reported
Not Locatable:	False
Primary Address:	True
AKA Site Name:	False
Primary Site Name:	True
AKA Site Address:	False
Lead:	Not reported
Seller Name:	Crown Park Industrial Par
Buyer Name:	Charlie Rubenstein et al
Certifying Party:	Not reported

TREASURE CHEST-CROWN IND PARK (Continued) **S110280719**

Certifying Attention Person:	Not reported
Title Of Certifying Person:	Not reported
Certifying Person Address:	Not reported
Certifying Person City,St,Zip:	Not reported
Property Transfer Forms:	Form III (DEP-PERD-PTP-203) when a discharge, spillage, uncontrolled loss, seepage or filtration of hazardous waste has occurred at the parcel that has not been fully remediated or the environmental conditions at the parcel are unknown. The person signing the Form III certification agrees to investigate and remediate the site in accordance with the remediation standards. The statute does not require completion of remediation before the parcel is transferred. Any person submitting a Form III shall simultaneously submit a completed Environmental Condition Assessment Form (ECAF)(DEP-PERD-PTP-200).
Date Recieved:	06/14/1988
Ackn Date:	07/21/1988
Determination Date:	Not reported
LEP Verified/DEP Approval Date:	1993-10-13 00:00:00
Rem Id:	3426
Remediation Location Id:	5644
Date Entered:	Not reported
Program:	Property Transfer Program
GAO Site:	False
Staff Full Name:	Jan Czeczotka
Super/Date:	Not reported
Stage Of Project:	Not reported
RP Level Of Activity:	Not reported
RP Needed Level Of Activity:	Not reported
Staff Level Of Activity:	Not reported
Staff Needed Level Of Activity:	Not reported
Public Intrest:	Not reported
PRP Cooperation:	Not reported
Enforcement Status:	Not reported
Level Of Complexity:	Not reported
Complex Eng Or Sci:	False
Complex Due To Public Involvement:	False
Politically Complex:	False
Complex Enforcement:	False
Coordination With Other Bureaus:	False
EPA Involvement:	False
Staff Prefrence:	Not reported
Readiness For Transfer:	Not reported
Project Transfer Time:	Not reported
Transfer Comments:	Not reported
Staff As Of July 2000:	Czeczotka Jan
Initial Staff:	JMC
Type Of Transfer:	Not reported
Salutation:	Not reported
Relationship To Transfer:	Not reported
Audit Date:	Not reported
Verif Type:	Not reported
Audit Outcome:	Not reported
GW:	GB/GA
Basin:	Not reported
1st Payment:	0
Pay Tag1:	Not reported
2nd Payment:	Not reported

TREASURE CHEST-CROWN IND PARK (Continued) **S110280719**

Pay Tag2:	Not reported
RTN:	Not reported
Revised:	Not reported
ECAF Received:	Not reported
Old Determination Date:	Not reported
Redeterminationdate:	Not reported
Previous Determination:	Not reported
Monitoringoption:	Not reported
Postremedialmonitoring:	Not reported
Schedule Of I/R:	Not reported
Schedule Overdue:	Not reported
Aprvl Sched:	Not reported
Yr 1 Report:	Not reported
Yr 2 Report:	Not reported
Report Overdue:	Not reported
Ext Aprvl Sched:	Not reported
License #:	Not reported
Project Phase:	Not reported
PT Comments:	fee not due
EPA Id Number:	Not reported
GW Class:	Not reported
SW Class:	Not reported
AO/C0:	Not reported
Water Lead(Y Or N):	Not reported
Priority:	Not reported
Project Status(A, I Or D):	Not reported
Last Updated:	Not reported
SR Comments:	Not reported
Priority Or Work-Load:	Not reported
Status:	Not reported
Notes:	Not reported
Special Project Name:	Not reported
Special Project Comments:	Not reported
DOT Project:	Not reported
Pt Counter:	Not reported
Project Complete:	True
Project Inactive:	False
Int Deposit #:	Not reported
Deposit #:	Not reported
Spill Case #:	Not reported
Diversion Id:	Not reported
Public Notice:	Not reported
RAP Received:	Not reported
RAP Approved:	Not reported
Compliance Category:	Not reported
Delete Record:	False
ECAF Reviewed By:	Not reported
Not Locatable:	False
Primary Address:	False
AKA Site Name:	False
Primary Site Name:	False
AKA Site Address:	False
Lead:	Not reported
Seller Name:	Charlie Rubenstein et al
Buyer Name:	Chicago Title Insurance
Certifying Party:	Not reported

TREASURE CHEST-CROWN IND PARK (Continued) **S110280719**

Certifying Attention Person:	Not reported
Title Of Certifying Person:	Not reported
Certifying Person Address:	Not reported
Certifying Person City,St,Zip:	Not reported
Property Transfer Forms:	Form III (DEP-PERD-PTP-203) when a discharge, spillage, uncontrolled loss, seepage or filtration of hazardous waste has occurred at the parcel that has not been fully remediated or the environmental conditions at the parcel are unknown. The person signing the Form III certification agrees to investigate and remediate the site in accordance with the remediation standards. The statute does not require completion of remediation before the parcel is transferred. Any person submitting a Form III shall simultaneously submit a completed Environmental Condition Assessment Form (ECAF)(DEP-PERD-PTP-200).
Date Recieved:	06/14/1988
Ackn Date:	07/21/1988
Determination Date:	Not reported
LEP Verified/DEP Approval Date:	Not reported
Rem Id:	3427
Remediation Location Id:	5644
Date Entered:	Not reported
Program:	Property Transfer Program
GAO Site:	False
Staff Full Name:	Jan Czeczotka
Super/Date:	Not reported
Stage Of Project:	Not reported
RP Level Of Activity:	Not reported
RP Needed Level Of Activity:	Not reported
Staff Level Of Activity:	Not reported
Staff Needed Level Of Activity:	Not reported
Public Intrest:	Not reported
PRP Cooperation:	Not reported
Enforcement Status:	Not reported
Level Of Complexity:	Not reported
Complex Eng Or Sci:	False
Complex Due To Public Involvement:	False
Politically Complex:	False
Complex Enforcement:	False
Coordination With Other Bureaus:	False
EPA Involvement:	False
Staff Prefrence:	Not reported
Readiness For Transfer:	Not reported
Project Transfer Time:	Not reported
Transfer Comments:	Not reported
Staff As Of July 2000:	Czeczotka Jan
Initial Staff:	JMC
Type Of Transfer:	Not reported
Salutation:	Not reported
Relationship To Transfer:	Not reported
Audit Date:	Not reported
Verif Type:	Not reported
Audit Outcome:	Not reported
GW:	GB/GA
Basin:	Not reported
1st Payment:	0
Pay Tag1:	Not reported
2nd Payment:	Not reported

TREASURE CHEST-CROWN IND PARK (Continued) **S110280719**

Pay Tag2:	Not reported
RTN:	Not reported
Revised:	Not reported
ECAF Received:	Not reported
Old Determination Date:	Not reported
Redeterminationdate:	Not reported
Previous Determination:	Not reported
Monitoringoption:	Not reported
Postremedialmonitoring:	Not reported
Schedule Of I/R:	Not reported
Schedule Overdue:	Not reported
Aprvl Sched:	Not reported
Yr 1 Report:	Not reported
Yr 2 Report:	Not reported
Report Overdue:	Not reported
Ext Aprvl Sched:	Not reported
License #:	Not reported
Project Phase:	Not reported
PT Comments:	fee not due
EPA Id Number:	Not reported
GW Class:	Not reported
SW Class:	Not reported
AO/C0:	Not reported
Water Lead(Y Or N):	Not reported
Priority:	Not reported
Project Status(A, I Or D):	Not reported
Last Updated:	Not reported
SR Comments:	Not reported
Priority Or Work-Load:	Not reported
Status:	Not reported
Notes:	Not reported
Special Project Name:	Not reported
Special Project Comments:	Not reported
DOT Project:	Not reported
Pt Counter:	Not reported
Project Complete:	False
Project Inactive:	False
Int Deposit #:	Not reported
Deposit #:	Not reported
Spill Case #:	Not reported
Diversion Id:	Not reported
Public Notice:	Not reported
RAP Received:	Not reported
RAP Approved:	Not reported
Compliance Category:	Not reported
Delete Record:	False
ECAF Reviewed By:	Not reported
Not Locatable:	False
Primary Address:	False
AKA Site Name:	False
Primary Site Name:	False
AKA Site Address:	False
Lead:	Not reported
Seller Name:	Chicago Title Insurance
Buyer Name:	Mutual Realty Financial
Certifying Party:	Not reported

TREASURE CHEST-CROWN IND PARK (Continued) **S110280719**

Certifying Attention Person:	Not reported
Title Of Certifying Person:	Not reported
Certifying Person Address:	Not reported
Certifying Person City,St,Zip:	Not reported
Property Transfer Forms:	Form III (DEP-PERD-PTP-203) when a discharge, spillage, uncontrolled loss, seepage or filtration of hazardous waste has occurred at the parcel that has not been fully remediated or the environmental conditions at the parcel are unknown. The person signing the Form III certification agrees to investigate and remediate the site in accordance with the remediation standards. The statute does not require completion of remediation before the parcel is transferred. Any person submitting a Form III shall simultaneously submit a completed Environmental Condition Assessment Form (ECAF)(DEP-PERD-PTP-200).
Date Recieved:	06/14/1988
Ackn Date:	07/21/1988
Determination Date:	Not reported
LEP Verified/DEP Approval Date:	Not reported
Rem Id:	3428
Remediation Location Id:	5644
Date Entered:	Not reported
Program:	Property Transfer Program
GAO Site:	False
Staff Full Name:	Jan Czeczotka
Super/Date:	Not reported
Stage Of Project:	Not reported
RP Level Of Activity:	Not reported
RP Needed Level Of Activity:	Not reported
Staff Level Of Activity:	Not reported
Staff Needed Level Of Activity:	Not reported
Public Intrest:	Not reported
PRP Cooperation:	Not reported
Enforcement Status:	Not reported
Level Of Complexity:	Not reported
Complex Eng Or Sci:	False
Complex Due To Public Involvement:	False
Politically Complex:	False
Complex Enforcement:	False
Coordination With Other Bureaus:	False
EPA Involvement:	False
Staff Prefrence:	Not reported
Readiness For Transfer:	Not reported
Project Transfer Time:	Not reported
Transfer Comments:	Not reported
Staff As Of July 2000:	Czeczotka Jan
Initial Staff:	JMC
Type Of Transfer:	Not reported
Salutation:	Not reported
Relationship To Transfer:	Not reported
Audit Date:	Not reported
Verif Type:	Not reported
Audit Outcome:	Not reported
GW:	GB/GA
Basin:	Not reported
1st Payment:	0
Pay Tag1:	Not reported
2nd Payment:	Not reported

TREASURE CHEST-CROWN IND PARK (Continued) **S110280719**

Pay Tag2:	Not reported
RTN:	Not reported
Revised:	Not reported
ECAF Received:	Not reported
Old Determination Date:	Not reported
Redeterminationdate:	Not reported
Previous Determination:	Not reported
Monitoringoption:	Not reported
Postremedialmonitoring:	Not reported
Schedule Of I/R:	Not reported
Schedule Overdue:	Not reported
Aprvl Sched:	Not reported
Yr 1 Report:	Not reported
Yr 2 Report:	Not reported
Report Overdue:	Not reported
Ext Aprvl Sched:	Not reported
License #:	Not reported
Project Phase:	Not reported
PT Comments:	fee not due
EPA Id Number:	Not reported
GW Class:	Not reported
SW Class:	Not reported
AO/C0:	Not reported
Water Lead(Y Or N):	Not reported
Priority:	Not reported
Project Status(A, I Or D):	Not reported
Last Updated:	Not reported
SR Comments:	Not reported
Priority Or Work-Load:	Not reported
Status:	Not reported
Notes:	Not reported
Special Project Name:	Not reported
Special Project Comments:	Not reported
DOT Project:	Not reported
Pt Counter:	Not reported
Project Complete:	False
Project Inactive:	False
Int Deposit #:	Not reported
Deposit #:	Not reported
Spill Case #:	Not reported
Diversion Id:	Not reported
Public Notice:	Not reported
RAP Received:	Not reported
RAP Approved:	Not reported
Compliance Category:	Not reported
Delete Record:	False
ECAF Reviewed By:	Not reported
Not Locatable:	False
Primary Address:	False
AKA Site Name:	False
Primary Site Name:	False
AKA Site Address:	False
Lead:	Not reported

CPCS:

Site Type:	Projects
Lust Status code:	Not reported

TREASURE CHEST-CROWN IND PARK (Continued) **S110280719**

Lust Status:	Not reported
PTP Form:	III
Program:	Property Transfer Program
Comments:	Projects
Site Type Definition:	Property Transfer Form III

Site Type:	Projects
Lust Status code:	Not reported
Lust Status:	Not reported
PTP Form:	III
Program:	Property Transfer Program
Comments:	Projects
Site Type Definition:	Property Transfer Form III

Site Type:	Projects
Lust Status code:	Not reported
Lust Status:	Not reported
PTP Form:	III
Program:	Property Transfer Program
Comments:	Projects
Site Type Definition:	Property Transfer Form III

50
SE
1/4-1/2
0.439 mi.
2319 ft.

W.L.C. WINDSOR CORP. **CT CPCS** **S104585136**
3 CHOICE ROAD **N/A**
WINDSOR LOCKS, CT 06096

Relative:
Higher

Actual:
193 ft.

CPCS:

Site Type:	Projects
Lust Status code:	Not reported
Lust Status:	Not reported
PTP Form:	III
Program:	Property Transfer Program
Comments:	Projects
Site Type Definition:	Property Transfer Form III

51
SSE
1/4-1/2
0.467 mi.
2467 ft.

GFI DISPLAY **CT VCP** **S121136678**
295 ELLA GRASSO TNPKE **CT MANIFEST** **N/A**
WINDSOR LOCKS, CT 06096

Relative:
Higher

Actual:
185 ft.

VCP:

Transferor (seller):	Not reported
Transfee (buyer):	Not reported
Certifying Party:	Winchester Partnership
Certifying Party Attn:	Adrien Maught, Jr.
Certifying Party Title:	Managing Partner
Certifying Party Address:	PO Box 287
Certifying Party City,St,Zip:	Windsor Locks, CT 06096
Voluntary Remediation Site:	Yes
Date Received:	08/03/2017
Acknowledge Date:	10/13/2017
Determination Date:	Not reported
LEP Verified/DEP:	Not reported

GFI DISPLAY (Continued) **S121136678**

Rem Id:	13438
Remediation Location Id:	190
Date Entered:	09/12/2017
Program:	VOL_REM_X
GAO Site:	False
Staff Full Name:	Robert Robinson
Super/Date:	10/13/2017
Stage Of Project:	Not reported
RP Level Of Activity:	Not reported
RP Needed Level Of Activity:	Not reported
Staff Level Of Activity:	Not reported
Staff Needed Level Of Activity:	Not reported
Public Intrest:	Not reported
PRP Cooperation:	Not reported
Enforcement Status:	Not reported
Level Of Complexity:	Not reported
Complex Eng Or Sci:	False
Complex Due To Public Involvement:	False
Politically Complex:	False
Complex Enforcement:	False
Coordination With Other Bureaus:	False
EPA Involvement:	False
Staff Prefrence:	Not reported
Readiness For Transfer:	Not reported
Project Transfer Time:	Not reported
Transfer Comments:	Not reported
Staff As Of July 2000:	Not reported
Initial Staff:	Not reported
Type Of Transfer:	Voluntary Remediation
Salutation:	Mr. Maught
Relationship To Transfer:	Not reported
Audit Date:	Not reported
Verif Type:	Not reported
Audit Outcome:	Not reported
GW:	GB
Basin:	Not reported
1st Payment:	3250
Pay Tag1:	6290
2nd Payment:	Not reported
Pay Tag2:	Not reported
Rtn:	Not reported
Revised:	Not reported
ECAF Received:	Not reported
Old Determination Date:	Not reported
Redeterminationdate:	Not reported
Previous Determination:	Not reported
Monitoringoption:	Not reported
Postremedialmonitoring:	Not reported
Schedule Of I/R:	Not reported
Schedule Overdue:	Not reported
Aprvl Sched:	Not reported
Yr 1 Report:	Not reported
Yr 2 Report:	Not reported
Report Overdue:	Not reported
Ext Aprvl Sched:	Not reported
License #:	Not reported
Project Phase:	Not reported

GFI DISPLAY (Continued) **S121136678**

PT Comments:	Not reported
EPA Id Number:	Not reported
GW Class:	Not reported
SW Class:	Not reported
AO/C0:	Not reported
Water Lead(Y Or N):	Not reported
Priority:	Not reported
Project Status(A, I Or D):	Not reported
Last Updated:	Not reported
SR Comments:	Not reported
Priority Or Work-Load:	Not reported
Status:	LEP post 10/1/95 filing
Notes:	Not reported
Special Project Name:	Not reported
Special Project Comments:	Not reported
DOT Project:	Not reported
Pt Counter:	0
Project Complete:	False
Project Inactive:	False
Intl Deposit #:	Not reported
Deposit #:	Not reported
Spill Case #:	Not reported
Diversion Id:	0
Public Notice:	Not reported
Rap Received:	Not reported
Rap Approved:	Not reported
Compliance Category:	Not reported
Delete Record:	False
ECAF Reviewed By:	Not reported
Notlocatable:	False
Primaryaddress:	False
Aka_sitename:	False
Primarysitename:	False
Aka_siteaddress:	False
Lead:	LEP
Contain Value For Decode:	L
ACKTAG:	Not reported
RCVTAG:	Not reported
Rtn Ctfd:	Not reported
Review:	Not reported
I:	Not reported
C:	Not reported
D:	Not reported
Issued:	Not reported
Cont Type:	Not reported
Issues:	Not reported
PW Program:	False
PT Program:	False
US Program:	False
DA Program:	False
SR Program:	False
SF Program:	False

CT MANIFEST:

EPA ID:	CTP000012765
Years:	1992, 1987

GFI DISPLAY (Continued) **S121136678**

Details:

Year:	1992
EPA ID:	CTP000012765
Manifest Id:	INA0416898
TSDF EPA ID:	IND093219012
TSDF Name:	HERITAGE ENVIRONMENTAL SERVICE
TSDF Address:	7901WEST MORRIS ST
TSDF City,State,Zip:	INDIANAPOLIS, IN 46231
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	MAD982545436
Transporter Name:	OIL RECOVERY CORP DBA OIL RECOVERY OF MASS
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	295 ELLA GRASSO TPK
Generator City,State,Zip:	WINSDOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	N
Date Shipped:	07/01/1992
Date Received:	Not reported
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	2
US Dot Description:	WASTE FLAMMABLE SOLID, NOS
Number of Containers:	001
Container Type:	DM
Quantity:	51
Weight/Volume:	P
Batch Number:	999999
EPA Waste Codes:	D001
Copies:	2
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	INA04168982
Year:	1992
EPA ID:	CTP000012765
Manifest Id:	INA0416898
TSDF EPA ID:	IND093219012

GFI DISPLAY (Continued) **S121136678**

TSDF Name:	HERITAGE ENVIRONMENTAL SERVICE
TSDF Address:	7901WEST MORRIS ST
TSDF City,State,Zip:	INDIANAPOLIS, IN 46231
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	MAD982545436
Transporter Name:	OIL RECOVERY CORP DBA OIL RECOVERY OF MASS
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	295 ELLA GRASSO TPK
Generator City,State,Zip:	WINSDOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	N
Date Shipped:	07/01/1992
Date Received:	Not reported
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	WASTE FLAMMABLE LIQUID, NOS
Number of Containers:	001
Container Type:	DM
Quantity:	63
Weight/Volume:	P
Batch Number:	999999
EPA Waste Codes:	D001
Copies:	2
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported
Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	INA04168981

Details as of 2013:

Year:	1992
EPAID:	CTP000012765
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036237103

GFI DISPLAY (Continued) **S121136678**

Special Handling:	Y
Last Modified Date:	04/27/2004
Last Modified By:	IG
Year:	1992
EPAID:	CTP000012765
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	2036237103
Special Handling:	Y
Last Modified Date:	04/27/2004
Last Modified By:	IG

Waste as of 2013:

Year:	1992
Manifest ID:	INA0416898
Waste Occurrence:	2
UNNA:	2926
Hazard Class:	FLAMMABLE
US Dot Description:	WASTE FLAMMABLE SOLID, NOS
Number of Containers:	001
Container Type:	DM
Quantity:	51
Weight/Volume:	P
Additional Description:	Y
Handling Code:	T50
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG
Year:	1992
Manifest ID:	INA0416898
Waste Occurrence:	1
UNNA:	1993
Hazard Class:	FLAMMABLE
US Dot Description:	WASTE FLAMMABLE LIQUID, NOS
Number of Containers:	001
Container Type:	DM
Quantity:	63
Weight/Volume:	P
Additional Description:	Y
Handling Code:	T31
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Waste Code as of 2013:

Year:	1992
Manifest ID:	INA0416898
Waste Occurrence:	2
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

GFI DISPLAY (Continued) **S121136678**

Year:	1992
Manifest ID:	INA0416898
Waste Occurrence:	1
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

Details:

Year:	1987
EPA ID:	CTP000005981
Manifest Id:	CTB0078528
TSDF EPA ID:	MAD053452637
TSDF Name:	CLEAN HARBORS INC OF BRAINTREE
TSDF Address:	385 QUINCY AVE
TSDF City,State,Zip:	BRAINTREE, MA 02184
TSDF Country:	USA
TSDF Telephone:	Not reported
Transport Date:	Not reported
Transporter EPA ID:	CTD980521280
Transporter Name:	SEALAND ENVIRONMENTAL SERVICES INC
Transporter Address:	Not reported
Transporter City,State,Zip:	CT
Transporter Country:	USA
Transporter Phone:	Not reported
Trans 2 Date:	12/15/1987
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
Trans 2 Address:	Not reported
Transporter 2 City,State,Zip:	CT
Trans 2 Country:	USA
Trans 2 Phone:	Not reported
Generator Mailing Address:	295 ELLA GRASSO TNPKE
Generator City,State,Zip:	WINDSOR LOCKS, CT 06096
Generator Mailing Country:	Not reported
Generator Phone:	Not reported
Special Handling:	Not reported
Discrepancies:	N
Date Shipped:	12/14/1987
Date Received:	12/15/1987
Last modified date:	Not reported
Last modified by:	Not reported
Comments:	Not reported
Waste Occurence:	1
US Dot Description:	WASTE FLAMMABLE LIQUID
Number of Containers:	001
Container Type:	TT
Quantity:	2800
Weight/Volume:	G
Batch Number:	999999
EPA Waste Codes:	D001
Copies:	2
Alt Fac EPA:	Not reported
Alt Fac Name:	Not reported
Alt Fac Street Address:	Not reported
Alt Fac Town:	Not reported

GFI DISPLAY (Continued) **S121136678**

Alt Fac State:	Not reported
Alt Fac Zip:	Not reported
Alt Fac Date:	Not reported
Unique Key:	CTB00785281

Details as of 2013:

Year:	1987
EPAID:	CTP000005981
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	Not reported
Special Handling:	N
Last Modified Date:	04/27/2004
Last Modified By:	IG

Year:	1987
EPAID:	CTP000005981
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	Not reported
Special Handling:	N
Last Modified Date:	04/27/2004
Last Modified By:	IG

Year:	1987
EPAID:	CTP000005981
TSDF Telephone:	Not reported
Transporter Country:	USA
Transporter Telephone:	Not reported
Transporter 2 Telephone:	Not reported
Generator Mailing Country:	USA
Telephone:	Not reported
Special Handling:	N
Last Modified Date:	04/27/2004
Last Modified By:	IG

Waste as of 2013:

Year:	1987
Manifest ID:	CTB0078528
Waste Occurrence:	1
UNNA:	1993
Hazard Class:	FLAMMABLE
US Dot Description:	WASTE FLAMMABLE LIQUID
Number of Containers:	001
Container Type:	TT
Quantity:	2800
Weight/Volume:	G
Additional Description:	N
Handling Code:	S02
Last Modified Date:	2004-04-27 00:00:00

GFI DISPLAY (Continued) **S121136678**

Last Modified By: IG

Waste Code as of 2013:

Year:	1987
Manifest ID:	CTB0078528
Waste Occurrence:	1
EPA Waste Code:	D001
Recycled Waste?:	False
Last Modified Date:	2004-04-27 00:00:00
Last Modified By:	IG

L52 SSE 1/2-1 0.568 mi. 2999 ft. **WINCHESTER PROPERTIES 295 TURNPIKE RD WINDSOR LOCKS, CT 06096** **SEMS-ARCHIVE CORRACTS RCRA-TSDF US INST CONTROL RCRA NonGen / NLR** **1000170557 CTD001444066**

Site 1 of 2 in cluster L

Relative: Higher

Actual: 180 ft.

SEMS Archive:

Site ID:	101790
EPA ID:	CTD001444066
Cong District:	1
FIPS Code:	9003
FF:	N
NPL:	Not on the NPL
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information

SEMS Archive Detail:

Region:	1
Site ID:	101790
EPA ID:	CTD001444066
Site Name:	WINCHESTER INDUSTRIES
NPL:	N
FF:	N
OU:	0
Action Code:	VS
Action Name:	ARCH SITE
SEQ:	1
Start Date:	Not reported
Finish Date:	2001-10-22 00:00:00
Qual:	Not reported
Current Action Lead:	EPA Perf In-Hse

Region:	1
Site ID:	101790
EPA ID:	CTD001444066
Site Name:	WINCHESTER INDUSTRIES
NPL:	N
FF:	N
OU:	0
Action Code:	DS
Action Name:	DISCVRY
SEQ:	1
Start Date:	1988-06-30 00:00:00
Finish Date:	1988-06-30 00:00:00
Qual:	Not reported
Current Action Lead:	EPA Perf

WINCHESTER PROPERTIES (Continued) **1000170557**

Region:	1
Site ID:	101790
EPA ID:	CTD001444066
Site Name:	WINCHESTER INDUSTRIES
NPL:	N
FF:	N
OU:	0
Action Code:	PA
Action Name:	PA
SEQ:	1
Start Date:	Not reported
Finish Date:	1988-12-16 00:00:00
Qual:	L
Current Action Lead:	EPA Perf

Region:	1
Site ID:	101790
EPA ID:	CTD001444066
Site Name:	WINCHESTER INDUSTRIES
NPL:	N
FF:	N
OU:	0
Action Code:	SI
Action Name:	SI
SEQ:	1
Start Date:	2000-09-01 00:00:00
Finish Date:	2001-09-27 00:00:00
Qual:	N
Current Action Lead:	EPA Perf

CORRACTS:

EPA ID:	CTD001444066
EPA Region:	1
Area Name:	ENTIRE FACILITY
Actual Date:	20000824
Action:	CA210SF - CA Responsibility Referred To A Non-RCRA Federal Authority, Corrective Action at the facility or area referred to CERCLA
NAICS Code(s):	333311 Automatic Vending Machine Manufacturing
Original schedule date:	Not reported
Schedule end date:	Not reported

EPA ID:	CTD001444066
EPA Region:	1
Area Name:	ENTIRE FACILITY
Actual Date:	19960412
Action:	CA772GC
NAICS Code(s):	333311 Automatic Vending Machine Manufacturing
Original schedule date:	Not reported
Schedule end date:	Not reported

EPA ID:	CTD001444066
EPA Region:	1
Area Name:	ENTIRE FACILITY
Actual Date:	19940126

WINCHESTER PROPERTIES (Continued) **1000170557**

Action: CA075HI - CA Prioritization, Facility or area was assigned a high corrective action priority
NAICS Code(s): 333311
Automatic Vending Machine Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CTD001444066
EPA Region: 1
Area Name: ENTIRE FACILITY
Actual Date: 19931220
Action: CA050RF - RFA Completed, Assessment was an RFA
NAICS Code(s): 333311
Automatic Vending Machine Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

RCRA-TSDF:
Date form received by agency: 11/18/1980
Facility name: WINCHESTER PROPERTIES
Facility address: 295 TURNPIKE RD
WINDSOR LOCKS, CT 06096
EPA ID: CTD001444066
Mailing address: TURNPIKE RD BOX 250
WINDSOR LOCKS, CT 06096
Contact: JOE DOUGHERTY
Contact address: TURNPIKE RD BOX 250
WINDSOR LOCKS, CT 06096
Contact country: US
Contact telephone: 203-623-2551
Contact email: Not reported
EPA Region: 01
Land type: Other land type
Classification: TSDF
Description: Handler is engaged in the treatment, storage or disposal of hazardous waste
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: WINCHESTER PROPERTIES
Owner/operator address: BOX 250 TURNPIKE RD.
OPERCITY, CT 99999
Owner/operator country: Not reported
Owner/operator telephone: 203-623-2551
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: XCOR INTERNATIONAL
Owner/operator address: 2001 SPRING RD.
OAK BROOK, IL 60521

WINCHESTER PROPERTIES (Continued) **1000170557**

Owner/operator country: Not reported
Owner/operator telephone: 312-986-2100
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: Yes
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: F017
. Waste name: Not Defined

. Waste code: F018
. Waste name: Not Defined

Historical Generators:
Date form received by agency: 08/18/1980
Site name: WINCHESTER PROPERTIES
Classification: Not a generator, verified

. Waste code: D001
. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

. Waste code: F017
. Waste name: Not Defined

. Waste code: F018
. Waste name: Not Defined

Corrective Action Summary:
Event date: 12/20/1993
Event: RFA COMPLETED-ASSESSMENT WAS A RFA

WINCHESTER PROPERTIES (Continued) **1000170557**

Event date: 01/26/1994
Event: CA PRIORITIZATION-HIGH CA PRIORITY

Event date: 04/12/1996
Event: INSTITUTIONAL CONTROLS ESTABLISHED-GOVERNMENTAL CONTROL

Event date: 08/24/2000
Event: REFERRED TO A NON-RCRA AUTHORITY-REFERRED TO CERCLA

Facility Has Received Notices of Violations:
Regulation violated: Not reported
Area of violation: TSD - Financial Requirements
Date violation determined: 07/31/1990
Date achieved compliance: 08/10/1995
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 07/31/1990
Date achieved compliance: 08/10/1995
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General
Date violation determined: 07/31/1990
Date achieved compliance: 04/15/1992
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Formal Enforcement Agreement or Order
Date violation determined: 11/30/1987
Date achieved compliance: 08/10/1995
Violation lead agency: State

WINCHESTER PROPERTIES (Continued) **1000170557**

Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 11/26/1986
Date achieved compliance: 08/10/1995
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Financial Requirements
Date violation determined: 05/15/1986
Date achieved compliance: 08/10/1995
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 12/10/1986
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 05/15/1986
Date achieved compliance: 08/10/1995
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 12/10/1986
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 05/15/1986
Date achieved compliance: 08/10/1995
Violation lead agency: State
Enforcement action: Not reported

WINCHESTER PROPERTIES (Continued) **1000170557**

Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General
Date violation determined: 02/19/1985
Date achieved compliance: 04/15/1992
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 02/19/1985
Date achieved compliance: 08/10/1995
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 02/23/1984
Date achieved compliance: 04/30/1985
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 06/01/1984
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 02/23/1984
Date achieved compliance: 06/05/1986
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 06/01/1984

WINCHESTER PROPERTIES (Continued) **1000170557**

Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:

Evaluation date: 08/10/1995
Evaluation: COMPLIANCE SCHEDULE EVALUATION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/31/1990
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 08/10/1995
Evaluation lead agency: State

Evaluation date: 07/31/1990
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Financial Requirements
Date achieved compliance: 08/10/1995
Evaluation lead agency: State

Evaluation date: 07/31/1990
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 04/15/1992
Evaluation lead agency: State

Evaluation date: 11/30/1987
Evaluation: COMPLIANCE SCHEDULE EVALUATION
Area of violation: Formal Enforcement Agreement or Order
Date achieved compliance: 08/10/1995
Evaluation lead agency: State

Evaluation date: 11/30/1987
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 11/26/1986
Evaluation: GROUNDWATER MONITORING EVALUATION
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 08/10/1995
Evaluation lead agency: State

Evaluation date: 05/15/1986
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 08/10/1995
Evaluation lead agency: State

Evaluation date: 05/15/1986

WINCHESTER PROPERTIES (Continued) **1000170557**

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 08/10/1995
Evaluation lead agency: State

Evaluation date: 05/15/1986
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Financial Requirements
Date achieved compliance: 08/10/1995
Evaluation lead agency: State

Evaluation date: 04/15/1986
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/19/1985
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 04/15/1992
Evaluation lead agency: State

Evaluation date: 02/19/1985
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 08/10/1995
Evaluation lead agency: State

Evaluation date: 08/14/1984
Evaluation: GROUNDWATER MONITORING EVALUATION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA-Initiated Oversight/Observation/Training Actions

Evaluation date: 02/23/1984
Evaluation: COMPLIANCE SCHEDULE EVALUATION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/23/1984
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 04/30/1985
Evaluation lead agency: State

Evaluation date: 02/23/1984
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 06/05/1986
Evaluation lead agency: State

US INST CONTROL:
EPA ID: CTD001444066
Site ID: Not reported
Name: WINCHESTER PROPERTIES
Action Name: Not reported

WINCHESTER PROPERTIES (Continued) **1000170557**

Address:	295 TURNPIKE RD
	WINDSOR LOCKS, CT 06096
EPA Region:	1
County:	HARTFORD
Event Code:	CA772GC
Inst. Control:	Not reported
Actual Date:	04/12/1996
Complet. Date:	01/01/1900
Operable Unit:	Not reported
Contaminated Media :	Not reported
Contact Name :	JOE DOUGHERTY
Contact Phone and Ext :	203-623-2551
Event Code Description:	INSTITUTIONAL CONTROLS ESTABLISHED-GOVERNMENTAL CONTROL

L53 **CHOICE VEND, INC.** **CT SHWS** **S104255557**
SSE **295 ELLA GRASSO TURNPIKE** **CT SDADB** **N/A**
1/2-1 **WINDSOR LOCKS, CT 06096** **CT CPCS**
0.568 mi.
2999 ft. **Site 2 of 2 in cluster L**

Relative:
Higher

Actual:
180 ft.

SHWS:

State ID:	547
PTP Id Number:	Not reported
WPC Number:	Not reported
EPA ID:	CTD001444066
PO Office:	Not reported
Lat/Long:	41.9358/-72.6694
Location Method:	Not reported
Groundwater Class:	Not reported
Surface Water Qualification:	Not reported
Waste Category:	SOLVENTS
Disposal Method:	DRY WELL
Sample:	False
Other Dept of Env. Protection:	RCRA
Updated By:	Not reported
Update Program:	Not reported
Date Updated:	Not reported
Duplicate:	False
Program:	SUPERFUND
Inventory Date:	7/6/1987
On Inventory:	True
Assessed:	True
87 Group:	RI
87 Origin:	INVENTORY
On 87:	True
Comments:	A.K.A. SEEBURG CORP. RCRA TSDF, ORDERS ISSUED BY HMMU TO CEASE DISCHARGE. ORDERS REMAIN ACTIVE. CO. IS O.O.B.

Site Discovery and Assessment:

Facility ID:	547
Rem Master ID:	935
PTP Id:	Not reported
WPC Number:	Not reported
Postal District:	Not reported
Latitude:	41.9358
Longitude:	-72.6694
Lat/Long Determined By:	Not reported

CHOICE VEND, INC. (Continued) **S104255557**

Ground Water Quality Classification:	GB/GA
Surface Water Quality Classification:	Not reported
Waste Type:	SOLVENTS
Disposal:	DRY WELL
Sample Data Available:	False
Updated By:	Not reported
Update Program:	Not reported
Updated:	Not reported
Date Created:	Not reported
Duplicate:	False

SDA Federal:

EPA CERCLIS Id:	Not reported
Number EPA RCRIS Id:	Not reported
Site on EPA's CERCLIS:	True
Site Archived from CERCLIS:	False
Archive Date:	Not reported
EPA's Removal at Site:	False
Deferred to another EPA Program:	True
EPA Env Priority Initiative Site:	False
Federal Facility:	False
Site on EPA's National Priority List:	False
Part of an NPL site:	False
RCRA Generator Status:	returned to cerclis
RCRA Permit Status:	Not reported

SDA Referral:

Referral Id:	536
Source of referral:	SUPERFUND
Date Received:	7/6/1987
Staff Assigned:	DEP
Remediation Program:	SUPERFUND
Date dt_assigned:	7/6/1987
Remediation Complete Approved DEP/Verified by LEP:	7/6/1987
Outcome:	INVENTORY

SDA Remedial:

Remedial Id:	Not reported
PTP Id:	Not reported
Remediation Program:	Not reported
Remediation Program Entered:	Not reported
Staff Assigned:	Not reported
Remediation Program:	Not reported
Date dt_assign:	Not reported
Project Phase:	Not reported
Order issued:	Not reported
Order Number:	Not reported
Date order issued:	Not reported
Remedial Investigation Start:	Not reported
Remedial Investigation Completed:	Not reported
Remedial Design Start:	Not reported
Remedial Design complet:	Not reported
Remedial Action Start:	Not reported
Remedial Action Completed:	Not reported
Date Oper/ maintenance Started:	Not reported
GW monitoring:	Not reported
Remediation complete Approved DEP/Verified by LEP:	Not reported

SDA Orders:

CHOICE VEND, INC. (Continued) **S104255557**

Order Id:	176
Order Number:	WC3150 HM6
Date order issued:	10/31/1981
Staff Assigned:	Not reported
Type of Order:	Not reported
Order Respondent:	Not reported
Admin Appeal Date:	Not reported
Date of Admin Appeal Ruling:	Not reported
Date of Admin Appeal Ruling:	Not reported
Date of Final Order:	Not reported
Date of Court Appeal:	Not reported
Date of Court Ruling:	Not reported
Date of Court Ruling:	Not reported
Date Order Modified:	Not reported
Date Referred to AG:	Not reported
Judgement:	Not reported
Date of AGR judgement:	Not reported
Penalty assessed:	Not reported
Order Complete:	Not reported
In compliance:	False
Comments:	Status unknown at date of entry

SDA Orders:

Order Id:	177
Order Number:	327
Date order issued:	Not reported
Staff Assigned:	Not reported
Type of Order:	Not reported
Order Respondent:	Not reported
Admin Appeal Date:	Not reported
Date of Admin Appeal Ruling:	Not reported
Date of Admin Appeal Ruling:	Not reported
Date of Final Order:	Not reported
Date of Court Appeal:	Not reported
Date of Court Ruling:	Not reported
Date of Court Ruling:	Not reported
Date Order Modified:	Not reported
Date Referred to AG:	Not reported
Judgement:	Not reported
Date of AGR judgement:	Not reported
Penalty assessed:	Not reported
Order Complete:	Not reported
In compliance:	False
Comments:	issued some time in June 1982 Status unknown at date of entry

SDA Orders:

Order Id:	178
Order Number:	MH-181
Date order issued:	Not reported
Staff Assigned:	Not reported
Type of Order:	Not reported
Order Respondent:	Not reported
Admin Appeal Date:	Not reported
Date of Admin Appeal Ruling:	Not reported
Date of Admin Appeal Ruling:	Not reported
Date of Final Order:	Not reported
Date of Court Appeal:	Not reported
Date of Court Ruling:	Not reported

CHOICE VEND, INC. (Continued) **S104255557**

Date of Court Ruling:	Not reported
Date Order Modified:	Not reported
Date Referred to AG:	Not reported
Judgement:	Not reported
Date of AGR judgement:	Not reported
Penalty assessed:	Not reported
Order Complete:	Not reported
In compliance:	False
Comments:	issued sometime in 1984 Status unknown at date of entry

SDADB:

SDA Waste:

Waste Id:	22
Waste Type:	SOLVENTS
Description:	Solvents

CPCS:

Site Type:	Sites
Lust Status code:	Not reported
Lust Status:	Not reported
PTP Form:	Not reported
Program:	-1
Comments:	A.k.a. Seeburg Corp. Rcra Tsdf, Orders Issued By Hmmu To Cease Discharge. Orders Remain Active. Co. Is O.o.b./kettle Brook Is Near By.
Site Type Definition:	Inventory of Hazardous Waste Disposal Sites

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54
SW
1/2-1
0.604 mi.
3188 ft.

BRADLEY INTERNATIONAL AIRPORT
BRADLEY INTERNATIONAL AIRPORT
WINDSOR LOCKS, CT 06096

CT SHWS **1007261152**
CT SDADB **N/A**
CT SPILLS
CT CPCS

Relative:
Higher

Actual:
182 ft.

SHWS:

State ID:	546
PTP Id Number:	Not reported
WPC Number:	Not reported
EPA ID:	Not reported
PO Office:	Not reported
Lat/Long:	/
Location Method:	Not reported
Groundwater Class:	Not reported
Surface Water Qualification:	Not reported
Waste Category:	SOLVENTS, HYDRO/OIL
Disposal Method:	UST, DRUMS, BURIAL
Sample:	False
Other Dept of Env. Protection:	Not reported
Updated By:	WING, S.
Update Program:	PWP
Date Updated:	5/12/1995
Duplicate:	False
Program:	SUPERFUND
Inventory Date:	7/6/1987
On Inventory:	True
Assessed:	True
87 Group:	RI

BRADLEY INTERNATIONAL AIRPORT (Continued) **1007261152**

87 Origin:	INVENTORY
On 87:	True
Comments:	SITE CLEAN-UP ONGOING. AKA: CONCOURSE C ASSGINED TO S. WING

Site Discovery and Assessment:

Facility ID:	546
Rem Master ID:	934
PTP Id:	Not reported
WPC Number:	Not reported
Postal District:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Lat/Long Determined By:	Not reported
Ground Water Quality Classification:	Not reported
Surface Water Quality Classification:	Not reported
Waste Type:	SOLVENTS, HYDRO/OIL
Disposal:	UST, DRUMS, BURIAL
Sample Data Available:	False
Updated By:	WING, S.
Update Program:	PWP
Updated:	5/12/1995
Date Created:	Not reported
Duplicate:	False

SDA Federal:

EPA CERCLIS Id:	Not reported
Number EPA RCRIS Id:	Not reported
Site on EPA's CERCLIS:	Not reported
Site Archived from CERCLIS:	Not reported
Archive Date:	Not reported
EPA's Removal at Site:	Not reported
Deferred to another EPA Program:	Not reported
EPA Env Priority Initiative Site:	Not reported
Federal Facility:	Not reported
Site on EPA's National Priority List:	Not reported
Part of an NPL site:	Not reported
RCRA Generator Status:	Not reported
RCRA Permit Status:	Not reported

SDA Referral:

Referral Id:	535
Source of referral:	SUPERFUND
Date Received:	7/6/1987
Staff Assigned:	DEP
Remediation Program:	SUPERFUND
Date dt_assigned:	7/6/1987
Remediation Complete Approved DEP/Verified by LEP:	7/6/1987
Outcome:	INVENTORY

SDA Remedial:

Remedial Id:	Not reported
PTP Id:	Not reported
Remediation Program:	Not reported
Remediation Program Entered:	Not reported
Staff Assigned:	Not reported
Remediation Program:	Not reported
Date dt_assign:	Not reported
Project Phase:	Not reported

BRADLEY INTERNATIONAL AIRPORT (Continued) **1007261152**

Order issued:	Not reported
Order Number:	Not reported
Date order issued:	Not reported
Remedial Investigation Start:	Not reported
Remedial Investigation Completed:	Not reported
Remedial Design Start:	Not reported
Remedial Design complet:	Not reported
Remedial Action Start:	Not reported
Remedial Action Completed:	Not reported
Date Oper/ maintenance Started:	Not reported
GW monitoring:	Not reported
Remediation complete Approved DEP/Verified by LEP:	Not reported

SDA Orders:

Order Id:	Not reported
Order Number:	Not reported
Date order issued:	Not reported
Staff Assigned:	Not reported
Type of Order:	Not reported
Order Respondent:	Not reported
Admin Appeal Date:	Not reported
Date of Admin Appeal Ruling:	Not reported
Date of Admin Appeal Ruling:	Not reported
Date of Final Order:	Not reported
Date of Court Appeal:	Not reported
Date of Court Ruling:	Not reported
Date of Court Ruling:	Not reported
Date Order Modified:	Not reported
Date Referred to AG:	Not reported
Judgement:	Not reported
Date of AGR judgement:	Not reported
Penalty assessed:	Not reported
Order Complete:	Not reported
In compliance:	Not reported
Comments:	Not reported

SDADB:

SDA Waste:

Waste Id:	22
Waste Type:	SOLVENTS
Description:	Solvents

SPILLS:

Year of Database:	2006
Case Number:	200603974
Who Took Spill:	210
Assigned To:	0
Report Date:	07/01/2006
Report Time:	20:39:07
Date Release:	07/01/2006
Time Responded:	Not reported
Reported By:	Gentile
Phone:	860 2927400
Representing:	FD
Terminated:	YES
Recovd (Total):	0

BRADLEY INTERNATIONAL AIRPORT (Continued) **1007261152**

Total (Water): 0
Facility Status: CLOSED
Continuous Spill: False
Released Substance: DIESEL FUEL
Qty: 3 (Gallons)
Emergency Measure: Not reported
Water Body: Not reported
Discharger: Not reported
Telephone: Not reported
Responsible Party: Not reported
RP Address 1: Not reported
RP City,St,Zip: CT
Historic: False
Waterbody: False
Time Stamp: 2006-07-10 14:23:15
Sr Inspector: Matt Wisniewski
At Inspctor: **NO RESPONSE
User Stamp: mgranill
Comments: Not reported
Action: Sanded
Other Action: Not reported
Action: Other
Other Action: SPEEDY DRY
Agency ID: DEP Dispatch
Other Agency: Not reported
DEP Bureau: Not reported
DEP Agency: Not reported
Cause ID: Overfill
Other Cause: Not reported
Media ID: Ground Surface
Other Media: Not reported
Class ID: Other
Other Class: Airport
Release Type: petroleum
Other Release: Not reported
Waterbody: Other
Other Wtrbody: None

CPCS:
Site Type: Sites
Lust Status code: Not reported
Lust Status: Not reported
PTP Form: Not reported
Program: -1
Comments: Site Clean-up Ongoing. Aka: Concourse C Assgined To S. Wing
Site Type Definition: Inventory of Hazardous Waste Disposal Sites

Count: 2 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
WINDSOR LOCKS	S110055345	DOT MAINTENANCE GARAGE (GLYCOL REC	CITATION LANE (BRADLEY INTERNA		CT LUST
WINDSOR LOCKS	S121817441	AREH WINDSOR LOCKS, LLC	100 KING SPRING RD	06096	CT ASBESTOS

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 07/17/2018
Date Data Arrived at EDR: 08/09/2018
Date Made Active in Reports: 09/07/2018
Number of Days to Update: 29

Source: EPA
Telephone: N/A
Last EDR Contact: 10/04/2018
Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 07/17/2018
Date Data Arrived at EDR: 08/09/2018
Date Made Active in Reports: 09/07/2018
Number of Days to Update: 29

Source: EPA
Telephone: N/A
Last EDR Contact: 10/04/2018
Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 07/17/2018
Date Data Arrived at EDR: 08/09/2018
Date Made Active in Reports: 09/07/2018
Number of Days to Update: 29

Source: EPA
Telephone: N/A
Last EDR Contact: 10/04/2018
Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/07/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 92

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 07/06/2018
Next Scheduled EDR Contact: 10/15/2018
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 07/17/2018
Date Data Arrived at EDR: 08/09/2018
Date Made Active in Reports: 09/07/2018
Number of Days to Update: 29

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 10/04/2018
Next Scheduled EDR Contact: 10/29/2018
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 07/17/2018
Date Data Arrived at EDR: 08/09/2018
Date Made Active in Reports: 09/07/2018
Number of Days to Update: 29

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 10/04/2018
Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report
CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/28/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 86

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 09/19/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/28/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: (888) 372-7341
Last EDR Contact: 09/19/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/28/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: (888) 372-7341
Last EDR Contact: 09/19/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/28/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: (888) 372-7341
Last EDR Contact: 09/19/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/28/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: (888) 372-7341
Last EDR Contact: 09/19/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/14/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 07/16/2018
Next Scheduled EDR Contact: 11/26/2018
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 07/31/2018
Date Data Arrived at EDR: 08/28/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 17

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/28/2018
Next Scheduled EDR Contact: 12/10/2018
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 07/31/2018
Date Data Arrived at EDR: 08/28/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 17

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/28/2018
Next Scheduled EDR Contact: 12/10/2018
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 06/18/2018
Date Data Arrived at EDR: 06/27/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 79

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 09/25/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

SHWS: Inventory of Hazardous Disposal Sites

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 04/23/2010
Date Data Arrived at EDR: 04/23/2010
Date Made Active in Reports: 05/25/2010
Number of Days to Update: 32

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3705
Last EDR Contact: 10/01/2018
Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: No Update Planned

SDADB: Site Discovery and Assessment Database

All sites reported to Permitting, Enforcement, and Remediation Division where it is suspected that hazardous waste may have been disposed or sites that are eligible for listing on the State Inventory of Hazardous Waste Disposal Sites.

Date of Government Version: 04/23/2010
Date Data Arrived at EDR: 04/23/2010
Date Made Active in Reports: 05/25/2010
Number of Days to Update: 32

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3705
Last EDR Contact: 10/01/2018
Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: No Update Planned

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: List of Landfills/Transfer Stations

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 03/29/2018
Date Data Arrived at EDR: 07/25/2018
Date Made Active in Reports: 07/31/2018
Number of Days to Update: 6

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3366
Last EDR Contact: 07/25/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Annually

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank List

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 07/31/2018
Date Data Arrived at EDR: 08/06/2018
Date Made Active in Reports: 09/10/2018
Number of Days to Update: 35

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3376
Last EDR Contact: 10/01/2018
Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: Semi-Annually

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/12/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 07/27/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/12/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/27/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/10/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 07/27/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/25/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 07/27/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/24/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/27/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/01/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 07/27/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 05/08/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 07/27/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/13/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/27/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 05/15/2017
Date Data Arrived at EDR: 05/30/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 136

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 07/11/2018
Next Scheduled EDR Contact: 10/22/2018
Data Release Frequency: Varies

UST: Underground Storage Tank Data
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 06/19/2018
Date Data Arrived at EDR: 08/09/2018
Date Made Active in Reports: 09/10/2018
Number of Days to Update: 32

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3376
Last EDR Contact: 08/01/2018
Next Scheduled EDR Contact: 12/10/2018
Data Release Frequency: Semi-Annually

AST: Marine Terminals and Tank Information
A listing of bulk petroleum facilities that receive petroleum by a vessel.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 08/09/2018
Date Made Active in Reports: 09/10/2018
Number of Days to Update: 32

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3233
Last EDR Contact: 10/01/2018
Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/12/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/27/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/24/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/27/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/01/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 07/27/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/12/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 07/27/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 05/08/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 07/27/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/13/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/27/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 04/25/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 07/27/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/10/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 07/27/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

ENG CONTROLS: Engineering Controls Listing

An Engineered Control is a permanent physical structure designed to safely isolate pollutants which would otherwise not comply with the self-implementing remedial options allowed in the Connecticut Remediation Standard Regulations (RSRs). The ECGD includes a description of what is eligible to be considered as an Engineered Control under section 22a-133k-2(f)(2) of the RSRs, a description of the information necessary for the preparation of complete and approvable applications, a step-by-step outline of the review and approval process, and supplemental resources provided in the appendices.

Date of Government Version: 03/05/2013
Date Data Arrived at EDR: 05/07/2013
Date Made Active in Reports: 06/19/2013
Number of Days to Update: 43

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3000
Last EDR Contact: 09/07/2018
Next Scheduled EDR Contact: 12/17/2018
Data Release Frequency: Varies

AUL: ELUR Sites

Environmental Land Use Restriction sites.

Date of Government Version: 05/04/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 06/20/2018
Number of Days to Update: 33

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3912
Last EDR Contact: 08/01/2018
Next Scheduled EDR Contact: 11/19/2018
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 09/24/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Varies

VCP: Voluntary Remediation Sites

Sites involved in the Voluntary Remediation Program.

Date of Government Version: 08/10/2018
Date Data Arrived at EDR: 08/10/2018
Date Made Active in Reports: 09/10/2018
Number of Days to Update: 31

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3705
Last EDR Contact: 08/01/2018
Next Scheduled EDR Contact: 02/20/2047
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS 2: Brownfields Inventory

A brownfield site is generally defined as "real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant or contaminanta?|"

Date of Government Version: 08/03/2017
Date Data Arrived at EDR: 09/20/2017
Date Made Active in Reports: 09/26/2017
Number of Days to Update: 6

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3705
Last EDR Contact: 09/21/2018
Next Scheduled EDR Contact: 12/31/2018
Data Release Frequency: Varies

BROWNFIELDS: Brownfields Inventory

CBRA has identified over 200 brownfield sites eligible for redevelopment. In most cases these are prime properties for commercial or industrial use. CBRA's grants, assistance and financing lower the financial risks and eliminate the legal, regulatory and environmental risks of redevelopment.

Date of Government Version: 03/25/2016
Date Data Arrived at EDR: 03/29/2016
Date Made Active in Reports: 05/18/2016
Number of Days to Update: 50

Source: Connecticut Brownfields Redevelopment Authority
Telephone: 860-258-7833
Last EDR Contact: 09/17/2018
Next Scheduled EDR Contact: 12/31/2018
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/18/2018
Date Data Arrived at EDR: 06/20/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 09/18/2018
Next Scheduled EDR Contact: 12/31/2018
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY: Recycling Facilities

A listing of recycling facilities.

Date of Government Version: 09/14/2018
Date Data Arrived at EDR: 09/20/2018
Date Made Active in Reports: 10/04/2018
Number of Days to Update: 14

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3223
Last EDR Contact: 09/10/2018
Next Scheduled EDR Contact: 12/24/2018
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 07/30/2018
Next Scheduled EDR Contact: 11/12/2018
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 07/17/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 08/03/2018
Next Scheduled EDR Contact: 11/12/2018
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 05/18/2018
Date Data Arrived at EDR: 06/20/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 86

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/28/2018
Next Scheduled EDR Contact: 12/10/2018
Data Release Frequency: No Update Planned

CDL: Clandestine Drug Lab Listing

A listing of clandestine drug lab locations included in the Spills database.

Date of Government Version: 07/31/2018
Date Data Arrived at EDR: 08/06/2018
Date Made Active in Reports: 09/10/2018
Number of Days to Update: 35

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3361
Last EDR Contact: 10/01/2018
Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: Quarterly

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 05/18/2018
Date Data Arrived at EDR: 06/20/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 86

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/28/2018
Next Scheduled EDR Contact: 12/10/2018
Data Release Frequency: Quarterly

Local Land Records

CT PROPERTY: Property Transfer Filings

A listing of sites that meet the definition of a hazardous waste establishment. They can be generators, dry cleaners, furniture strippers, etc. These sites have been sold to another owner.

Date of Government Version: 08/10/2018
Date Data Arrived at EDR: 08/10/2018
Date Made Active in Reports: 09/10/2018
Number of Days to Update: 31

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3705
Last EDR Contact: 08/01/2018
Next Scheduled EDR Contact: 11/19/2018
Data Release Frequency: Semi-Annually

LIENS: Environmental Liens Listing

A listing of environmental liens placed by the Cost Recovery Program.

Date of Government Version: 10/23/2017
Date Data Arrived at EDR: 11/17/2017
Date Made Active in Reports: 12/13/2017
Number of Days to Update: 26

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3120
Last EDR Contact: 08/07/2018
Next Scheduled EDR Contact: 11/26/2018
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 07/17/2018
Date Data Arrived at EDR: 08/09/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 10/04/2018
Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 03/26/2018
Date Data Arrived at EDR: 03/27/2018
Date Made Active in Reports: 06/08/2018
Number of Days to Update: 73

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 09/25/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Quarterly

SPILLS: Oil & Chemical Spill Database

Oil and Chemical Spill Data.

Date of Government Version: 07/31/2018
Date Data Arrived at EDR: 08/06/2018
Date Made Active in Reports: 09/10/2018
Number of Days to Update: 35

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3024
Last EDR Contact: 10/01/2018
Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: Semi-Annually

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 10/15/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/11/2013
Number of Days to Update: 39

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/28/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: (888) 372-7341
Last EDR Contact: 09/19/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015
Date Data Arrived at EDR: 07/08/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 08/24/2018
Next Scheduled EDR Contact: 12/03/2018
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 07/11/2018
Next Scheduled EDR Contact: 10/22/2018
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 07/13/2018
Next Scheduled EDR Contact: 10/22/2018
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 08/17/2018
Next Scheduled EDR Contact: 11/26/2018
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/27/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 100

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 09/25/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 08/03/2018
Next Scheduled EDR Contact: 11/19/2018
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 08/10/2018
Next Scheduled EDR Contact: 11/19/2018
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/21/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 198

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 09/21/2018
Next Scheduled EDR Contact: 12/31/2018
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 01/10/2018
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 2

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 08/24/2018
Next Scheduled EDR Contact: 12/03/2018
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 07/27/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 07/17/2018
Date Data Arrived at EDR: 08/09/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 57

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 10/04/2018
Next Scheduled EDR Contact: 12/17/2018
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 08/01/2018
Date Data Arrived at EDR: 08/22/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 07/20/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 10/17/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 3

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 10/04/2018
Next Scheduled EDR Contact: 11/19/2018
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 06/01/2017
Date Data Arrived at EDR: 06/09/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 126

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 07/13/2018
Next Scheduled EDR Contact: 10/22/2018
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 07/09/2018
Next Scheduled EDR Contact: 10/22/2018
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016
Date Data Arrived at EDR: 09/08/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 43

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 09/28/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 09/07/2018
Next Scheduled EDR Contact: 12/17/2018
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 09/04/2018
Next Scheduled EDR Contact: 12/17/2018
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 05/24/2017
Date Data Arrived at EDR: 11/30/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 07/27/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/02/2018
Date Data Arrived at EDR: 07/05/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 92

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 10/03/2018
Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data
Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 08/09/2018
Next Scheduled EDR Contact: 11/12/2018
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/17/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 80

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 10/01/2018
Next Scheduled EDR Contact: 12/31/2018
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 09/28/2017
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 08/24/2018
Next Scheduled EDR Contact: 12/03/2018
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 07/11/2018
Next Scheduled EDR Contact: 10/22/2018
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017
Date Data Arrived at EDR: 09/11/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 3

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 09/11/2018
Next Scheduled EDR Contact: 11/19/2018
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 06/23/2017
Date Data Arrived at EDR: 10/11/2017
Date Made Active in Reports: 11/03/2017
Number of Days to Update: 23

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 08/20/2018
Next Scheduled EDR Contact: 12/03/2018
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites
A listing of former lead smelter site locations.

Date of Government Version: 07/17/2018
Date Data Arrived at EDR: 08/09/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 10/04/2018
Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites
A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)
The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File
Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/01/2018
Date Data Arrived at EDR: 08/29/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 37

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 08/29/2018
Next Scheduled EDR Contact: 12/10/2018
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing
This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 08/31/2018
Next Scheduled EDR Contact: 12/10/2018
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 08/31/2018
Next Scheduled EDR Contact: 12/10/2018
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 09/10/2018
Date Data Arrived at EDR: 09/11/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 3

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 09/10/2018
Next Scheduled EDR Contact: 12/24/2018
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 08/07/2018
Date Data Arrived at EDR: 09/05/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 30

Source: EPA
Telephone: (617) 918-1111
Last EDR Contact: 09/18/2018
Next Scheduled EDR Contact: 12/17/2018
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 06/19/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 87

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 07/13/2018
Next Scheduled EDR Contact: 10/29/2018
Data Release Frequency: Varies

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 07/26/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 71

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 08/31/2018
Next Scheduled EDR Contact: 12/10/2018
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 09/02/2018
Date Data Arrived at EDR: 09/05/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 9

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 09/05/2018
Next Scheduled EDR Contact: 12/17/2018
Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 08/22/2018
Date Data Arrived at EDR: 08/22/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 44

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 08/22/2018
Next Scheduled EDR Contact: 12/03/2018
Data Release Frequency: Quarterly

AIRS: Permitted Air Sources Listing

A listing of permitted air sources in Connecticut.

Date of Government Version: 07/25/2018
Date Data Arrived at EDR: 07/31/2018
Date Made Active in Reports: 09/13/2018
Number of Days to Update: 44

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3026
Last EDR Contact: 07/17/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

ASBESTOS: Asbestos Notification Listing

A listing of asbestos notification site locations.

Date of Government Version: 08/01/2018
Date Data Arrived at EDR: 08/02/2018
Date Made Active in Reports: 09/10/2018
Number of Days to Update: 39

Source: Department of Public Health
Telephone: 860-509-7371
Last EDR Contact: 07/24/2018
Next Scheduled EDR Contact: 11/12/2018
Data Release Frequency: Varies

CPCS: Contaminated or Potentially Contaminated Sites

A list of Contaminated or Potentially Contaminated Sites within Connecticut. This list represents the "Hazardous Waste Facilities," as defined in Section 22a-134f of the Connecticut General Statutes (CGS). The list contains the following types of sites: Sites listed on the Inventory of Hazardous Waste Disposal Sites; Sites subject to the Property Transfer Act; Sites at which underground storage tanks are known to have leaked; Sites at which hazardous waste subject to the RCRA; Sites that are included in EPA's (CERCLIS); Sites that are the subject of an order issued by the Commissioner of DEP that requires investigation and remediation of a potential or known source of pollution; and Sites that have entered into one of the Department's Voluntary Remediation Programs.

Date of Government Version: 08/07/2018
Date Data Arrived at EDR: 08/10/2018
Date Made Active in Reports: 09/10/2018
Number of Days to Update: 31

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3766
Last EDR Contact: 08/01/2018
Next Scheduled EDR Contact: 11/19/2018
Data Release Frequency: Quarterly

DRYCLEANERS: Drycleaner Facilities

A listing of drycleaner facility locations.

Date of Government Version: 07/18/2008
Date Data Arrived at EDR: 08/08/2008
Date Made Active in Reports: 08/27/2008
Number of Days to Update: 19

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3026
Last EDR Contact: 09/06/2018
Next Scheduled EDR Contact: 12/24/2018
Data Release Frequency: Varies

ENFORCEMENT: Enforcement Case Listing

The types of enforcement actions included are administrative consent orders, final unilateral orders and final dispositions of civil cases through the Attorney General's Office.

Date of Government Version: 09/21/2018
Date Data Arrived at EDR: 09/21/2018
Date Made Active in Reports: 10/04/2018
Number of Days to Update: 13

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3265
Last EDR Contact: 07/11/2018
Next Scheduled EDR Contact: 10/29/2018
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

A listing containing RCRA financial assurance information submitted on behalf of the CT DEP's Program Analysis Group of the Waste Engineering and Enforcement Division.

Date of Government Version: 06/14/2018
Date Data Arrived at EDR: 06/22/2018
Date Made Active in Reports: 07/31/2018
Number of Days to Update: 39

Source: Department of Energy & Environmental Protection
Telephone: 860-418-5930
Last EDR Contact: 09/17/2018
Next Scheduled EDR Contact: 12/31/2018
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 06/14/2018
Date Data Arrived at EDR: 06/22/2018
Date Made Active in Reports: 07/31/2018
Number of Days to Update: 39

Source: Department of Energy & Environmental Protection
Telephone: 860-418-5930
Last EDR Contact: 09/17/2018
Next Scheduled EDR Contact: 12/31/2018
Data Release Frequency: Varies

LEAD: Lead Inspection Database

The Lead Poisoning Prevention and Control Program lead inspection database.

Date of Government Version: 03/26/2014
Date Data Arrived at EDR: 03/27/2014
Date Made Active in Reports: 05/08/2014
Number of Days to Update: 42

Source: Department of Public Health
Telephone: 860-509-7299
Last EDR Contact: 08/29/2018
Next Scheduled EDR Contact: 12/17/2018
Data Release Frequency: Varies

LWDS: Connecticut Leachate and Wastewater Discharge Sites

The Leachate and Waste Water Discharge Inventory Data Layer (LWDS) includes point locations digitized from Leachate and Wastewater Discharge Source maps compiled by the Connecticut DEP. These maps locate surface and groundwater discharges that (1) have received a waste water discharge permit from the state or (2) are historic and now defunct waste sites or (3) are locations of accidental spills, leaks, or discharges of a variety of liquid or solid wastes.

Date of Government Version: 07/17/2009
Date Data Arrived at EDR: 10/21/2009
Date Made Active in Reports: 10/30/2009
Number of Days to Update: 9

Source: Department of Energy & Environmental Protection
Telephone: N/A
Last EDR Contact: 10/15/2014
Next Scheduled EDR Contact: 01/26/2015
Data Release Frequency: Varies

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 08/10/2018
Date Data Arrived at EDR: 08/10/2018
Date Made Active in Reports: 09/10/2018
Number of Days to Update: 31

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 08/09/2018
Next Scheduled EDR Contact: 11/26/2018
Data Release Frequency: No Update Planned

NPDES: Wastewater Permit Listing
A listing of permits issued by the DEP.

Date of Government Version: 07/13/2018
Date Data Arrived at EDR: 07/18/2018
Date Made Active in Reports: 08/01/2018
Number of Days to Update: 14

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3832
Last EDR Contact: 09/24/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Varies

SEH: List of Significant Environmental Hazards Report to DEEP
The Significant Environmental Hazard Statute is intended to identify and abate short-term risks associated with specific environmental conditions identified in the statute. After abatement of short-term risks (meaning abatement of the significant environmental hazard condition), there may still be potential long-term risks associated with the release. However, a significant environmental hazard can be considered abated under the statute even though potential long-term risks may not have been addressed.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/24/2018
Date Made Active in Reports: 08/01/2018
Number of Days to Update: 8

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3766
Last EDR Contact: 07/16/2018
Next Scheduled EDR Contact: 10/29/2018
Data Release Frequency: Varies

UIC: Underground Injection Control Listing
A list of of subsurface disposal permits and their locations.

Date of Government Version: 07/16/2018
Date Data Arrived at EDR: 07/24/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 52

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3058
Last EDR Contact: 06/26/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations
EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Energy & Environmental Protection formerly know as the DEP which changes in July 2011 in Connecticut.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/02/2014
Number of Days to Update: 185

Source: Department of Energy & Environmental Protection
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Energy & Environmental Protection formerly know as the DEP which changes in July 2011 in Connecticut.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/02/2014
Number of Days to Update: 185

Source: Department of Energy & Environmental Protection
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 07/13/2018
Date Made Active in Reports: 08/01/2018
Number of Days to Update: 19

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 07/13/2018
Next Scheduled EDR Contact: 10/22/2018
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 07/01/2018
Date Data Arrived at EDR: 08/01/2018
Date Made Active in Reports: 08/31/2018
Number of Days to Update: 30

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 08/01/2018
Next Scheduled EDR Contact: 11/12/2018
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 07/25/2017
Date Made Active in Reports: 09/25/2017
Number of Days to Update: 62

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 07/12/2018
Next Scheduled EDR Contact: 10/29/2018
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 02/23/2018
Date Made Active in Reports: 04/09/2018
Number of Days to Update: 45

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 08/21/2018
Next Scheduled EDR Contact: 12/03/2018
Data Release Frequency: Annually

VT MANIFEST: Hazardous Waste Manifest Data
Hazardous waste manifest information.

Date of Government Version: 08/23/2018
Date Data Arrived at EDR: 08/23/2018
Date Made Active in Reports: 09/18/2018
Number of Days to Update: 26

Source: Department of Environmental Conservation
Telephone: 802-241-3443
Last EDR Contact: 07/16/2018
Next Scheduled EDR Contact: 10/29/2018
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 06/15/2018
Date Made Active in Reports: 07/09/2018
Number of Days to Update: 24

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 09/06/2018
Next Scheduled EDR Contact: 12/24/2018
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: PennWell Corporation
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data
Source: PennWell Corporation
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GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Child Care Facilities
Source: Department of Public Health
Telephone: 860-509-8045

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Tidal Wetlands
Source: Department of Energy & Environmental Protection
Telephone: 860-424-4054

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

WINDSOR LOCKS AASF
ELLA GRASSO RT 75 TURNPIKE
WINDSOR LOCKS, CT 06096

TARGET PROPERTY COORDINATES

Latitude (North):	41.945816 - 41˚ 56’ 44.94’’
Longitude (West):	72.673716 - 72˚ 40’ 25.38’’
Universal Tranverse Mercator:	Zone 18
UTM X (Meters):	692831.7
UTM Y (Meters):	4646164.0
Elevation:	173 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5642461 WINDSOR LOCKS, CT
Version Date:	2012

EDR’s GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

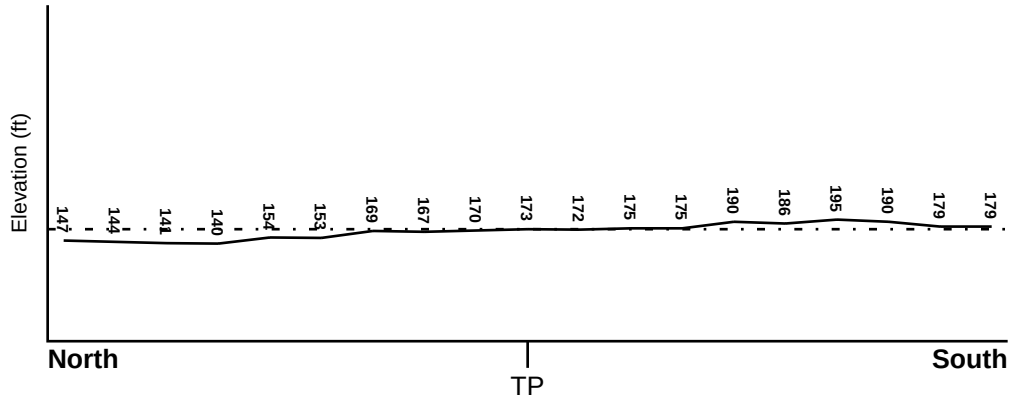
TOPOGRAPHIC INFORMATION

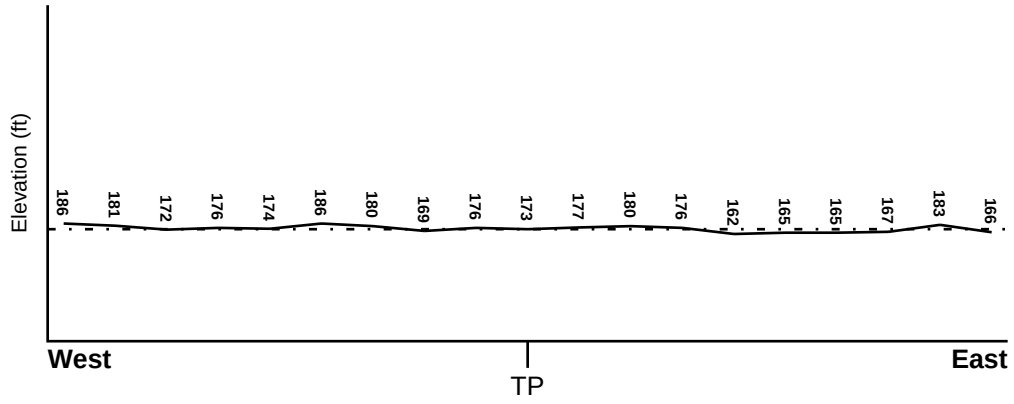
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General WNW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 173 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
09003C0208F	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
09003C0204F	FEMA FIRM Flood data
09003C0209F	FEMA FIRM Flood data
09003C0212F	FEMA FIRM Flood data
09003C0216F	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
WINDSOR LOCKS	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
A1	1/2 - 1 Mile SW	N E
A2	1/2 - 1 Mile SW	N E
1G	1/2 - 1 Mile SW	N E
2G	1/2 - 1 Mile SW	N E

For additional site information, refer to Physical Setting Source Map Findings.

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

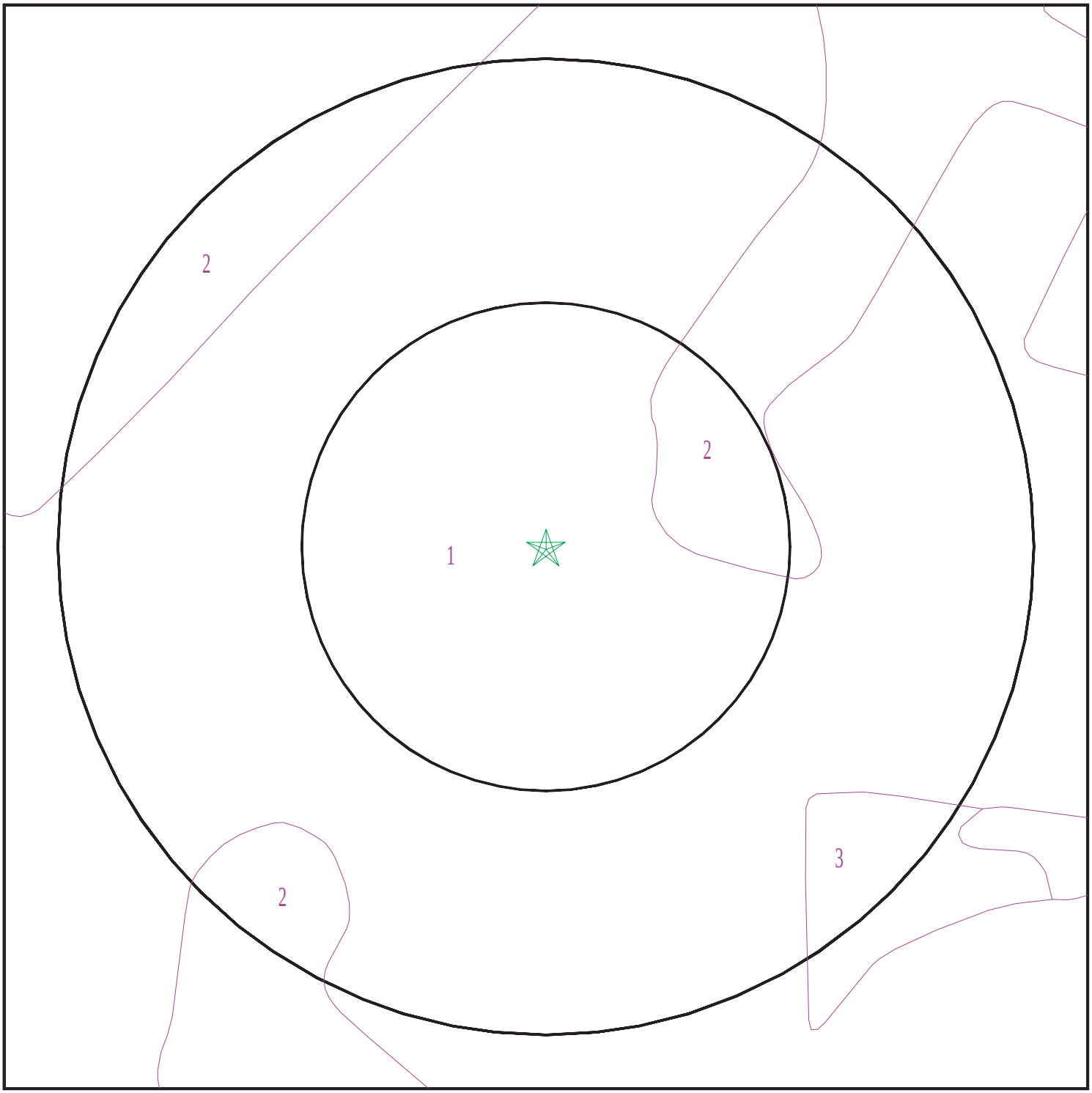
Era:	Mesozoic
System:	Triassic
Series:	Triassic
Code:	Tr *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 5446977.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Windsor Locks AASF	CLIENT:	AECOM
ADDRESS:	Ella Grasso RT 75 Turnpike Windsor Locks CT 06096	CONTACT:	Brittany Kirchmann
		INQUIRY #:	5446977.2s
LAT/LONG:	41.945816 / 72.673716	DATE:	October 08, 2018 12:13 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Udorthents

Soil Surface Texture: loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 0.01	Max: 7.8 Min: 4.5
2	5 inches	21 inches	gravelly loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 0.01	Max: 7.8 Min: 4.5
3	21 inches	79 inches	very gravelly sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 0.01	Max: 7.8 Min: 4.5

Soil Map ID: 2

Soil Component Name: Udorthents

Soil Surface Texture: loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 0.01	Max: 7.8 Min: 4.5
2	5 inches	21 inches	gravelly loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 0.01	Max: 7.8 Min: 4.5
3	21 inches	79 inches	very gravelly sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 0.01	Max: 7.8 Min: 4.5

Soil Map ID: 3

Soil Component Name: Windsor

Soil Surface Texture: moderately decomposed plant material

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Excessively drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	1 inches	moderately decomposed plant material	A-8	COARSE-GRAINED SOILS, Sands, Clean Sands, Well-graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 42	Max: 6.5 Min: 4.5
2	1 inches	3 inches	loamy sand	A-8	COARSE-GRAINED SOILS, Sands, Clean Sands, Well-graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 42	Max: 6.5 Min: 4.5
3	3 inches	9 inches	loamy sand	A-8	COARSE-GRAINED SOILS, Sands, Clean Sands, Well-graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 42	Max: 6.5 Min: 4.5
4	9 inches	20 inches	loamy sand	A-8	COARSE-GRAINED SOILS, Sands, Clean Sands, Well-graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 42	Max: 6.5 Min: 4.5
5	20 inches	25 inches	sand	A-8	COARSE-GRAINED SOILS, Sands, Clean Sands, Well-graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 42	Max: 6.5 Min: 4.5

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
6	25 inches	64 inches	sand	A-8	COARSE-GRAINED SOILS, Sands, Clean Sands, Well-graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 703 Min: 42	Max: 6.5 Min: 4.5

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 0.001 miles
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

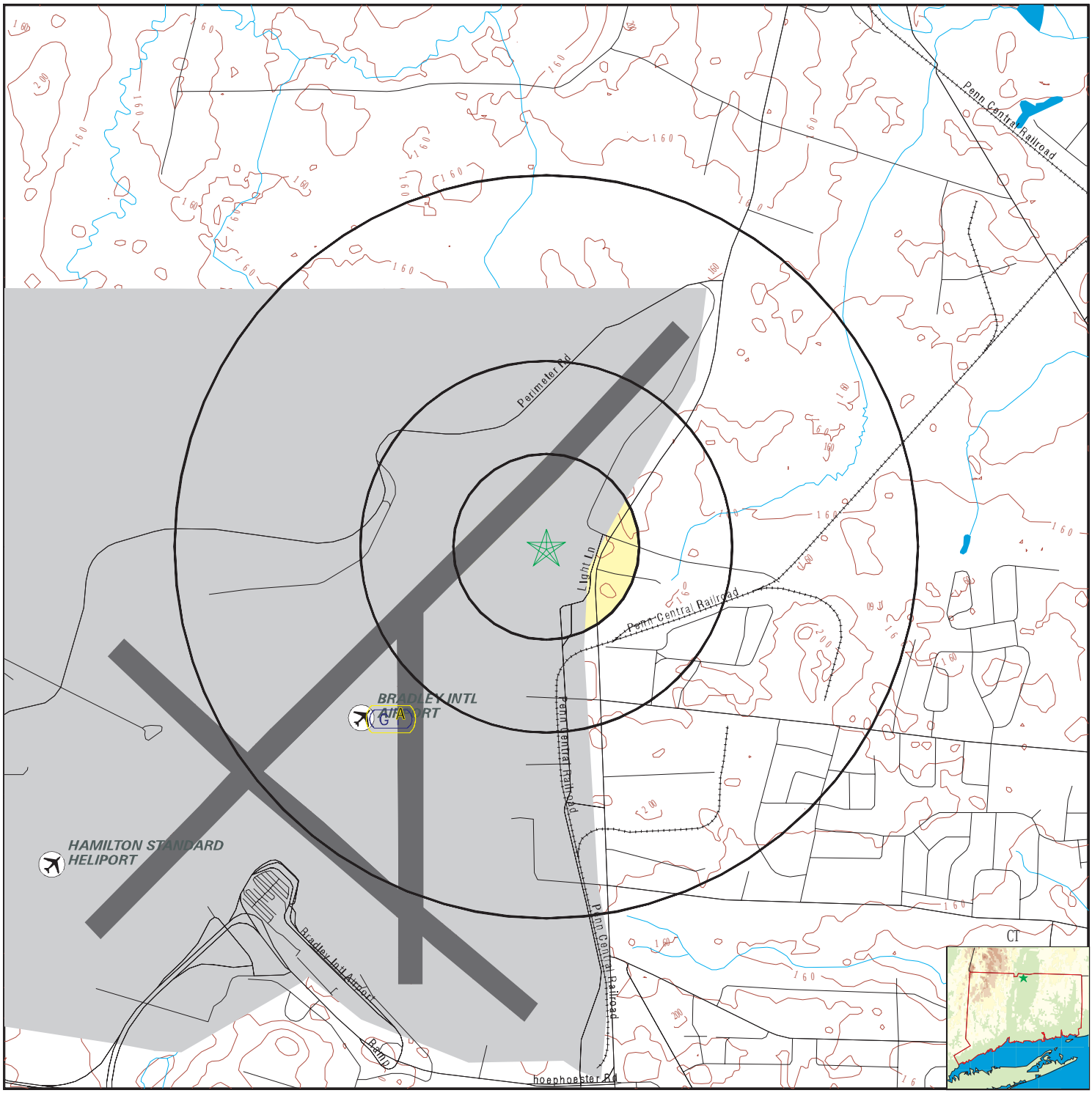
MAP ID	WELL ID	LOCATION FROM TP

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

PHYSICAL SETTING SOURCE MAP - 5446977.2s



County Boundary
Major Roads
Contour Lines
Airports
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

0 1/4 1/2 1 Miles

Groundwater Flow Direction
Indeterminate Groundwater Flow at Location
Groundwater Flow Varies at Location
Closest Hydrogeological Data
EPA Designated Sole Src. Aq.

N

SITE NAME:	Windsor Locks AASF	CLIENT:	AECOM
ADDRESS:	Ella Grasso RT 75 Turnpike Windsor Locks CT 06096	CONTACT:	Brittany Kirchmann
		INQUIRY #:	5446977.2s
LAT/LONG:	41.945816 / 72.673716	DATE:	October 08, 2018 12:13 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
A1 **SW** **1/2 - 1 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	Not Reported N E 4 6 Not Reported 7/8/1996	**AQUIFLOW**	**11431**
A2 **SW** **1/2 - 1 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	Not Reported N E 4 6 Not Reported 7/8/1996	**AQUIFLOW**	**11430**
1G **SW** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	Not Reported N E 4 6 Not Reported 7/8/1996	**AQUIFLOW**	**11431**
2G **SW** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	Not Reported N E 4 6 Not Reported 7/8/1996	**AQUIFLOW**	**11430**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CT Radon

Radon Test Results

City	# Sites	< 4 Pci/L	4 < 10 Pci/L	10 < 20 Pci/L	20 < 50 Pci/L	50 < 100 Pci/L	> 100 Pci/L
Southington	27	12 (44.4)	11 (40.7)	4 (14.8)	0 (0)	0 (0)	0 (0)
Suffield	12	10 (83.3)	2 (16.7)	0 (0)	0 (0)	0 (0)	0 (0)
Unionville	5	5 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Weatogue	6	6 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
West Hartford	55	46 (83.6)	7 (12.7)	1 (1.8)	1 (1.8)	0 (0)	0 (0)
West Simsbury	13	12 (92.3)	1 (7.7)	0 (0)	0 (0)	0 (0)	0 (0)
West Suffield	5	5 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Wethersfield	33	27 (81.8)	5 (15.2)	1 (3)	0 (0)	0 (0)	0 (0)
Windsor	19	15 (78.9)	4 (21.1)	0 (0)	0 (0)	0 (0)	0 (0)
Windsor Locks	8	8 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Tariffville	2	1 (50)	0 (0)	0 (0)	1 (50)	0 (0)	0 (0)
East Hampton	110	83 (100)	19 (0)	8 (0)	0 (0)	0 (0)	0 (0)
Manchester	34	24 (70.6)	10 (29.4)	0 (0)	0 (0)	0 (0)	0 (0)
Avon	15	8 (53.3)	6 (50)	1 (6.7)	0 (0)	0 (0)	0 (0)
Berlin	11	7 (63.6)	1 (9.1)	4 (36.4)	0 (0)	0 (0)	0 (0)
Bloomfield	7	7 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Bristol	17	10 (58.8)	4 (23.5)	3 (17.6)	0 (0)	0 (0)	0 (0)
Broad Brook	3	1 (33.3)	2 (66.7)	0 (0)	0 (0)	0 (0)	0 (0)
Burlington	125	125 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Canton	8	6 (75)	2 (25)	0 (0)	0 (0)	0 (0)	0 (0)
Collinsville	1	0 (0)	1 (100)	0 (0)	0 (0)	0 (0)	0 (0)
East Berlin	6	4 (66.7)	2 (33.3)	0 (0)	0 (0)	0 (0)	0 (0)
East Granby	13	8 (61.5)	0 (0)	1 (7.7)	0 (0)	4 (30.8)	0 (0)
East Hartford	20	20 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
East Hartland	1	1 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
East Windsor	4	3 (75)	1 (25)	0 (0)	0 (0)	0 (0)	0 (0)
Enfield	2	2 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Farmington	34	31 (91.2)	1 (2.9)	0 (5.9)	2 (0)	0 (0)	0 (0)
Forestville	3	3 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Glastonbury	152	120 (78.9)	22 (14.5)	5 (3.3)	4 (2.6)	0 (0)	1 (.7)
Granby	10	8 (80)	2 (20)	0 (0)	0 (0)	0 (0)	0 (0)
Hartford	99	95 (96)	5 (4)	0 (0)	0 (0)	0 (0)	0 (0)
Kensington	7	6 (85.7)	1 (14.3)	0 (0)	0 (0)	0 (0)	0 (0)
Marion	1	1 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Marlborough	16	12 (75)	4 (25)	0 (0)	0 (0)	0 (0)	0 (0)
New Britain	20	13 (65)	5 (25)	2 (10)	0 (0)	0 (0)	0 (0)
Newington	45	26 (57.8)	12 (26.7)	6 (13.3)	1 (2.2)	0 (0)	0 (0)
North Canton	2	2 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Plainville	2	2 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Plantsville	3	3 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Rocky Hill	24	19 (79.2)	3 (12.5)	2 (8.3)	0 (0)	0 (0)	0 (0)
Simsbury	13	12 (92.3)	1 (7.7)	0 (0)	0 (0)	0 (0)	0 (0)
South Glastonbury	13	10 (76.9)	0 (0)	1 (7.7)	1 (7.7)	0 (0)	1 (7.7)
South Windsor	23	23 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for HARTFORD County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 06096

Number of sites tested: 3

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.400 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	1.433 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Tidal Wetlands
Source: Department of Energy & Environmental Protection
Telephone: 860-424-4054

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Connecticut Leachate and Wastewater Discharge Sites
Source: Department of Environmental Protection
The Leachate and Waste Water Discharge Inventory Data Layer (LWDS) includes point locations digitized from Leachate and Wastewater Discharge Source maps compiled by the Connecticut DEP. These maps locate surface and groundwater discharges that (1) have received a waste water discharge permit from the state or (2) are historic and now defunct waste sites or (3) are locations of accidental spills, leaks, or discharges of a variety of liquid or solid wastes.

EPA-Approved Sole Source Aquifers in Connecticut
Source: EPA
Sole source aquifers are defined as an aquifer designated as the sole or principal source of drinking water for a given aquifer service area; that is, an aquifer which is needed to supply 50% or more of the drinking water for the area and for which there are no reasonable alternative sources should the aquifer become contaminated.

Community and Non-Community Water System Wells
Source: Department of Public Health, Water Supplies Section
Telephone: 860-509-7333
Active, emergency and inactive wells used for potable purposes that are owned and operated by active community and non-community water systems in Connecticut.

OTHER STATE DATABASE INFORMATION

RADON

State Database: CT Radon
Source: Department of Public Health
Telephone: 860-509-7367
Radon Statistical Summary

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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PWSID	PWSName	Size	FacilityID	FacilityName	FacilityWaterType	SamplePointID	SamplePointName	SamplePointType	AssociatedFacilityID	AssociatedSamplePointID	CollectionDate	SampleID	Contaminant	MRL	MethodID	AnalyticalResultsSign	AnalyticalResultValue	SampleEventCode	MonitoringRequirement	Region	State
CT1100011	Valley Water Systems, Inc.	L	38160	Johnson Ave. Wells #3 & #6	GW	3	Entry Point	EP	35954	VWS002	4/8/2014	200393990	PFBS	0.09	EPA 537	<		SE2	AM	1	CT
CT1100011	Valley Water Systems, Inc.	L	38160	Johnson Ave. Wells #3 & #6	GW	3	Entry Point	EP	35954	VWS002	4/8/2014	200393990	PFHpA	0.01	EPA 537	<		SE2	AM	1	CT
CT1100011	Valley Water Systems, Inc.	L	38160	Johnson Ave. Wells #3 & #6	GW	3	Entry Point	EP	35954	VWS002	4/8/2014	200393990	PFHxS	0.03	EPA 537	<		SE2	AM	1	CT
CT1100011	Valley Water Systems, Inc.	L	38160	Johnson Ave. Wells #3 & #6	GW	3	Entry Point	EP	35954	VWS002	4/8/2014	200393990	PFOS	0.04	EPA 537	<		SE2	AM	1	CT
CT1100011	Valley Water Systems, Inc.	L	46150	Woodford Ave. Wells 2A, 4A & 7	GW	3	Entry Point	EP	35954	VWS003	4/8/2014	200393992	PFOA	0.02	EPA 537	<		SE2	AM	1	CT
CT1100011	Valley Water Systems, Inc.	L	38160	Johnson Ave. Wells #3 & #6	GW	3	Entry Point	EP	35954	VWS002	4/8/2014	200393990	PFOA	0.02	EPA 537	<		SE2	AM	1	CT
CT1100011	Valley Water Systems, Inc.	L	46150	Woodford Ave. Wells 2A, 4A & 7	GW	3	Entry Point	EP	35954	VWS003	4/8/2014	200393992	PFBS	0.09	EPA 537	<		SE2	AM	1	CT
CT1100011	Valley Water Systems, Inc.	L	46150	Woodford Ave. Wells 2A, 4A & 7	GW	3	Entry Point	EP	35954	VWS003	4/8/2014	200393992	PFOS	0.04	EPA 537	<		SE2	AM	1	CT
CT1100011	Valley Water Systems, Inc.	L	46150	Woodford Ave. Wells 2A, 4A & 7	GW	3	Entry Point	EP	35954	VWS003	4/8/2014	200393992	PFNA	0.02	EPA 537	<		SE2	AM	1	CT
CT1100011	Valley Water Systems, Inc.	L	46150	Woodford Ave. Wells 2A, 4A & 7	GW	3	Entry Point	EP	35954	VWS003	4/8/2014	200393992	PFHxS	0.03	EPA 537	<		SE2	AM	1	CT
CT1100011	Valley Water Systems, Inc.	L	46150	Woodford Ave. Wells 2A, 4A & 7	GW	3	Entry Point	EP	35954	VWS003	4/8/2014	200393992	PFHpA	0.01	EPA 537	<		SE2	AM	1	CT
CT1100011	Valley Water Systems, Inc.	L	46150	Woodford Ave. Wells 2A, 4A & 7	GW	3	Entry Point	EP	35954	VWS003	10/16/2013	200385114	PFBS	0.09	EPA 537	<		SE1	AM	1	CT
CT1100011	Valley Water Systems, Inc.	L	46150	Woodford Ave. Wells 2A, 4A & 7	GW	3	Entry Point	EP	35954	VWS003	10/16/2013	200385114	PFHpA	0.01	EPA 537	<		SE1	AM	1	CT
CT1100011	Valley Water Systems, Inc.	L	46150	Woodford Ave. Wells 2A, 4A & 7	GW	3	Entry Point	EP	35954	VWS003	10/16/2013	200385114	PFHxS	0.03	EPA 537	<		SE1	AM	1	CT
CT1100011	Valley Water Systems, Inc.	L	46150	Woodford Ave. Wells 2A, 4A & 7	GW	3	Entry Point	EP	35954	VWS003	10/16/2013	200385114	PFNA	0.02	EPA 537	<		SE1	AM	1	CT
CT1100011	Valley Water Systems, Inc.	L	46150	Woodford Ave. Wells 2A, 4A & 7	GW	3	Entry Point	EP	35954	VWS003	10/16/2013	200385114	PFOS	0.04	EPA 537	<		SE1	AM	1	CT
CT1100011	Valley Water Systems, Inc.	L	46150	Woodford Ave. Wells 2A, 4A & 7	GW	3	Entry Point	EP	35954	VWS003	10/16/2013	200385114	PFOA	0.02	EPA 537	<		SE1	AM	1	CT
CT1100011	Valley Water Systems, Inc.	L	38160	Johnson Ave. Wells #3 & #6	GW	3	Entry Point	EP	35954	VWS002	4/8/2014	200393990	PFNA	0.02	EPA 537	<		SE2	AM	1	CT
CT1100011	Valley Water Systems, Inc.	L	38160	Johnson Ave. Wells #3 & #6	GW	3	Entry Point	EP	35954	VWS002	10/16/2013	200385110	PFOA	0.02	EPA 537	<		SE1	AM	1	CT
CT1100011	Valley Water Systems, Inc.	L	38160	Johnson Ave. Wells #3 & #6	GW	3	Entry Point	EP	35954	VWS002	10/16/2013	200385110	PFOS	0.04	EPA 537	<		SE1	AM	1	CT
CT1100011	Valley Water Systems, Inc.	L	38160	Johnson Ave. Wells #3 & #6	GW	3	Entry Point	EP	35954	VWS002	10/16/2013	200385110	PFNA	0.02	EPA 537	<		SE1	AM	1	CT
CT1100011	Valley Water Systems, Inc.	L	38160	Johnson Ave. Wells #3 & #6	GW	3	Entry Point	EP	35954	VWS002	10/16/2013	200385110	PFHxS	0.03	EPA 537	<		SE1	AM	1	CT
CT1100011	Valley Water Systems, Inc.	L	38160	Johnson Ave. Wells #3 & #6	GW	3	Entry Point	EP	35954	VWS002	10/16/2013	200385110	PFHpA	0.01	EPA 537	<		SE1	AM	1	CT
CT1100011	Valley Water Systems, Inc.	L	38160	Johnson Ave. Wells #3 & #6	GW	3	Entry Point	EP	35954	VWS002	10/16/2013	200385110	PFBS	0.09	EPA 537	<		SE1	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36338	Guilford Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	8/26/2014	201408270836AM	PFOA	0.02	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36338	Guilford Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	8/26/2014	201408270836AM	PFNA	0.02	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36338	Guilford Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	8/26/2014	201408270836AM	PFHxS	0.03	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36338	Guilford Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	8/26/2014	201408270836AM	PFHpA	0.01	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36338	Guilford Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	2/10/2014	201402110107AM	PFBS	0.09	EPA 537	<		SE1	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36338	Guilford Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	8/26/2014	201408270836AM	PFBS	0.09	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36338	Guilford Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	2/10/2014	201402110107AM	PFHpA	0.01	EPA 537	<		SE1	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36338	Guilford Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	2/10/2014	201402110107AM	PFNA	0.02	EPA 537	<		SE1	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36338	Guilford Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	2/10/2014	201402110107AM	PFOS	0.04	EPA 537	<		SE1	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36338	Guilford Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	2/10/2014	201402110107AM	PFOA	0.02	EPA 537	<		SE1	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36339	Pinewood Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	2/10/2014	201402110109AM	PFNA	0.02	EPA 537	<		SE1	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36339	Pinewood Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	2/10/2014	201402110109AM	PFOA	0.02	EPA 537	<		SE1	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36339	Pinewood Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	2/10/2014	201402110109AM	PFHxS	0.03	EPA 537	<		SE1	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36339	Pinewood Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	2/10/2014	201402110109AM	PFOS	0.04	EPA 537	<		SE1	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36339	Pinewood Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	2/10/2014	201402110109AM	PFHpA	0.01	EPA 537	<		SE1	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36339	Pinewood Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	2/10/2014	201402110109AM	PFBS	0.09	EPA 537	<		SE1	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36338	Guilford Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	8/26/2014	201408270836AM	PFOS	0.04	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36338	Guilford Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	2/10/2014	201402110107AM	PFHxS	0.03	EPA 537	<		SE1	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36337	Five Fields Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	2/10/2014	201402110093AM	PFOA	0.02	EPA 537	<		SE1	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36337	Five Fields Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	2/10/2014	201402110093AM	PFBS	0.09	EPA 537	<		SE1	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36337	Five Fields Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	2/10/2014	201402110093AM	PFHpA	0.01	EPA 537	<		SE1	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36337	Five Fields Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	2/10/2014	201402110093AM	PFHxS	0.03	EPA 537	<		SE1	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36337	Five Fields Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	2/10/2014	201402110093AM	PFNA	0.02	EPA 537	<		SE1	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36336	Weiss Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	8/4/2014	201408050418AM	PFNA	0.02	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36337	Five Fields Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	2/10/2014	201402110093AM	PFOS	0.04	EPA 537	<		SE1	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36337	Five Fields Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	8/4/2014	201408050384AM	PFNA	0.02	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36337	Five Fields Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	8/4/2014	201408050384AM	PFOA	0.02	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36337	Five Fields Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	8/4/2014	201408050384AM	PFOS	0.04	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36337	Five Fields Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	8/4/2014	201408050384AM	PFBS	0.09	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36337	Five Fields Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	8/4/2014	201408050384AM	PFHpA	0.01	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36337	Five Fields Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	8/4/2014	201408050384AM	PFHxS	0.03	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	90001	Williams WTP	SW	5	Entry Point	EP	21240	MR001	4/8/2014	201404090510AM	PFHpA	0.01	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	90001	Williams WTP	SW	5	Entry Point	EP	21240	MR001	4/8/2014	201404090510AM	PFHxS	0.03	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	90001	Williams WTP	SW	5	Entry Point	EP	21240	MR001	4/8/2014	201404090510AM	PFBS	0.09	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	90001	Williams WTP	SW	5	Entry Point	EP	21240	MR001	4/8/2014	201404090510AM	PFOA	0.02	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	50316	Holbrook Well	GW	3	Entry Point	EP	21240	MR001	8/4/2014	201408050337AM	PFOS	0.04	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	50316	Holbrook Well	GW	3	Entry Point	EP	21240	MR001	8/4/2014	201408050337AM	PFNA	0.02	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	50316	Holbrook Well	GW	3	Entry Point	EP	21240	MR001	8/4/2014	201408050337AM	PFHxS	0.03	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	50316	Holbrook Well	GW	3	Entry Point	EP	21240	MR001	8/4/2014	201408050337AM	PFHpA	0.01	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	50316	Holbrook Well	GW	3	Entry Point	EP	21240	MR001	8/4/2014	201408050337AM	PFBS	0.09	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	90002	Dennison Well	GW	3	Entry Point	EP	21240	MR001	4/8/2014	201404090427AM	PFHpA	0.01	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	90002	Dennison Well	GW	3	Entry Point	EP	21240	MR001	4/8/2014	201404090427AM	PFOA	0.02	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	90002	Dennison Well	GW	3	Entry Point	EP	21240	MR001	4/8/2014	201404090427AM	PFHxS	0.03	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	90002	Dennison Well	GW	3	Entry Point	EP	21240	MR001	4/8/2014	201404090427AM	PFBS	0.09	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	90002	Dennison Well	GW	3	Entry Point	EP	21240	MR001	4/8/2014	201404090427AM	PFOS	0.04	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	90002	Dennison Well	GW	3	Entry Point	EP	21240	MR001	4/8/2014	201404090427AM	PFNA	0.02	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	90001	Williams WTP	SW	5	Entry Point	EP	21240	MR001	4/8/2014	201404090510AM	PFOS	0.04	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	90001	Williams WTP	SW	5	Entry Point	EP	21240	MR001	4/8/2014	201404090510AM	PFNA	0.02	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36339	Pinewood Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	8/26/2014	201408270840AM	PFBS	0.09	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36339	Pinewood Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	8/26/2014	201408270840AM	PFHpA	0.01	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36339	Pinewood Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	8/26/2014	201408270840AM	PFOA	0.02	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36339	Pinewood Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	8/26/2014	201408270840AM	PFOS	0.04	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36339	Pinewood Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	8/26/2014	201408270840AM	PFNA	0.02	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36339	Pinewood Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	8/26/2014	201408270840AM	PFHxS	0.03	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	50316	Holbrook Well	GW	3	Entry Point	EP	21240	MR001	2/11/2014	201402120438AM	PFOS	0.04	EPA 537	<		SE1	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	50316	Holbrook Well	GW	3	Entry Point	EP	21240	MR001	8/4/2014	201408050337AM	PFOA	0.02	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	50316	Holbrook Well	GW	3	Entry Point	EP	21240	MR001	2/11/2014	201402120438AM	PFOA	0.02	EPA 537	<		SE1	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	50316	Holbrook Well	GW	3	Entry Point	EP	21240	MR001	2/11/2014	201402120438AM	PFHpA	0.01	EPA 537	<		SE1	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	50316	Holbrook Well	GW	3	Entry Point	EP	21240	MR001	2/11/2014	201402120438AM	PFBS	0.09	EPA 537	<		SE1	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	50316	Holbrook Well	GW	3	Entry Point	EP	21240	MR001	2/11/2014	201402120438AM	PFHxS	0.03	EPA 537	<		SE1	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	50316	Holbrook Well	GW	3	Entry Point	EP	21240	MR001	2/11/2014	201402120438AM	PFNA	0.02	EPA 537	<		SE1	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36331	Mackenzie Water Treatment Plant	SW	5	Entry Point	EP	21240	MR001	8/25/2014	201408260368AM	PFHpA	0.01	EPA 537	<		SE3	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36331	Mackenzie Water Treatment Plant	SW	5	Entry Point	EP	21240	MR001	2/11/2014	201402120674AM	PFBS	0.09	EPA 537	<		SE1	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36331	Mackenzie Water Treatment Plant	SW	5	Entry Point	EP	21240	MR001	8/25/2014	201408260368AM	PFHxS	0.03	EPA 537	<		SE3	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36331	Mackenzie Water Treatment Plant	SW	5	Entry Point	EP	21240	MR001	8/25/2014	201408260368AM	PFBS	0.09	EPA 537	<		SE3	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36331	Mackenzie Water Treatment Plant	SW	5	Entry Point	EP	21240	MR001	8/25/2014	201408260368AM	PFOS	0.04	EPA 537	<		SE3	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36331	Mackenzie Water Treatment Plant	SW	5	Entry Point	EP	21240	MR001	8/25/2014	201408260368AM	PFNA	0.02	EPA 537	<		SE3	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36331	Mackenzie Water Treatment Plant	SW	5	Entry Point	EP	21240	MR001	8/25/2014	201408260368AM	PFOA	0.02	EPA 537	<		SE3	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36331	Mackenzie Water Treatment Plant	SW	5	Entry Point	EP	21240	MR001	2/11/2014	201402120674AM	PFOS	0.04	EPA 537	<		SE1	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36331	Mackenzie Water Treatment Plant	SW	5	Entry Point	EP	21240	MR001	2/11/2014	201402120674AM	PFOA	0.02	EPA 537	<		SE1	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36331	Mackenzie Water Treatment Plant	SW	5	Entry Point	EP	21240	MR001	2/11/2014	201402120674AM	PFNA	0.02	EPA 537	<		SE1	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36331	Mackenzie Water Treatment Plant	SW	5	Entry Point	EP	21240	MR001	2/11/2014	201402120674AM	PFHxS	0.03	EPA 537	<		SE1	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36331	Mackenzie Water Treatment Plant	SW	5	Entry Point	EP	21240	MR001	5/21/2014	201405220417AM	PFOS	0.04	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36331	Mackenzie Water Treatment Plant	SW	5	Entry Point	EP	21240	MR001	5/21/2014	201405220417AM	PFOA	0.02	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36331	Mackenzie Water Treatment Plant	SW	5	Entry Point	EP	21240	MR001	5/21/2014	201405220417AM	PFHxS	0.03	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36331	Mackenzie Water Treatment Plant	SW	5	Entry Point	EP	21240	MR001	5/21/2014	201405220417AM	PFNA	0.02	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36331	Mackenzie Water Treatment Plant	SW	5	Entry Point	EP	21240	MR001	5/21/2014	201405220417AM	PFHpA	0.01	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36331	Mackenzie Water Treatment Plant	SW	5	Entry Point	EP	21240	MR001	5/21/2014	201405220417AM	PFBS	0.09	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36331	Mackenzie Water Treatment Plant	SW	5	Entry Point	EP	21240	MR001	2/11/2014	201402120674AM	PFHpA	0.01	EPA 537	<		SE1	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36336	Weiss Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	8/4/2014	201408050418AM	PFBS	0.09	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36331	Mackenzie Water Treatment Plant	SW	5	Entry Point	EP	21240	MR001	11/18/2014	201411190581AM	PFBS	0.09	EPA 537	<		SE4	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36331	Mackenzie Water Treatment Plant	SW	5	Entry Point	EP	21240	MR001	11/18/2014	201411190581AM	PFHpA	0.01	EPA 537	<		SE4	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36331	Mackenzie Water Treatment Plant	SW	5	Entry Point	EP	21240	MR001	11/18/2014	201411190581AM	PFOA	0.02	EPA 537	<		SE4	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36331	Mackenzie Water Treatment Plant	SW	5	Entry Point	EP	21240	MR001	11/18/2014	201411190581AM	PFOS	0.04	EPA 537	<		SE4	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36331	Mackenzie Water Treatment Plant	SW	5	Entry Point	EP	21240	MR001	11/18/2014	201411190581AM	PFNA	0.02	EPA 537	<		SE4	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36331	Mackenzie Water Treatment Plant	SW	5	Entry Point	EP	21240	MR001	11/18/2014	201411190581AM	PFHxS	0.03	EPA 537	<		SE4	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36334	Clinton Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	3/11/2014	201403120511AM	PFHpA	0.01	EPA 537	<		SE1	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36334	Clinton Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	8/4/2014	201408050412AM	PFOA	0.02	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36334	Clinton Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	8/4/2014	201408050412AM	PFBS	0.09	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36334	Clinton Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	8/4/2014	201408050412AM	PFHpA	0.01	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36334	Clinton Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	8/4/2014	201408050412AM	PFHxS	0.03	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36334	Clinton Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	8/4/2014	201408050412AM	PFNA	0.02	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36334	Clinton Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	8/4/2014	201408050412AM	PFOS	0.04	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36334	Clinton Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	3/11/2014	201403120511AM	PFOA	0.02	EPA 537	<		SE1	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36334	Clinton Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	3/11/2014	201403120511AM	PFOS	0.04	EPA 537	<		SE1	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36334	Clinton Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	3/11/2014	201403120511AM	PFNA	0.02	EPA 537	<		SE1	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36334	Clinton Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	3/11/2014	201403120511AM	PFHxS	0.03	EPA 537	<		SE1	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36336	Weiss Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	2/11/2014	201402120573AM	PFHpA	0.01	EPA 537	<		SE1	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36336	Weiss Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	8/4/2014	201408050418AM	PFHxS	0.03	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36336	Weiss Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	8/4/2014	201408050418AM	PFOS	0.04	EPA 537	<		SE2	AM	1	CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36336	Weiss Well Treatment Plant	GW	5	Entry Point	EP	21240	MR001	8/4/2014	201408050418AM	PFOA	0.02	EPA 537	<		SE2	AM	1	CT

CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36336 Weiss Well Treatment Plant	GW	5	Entry Point	EP	21240 MR001	8/4/2014 201408050418AM	PFHpA	0.01	EPA 537	<	SE2	AM	1 CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36336 Weiss Well Treatment Plant	GW	5	Entry Point	EP	21240 MR001	2/11/2014 201402120573AM	PFHxS	0.03	EPA 537	<	SE1	AM	1 CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36336 Weiss Well Treatment Plant	GW	5	Entry Point	EP	21240 MR001	2/11/2014 201402120573AM	PFOA	0.02	EPA 537	<	SE1	AM	1 CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36336 Weiss Well Treatment Plant	GW	5	Entry Point	EP	21240 MR001	2/11/2014 201402120573AM	PFBS	0.09	EPA 537	<	SE1	AM	1 CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36336 Weiss Well Treatment Plant	GW	5	Entry Point	EP	21240 MR001	2/11/2014 201402120573AM	PFOS	0.04	EPA 537	<	SE1	AM	1 CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36336 Weiss Well Treatment Plant	GW	5	Entry Point	EP	21240 MR001	2/11/2014 201402120573AM	PFNA	0.02	EPA 537	<	SE1	AM	1 CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36332 Saybrook Well Treatment Plant	GW	5	Entry Point	EP	21240 MR001	2/11/2014 201402120405AM	PFOS	0.04	EPA 537	<	SE1	AM	1 CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36332 Saybrook Well Treatment Plant	GW	5	Entry Point	EP	21240 MR001	8/26/2014 201408270820AM	PFBS	0.09	EPA 537	<	SE2	AM	1 CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36332 Saybrook Well Treatment Plant	GW	5	Entry Point	EP	21240 MR001	8/26/2014 201408270820AM	PFOA	0.02	EPA 537	<	SE2	AM	1 CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36332 Saybrook Well Treatment Plant	GW	5	Entry Point	EP	21240 MR001	2/11/2014 201402120405AM	PFOA	0.02	EPA 537	<	SE1	AM	1 CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36332 Saybrook Well Treatment Plant	GW	5	Entry Point	EP	21240 MR001	2/11/2014 201402120405AM	PFNA	0.02	EPA 537	<	SE1	AM	1 CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36332 Saybrook Well Treatment Plant	GW	5	Entry Point	EP	21240 MR001	2/11/2014 201402120405AM	PFHxS	0.03	EPA 537	<	SE1	AM	1 CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36332 Saybrook Well Treatment Plant	GW	5	Entry Point	EP	21240 MR001	2/11/2014 201402120405AM	PFHpA	0.01	EPA 537	<	SE1	AM	1 CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36332 Saybrook Well Treatment Plant	GW	5	Entry Point	EP	21240 MR001	2/11/2014 201402120405AM	PFBS	0.09	EPA 537	<	SE1	AM	1 CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36334 Clinton Well Treatment Plant	GW	5	Entry Point	EP	21240 MR001	3/11/2014 201403120511AM	PFBS	0.09	EPA 537	<	SE1	AM	1 CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36332 Saybrook Well Treatment Plant	GW	5	Entry Point	EP	21240 MR001	8/26/2014 201408270820AM	PFHxS	0.03	EPA 537	<	SE2	AM	1 CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36332 Saybrook Well Treatment Plant	GW	5	Entry Point	EP	21240 MR001	8/26/2014 201408270820AM	PFOS	0.04	EPA 537	<	SE2	AM	1 CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36332 Saybrook Well Treatment Plant	GW	5	Entry Point	EP	21240 MR001	8/26/2014 201408270820AM	PFHpA	0.01	EPA 537	<	SE2	AM	1 CT
CT0608011	CT Water Co. - Shoreline R., Guilford S.	L	36332 Saybrook Well Treatment Plant	GW	5	Entry Point	EP	21240 MR001	8/26/2014 201408270820AM	PFNA	0.02	EPA 537	<	SE2	AM	1 CT
CT0780021	University of Connecticut - Main Campus	L	38458 High Head	GW	3	Entry Point	EP	21786 MR001	10/23/2014 201410240270AM	PFBS	0.09	EPA 537	<	SE2	AM	1 CT
CT0780021	University of Connecticut - Main Campus	L	38458 High Head	GW	3	Entry Point	EP	21786 MR001	4/21/2014 201404230476AM	PFHxS	0.03	EPA 537	<	SE1	AM	1 CT
CT0780021	University of Connecticut - Main Campus	L	38458 High Head	GW	3	Entry Point	EP	21786 MR001	4/21/2014 201404230476AM	PFBS	0.09	EPA 537	<	SE1	AM	1 CT
CT0780021	University of Connecticut - Main Campus	L	38458 High Head	GW	3	Entry Point	EP	21786 MR001	4/21/2014 201404230476AM	PFOS	0.04	EPA 537	<	SE1	AM	1 CT
CT0780021	University of Connecticut - Main Campus	L	38458 High Head	GW	3	Entry Point	EP	21786 MR001	4/21/2014 201404230476AM	PFOA	0.02	EPA 537	<	SE1	AM	1 CT
CT0780021	University of Connecticut - Main Campus	L	38458 High Head	GW	3	Entry Point	EP	21786 MR001	4/21/2014 201404230476AM	PFHpA	0.01	EPA 537	<	SE1	AM	1 CT
CT0780021	University of Connecticut - Main Campus	L	38458 High Head	GW	3	Entry Point	EP	21786 MR001	10/23/2014 201410240270AM	PFHpA	0.01	EPA 537	<	SE2	AM	1 CT
CT0780021	University of Connecticut - Main Campus	L	38458 High Head	GW	3	Entry Point	EP	21786 MR001	10/23/2014 201410240270AM	PFHxS	0.03	EPA 537	<	SE2	AM	1 CT
CT0780021	University of Connecticut - Main Campus	L	38458 High Head	GW	3	Entry Point	EP	21786 MR001	4/21/2014 201404230476AM	PFNA	0.02	EPA 537	<	SE1	AM	1 CT
CT0780021	University of Connecticut - Main Campus	L	38458 High Head	GW	3	Entry Point	EP	21786 MR001	10/23/2014 201410240270AM	PFNA	0.02	EPA 537	<	SE2	AM	1 CT
CT0780021	University of Connecticut - Main Campus	L	38458 High Head	GW	3	Entry Point	EP	21786 MR001	10/23/2014 201410240270AM	PFOS	0.04	EPA 537	<	SE2	AM	1 CT
CT0780021	University of Connecticut - Main Campus	L	38458 High Head	GW	3	Entry Point	EP	21786 MR001	10/23/2014 201410240270AM	PFOA	0.02	EPA 537	<	SE2	AM	1 CT
CT0830011	Middletown Water Department	L	36404 Charles Bacon Water Treatment Plant	SW	70201	Entry Point	EP	22062 MR001	11/19/2014 200408290	PFOS	0.04	EPA 537	<	SE2	AM	1 CT
CT0830011	Middletown Water Department	L	36404 Charles Bacon Water Treatment Plant	SW	70201	Entry Point	EP	22062 MR001	11/19/2014 200408290	PFHxS	0.03	EPA 537	<	SE2	AM	1 CT
CT0830011	Middletown Water Department	L	36404 Charles Bacon Water Treatment Plant	SW	70201	Entry Point	EP	22062 MR001	11/19/2014 200408290	PFNA	0.02	EPA 537	<	SE2	AM	1 CT
CT0830011	Middletown Water Department	L	36405 John Roth Water Treatment Plant	GW	70202	Entry Point	EP	99001 MR002	2/26/2015 200412753	PFOA	0.02	EPA 537	<	SE2	AM	1 CT
CT0830011	Middletown Water Department	L	36405 John Roth Water Treatment Plant	GW	70202	Entry Point	EP	99001 MR002	2/26/2015 200412753	PFNA	0.02	EPA 537	<	SE2	AM	1 CT
CT0830011	Middletown Water Department	L	36405 John Roth Water Treatment Plant	GW	70202	Entry Point	EP	99001 MR002	2/26/2015 200412753	PFHxS	0.03	EPA 537	<	SE2	AM	1 CT
CT0830011	Middletown Water Department	L	36405 John Roth Water Treatment Plant	GW	70202	Entry Point	EP	99001 MR002	2/26/2015 200412753	PFHpA	0.01	EPA 537	<	SE2	AM	1 CT
CT0830011	Middletown Water Department	L	36405 John Roth Water Treatment Plant	GW	70202	Entry Point	EP	99001 MR002	2/26/2015 200412753	PFOS	0.04	EPA 537	<	SE2	AM	1 CT
CT0830011	Middletown Water Department	L	36404 Charles Bacon Water Treatment Plant	SW	70201	Entry Point	EP	22062 MR001	11/19/2014 200408290	PFHpA	0.01	EPA 537	<	SE2	AM	1 CT
CT0830011	Middletown Water Department	L	36405 John Roth Water Treatment Plant	GW	70202	Entry Point	EP	99001 MR002	2/26/2015 200412753	PFBS	0.09	EPA 537	<	SE2	AM	1 CT
CT0830011	Middletown Water Department	L	36404 Charles Bacon Water Treatment Plant	SW	70201	Entry Point	EP	22062 MR001	11/19/2014 200408290	PFOA	0.02	EPA 537	<	SE2	AM	1 CT
CT0830011	Middletown Water Department	L	36404 Charles Bacon Water Treatment Plant	SW	70201	Entry Point	EP	22062 MR001	8/11/2014 200401594	PFOA	0.02	EPA 537	<	SE1	AM	1 CT
CT0830011	Middletown Water Department	L	36404 Charles Bacon Water Treatment Plant	SW	70201	Entry Point	EP	22062 MR001	8/11/2014 200401594	PFOS	0.04	EPA 537	<	SE1	AM	1 CT
CT0830011	Middletown Water Department	L	36404 Charles Bacon Water Treatment Plant	SW	70201	Entry Point	EP	22062 MR001	8/11/2014 200401594	PFHpA	0.01	EPA 537	<	SE1	AM	1 CT
CT0830011	Middletown Water Department	L	36404 Charles Bacon Water Treatment Plant	SW	70201	Entry Point	EP	22062 MR001	8/11/2014 200401594	PFBS	0.09	EPA 537	<	SE1	AM	1 CT
CT0830011	Middletown Water Department	L	36404 Charles Bacon Water Treatment Plant	SW	70201	Entry Point	EP	22062 MR001	8/11/2014 200401594	PFHxS	0.03	EPA 537	<	SE1	AM	1 CT
CT0830011	Middletown Water Department	L	36404 Charles Bacon Water Treatment Plant	SW	70201	Entry Point	EP	22062 MR001	8/11/2014 200401594	PFNA	0.02	EPA 537	<	SE1	AM	1 CT
CT0830011	Middletown Water Department	L	36404 Charles Bacon Water Treatment Plant	SW	70201	Entry Point	EP	22062 MR001	11/19/2014 200408290	PFBS	0.09	EPA 537	<	SE2	AM	1 CT
CT0830011	Middletown Water Department	L	36405 John Roth Water Treatment Plant	GW	70202	Entry Point	EP	99001 MR002	8/11/2014 200401595	PFHpA	0.01	EPA 537	<	SE1	AM	1 CT
CT0830011	Middletown Water Department	L	36405 John Roth Water Treatment Plant	GW	70202	Entry Point	EP	99001 MR002	8/11/2014 200401595	PFHxS	0.03	EPA 537	<	SE1	AM	1 CT
CT0830011	Middletown Water Department	L	36405 John Roth Water Treatment Plant	GW	70202	Entry Point	EP	99001 MR002	8/11/2014 200401595	PFNA	0.02	EPA 537	<	SE1	AM	1 CT
CT0830011	Middletown Water Department	L	36405 John Roth Water Treatment Plant	GW	70202	Entry Point	EP	99001 MR002	8/11/2014 200401595	PFOS	0.04	EPA 537	<	SE1	AM	1 CT
CT0830011	Middletown Water Department	L	36405 John Roth Water Treatment Plant	GW	70202	Entry Point	EP	99001 MR002	8/11/2014 200401595	PFOA	0.02	EPA 537	<	SE1	AM	1 CT
CT0830011	Middletown Water Department	L	36405 John Roth Water Treatment Plant	GW	70202	Entry Point	EP	99001 MR002	8/11/2014 200401595	PFBS	0.09	EPA 537	<	SE1	AM	1 CT
CT0830011	Middletown Water Department	L	36404 Charles Bacon Water Treatment Plant	SW	70201	Entry Point	EP	22062 MR001	5/20/2015 200417220	PFHpA	0.01	EPA 537	<	SE4	AM	1 CT
CT0830011	Middletown Water Department	L	36404 Charles Bacon Water Treatment Plant	SW	70201	Entry Point	EP	22062 MR001	2/26/2015 200412752	PFNA	0.02	EPA 537	<	SE3	AM	1 CT
CT0830011	Middletown Water Department	L	36404 Charles Bacon Water Treatment Plant	SW	70201	Entry Point	EP	22062 MR001	2/26/2015 200412752	PFOS	0.04	EPA 537	<	SE3	AM	1 CT
CT0830011	Middletown Water Department	L	36404 Charles Bacon Water Treatment Plant	SW	70201	Entry Point	EP	22062 MR001	2/26/2015 200412752	PFOA	0.02	EPA 537	<	SE3	AM	1 CT
CT0830011	Middletown Water Department	L	36404 Charles Bacon Water Treatment Plant	SW	70201	Entry Point	EP	22062 MR001	2/26/2015 200412752	PFBS	0.09	EPA 537	<	SE3	AM	1 CT
CT0830011	Middletown Water Department	L	36404 Charles Bacon Water Treatment Plant	SW	70201	Entry Point	EP	22062 MR001	2/26/2015 200412752	PFHpA	0.01	EPA 537	<	SE3	AM	1 CT
CT0830011	Middletown Water Department	L	36404 Charles Bacon Water Treatment Plant	SW	70201	Entry Point	EP	22062 MR001	5/20/2015 200417220	PFBS	0.09	EPA 537	<	SE4	AM	1 CT
CT0830011	Middletown Water Department	L	36404 Charles Bacon Water Treatment Plant	SW	70201	Entry Point	EP	22062 MR001	2/26/2015 200412752	PFHxS	0.03	EPA 537	<	SE3	AM	1 CT
CT0830011	Middletown Water Department	L	36404 Charles Bacon Water Treatment Plant	SW	70201	Entry Point	EP	22062 MR001	5/20/2015 200417220	PFHxS	0.03	EPA 537	<	SE4	AM	1 CT
CT0830011	Middletown Water Department	L	36404 Charles Bacon Water Treatment Plant	SW	70201	Entry Point	EP	22062 MR001	5/20/2015 200417220	PFNA	0.02	EPA 537	<	SE4	AM	1 CT
CT0830011	Middletown Water Department	L	36404 Charles Bacon Water Treatment Plant	SW	70201	Entry Point	EP	22062 MR001	5/20/2015 200417220	PFOS	0.04	EPA 537	<	SE4	AM	1 CT
CT0830011	Middletown Water Department	L	36404 Charles Bacon Water Treatment Plant	SW	70201	Entry Point	EP	22062 MR001	5/20/2015 200417220	PFOA	0.02	EPA 537	<	SE4	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36423 Stewart Water Treatment Plant	SW	5	Entry Point	EP	22345 MR001	8/13/2013 201308140348AM	PFOA	0.02	EPA 537	<	SE2	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36423 Stewart Water Treatment Plant	SW	5	Entry Point	EP	22345 MR001	5/29/2013 201305300168AM	PFHxS	0.03	EPA 537	<	SE1	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36423 Stewart Water Treatment Plant	SW	5	Entry Point	EP	22345 MR001	8/13/2013 201308140348AM	PFNA	0.02	EPA 537	<	SE2	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36423 Stewart Water Treatment Plant	SW	5	Entry Point	EP	22345 MR001	8/13/2013 201308140348AM	PFHxS	0.03	EPA 537	<	SE2	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36423 Stewart Water Treatment Plant	SW	5	Entry Point	EP	22345 MR001	8/13/2013 201308140348AM	PFOS	0.04	EPA 537	<	SE2	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36423 Stewart Water Treatment Plant	SW	5	Entry Point	EP	22345 MR001	8/13/2013 201308140348AM	PFBS	0.09	EPA 537	<	SE2	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36423 Stewart Water Treatment Plant	SW	5	Entry Point	EP	22345 MR001	5/29/2013 201305300168AM	PFOS	0.04	EPA 537	<	SE1	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36423 Stewart Water Treatment Plant	SW	5	Entry Point	EP	22345 MR001	11/19/2013 201311200412AM	PFHpA	0.01	EPA 537	<	SE3	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36423 Stewart Water Treatment Plant	SW	5	Entry Point	EP	22345 MR001	11/19/2013 201311200412AM	PFHxS	0.03	EPA 537	<	SE3	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36423 Stewart Water Treatment Plant	SW	5	Entry Point	EP	22345 MR001	11/19/2013 201311200412AM	PFNA	0.02	EPA 537	<	SE3	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36425 Indian Fields Treatment Station	GW	5	Entry Point	EP	22345 MR001	5/29/2013 201305300148AM	PFBS	0.09	EPA 537	<	SE1	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36423 Stewart Water Treatment Plant	SW	5	Entry Point	EP	22345 MR001	11/19/2013 201311200412AM	PFOS	0.04	EPA 537	<	SE3	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36423 Stewart Water Treatment Plant	SW	5	Entry Point	EP	22345 MR001	11/19/2013 201311200412AM	PFBS	0.09	EPA 537	<	SE3	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36423 Stewart Water Treatment Plant	SW	5	Entry Point	EP	22345 MR001	5/29/2013 201305300168AM	PFBS	0.09	EPA 537	<	SE1	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36423 Stewart Water Treatment Plant	SW	5	Entry Point	EP	22345 MR001	5/29/2013 201305300168AM	PFHpA	0.01	EPA 537	<	SE1	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36425 Indian Fields Treatment Station	GW	5	Entry Point	EP	22345 MR001	5/29/2013 201305300148AM	PFOS	0.04	EPA 537	<	SE1	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36425 Indian Fields Treatment Station	GW	5	Entry Point	EP	22345 MR001	5/29/2013 201305300148AM	PFOA	0.02	EPA 537	<	SE1	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36425 Indian Fields Treatment Station	GW	5	Entry Point	EP	22345 MR001	5/29/2013 201305300148AM	PFHpA	0.01	EPA 537	<	SE1	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36425 Indian Fields Treatment Station	GW	5	Entry Point	EP	22345 MR001	5/29/2013 201305300148AM	PFHxS	0.03	EPA 537	<	SE1	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36425 Indian Fields Treatment Station	GW	5	Entry Point	EP	22345 MR001	5/29/2013 201305300148AM	PFNA	0.02	EPA 537	<	SE1	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36423 Stewart Water Treatment Plant	SW	5	Entry Point	EP	22345 MR001	5/29/2013 201305300168AM	PFOA	0.02	EPA 537	<	SE1	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36423 Stewart Water Treatment Plant	SW	5	Entry Point	EP	22345 MR001	11/19/2013 201311200412AM	PFOA	0.02	EPA 537	<	SE3	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36425 Indian Fields Treatment Station	GW	5	Entry Point	EP	22345 MR001	11/18/2013 201311190229AM	PFOS	0.04	EPA 537	<	SE2	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36423 Stewart Water Treatment Plant	SW	5	Entry Point	EP	22345 MR001	8/13/2013 201308140348AM	PFHpA	0.01	EPA 537	<	SE2	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36425 Indian Fields Treatment Station	GW	5	Entry Point	EP	22345 MR001	11/18/2013 201311190229AM	PFBS	0.09	EPA 537	<	SE2	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36425 Indian Fields Treatment Station	GW	5	Entry Point	EP	22345 MR001	11/18/2013 201311190229AM	PFHxS	0.03	EPA 537	<	SE2	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36425 Indian Fields Treatment Station	GW	5	Entry Point	EP	22345 MR001	11/18/2013 201311190229AM	PFNA	0.02	EPA 537	<	SE2	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36425 Indian Fields Treatment Station	GW	5	Entry Point	EP	22345 MR001	11/18/2013 201311190229AM	PFOA	0.02	EPA 537	<	SE2	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36425 Indian Fields Treatment Station	GW	5	Entry Point	EP	22345 MR001	11/18/2013 201311190229AM	PFHpA	0.01	EPA 537	<	SE2	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36422 Marks Brook Treatment Station	GW	5	Entry Point	EP	22345 MR001	11/18/2013 201311190238AM	PFNA	0.02	EPA 537	<	SE2	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36422 Marks Brook Treatment Station	GW	5	Entry Point	EP	22345 MR001	11/18/2013 201311190238AM	PFBS	0.09	EPA 537	<	SE2	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36422 Marks Brook Treatment Station	GW	5	Entry Point	EP	22345 MR001	11/18/2013 201311190238AM	PFHpA	0.01	EPA 537	<	SE2	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36422 Marks Brook Treatment Station	GW	5	Entry Point	EP	22345 MR001	11/18/2013 201311190238AM	PFHxS	0.03	EPA 537	<	SE2	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36422 Marks Brook Treatment Station	GW	5	Entry Point	EP	22345 MR001	11/18/2013 201311190238AM	PFOS	0.04	EPA 537	<	SE2	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36422 Marks Brook Treatment Station	GW	5	Entry Point	EP	22345 MR001	11/18/2013 201311190238AM	PFOA	0.02	EPA 537	<	SE2	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36423 Stewart Water Treatment Plant	SW	5	Entry Point	EP	22345 MR001	2/11/2014 201402120585AM	PFNA	0.02	EPA 537	<	SE4	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36423 Stewart Water Treatment Plant	SW	5	Entry Point	EP	22345 MR001	2/11/2014 201402120585AM	PFOS	0.04	EPA 537	<	SE4	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36423 Stewart Water Treatment Plant	SW	5	Entry Point	EP	22345 MR001	2/11/2014 201402120585AM	PFHxS	0.03	EPA 537	<	SE4	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36423 Stewart Water Treatment Plant	SW	5	Entry Point	EP	22345 MR001	2/11/2014 201402120585AM	PFOA	0.02	EPA 537	<	SE4	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36423 Stewart Water Treatment Plant	SW	5	Entry Point	EP	22345 MR001	2/11/2014 201402120585AM	PFHpA	0.01	EPA 537	<	SE4	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36422 Marks Brook Treatment Station	GW	5	Entry Point	EP	22345 MR001	5/29/2013 201305300192AM	PFHpA	0.01	EPA 537	<	SE1	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36423 Stewart Water Treatment Plant	SW	5	Entry Point	EP	22345 MR001	2/11/2014 201402120585AM	PFBS	0.09	EPA 537	<	SE4	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36422 Marks Brook Treatment Station	GW	5	Entry Point	EP	22345 MR001	5/29/2013 201305300192AM	PFBS	0.09	EPA 537	<	SE1	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36422 Marks Brook Treatment Station	GW	5	Entry Point	EP	22345 MR001	5/29/2013 201305300192AM	PFOA	0.02	EPA 537	<	SE1	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36423 Stewart Water Treatment Plant	SW	5	Entry Point	EP	22345 MR001	5/29/2013 201305300168AM	PFNA	0.02	EPA 537	<	SE1	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36422 Marks Brook Treatment Station	GW	5	Entry Point	EP	22345 MR001	5/29/2013 201305300192AM	PFNA	0.02	EPA 537	<	SE1	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36422 Marks Brook Treatment Station	GW	5	Entry Point	EP	22345 MR001	5/29/2013 201305300192AM	PFHxS	0.03	EPA 537	<	SE1	AM	1 CT
CT0880011	CT Water Co. - Naugatuck R., Central S.	L	36422 Marks Brook Treatment Station	GW	5	Entry Point	EP	22345 MR001	5/29/2013 201305300192AM	PFOS	0.04	EPA 537	<	SE1	AM	1 CT
CT0950011	New London Department of Public Utilities	L	36453 Lake Konomoc Water Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	6/17/2014 201406180539AM	PFHpA	0.01	EPA 537	<	SE4	AM	1 CT
CT0950011	New London Department of Public Utilities	L	36453 Lake Konomoc Water Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	6/17/2014 201406180539AM	PFNA	0.02	EPA 537	<	SE4	AM	1 CT
CT0950011	New London Department of Public Utilities	L	36453 Lake Konomoc Water Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	6/17/2014 201406180539AM	PFHxS	0.03	EPA 537	<	SE4	AM	1 CT
CT0950011	New London Department of Public Utilities	L	36453 Lake Konomoc Water Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	6/17/2014 201406180539AM	PFOA	0.02	EPA 537	<	SE4	AM	1 CT
CT0950011	New London Department of Public Utilities	L	36453 Lake Konomoc Water Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	6/17/2014 201406180539AM	PFOS	0.04	EPA 537	<	SE4	AM	1 CT
CT0950011	New London Department of Public Utilities	L	36453 Lake Konomoc Water Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	6/17/2014 201406180539AM	PFBS	0.09	EPA 537	<	SE4	AM	1 CT
CT0950011	New London Department of Public Utilities	L	36453 Lake Konomoc Water Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	3/17/2014 201403180211AM	PFOA	0.02	EPA 537	<	SE3	AM	1 CT
CT0950011	New London Department of Public Utilities	L	36453 Lake Konomoc Water Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	3/17/2014 201403180211AM	PFOS	0.04	EPA 537	<	SE3	AM	1 CT
CT0950011	New London Department of Public Utilities	L	36453 Lake Konomoc Water Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	3/17/2014 201403180211AM	PFNA	0.02	EPA 537	<	SE3	AM	1 CT
CT0950011	New London Department of Public Utilities	L	36453 Lake Konomoc Water Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	3/17/2014 201403180211AM	PFHxS	0.03	EPA 537	<	SE3	AM	1 CT
CT0950011	New London Department of Public Utilities	L	36453 Lake Konomoc Water Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	12/16/2013 201312170300AM	PFOA	0.02	EPA 537	<	SE2	AM	1 CT

CT0950011	New London Department of Public Utilities	L	36453 Lake Konomoc Water Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	12/16/2013 201312170300AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0950011	New London Department of Public Utilities	L	36453 Lake Konomoc Water Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	12/16/2013 201312170300AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0950011	New London Department of Public Utilities	L	36453 Lake Konomoc Water Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	12/16/2013 201312170300AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0950011	New London Department of Public Utilities	L	36453 Lake Konomoc Water Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	12/16/2013 201312170300AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0950011	New London Department of Public Utilities	L	36453 Lake Konomoc Water Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	12/16/2013 201312170300AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0950011	New London Department of Public Utilities	L	36453 Lake Konomoc Water Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	3/17/2014 201403180211AM	PFHpA	0.01 EPA 537	<	SE3	AM	1 CT
CT0950011	New London Department of Public Utilities	L	36453 Lake Konomoc Water Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	9/17/2013 201309180529AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0950011	New London Department of Public Utilities	L	36453 Lake Konomoc Water Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	9/17/2013 201309180529AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0950011	New London Department of Public Utilities	L	36453 Lake Konomoc Water Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	9/17/2013 201309180529AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0950011	New London Department of Public Utilities	L	36453 Lake Konomoc Water Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	9/17/2013 201309180529AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0950011	New London Department of Public Utilities	L	36453 Lake Konomoc Water Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	9/17/2013 201309180529AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0950011	New London Department of Public Utilities	L	36453 Lake Konomoc Water Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	3/17/2014 201403180211AM	PFBS	0.09 EPA 537	<	SE3	AM	1 CT
CT0950011	New London Department of Public Utilities	L	36453 Lake Konomoc Water Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	9/17/2013 201309180529AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT1030011	Norwalk First Taxing District	L	36479 Norwalk Water Filtration Plant	SW	5	Entry Point	EP	22862 MR001	4/22/2014 201404230371AM	PFOA	0.02 EPA 537	<	SE4	AM	1 CT
CT1030011	Norwalk First Taxing District	L	36479 Norwalk Water Filtration Plant	SW	5	Entry Point	EP	22862 MR001	10/21/2013 201310220088AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT1030011	Norwalk First Taxing District	L	36479 Norwalk Water Filtration Plant	SW	5	Entry Point	EP	22862 MR001	10/21/2013 201310220088AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT1030011	Norwalk First Taxing District	L	36479 Norwalk Water Filtration Plant	SW	5	Entry Point	EP	22862 MR001	10/21/2013 201310220088AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT1030011	Norwalk First Taxing District	L	36479 Norwalk Water Filtration Plant	SW	5	Entry Point	EP	22862 MR001	10/21/2013 201310220088AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT1030011	Norwalk First Taxing District	L	36479 Norwalk Water Filtration Plant	SW	5	Entry Point	EP	22862 MR001	10/21/2013 201310220088AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT1030011	Norwalk First Taxing District	L	36479 Norwalk Water Filtration Plant	SW	5	Entry Point	EP	22862 MR001	10/21/2013 201310220088AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT1030011	Norwalk First Taxing District	L	36479 Norwalk Water Filtration Plant	SW	5	Entry Point	EP	22862 MR001	1/27/2014 201401280236AM	PFOA	0.02 EPA 537	<	SE3	AM	1 CT
CT1030011	Norwalk First Taxing District	L	36479 Norwalk Water Filtration Plant	SW	5	Entry Point	EP	22862 MR001	7/16/2013 201307170585AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT1030011	Norwalk First Taxing District	L	36479 Norwalk Water Filtration Plant	SW	5	Entry Point	EP	22862 MR001	7/16/2013 201307170585AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT1030011	Norwalk First Taxing District	L	36479 Norwalk Water Filtration Plant	SW	5	Entry Point	EP	22862 MR001	7/16/2013 201307170585AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT1030011	Norwalk First Taxing District	L	36479 Norwalk Water Filtration Plant	SW	5	Entry Point	EP	22862 MR001	1/27/2014 201401280236AM	PFBS	0.09 EPA 537	<	SE3	AM	1 CT
CT1030011	Norwalk First Taxing District	L	36479 Norwalk Water Filtration Plant	SW	5	Entry Point	EP	22862 MR001	1/27/2014 201401280236AM	PFHxS	0.03 EPA 537	<	SE3	AM	1 CT
CT1030011	Norwalk First Taxing District	L	36479 Norwalk Water Filtration Plant	SW	5	Entry Point	EP	22862 MR001	1/27/2014 201401280236AM	PFNA	0.02 EPA 537	<	SE3	AM	1 CT
CT1030011	Norwalk First Taxing District	L	36479 Norwalk Water Filtration Plant	SW	5	Entry Point	EP	22862 MR001	1/27/2014 201401280236AM	PFOS	0.04 EPA 537	<	SE3	AM	1 CT
CT1030011	Norwalk First Taxing District	L	36479 Norwalk Water Filtration Plant	SW	5	Entry Point	EP	22862 MR001	1/27/2014 201401280236AM	PFHpA	0.01 EPA 537	<	SE3	AM	1 CT
CT1030011	Norwalk First Taxing District	L	36479 Norwalk Water Filtration Plant	SW	5	Entry Point	EP	22862 MR001	4/22/2014 201404230371AM	PFNA	0.02 EPA 537	<	SE4	AM	1 CT
CT1030011	Norwalk First Taxing District	L	36479 Norwalk Water Filtration Plant	SW	5	Entry Point	EP	22862 MR001	4/22/2014 201404230371AM	PFBS	0.09 EPA 537	<	SE4	AM	1 CT
CT1030011	Norwalk First Taxing District	L	36479 Norwalk Water Filtration Plant	SW	5	Entry Point	EP	22862 MR001	4/22/2014 201404230371AM	PFOS	0.04 EPA 537	<	SE4	AM	1 CT
CT1030011	Norwalk First Taxing District	L	36479 Norwalk Water Filtration Plant	SW	5	Entry Point	EP	22862 MR001	4/22/2014 201404230371AM	PFHxS	0.03 EPA 537	<	SE4	AM	1 CT
CT1030011	Norwalk First Taxing District	L	36478 Norwalk Water Dept. Wells	GW	5	Entry Point	EP	22862 MR001	7/16/2013 201307170590AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT1030011	Norwalk First Taxing District	L	36478 Norwalk Water Dept. Wells	GW	5	Entry Point	EP	22862 MR001	7/16/2013 201307170590AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT1030011	Norwalk First Taxing District	L	36478 Norwalk Water Dept. Wells	GW	5	Entry Point	EP	22862 MR001	7/16/2013 201307170590AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT1030011	Norwalk First Taxing District	L	36478 Norwalk Water Dept. Wells	GW	5	Entry Point	EP	22862 MR001	7/16/2013 201307170590AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT1030011	Norwalk First Taxing District	L	36478 Norwalk Water Dept. Wells	GW	5	Entry Point	EP	22862 MR001	7/16/2013 201307170590AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT1030011	Norwalk First Taxing District	L	36479 Norwalk Water Filtration Plant	SW	5	Entry Point	EP	22862 MR001	4/22/2014 201404230371AM	PFHpA	0.01 EPA 537	<	SE4	AM	1 CT
CT1030011	Norwalk First Taxing District	L	36479 Norwalk Water Filtration Plant	SW	5	Entry Point	EP	22862 MR001	7/16/2013 201307170585AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT1030011	Norwalk First Taxing District	L	36478 Norwalk Water Dept. Wells	GW	5	Entry Point	EP	22862 MR001	1/27/2014 201401280238AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT1030011	Norwalk First Taxing District	L	36478 Norwalk Water Dept. Wells	GW	5	Entry Point	EP	22862 MR001	1/27/2014 201401280238AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT1030011	Norwalk First Taxing District	L	36478 Norwalk Water Dept. Wells	GW	5	Entry Point	EP	22862 MR001	1/27/2014 201401280238AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT1030011	Norwalk First Taxing District	L	36478 Norwalk Water Dept. Wells	GW	5	Entry Point	EP	22862 MR001	1/27/2014 201401280238AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT1030011	Norwalk First Taxing District	L	36479 Norwalk Water Filtration Plant	SW	5	Entry Point	EP	22862 MR001	7/16/2013 201307170585AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT1030011	Norwalk First Taxing District	L	36478 Norwalk Water Dept. Wells	GW	5	Entry Point	EP	22862 MR001	7/16/2013 201307170590AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT1030011	Norwalk First Taxing District	L	36479 Norwalk Water Filtration Plant	SW	5	Entry Point	EP	22862 MR001	7/16/2013 201307170585AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT1030011	Norwalk First Taxing District	L	36478 Norwalk Water Dept. Wells	GW	5	Entry Point	EP	22862 MR001	1/27/2014 201401280238AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT1030011	Norwalk First Taxing District	L	36478 Norwalk Water Dept. Wells	GW	5	Entry Point	EP	22862 MR001	1/27/2014 201401280238AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT1040011	Norwich Public Utilities	L	36481 Stony Brook Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR002	6/17/2014 200398127	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT1040011	Norwich Public Utilities	L	36481 Stony Brook Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR002	6/17/2014 200398127	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT1040011	Norwich Public Utilities	L	36481 Stony Brook Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR002	6/17/2014 200398127	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT1040011	Norwich Public Utilities	L	36481 Stony Brook Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR002	6/17/2014 200398127	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT1040011	Norwich Public Utilities	L	36481 Stony Brook Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR002	6/17/2014 200398127	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT1040011	Norwich Public Utilities	L	36481 Stony Brook Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR002	6/17/2014 200398127	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT1040011	Norwich Public Utilities	L	36481 Stony Brook Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR002	9/11/2014 200404222	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT1040011	Norwich Public Utilities	L	36481 Stony Brook Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR002	12/11/2014 200409479	PFOS	0.04 EPA 537	<	SE3	AM	1 CT
CT1040011	Norwich Public Utilities	L	36481 Stony Brook Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR002	9/11/2014 200404222	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT1040011	Norwich Public Utilities	L	36481 Stony Brook Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR002	12/11/2014 200409479	PFBS	0.09 EPA 537	<	SE3	AM	1 CT
CT1040011	Norwich Public Utilities	L	36481 Stony Brook Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR002	12/11/2014 200409479	PFHpA	0.01 EPA 537	<	SE3	AM	1 CT
CT1040011	Norwich Public Utilities	L	36481 Stony Brook Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR002	3/10/2015 200413493	PFHpA	0.01 EPA 537	<	SE4	AM	1 CT
CT1040011	Norwich Public Utilities	L	36481 Stony Brook Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR002	3/10/2015 200413493	PFOS	0.04 EPA 537	<	SE4	AM	1 CT
CT1040011	Norwich Public Utilities	L	36481 Stony Brook Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR002	3/10/2015 200413493	PFOA	0.02 EPA 537	<	SE4	AM	1 CT
CT1040011	Norwich Public Utilities	L	36481 Stony Brook Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR002	3/10/2015 200413493	PFNA	0.02 EPA 537	<	SE4	AM	1 CT
CT1040011	Norwich Public Utilities	L	36481 Stony Brook Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR002	3/10/2015 200413493	PFHxS	0.03 EPA 537	<	SE4	AM	1 CT
CT1040011	Norwich Public Utilities	L	36481 Stony Brook Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR002	3/10/2015 200413493	PFBS	0.09 EPA 537	<	SE4	AM	1 CT
CT1040011	Norwich Public Utilities	L	36481 Stony Brook Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR002	12/11/2014 200409479	PFNA	0.02 EPA 537	<	SE3	AM	1 CT
CT1040011	Norwich Public Utilities	L	36481 Stony Brook Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR002	12/11/2014 200409479	PFOA	0.02 EPA 537	<	SE3	AM	1 CT
CT1040011	Norwich Public Utilities	L	36481 Stony Brook Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR002	9/11/2014 200404222	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT1040011	Norwich Public Utilities	L	36481 Stony Brook Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR002	9/11/2014 200404222	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT1040011	Norwich Public Utilities	L	36778 Norwichtown Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR003	6/17/2014 200398126	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT1040011	Norwich Public Utilities	L	36778 Norwichtown Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR003	12/11/2014 200409481	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT1040011	Norwich Public Utilities	L	36778 Norwichtown Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR003	12/11/2014 200409481	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT1040011	Norwich Public Utilities	L	36778 Norwichtown Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR003	12/11/2014 200409481	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT1040011	Norwich Public Utilities	L	36778 Norwichtown Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR003	12/11/2014 200409481	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT1040011	Norwich Public Utilities	L	36778 Norwichtown Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR003	12/11/2014 200409481	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT1040011	Norwich Public Utilities	L	36778 Norwichtown Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR003	12/11/2014 200409481	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT1040011	Norwich Public Utilities	L	36481 Stony Brook Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR002	12/11/2014 200409479	PFHxS	0.03 EPA 537	<	SE3	AM	1 CT
CT1040011	Norwich Public Utilities	L	36481 Stony Brook Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR002	9/11/2014 200404222	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT1040011	Norwich Public Utilities	L	36481 Stony Brook Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR002	9/11/2014 200404222	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT1040011	Norwich Public Utilities	L	36778 Norwichtown Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR003	6/17/2014 200398126	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT1040011	Norwich Public Utilities	L	36778 Norwichtown Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR003	6/17/2014 200398126	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT1040011	Norwich Public Utilities	L	36778 Norwichtown Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR003	6/17/2014 200398126	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT1040011	Norwich Public Utilities	L	36778 Norwichtown Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR003	6/17/2014 200398126	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT1040011	Norwich Public Utilities	L	36778 Norwichtown Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR003	6/17/2014 200398126	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT1040011	Norwich Public Utilities	L	11252 Deep River Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR001	12/11/2014 200409477	PFNA	0.02 EPA 537	<	SE3	AM	1 CT
CT1040011	Norwich Public Utilities	L	11252 Deep River Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR001	12/11/2014 200409477	PFBS	0.09 EPA 537	<	SE3	AM	1 CT
CT1040011	Norwich Public Utilities	L	11252 Deep River Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR001	12/11/2014 200409477	PFHxS	0.03 EPA 537	<	SE3	AM	1 CT
CT1040011	Norwich Public Utilities	L	11252 Deep River Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR001	12/11/2014 200409477	PFOA	0.02 EPA 537	<	SE3	AM	1 CT
CT1040011	Norwich Public Utilities	L	11252 Deep River Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR001	12/11/2014 200409477	PFHpA	0.01 EPA 537	<	SE3	AM	1 CT
CT1040011	Norwich Public Utilities	L	11252 Deep River Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR001	12/11/2014 200409477	PFOS	0.04 EPA 537	<	SE3	AM	1 CT
CT1040011	Norwich Public Utilities	L	11252 Deep River Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR001	6/17/2014 200398125	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT1040011	Norwich Public Utilities	L	11252 Deep River Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR001	6/17/2014 200398125	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT1040011	Norwich Public Utilities	L	11252 Deep River Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR001	9/11/2014 200404220	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT1040011	Norwich Public Utilities	L	11252 Deep River Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR001	9/11/2014 200404220	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT1040011	Norwich Public Utilities	L	11252 Deep River Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR001	9/11/2014 200404220	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT1040011	Norwich Public Utilities	L	11252 Deep River Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR001	9/11/2014 200404220	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT1040011	Norwich Public Utilities	L	11252 Deep River Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR001	6/17/2014 200398125	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT1040011	Norwich Public Utilities	L	11252 Deep River Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR001	9/11/2014 200404220	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT1040011	Norwich Public Utilities	L	11252 Deep River Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR001	6/17/2014 200398125	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT1040011	Norwich Public Utilities	L	11252 Deep River Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR001	9/11/2014 200404220	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT1040011	Norwich Public Utilities	L	11252 Deep River Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR001	6/17/2014 200398125	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT1040011	Norwich Public Utilities	L	11252 Deep River Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR001	6/17/2014 200398125	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT1040011	Norwich Public Utilities	L	11252 Deep River Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR001	3/10/2015 200413492	PFHpA	0.01 EPA 537	<	SE4	AM	1 CT
CT1040011	Norwich Public Utilities	L	11252 Deep River Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR001	3/10/2015 200413492	PFBS	0.09 EPA 537	<	SE4	AM	1 CT
CT1040011	Norwich Public Utilities	L	11252 Deep River Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR001	3/10/2015 200413492	PFOS	0.04 EPA 537	<	SE4	AM	1 CT
CT1040011	Norwich Public Utilities	L	11252 Deep River Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR001	3/10/2015 200413492	PFNA	0.02 EPA 537	<	SE4	AM	1 CT
CT1040011	Norwich Public Utilities	L	11252 Deep River Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR001	3/10/2015 200413492	PFHxS	0.03 EPA 537	<	SE4	AM	1 CT
CT1040011	Norwich Public Utilities	L	11252 Deep River Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	22882 MR001	3/10/2015 200413492	PFOA	0.02 EPA 537	<	SE4	AM	1 CT
CT0490021	Hazardville Water Company	L	46091 Neelans Park Well	GW	3	EPTDS from Neelans Park Well	EP	20852 MR004	1/21/2015 35172671007AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0490021	Hazardville Water Company	L	46093 Town Farm Well	GW	3	EPTDS from Town Farm Well	EP	20852 MR005	7/21/2015 35200095009AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0490021	Hazardville Water Company	L	46093 Town Farm Well	GW	3	EPTDS from Town Farm Well	EP	20852 MR005	7/21/2015 35200095009AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0490021	Hazardville Water Company	L	46093 Town Farm Well	GW	3	EPTDS from Town Farm Well	EP	20852 MR005	7/21/2015 35200095009AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0490021	Hazardville Water Company	L	46093 Town Farm Well	GW	3	EPTDS from Town Farm Well	EP	20852 MR005	7/21/2015 35200095009AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0490021	Hazardville Water Company	L	46093 Town Farm Well	GW	3	EPTDS from Town Farm Well	EP	20852 MR005	7/21/2015 35200095009AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0490021	Hazardville Water Company	L	46093 Town Farm Well	GW	3	EPTDS from Town Farm Well	EP	20852 MR005	7/21/2015 35200095009AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0490021	Hazardville Water Company	L	46091 Neelans Park Well	GW	3	EPTDS from Neelans Park Well	EP	20852 MR004	7/21/2015 35200095007AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0490021	Hazardville Water Company	L	46091 Neelans Park Well	GW	3	EPTDS from Neelans Park Well	EP	20852 MR004	7/21/2015 35200095007AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0490021	Hazardville Water Company	L	46091 Neelans Park Well	GW	3	EPTDS from Neelans Park Well	EP	20852 MR004	7/21/2015 35200095007AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0490021	Hazardville Water Company	L	46091 Neelans Park Well	GW	3	EPTDS from Neelans Park Well	EP	20852 MR004	7/21/2015 35200095007AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0490021	Hazardville Water Company	L	46091 Neelans Park Well	GW	3	EPTDS from Neelans Park Well	EP	20852 MR004	7/21/2015 35200095007AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0490021	Hazardville Water Company	L	46091 Neelans Park Well	GW	3	EPTDS from Neelans Park Well	EP	20852 MR004	7/21/2015 35200095007AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0490021	Hazardville Water Company	L	46091 Neelans Park Well	GW	3	EPTDS from Neelans Park Well	EP	20852 MR004	1/21/2015 35172671007AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0490021	Hazardville Water Company	L	46091 Neelans Park Well	GW	3	EPTDS from Neelans Park Well	EP	20852 MR004	1/21/2015 35172671007AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0490021	Hazardville Water Company	L	46091 Neelans Park Well	GW	3	EPTDS from Neelans Park Well	EP	20852 MR004	1/21/2015 35172671007AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0490021	Hazardville Water Company	L	46091 Neelans Park Well	GW	3	EPTDS from Neelans Park Well	EP	20852 MR004	1/21/2015 35172671007AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT

CT0490021	Hazardville Water Company	L	46091	Neelans Park Well	GW	3	EPTDS from Neelans Park Well	EP	20852	MR004	1/21/2015	35172671007AM	PFHpA	0.01	EPA 537	<	SE1	AM	1	CT
CT0490021	Hazardville Water Company	L	46093	Town Farm Well	GW	3	EPTDS from Town Farm Well	EP	20852	MR005	1/21/2015	35172671009AM	PFOA	0.02	EPA 537	<	SE1	AM	1	CT
CT0490021	Hazardville Water Company	L	46093	Town Farm Well	GW	3	EPTDS from Town Farm Well	EP	20852	MR005	1/21/2015	35172671009AM	PFHxS	0.03	EPA 537	<	SE1	AM	1	CT
CT0490021	Hazardville Water Company	L	46094	South Maple St. Well	GW	3	EPTDS from South Maple St. Well	EP	20852	MR006	1/21/2015	35172671011AM	PFOA	0.02	EPA 537	<	SE1	AM	1	CT
CT0490021	Hazardville Water Company	L	46094	South Maple St. Well	GW	3	EPTDS from South Maple St. Well	EP	20852	MR006	1/21/2015	35172671011AM	PFOS	0.04	EPA 537	<	SE1	AM	1	CT
CT0490021	Hazardville Water Company	L	46094	South Maple St. Well	GW	3	EPTDS from South Maple St. Well	EP	20852	MR006	1/21/2015	35172671011AM	PFNA	0.02	EPA 537	<	SE1	AM	1	CT
CT0490021	Hazardville Water Company	L	46094	South Maple St. Well	GW	3	EPTDS from South Maple St. Well	EP	20852	MR006	1/21/2015	35172671011AM	PFBS	0.09	EPA 537	<	SE1	AM	1	CT
CT0490021	Hazardville Water Company	L	46094	South Maple St. Well	GW	3	EPTDS from South Maple St. Well	EP	20852	MR006	1/21/2015	35172671011AM	PFHpA	0.01	EPA 537	<	SE1	AM	1	CT
CT0490021	Hazardville Water Company	L	46094	South Maple St. Well	GW	3	EPTDS from South Maple St. Well	EP	20852	MR006	1/21/2015	35172671011AM	PFHxS	0.03	EPA 537	<	SE1	AM	1	CT
CT0490021	Hazardville Water Company	L	46093	Town Farm Well	GW	3	EPTDS from Town Farm Well	EP	20852	MR005	1/21/2015	35172671009AM	PFBS	0.09	EPA 537	<	SE1	AM	1	CT
CT0490021	Hazardville Water Company	L	46093	Town Farm Well	GW	3	EPTDS from Town Farm Well	EP	20852	MR005	1/21/2015	35172671009AM	PFOS	0.04	EPA 537	<	SE1	AM	1	CT
CT0490021	Hazardville Water Company	L	46093	Town Farm Well	GW	3	EPTDS from Town Farm Well	EP	20852	MR005	1/21/2015	35172671009AM	PFNA	0.02	EPA 537	<	SE1	AM	1	CT
CT0490021	Hazardville Water Company	L	46093	Town Farm Well	GW	3	EPTDS from Town Farm Well	EP	20852	MR005	1/21/2015	35172671009AM	PFHpA	0.01	EPA 537	<	SE1	AM	1	CT
CT0490021	Hazardville Water Company	L	46094	South Maple St. Well	GW	3	EPTDS from South Maple St. Well	EP	20852	MR006	7/21/2015	35200095011AM	PFOA	0.02	EPA 537	<	SE2	AM	1	CT
CT0490021	Hazardville Water Company	L	46094	South Maple St. Well	GW	3	EPTDS from South Maple St. Well	EP	20852	MR006	7/21/2015	35200095011AM	PFOS	0.04	EPA 537	<	SE2	AM	1	CT
CT0490021	Hazardville Water Company	L	46094	South Maple St. Well	GW	3	EPTDS from South Maple St. Well	EP	20852	MR006	7/21/2015	35200095011AM	PFNA	0.02	EPA 537	<	SE2	AM	1	CT
CT0490021	Hazardville Water Company	L	46094	South Maple St. Well	GW	3	EPTDS from South Maple St. Well	EP	20852	MR006	7/21/2015	35200095011AM	PFHxS	0.03	EPA 537	<	SE2	AM	1	CT
CT0490021	Hazardville Water Company	L	46094	South Maple St. Well	GW	3	EPTDS from South Maple St. Well	EP	20852	MR006	7/21/2015	35200095011AM	PFHpA	0.01	EPA 537	<	SE2	AM	1	CT
CT0490021	Hazardville Water Company	L	46094	South Maple St. Well	GW	3	EPTDS from South Maple St. Well	EP	20852	MR006	7/21/2015	35200095011AM	PFBS	0.09	EPA 537	<	SE2	AM	1	CT
CT0490021	Hazardville Water Company	L	38661	Scitico Wellfield	GW	3	EPTDS from Scitico Wellfield	EP	20852	MR001	1/21/2015	35172671001AM	PFHpA	0.01	EPA 537	<	SE1	AM	1	CT
CT0490021	Hazardville Water Company	L	38661	Scitico Wellfield	GW	3	EPTDS from Scitico Wellfield	EP	20852	MR001	1/21/2015	35172671001AM	PFBS	0.09	EPA 537	<	SE1	AM	1	CT
CT0490021	Hazardville Water Company	L	38661	Scitico Wellfield	GW	3	EPTDS from Scitico Wellfield	EP	20852	MR001	1/21/2015	35172671001AM	PFOA	0.02	EPA 537	<	SE1	AM	1	CT
CT0490021	Hazardville Water Company	L	46088	Avery Wellfield	GW	3	EPTDS from Avery Wellfield	EP	20852	MR002	7/21/2015	35200095003AM	PFOS	0.04	EPA 537	<	SE2	AM	1	CT
CT0490021	Hazardville Water Company	L	46088	Avery Wellfield	GW	3	EPTDS from Avery Wellfield	EP	20852	MR002	7/21/2015	35200095003AM	PFBS	0.09	EPA 537	<	SE2	AM	1	CT
CT0490021	Hazardville Water Company	L	46088	Avery Wellfield	GW	3	EPTDS from Avery Wellfield	EP	20852	MR002	7/21/2015	35200095003AM	PFOA	0.02	EPA 537	<	SE2	AM	1	CT
CT0490021	Hazardville Water Company	L	46088	Avery Wellfield	GW	3	EPTDS from Avery Wellfield	EP	20852	MR002	7/21/2015	35200095003AM	PFNA	0.02	EPA 537	<	SE2	AM	1	CT
CT0490021	Hazardville Water Company	L	46088	Avery Wellfield	GW	3	EPTDS from Avery Wellfield	EP	20852	MR002	7/21/2015	35200095003AM	PFHxS	0.03	EPA 537	<	SE2	AM	1	CT
CT0490021	Hazardville Water Company	L	46088	Avery Wellfield	GW	3	EPTDS from Avery Wellfield	EP	20852	MR002	7/21/2015	35200095003AM	PFHpA	0.01	EPA 537	<	SE2	AM	1	CT
CT0490021	Hazardville Water Company	L	38661	Scitico Wellfield	GW	3	EPTDS from Scitico Wellfield	EP	20852	MR001	7/21/2015	35200095001AM	PFOA	0.02	EPA 537	<	SE2	AM	1	CT
CT0490021	Hazardville Water Company	L	38661	Scitico Wellfield	GW	3	EPTDS from Scitico Wellfield	EP	20852	MR001	1/21/2015	35172671001AM	PFHxS	0.03	EPA 537	<	SE1	AM	1	CT
CT0490021	Hazardville Water Company	L	38661	Scitico Wellfield	GW	3	EPTDS from Scitico Wellfield	EP	20852	MR001	7/21/2015	35200095001AM	PFHxS	0.03	EPA 537	<	SE2	AM	1	CT
CT0490021	Hazardville Water Company	L	38661	Scitico Wellfield	GW	3	EPTDS from Scitico Wellfield	EP	20852	MR001	1/21/2015	35172671001AM	PFOS	0.04	EPA 537	<	SE1	AM	1	CT
CT0490021	Hazardville Water Company	L	38661	Scitico Wellfield	GW	3	EPTDS from Scitico Wellfield	EP	20852	MR001	7/21/2015	35200095001AM	PFOS	0.04	EPA 537	<	SE2	AM	1	CT
CT0490021	Hazardville Water Company	L	38661	Scitico Wellfield	GW	3	EPTDS from Scitico Wellfield	EP	20852	MR001	7/21/2015	35200095001AM	PFHpA	0.01	EPA 537	<	SE2	AM	1	CT
CT0490021	Hazardville Water Company	L	38661	Scitico Wellfield	GW	3	EPTDS from Scitico Wellfield	EP	20852	MR001	7/21/2015	35200095001AM	PFBS	0.09	EPA 537	<	SE2	AM	1	CT
CT0490021	Hazardville Water Company	L	38661	Scitico Wellfield	GW	3	EPTDS from Scitico Wellfield	EP	20852	MR001	7/21/2015	35200095001AM	PFNA	0.02	EPA 537	<	SE2	AM	1	CT
CT0490021	Hazardville Water Company	L	38661	Scitico Wellfield	GW	3	EPTDS from Scitico Wellfield	EP	20852	MR001	1/21/2015	35172671001AM	PFNA	0.02	EPA 537	<	SE1	AM	1	CT
CT0490021	Hazardville Water Company	L	46090	Bucken Well	GW	3	EPTDS from Bucken Well	EP	20852	MR003	1/21/2015	35172671005AM	PFHxS	0.03	EPA 537	<	SE1	AM	1	CT
CT0490021	Hazardville Water Company	L	46090	Bucken Well	GW	3	EPTDS from Bucken Well	EP	20852	MR003	7/21/2015	35200095005AM	PFOS	0.04	EPA 537	<	SE2	AM	1	CT
CT0490021	Hazardville Water Company	L	46090	Bucken Well	GW	3	EPTDS from Bucken Well	EP	20852	MR003	7/21/2015	35200095005AM	PFOA	0.02	EPA 537	<	SE2	AM	1	CT
CT0490021	Hazardville Water Company	L	46090	Bucken Well	GW	3	EPTDS from Bucken Well	EP	20852	MR003	7/21/2015	35200095005AM	PFHxS	0.03	EPA 537	<	SE2	AM	1	CT
CT0490021	Hazardville Water Company	L	46090	Bucken Well	GW	3	EPTDS from Bucken Well	EP	20852	MR003	7/21/2015	35200095005AM	PFHpA	0.01	EPA 537	<	SE2	AM	1	CT
CT0490021	Hazardville Water Company	L	46090	Bucken Well	GW	3	EPTDS from Bucken Well	EP	20852	MR003	7/21/2015	35200095005AM	PFNA	0.02	EPA 537	<	SE2	AM	1	CT
CT0490021	Hazardville Water Company	L	46090	Bucken Well	GW	3	EPTDS from Bucken Well	EP	20852	MR003	1/21/2015	35172671005AM	PFNA	0.02	EPA 537	<	SE1	AM	1	CT
CT0490021	Hazardville Water Company	L	46090	Bucken Well	GW	3	EPTDS from Bucken Well	EP	20852	MR003	1/21/2015	35172671005AM	PFOS	0.04	EPA 537	<	SE1	AM	1	CT
CT0490021	Hazardville Water Company	L	46090	Bucken Well	GW	3	EPTDS from Bucken Well	EP	20852	MR003	1/21/2015	35172671005AM	PFOA	0.02	EPA 537	<	SE1	AM	1	CT
CT0490021	Hazardville Water Company	L	46090	Bucken Well	GW	3	EPTDS from Bucken Well	EP	20852	MR003	1/21/2015	35172671005AM	PFBS	0.09	EPA 537	<	SE1	AM	1	CT
CT0490021	Hazardville Water Company	L	46088	Avery Wellfield	GW	3	EPTDS from Avery Wellfield	EP	20852	MR002	1/21/2015	35172671003AM	PFHpA	0.01	EPA 537	<	SE1	AM	1	CT
CT0490021	Hazardville Water Company	L	46088	Avery Wellfield	GW	3	EPTDS from Avery Wellfield	EP	20852	MR002	1/21/2015	35172671003AM	PFOA	0.02	EPA 537	<	SE1	AM	1	CT
CT0490021	Hazardville Water Company	L	46090	Bucken Well	GW	3	EPTDS from Bucken Well	EP	20852	MR003	1/21/2015	35172671005AM	PFHpA	0.01	EPA 537	<	SE1	AM	1	CT
CT0490021	Hazardville Water Company	L	46090	Bucken Well	GW	3	EPTDS from Bucken Well	EP	20852	MR003	7/21/2015	35200095005AM	PFBS	0.09	EPA 537	<	SE2	AM	1	CT
CT0490021	Hazardville Water Company	L	46088	Avery Wellfield	GW	3	EPTDS from Avery Wellfield	EP	20852	MR002	1/21/2015	35172671003AM	PFOS	0.04	EPA 537	<	SE1	AM	1	CT
CT0490021	Hazardville Water Company	L	46088	Avery Wellfield	GW	3	EPTDS from Avery Wellfield	EP	20852	MR002	1/21/2015	35172671003AM	PFNA	0.02	EPA 537	<	SE1	AM	1	CT
CT0490021	Hazardville Water Company	L	46088	Avery Wellfield	GW	3	EPTDS from Avery Wellfield	EP	20852	MR002	1/21/2015	35172671003AM	PFHxS	0.03	EPA 537	<	SE1	AM	1	CT
CT0490021	Hazardville Water Company	L	46088	Avery Wellfield	GW	3	EPTDS from Avery Wellfield	EP	20852	MR002	1/21/2015	35172671003AM	PFBS	0.09	EPA 537	<	SE1	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	54984	Regional Water Authority Intertie	SW	3	Maples St Meter Pit	EP	35930	MR001	3/19/2014	201403200579AM	PFBS	0.09	EPA 537	<	SE4	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	54984	Regional Water Authority Intertie	SW	3	Maples St Meter Pit	EP	35930	MR001	3/19/2014	201403200579AM	PFHpA	0.01	EPA 537	<	SE4	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	54984	Regional Water Authority Intertie	SW	3	Maples St Meter Pit	EP	35930	MR001	3/19/2014	201403200579AM	PFHxS	0.03	EPA 537	<	SE4	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	54984	Regional Water Authority Intertie	SW	3	Maples St Meter Pit	EP	35930	MR001	3/19/2014	201403200579AM	PFNA	0.02	EPA 537	<	SE4	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	54984	Regional Water Authority Intertie	SW	3	Maples St Meter Pit	EP	35930	MR001	3/19/2014	201403200579AM	PFOS	0.04	EPA 537	<	SE4	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	54984	Regional Water Authority Intertie	SW	3	Maples St Meter Pit	EP	35930	MR001	12/3/2013	201312040656AM	PFNA	0.02	EPA 537	<	SE3	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	54984	Regional Water Authority Intertie	SW	3	Maples St Meter Pit	EP	35930	MR001	12/3/2013	201312040656AM	PFBS	0.09	EPA 537	<	SE3	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	54984	Regional Water Authority Intertie	SW	3	Maples St Meter Pit	EP	35930	MR001	12/3/2013	201312040656AM	PFHxS	0.03	EPA 537	<	SE3	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	54984	Regional Water Authority Intertie	SW	3	Maples St Meter Pit	EP	35930	MR001	12/3/2013	201312040656AM	PFOA	0.02	EPA 537	<	SE3	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	54984	Regional Water Authority Intertie	SW	3	Maples St Meter Pit	EP	35930	MR001	12/3/2013	201312040656AM	PFHpA	0.01	EPA 537	<	SE3	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	54984	Regional Water Authority Intertie	SW	3	Maples St Meter Pit	EP	35930	MR001	3/19/2014	201403200579AM	PFOA	0.02	EPA 537	<	SE4	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	54984	Regional Water Authority Intertie	SW	3	Maples St Meter Pit	EP	35930	MR001	6/6/2013	201306070098AM	PFHpA	0.01	EPA 537	<	SE1	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	54984	Regional Water Authority Intertie	SW	3	Maples St Meter Pit	EP	35930	MR001	6/6/2013	201306070098AM	PFOA	0.02	EPA 537	<	SE1	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	54984	Regional Water Authority Intertie	SW	3	Maples St Meter Pit	EP	35930	MR001	6/6/2013	201306070098AM	PFOS	0.04	EPA 537	<	SE1	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	54984	Regional Water Authority Intertie	SW	3	Maples St Meter Pit	EP	35930	MR001	6/6/2013	201306070098AM	PFNA	0.02	EPA 537	<	SE1	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	54984	Regional Water Authority Intertie	SW	3	Maples St Meter Pit	EP	35930	MR001	6/6/2013	201306070098AM	PFHxS	0.03	EPA 537	<	SE1	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	54984	Regional Water Authority Intertie	SW	3	Maples St Meter Pit	EP	35930	MR001	6/6/2013	201306070098AM	PFBS	0.09	EPA 537	<	SE1	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	54984	Regional Water Authority Intertie	SW	3	Maples St Meter Pit	EP	35930	MR001	9/5/2013	201309060358AM	PFOS	0.04	EPA 537	<	SE2	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	54984	Regional Water Authority Intertie	SW	3	Maples St Meter Pit	EP	35930	MR001	9/5/2013	201309060358AM	PFOA	0.02	EPA 537	<	SE2	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	54984	Regional Water Authority Intertie	SW	3	Maples St Meter Pit	EP	35930	MR001	9/5/2013	201309060358AM	PFHxS	0.03	EPA 537	<	SE2	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	54984	Regional Water Authority Intertie	SW	3	Maples St Meter Pit	EP	35930	MR001	9/5/2013	201309060358AM	PFHpA	0.01	EPA 537	<	SE2	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	54984	Regional Water Authority Intertie	SW	3	Maples St Meter Pit	EP	35930	MR001	12/3/2013	201312040656AM	PFOS	0.04	EPA 537	<	SE3	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	54984	Regional Water Authority Intertie	SW	3	Maples St Meter Pit	EP	35930	MR001	9/5/2013	201309060358AM	PFNA	0.02	EPA 537	<	SE2	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	54984	Regional Water Authority Intertie	SW	3	Maples St Meter Pit	EP	35930	MR001	9/5/2013	201309060358AM	PFBS	0.09	EPA 537	<	SE2	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	701	Oxford Wells #5/6 TP	GW	3	Oxford Wells #5/6 Comb TP Eff. Tap	EP	99001	MR002	12/3/2013	201312040709AM	PFBS	0.09	EPA 537	<	SE2	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	700	Oxford Wells #1/7 TP	GW	3	Oxford Wells #1/7 Comb TP Eff. Tap	EP	99001	MR002	6/6/2013	201306070273AM	PFOA	0.02	EPA 537	<	SE1	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	700	Oxford Wells #1/7 TP	GW	3	Oxford Wells #1/7 Comb TP Eff. Tap	EP	99001	MR002	6/6/2013	201306070273AM	PFOS	0.04	EPA 537	<	SE1	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	700	Oxford Wells #1/7 TP	GW	3	Oxford Wells #1/7 Comb TP Eff. Tap	EP	99001	MR002	6/6/2013	201306070273AM	PFHxS	0.03	EPA 537	<	SE1	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	701	Oxford Wells #5/6 TP	GW	3	Oxford Wells #5/6 Comb TP Eff. Tap	EP	99001	MR002	12/3/2013	201312040709AM	PFOA	0.02	EPA 537	<	SE2	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	701	Oxford Wells #5/6 TP	GW	3	Oxford Wells #5/6 Comb TP Eff. Tap	EP	99001	MR002	12/3/2013	201312040709AM	PFOS	0.04	EPA 537	<	SE2	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	701	Oxford Wells #5/6 TP	GW	3	Oxford Wells #5/6 Comb TP Eff. Tap	EP	99001	MR002	12/3/2013	201312040709AM	PFNA	0.02	EPA 537	<	SE2	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	701	Oxford Wells #5/6 TP	GW	3	Oxford Wells #5/6 Comb TP Eff. Tap	EP	99001	MR002	12/3/2013	201312040709AM	PFHxS	0.03	EPA 537	<	SE2	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	701	Oxford Wells #5/6 TP	GW	3	Oxford Wells #5/6 Comb TP Eff. Tap	EP	99001	MR002	12/3/2013	201312040709AM	PFHpA	0.01	EPA 537	<	SE2	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	700	Oxford Wells #1/7 TP	GW	3	Oxford Wells #1/7 Comb TP Eff. Tap	EP	99001	MR002	6/6/2013	201306070273AM	PFNA	0.02	EPA 537	<	SE1	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	700	Oxford Wells #1/7 TP	GW	3	Oxford Wells #1/7 Comb TP Eff. Tap	EP	99001	MR002	12/3/2013	201312040722AM	PFHpA	0.01	EPA 537	<	SE2	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	700	Oxford Wells #1/7 TP	GW	3	Oxford Wells #1/7 Comb TP Eff. Tap	EP	99001	MR002	12/3/2013	201312040722AM	PFOS	0.04	EPA 537	<	SE2	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	700	Oxford Wells #1/7 TP	GW	3	Oxford Wells #1/7 Comb TP Eff. Tap	EP	99001	MR002	12/3/2013	201312040722AM	PFBS	0.09	EPA 537	<	SE2	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	700	Oxford Wells #1/7 TP	GW	3	Oxford Wells #1/7 Comb TP Eff. Tap	EP	99001	MR002	12/3/2013	201312040722AM	PFHxS	0.03	EPA 537	<	SE2	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	700	Oxford Wells #1/7 TP	GW	3	Oxford Wells #1/7 Comb TP Eff. Tap	EP	99001	MR002	12/3/2013	201312040722AM	PFNA	0.02	EPA 537	<	SE2	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	703	Oxford Well #2 TP	GW	00512	Oxford Well #2 TP Eff Tap	EP	99001	MR002	6/6/2013	201306070176AM	PFNA	0.02	EPA 537	<	SE1	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	700	Oxford Wells #1/7 TP	GW	3	Oxford Wells #1/7 Comb TP Eff. Tap	EP	99001	MR002	6/6/2013	201306070273AM	PFBS	0.09	EPA 537	<	SE1	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	700	Oxford Wells #1/7 TP	GW	3	Oxford Wells #1/7 Comb TP Eff. Tap	EP	99001	MR002	6/6/2013	201306070273AM	PFHpA	0.01	EPA 537	<	SE1	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	703	Oxford Well #2 TP	GW	00512	Oxford Well #2 TP Eff Tap	EP	99001	MR002	12/3/2013	201312040681AM	PFOA	0.02	EPA 537	<	SE2	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	703	Oxford Well #2 TP	GW	00512	Oxford Well #2 TP Eff Tap	EP	99001	MR002	12/3/2013	201312040681AM	PFOS	0.04	EPA 537	<	SE2	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	703	Oxford Well #2 TP	GW	00512	Oxford Well #2 TP Eff Tap	EP	99001	MR002	12/3/2013	201312040681AM	PFNA	0.02	EPA 537	<	SE2	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	703	Oxford Well #2 TP	GW	00512	Oxford Well #2 TP Eff Tap	EP	99001	MR002	12/3/2013	201312040681AM	PFHxS	0.03	EPA 537	<	SE2	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	703	Oxford Well #2 TP	GW	00512	Oxford Well #2 TP Eff Tap	EP	99001	MR002	12/3/2013	201312040681AM	PFHpA	0.01	EPA 537	<	SE2	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	703	Oxford Well #2 TP	GW	00512	Oxford Well #2 TP Eff Tap	EP	99001	MR002	12/3/2013	201312040681AM	PFBS	0.09	EPA 537	<	SE2	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	703	Oxford Well #2 TP	GW	00512	Oxford Well #2 TP Eff Tap	EP	99001	MR002	6/6/2013	201306070176AM	PFBS	0.09	EPA 537	<	SE1	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	703	Oxford Well #2 TP	GW	00512	Oxford Well #2 TP Eff Tap	EP	99001	MR002	6/6/2013	201306070176AM	PFHpA	0.01	EPA 537	<	SE1	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	703	Oxford Well #2 TP	GW	00512	Oxford Well #2 TP Eff Tap	EP	99001	MR002	6/6/2013	201306070176AM	PFOA	0.02	EPA 537	<	SE1	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	703	Oxford Well #2 TP	GW	00512	Oxford Well #2 TP Eff Tap	EP	99001	MR002	6/6/2013	201306070176AM	PFHxS	0.03	EPA 537	<	SE1	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	700	Oxford Wells #1/7 TP	GW	3	Oxford Wells #1/7 Comb TP Eff. Tap	EP	99001	MR002	12/3/2013	201312040722AM	PFOA	0.02	EPA 537	<	SE2	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	703	Oxford Well #2 TP	GW	00512	Oxford Well #2 TP Eff Tap	EP	99001	MR002	6/6/2013	201306070176AM	PFOS	0.04	EPA 537	<	SE1	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	701	Oxford Wells #5/6 TP	GW	3	Oxford Wells #5/6 Comb TP Eff. Tap	EP	99001	MR002	6/6/2013	201306070298AM	PFBS	0.09	EPA 537	<	SE1	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	701	Oxford Wells #5/6 TP	GW	3	Oxford Wells #5/6 Comb TP Eff. Tap	EP	99001	MR002	6/6/2013	201306070298AM	PFOS	0.04	EPA 537	<	SE1	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	701	Oxford Wells #5/6 TP	GW	3	Oxford Wells #5/6 Comb TP Eff. Tap	EP	99001	MR002	6/6/2013	201306070298AM	PFHxS	0.03	EPA 537	<	SE1	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	701	Oxford Wells #5/6 TP	GW	3	Oxford Wells #5/6 Comb TP Eff. Tap	EP	99001	MR002	6/6/2013	201306070298AM	PFHpA	0.01	EPA 537	<	SE1	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	701	Oxford Wells #5/6 TP	GW	3	Oxford Wells #5/6 Comb TP Eff. Tap	EP	99001	MR002	6/6/2013	201306070298AM	PFOA	0.02	EPA 537	<	SE1	AM	1	CT
CT1240011	Aquarion Water Co. of CT - Valley	L	701	Oxford Wells #5/6 TP	GW	3	Oxford Wells #5/6 Comb TP Eff. Tap	EP	99001	MR002	6/6/2013	201306070298AM	PFNA	0.02	EPA 537	<	SE1	AM	1	CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	708	Simsbury Wells #7/8 TP	GW	3	Simsbury Wells PW #7/8 Comb Eff. Tap	EP	23580	MR004	12/4/2013	201312050185AM	PFOA	0.02	EPA 537	<	SE2	AM	1	CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	705	Simsbury Wells #4 TP	GW	3	Simsbury Wells PW #4 Eff. Tap	EP	23580	MR002	6/6/2013	201306070150AM	PFBS	0.09	EPA 537	<	SE1	AM	1	CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	708	Simsbury Wells #7/8 TP	GW	3	Simsbury Wells PW #7/8 Comb Eff. Tap	EP	23580	MR004	12/4/2013	201312050185AM	PFHpA	0.01	EPA 537	<	SE2	AM	1	CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	704	Simsbury Wells #3 TP	GW	3	Simsbury Wells PW #3 Eff. Tap	EP	23580	MR002	6/6/2013	201306070171AM	PFHpA	0.01	EPA 537	<	SE1	AM	1	CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	705	Simsbury Wells #4 TP	GW	3	Simsbury Wells PW #4 Eff. Tap	EP	23580	MR002	6/6/2013	201306070150AM	PFHpA	0.01	EPA 537	<	SE1	AM	1	CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	708	Simsbury Wells #7/8 TP	GW	3	Simsbury Wells PW #7/8 Comb Eff. Tap	EP	23580	MR004	12/4/2013	201312050185AM	PFOS	0.04	EPA 537	<	SE2	AM	1	CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	708	Simsbury Wells #7/8 TP	GW	3	Simsbury Wells PW #7/8 Comb Eff. Tap	EP	23580	MR004	12/4/2013	201312050185AM	PFHxS	0.03	EPA 537	<	SE2	AM	1	CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	708	Simsbury Wells #7/8 TP	GW	3	Simsbury Wells PW #7/8 Comb Eff. Tap	EP	23580	MR004	12/4/2013	201312050185AM	PFNA	0.02	EPA 537	<	SE2	AM	1	CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	704	Simsbury Wells #3 TP	GW	3	Simsbury Wells PW #3 Eff. Tap	EP	23580	MR002	6/6/2013	201306070171AM	PFHxS	0.03	EPA 537	<	SE1	AM	1	CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	705	Simsbury Wells #4 TP	GW	3	Simsbury Wells PW #4 Eff. Tap	EP	23580	MR002	12/4/2013	201312050291AM	PFHpA	0.01	EPA 537	<	SE2	AM	1	CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	705	Simsbury Wells #4 TP	GW	3	Simsbury Wells PW #4 Eff. Tap	EP	23580	MR002	12/4/2013	201312050291AM	PFHxS	0.03	EPA 537	<	SE2	AM	1	CT

CT1280021	Aquarion Water Co. of CT - Simsbury	L	705 Simsbury Wells #4 TP	GW	3	Simsbury Wells PW #4 Eff. Tap	EP	23580 MR002	12/4/2013 201312050291AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	705 Simsbury Wells #4 TP	GW	3	Simsbury Wells PW #4 Eff. Tap	EP	23580 MR002	12/4/2013 201312050291AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	704 Simsbury Wells #3 TP	GW	3	Simsbury Wells PW #3 Eff. Tap	EP	23580 MR002	6/6/2013 201306070171AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	704 Simsbury Wells #3 TP	GW	3	Simsbury Wells PW #3 Eff. Tap	EP	23580 MR002	6/6/2013 201306070171AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	704 Simsbury Wells #3 TP	GW	3	Simsbury Wells PW #3 Eff. Tap	EP	23580 MR002	6/6/2013 201306070171AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	704 Simsbury Wells #3 TP	GW	3	Simsbury Wells PW #3 Eff. Tap	EP	23580 MR002	6/6/2013 201306070171AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	708 Simsbury Wells #7/8 TP	GW	3	Simsbury Wells PW #7/8 Comb Eff. Tap	EP	23580 MR004	12/4/2013 201312050185AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	705 Simsbury Wells #4 TP	GW	3	Simsbury Wells PW #4 Eff. Tap	EP	23580 MR002	6/6/2013 201306070150AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	705 Simsbury Wells #4 TP	GW	3	Simsbury Wells PW #4 Eff. Tap	EP	23580 MR002	6/6/2013 201306070150AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	705 Simsbury Wells #4 TP	GW	3	Simsbury Wells PW #4 Eff. Tap	EP	23580 MR002	6/6/2013 201306070150AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	705 Simsbury Wells #4 TP	GW	3	Simsbury Wells PW #4 Eff. Tap	EP	23580 MR002	12/4/2013 201312050291AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	705 Simsbury Wells #4 TP	GW	3	Simsbury Wells PW #4 Eff. Tap	EP	23580 MR002	12/4/2013 201312050291AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	705 Simsbury Wells #4 TP	GW	3	Simsbury Wells PW #4 Eff. Tap	EP	23580 MR002	6/6/2013 201306070150AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	708 Simsbury Wells #7/8 TP	GW	3	Simsbury Wells PW #7/8 Comb Eff. Tap	EP	23580 MR004	6/6/2013 201306070152AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	708 Simsbury Wells #7/8 TP	GW	3	Simsbury Wells PW #7/8 Comb Eff. Tap	EP	23580 MR004	6/6/2013 201306070152AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	708 Simsbury Wells #7/8 TP	GW	3	Simsbury Wells PW #7/8 Comb Eff. Tap	EP	23580 MR004	6/6/2013 201306070152AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	708 Simsbury Wells #7/8 TP	GW	3	Simsbury Wells PW #7/8 Comb Eff. Tap	EP	23580 MR004	6/6/2013 201306070152AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	708 Simsbury Wells #7/8 TP	GW	3	Simsbury Wells PW #7/8 Comb Eff. Tap	EP	23580 MR004	6/6/2013 201306070152AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	708 Simsbury Wells #7/8 TP	GW	3	Simsbury Wells PW #7/8 Comb Eff. Tap	EP	23580 MR004	6/6/2013 201306070152AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	702 Simsbury Wells #6	GW	3	Simsbury Wells PW #6 TP Eff. Tap	EP	23580 MR002	12/4/2013 201312050155AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	702 Simsbury Wells #6	GW	3	Simsbury Wells PW #6 TP Eff. Tap	EP	23580 MR002	12/4/2013 201312050155AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	702 Simsbury Wells #6	GW	3	Simsbury Wells PW #6 TP Eff. Tap	EP	23580 MR002	12/4/2013 201312050155AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	702 Simsbury Wells #6	GW	3	Simsbury Wells PW #6 TP Eff. Tap	EP	23580 MR002	12/4/2013 201312050155AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	702 Simsbury Wells #6	GW	3	Simsbury Wells PW #6 TP Eff. Tap	EP	23580 MR002	12/4/2013 201312050155AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	702 Simsbury Wells #6	GW	3	Simsbury Wells PW #6 TP Eff. Tap	EP	23580 MR002	12/4/2013 201312050155AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	702 Simsbury Wells #6	GW	3	Simsbury Wells PW #6 TP Eff. Tap	EP	23580 MR002	6/6/2013 201306070094AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	700 Simsbury Wells #1	GW	3	Simsbury Wells PW #1 Eff. Tap	EP	23580 MR001	12/4/2013 201312050285AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	700 Simsbury Wells #1	GW	3	Simsbury Wells PW #1 Eff. Tap	EP	23580 MR001	12/4/2013 201312050285AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	700 Simsbury Wells #1	GW	3	Simsbury Wells PW #1 Eff. Tap	EP	23580 MR001	6/6/2013 201306070252AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	700 Simsbury Wells #1	GW	3	Simsbury Wells PW #1 Eff. Tap	EP	23580 MR001	12/4/2013 201312050285AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	700 Simsbury Wells #1	GW	3	Simsbury Wells PW #1 Eff. Tap	EP	23580 MR001	12/4/2013 201312050285AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	700 Simsbury Wells #1	GW	3	Simsbury Wells PW #1 Eff. Tap	EP	23580 MR001	12/4/2013 201312050285AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	700 Simsbury Wells #1	GW	3	Simsbury Wells PW #1 Eff. Tap	EP	23580 MR001	12/4/2013 201312050285AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	700 Simsbury Wells #1	GW	3	Simsbury Wells PW #1 Eff. Tap	EP	23580 MR001	6/6/2013 201306070252AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	700 Simsbury Wells #1	GW	3	Simsbury Wells PW #1 Eff. Tap	EP	23580 MR001	6/6/2013 201306070252AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	700 Simsbury Wells #1	GW	3	Simsbury Wells PW #1 Eff. Tap	EP	23580 MR001	6/6/2013 201306070252AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	700 Simsbury Wells #1	GW	3	Simsbury Wells PW #1 Eff. Tap	EP	23580 MR001	6/6/2013 201306070252AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	700 Simsbury Wells #1	GW	3	Simsbury Wells PW #1 Eff. Tap	EP	23580 MR001	6/6/2013 201306070252AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	704 Simsbury Wells #3 TP	GW	3	Simsbury Wells PW #3 Eff. Tap	EP	23580 MR002	12/4/2013 201312050176AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	704 Simsbury Wells #3 TP	GW	3	Simsbury Wells PW #3 Eff. Tap	EP	23580 MR002	12/4/2013 201312050176AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	704 Simsbury Wells #3 TP	GW	3	Simsbury Wells PW #3 Eff. Tap	EP	23580 MR002	12/4/2013 201312050176AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	702 Simsbury Wells #6	GW	3	Simsbury Wells PW #6 TP Eff. Tap	EP	23580 MR002	6/6/2013 201306070094AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	703 Simsbury Wells #2/5	GW	3	Simsbury Wells PW #2/5 Comb Eff. Tap	EP	23580 MR003	6/6/2013 201306070271AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	703 Simsbury Wells #2/5	GW	3	Simsbury Wells PW #2/5 Comb Eff. Tap	EP	23580 MR003	6/6/2013 201306070271AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	704 Simsbury Wells #3 TP	GW	3	Simsbury Wells PW #3 Eff. Tap	EP	23580 MR002	12/4/2013 201312050176AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	704 Simsbury Wells #3 TP	GW	3	Simsbury Wells PW #3 Eff. Tap	EP	23580 MR002	12/4/2013 201312050176AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	703 Simsbury Wells #2/5	GW	3	Simsbury Wells PW #2/5 Comb Eff. Tap	EP	23580 MR003	12/4/2013 201312050159AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	704 Simsbury Wells #3 TP	GW	3	Simsbury Wells PW #3 Eff. Tap	EP	23580 MR002	12/4/2013 201312050176AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	702 Simsbury Wells #6	GW	3	Simsbury Wells PW #6 TP Eff. Tap	EP	23580 MR002	6/6/2013 201306070094AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	702 Simsbury Wells #6	GW	3	Simsbury Wells PW #6 TP Eff. Tap	EP	23580 MR002	6/6/2013 201306070094AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	702 Simsbury Wells #6	GW	3	Simsbury Wells PW #6 TP Eff. Tap	EP	23580 MR002	6/6/2013 201306070094AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	702 Simsbury Wells #6	GW	3	Simsbury Wells PW #6 TP Eff. Tap	EP	23580 MR002	6/6/2013 201306070094AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	703 Simsbury Wells #2/5	GW	3	Simsbury Wells PW #2/5 Comb Eff. Tap	EP	23580 MR003	6/6/2013 201306070271AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	703 Simsbury Wells #2/5	GW	3	Simsbury Wells PW #2/5 Comb Eff. Tap	EP	23580 MR003	6/6/2013 201306070271AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	703 Simsbury Wells #2/5	GW	3	Simsbury Wells PW #2/5 Comb Eff. Tap	EP	23580 MR003	12/4/2013 201312050159AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	703 Simsbury Wells #2/5	GW	3	Simsbury Wells PW #2/5 Comb Eff. Tap	EP	23580 MR003	12/4/2013 201312050159AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	703 Simsbury Wells #2/5	GW	3	Simsbury Wells PW #2/5 Comb Eff. Tap	EP	23580 MR003	12/4/2013 201312050159AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	703 Simsbury Wells #2/5	GW	3	Simsbury Wells PW #2/5 Comb Eff. Tap	EP	23580 MR003	12/4/2013 201312050159AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	703 Simsbury Wells #2/5	GW	3	Simsbury Wells PW #2/5 Comb Eff. Tap	EP	23580 MR003	6/6/2013 201306070271AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	703 Simsbury Wells #2/5	GW	3	Simsbury Wells PW #2/5 Comb Eff. Tap	EP	23580 MR003	6/6/2013 201306070271AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT1280021	Aquarion Water Co. of CT - Simsbury	L	703 Simsbury Wells #2/5	GW	3	Simsbury Wells PW #2/5 Comb Eff. Tap	EP	23580 MR003	12/4/2013 201312050159AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	38040 Southington FP	SW	3	Entry Point	EP	23716 MR001	6/25/2015 35195588001AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	38040 Southington FP	SW	3	Entry Point	EP	23716 MR001	6/25/2015 35195588001AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	38040 Southington FP	SW	3	Entry Point	EP	23716 MR001	6/25/2015 35195588001AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	38040 Southington FP	SW	3	Entry Point	EP	23716 MR001	6/25/2015 35195588001AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	46037 Well 7	GW	3	Entry Point	EP	99001 MR005	3/18/2015 35180798019AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT1310011	Southington Water Department	L	46039 Well 9	GW	3	Entry Point	EP	99001 MR007	9/24/2015 35209566003AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	46039 Well 9	GW	3	Entry Point	EP	99001 MR007	9/24/2015 35209566003AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	46039 Well 9	GW	3	Entry Point	EP	99001 MR007	9/24/2015 35209566003AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	46038 Well 8	GW	3	Entry Point	EP	99001 MR005	3/18/2015 35180798021AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT1310011	Southington Water Department	L	46038 Well 8	GW	3	Entry Point	EP	99001 MR005	3/18/2015 35180798021AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT1310011	Southington Water Department	L	46038 Well 8	GW	3	Entry Point	EP	99001 MR005	3/18/2015 35180798021AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT1310011	Southington Water Department	L	46038 Well 8	GW	3	Entry Point	EP	99001 MR005	3/18/2015 35180798021AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT1310011	Southington Water Department	L	46038 Well 8	GW	3	Entry Point	EP	99001 MR005	3/18/2015 35180798021AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT1310011	Southington Water Department	L	46038 Well 8	GW	3	Entry Point	EP	99001 MR005	3/18/2015 35180798021AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT1310011	Southington Water Department	L	46039 Well 9	GW	3	Entry Point	EP	99001 MR007	9/24/2015 35209566003AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	46038 Well 8	GW	3	Entry Point	EP	99001 MR005	9/23/2015 35209466007AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	46038 Well 8	GW	3	Entry Point	EP	99001 MR005	9/23/2015 35209466007AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	46038 Well 8	GW	3	Entry Point	EP	99001 MR005	9/23/2015 35209466007AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	46038 Well 8	GW	3	Entry Point	EP	99001 MR005	9/23/2015 35209466007AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	46038 Well 8	GW	3	Entry Point	EP	99001 MR005	9/23/2015 35209466007AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	46038 Well 8	GW	3	Entry Point	EP	99001 MR005	9/23/2015 35209466007AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	46037 Well 7	GW	3	Entry Point	EP	99001 MR005	3/18/2015 35180798019AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT1310011	Southington Water Department	L	46037 Well 7	GW	3	Entry Point	EP	99001 MR005	3/18/2015 35180798019AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT1310011	Southington Water Department	L	46037 Well 7	GW	3	Entry Point	EP	99001 MR005	3/18/2015 35180798019AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT1310011	Southington Water Department	L	46037 Well 7	GW	3	Entry Point	EP	99001 MR005	3/18/2015 35180798019AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT1310011	Southington Water Department	L	46039 Well 9	GW	3	Entry Point	EP	99001 MR007	3/18/2015 35180798007AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT1310011	Southington Water Department	L	46039 Well 9	GW	3	Entry Point	EP	99001 MR007	3/18/2015 35180798007AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT1310011	Southington Water Department	L	38040 Southington FP	SW	3	Entry Point	EP	23716 MR001	6/25/2015 35195588001AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	46039 Well 9	GW	3	Entry Point	EP	99001 MR007	3/18/2015 35180798007AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT1310011	Southington Water Department	L	46039 Well 9	GW	3	Entry Point	EP	99001 MR007	3/18/2015 35180798007AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT1310011	Southington Water Department	L	46039 Well 9	GW	3	Entry Point	EP	99001 MR007	3/18/2015 35180798007AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT1310011	Southington Water Department	L	46039 Well 9	GW	3	Entry Point	EP	99001 MR007	9/24/2015 35209566003AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	46039 Well 9	GW	3	Entry Point	EP	99001 MR007	3/18/2015 35180798007AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT1310011	Southington Water Department	L	46035 Well 2	GW	3	Entry Point	EP	99001 MR003	9/24/2015 35209566001AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	46035 Well 2	GW	3	Entry Point	EP	99001 MR003	9/24/2015 35209566001AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	46035 Well 2	GW	3	Entry Point	EP	99001 MR003	9/24/2015 35209566001AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	46035 Well 2	GW	3	Entry Point	EP	99001 MR003	9/24/2015 35209566001AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	46035 Well 2	GW	3	Entry Point	EP	99001 MR003	9/24/2015 35209566001AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	46034 Well 1A	GW	3	Entry Point	EP	99001 MR002	3/18/2015 35180798001AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT1310011	Southington Water Department	L	46035 Well 2	GW	3	Entry Point	EP	99001 MR003	9/24/2015 35209566001AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	46034 Well 1A	GW	3	Entry Point	EP	99001 MR002	3/18/2015 35180798001AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT1310011	Southington Water Department	L	46035 Well 2	GW	3	Entry Point	EP	99001 MR003	3/18/2015 35180798003AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT1310011	Southington Water Department	L	46035 Well 2	GW	3	Entry Point	EP	99001 MR003	3/18/2015 35180798003AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT1310011	Southington Water Department	L	46034 Well 1A	GW	3	Entry Point	EP	99001 MR002	3/18/2015 35180798001AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT1310011	Southington Water Department	L	46034 Well 1A	GW	3	Entry Point	EP	99001 MR002	9/23/2015 35209466001AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	46034 Well 1A	GW	3	Entry Point	EP	99001 MR002	9/23/2015 35209466001AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	46034 Well 1A	GW	3	Entry Point	EP	99001 MR002	9/23/2015 35209466001AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	46034 Well 1A	GW	3	Entry Point	EP	99001 MR002	9/23/2015 35209466001AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	46034 Well 1A	GW	3	Entry Point	EP	99001 MR002	9/23/2015 35209466001AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	38040 Southington FP	SW	3	Entry Point	EP	23716 MR001	6/25/2015 35195588001AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	46034 Well 1A	GW	3	Entry Point	EP	99001 MR002	9/23/2015 35209466001AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	46034 Well 1A	GW	3	Entry Point	EP	99001 MR002	3/18/2015 35180798001AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT1310011	Southington Water Department	L	46034 Well 1A	GW	3	Entry Point	EP	99001 MR002	3/18/2015 35180798001AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT1310011	Southington Water Department	L	46034 Well 1A	GW	3	Entry Point	EP	99001 MR002	3/18/2015 35180798001AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT1310011	Southington Water Department	L	46037 Well 7	GW	3	Entry Point	EP	99001 MR005	3/18/2015 35180798019AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT1310011	Southington Water Department	L	46039 Well 9	GW	3	Entry Point	EP	99001 MR007	9/24/2015 35209566003AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	46037 Well 7	GW	3	Entry Point	EP	99001 MR005	9/23/2015 35209466005AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	46037 Well 7	GW	3	Entry Point	EP	99001 MR005	9/23/2015 35209466005AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	46037 Well 7	GW	3	Entry Point	EP	99001 MR005	9/23/2015 35209466005AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	46036 Well 3	GW	3	Entry Point	EP	99001 MR004	3/18/2015 35180798005AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT1310011	Southington Water Department	L	46037 Well 7	GW	3	Entry Point	EP	99001 MR005	9/23/2015 35209466005AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	46036 Well 3	GW	3	Entry Point	EP	99001 MR004	3/18/2015 35180798005AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT1310011	Southington Water Department	L	46036 Well 3	GW	3	Entry Point	EP	99001 MR004	3/18/2015 35180798005AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT1310011	Southington Water Department	L	46036 Well 3	GW	3	Entry Point	EP	99001 MR004	3/18/2015 35180798005AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT1310011	Southington Water Department	L	46036 Well 3	GW	3	Entry Point	EP	99001 MR004	3/18/2015 35180798005AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT

CT1310011	Southington Water Department	L	46037 Well 7	GW	3	Entry Point	EP	99001 MR005	9/23/2015 35209466005AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	46035 Well 2	GW	3	Entry Point	EP	99001 MR003	3/18/2015 3518079800 3AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT1310011	Southington Water Department	L	46037 Well 7	GW	3	Entry Point	EP	99001 MR005	9/23/2015 35209466005AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	46036 Well 3	GW	3	Entry Point	EP	99001 MR004	9/23/2015 35209466003AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	46036 Well 3	GW	3	Entry Point	EP	99001 MR004	9/23/2015 35209466003AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	46036 Well 3	GW	3	Entry Point	EP	99001 MR004	9/23/2015 35209466003AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	46036 Well 3	GW	3	Entry Point	EP	99001 MR004	9/23/2015 35209466003AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	46036 Well 3	GW	3	Entry Point	EP	99001 MR004	9/23/2015 35209466003AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	46036 Well 3	GW	3	Entry Point	EP	99001 MR004	9/23/2015 35209466003AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT1310011	Southington Water Department	L	46035 Well 2	GW	3	Entry Point	EP	99001 MR003	3/18/2015 3518079800 3AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT1310011	Southington Water Department	L	46035 Well 2	GW	3	Entry Point	EP	99001 MR003	3/18/2015 3518079800 3AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT1310011	Southington Water Department	L	46035 Well 2	GW	3	Entry Point	EP	99001 MR003	3/18/2015 3518079800 3AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT1310011	Southington Water Department	L	46036 Well 3	GW	3	Entry Point	EP	99001 MR004	3/18/2015 3518079800 5AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT1370011	Aquarion Water Co. of CT - Mystic	L	36548 Deans Mill Treatment Plant	SW	5	Deans Mill FP Eff. Tap	EP	23909 MR001	7/7/2014 201407080346AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT1370011	Aquarion Water Co. of CT - Mystic	L	36548 Deans Mill Treatment Plant	SW	5	Deans Mill FP Eff. Tap	EP	23909 MR001	7/7/2014 201407080346AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT1370011	Aquarion Water Co. of CT - Mystic	L	36548 Deans Mill Treatment Plant	SW	5	Deans Mill FP Eff. Tap	EP	23909 MR001	7/7/2014 201407080346AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT1370011	Aquarion Water Co. of CT - Mystic	L	36549 Lantern Hill Well	GW	5	Lantern Hill Well Eff. Tap	EP	99001 MR002	1/5/2015 201501060323AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT1370011	Aquarion Water Co. of CT - Mystic	L	36548 Deans Mill Treatment Plant	SW	5	Deans Mill FP Eff. Tap	EP	23909 MR001	7/7/2014 201407080346AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT1370011	Aquarion Water Co. of CT - Mystic	L	36548 Deans Mill Treatment Plant	SW	5	Deans Mill FP Eff. Tap	EP	23909 MR001	7/7/2014 201407080346AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT1370011	Aquarion Water Co. of CT - Mystic	L	36548 Deans Mill Treatment Plant	SW	5	Deans Mill FP Eff. Tap	EP	23909 MR001	7/7/2014 201407080346AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT1370011	Aquarion Water Co. of CT - Mystic	L	36549 Lantern Hill Well	GW	5	Lantern Hill Well Eff. Tap	EP	99001 MR002	7/7/2014 201407080348AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT1370011	Aquarion Water Co. of CT - Mystic	L	36549 Lantern Hill Well	GW	5	Lantern Hill Well Eff. Tap	EP	99001 MR002	7/7/2014 201407080348AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT1370011	Aquarion Water Co. of CT - Mystic	L	36549 Lantern Hill Well	GW	5	Lantern Hill Well Eff. Tap	EP	99001 MR002	7/7/2014 201407080348AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT1370011	Aquarion Water Co. of CT - Mystic	L	36549 Lantern Hill Well	GW	5	Lantern Hill Well Eff. Tap	EP	99001 MR002	7/7/2014 201407080348AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT1370011	Aquarion Water Co. of CT - Mystic	L	36549 Lantern Hill Well	GW	5	Lantern Hill Well Eff. Tap	EP	99001 MR002	1/5/2015 201501060323AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT1370011	Aquarion Water Co. of CT - Mystic	L	36549 Lantern Hill Well	GW	5	Lantern Hill Well Eff. Tap	EP	99001 MR002	1/5/2015 201501060323AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT1370011	Aquarion Water Co. of CT - Mystic	L	36549 Lantern Hill Well	GW	5	Lantern Hill Well Eff. Tap	EP	99001 MR002	1/5/2015 201501060323AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT1370011	Aquarion Water Co. of CT - Mystic	L	36549 Lantern Hill Well	GW	5	Lantern Hill Well Eff. Tap	EP	99001 MR002	1/5/2015 201501060323AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT1370011	Aquarion Water Co. of CT - Mystic	L	36549 Lantern Hill Well	GW	5	Lantern Hill Well Eff. Tap	EP	99001 MR002	7/7/2014 201407080348AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT1370011	Aquarion Water Co. of CT - Mystic	L	36549 Lantern Hill Well	GW	5	Lantern Hill Well Eff. Tap	EP	99001 MR002	1/5/2015 201501060323AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT1370011	Aquarion Water Co. of CT - Mystic	L	36549 Lantern Hill Well	GW	5	Lantern Hill Well Eff. Tap	EP	99001 MR002	7/7/2014 201407080348AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT1370011	Aquarion Water Co. of CT - Mystic	L	36548 Deans Mill Treatment Plant	SW	5	Deans Mill FP Eff. Tap	EP	23909 MR001	4/6/2015 201504070285AM	PFOA	0.02 EPA 537	<	SE4	AM	1 CT
CT1370011	Aquarion Water Co. of CT - Mystic	L	36548 Deans Mill Treatment Plant	SW	5	Deans Mill FP Eff. Tap	EP	23909 MR001	4/6/2015 201504070285AM	PFHpA	0.01 EPA 537	<	SE4	AM	1 CT
CT1370011	Aquarion Water Co. of CT - Mystic	L	36548 Deans Mill Treatment Plant	SW	5	Deans Mill FP Eff. Tap	EP	23909 MR001	4/6/2015 201504070285AM	PFBS	0.09 EPA 537	<	SE4	AM	1 CT
CT1370011	Aquarion Water Co. of CT - Mystic	L	36548 Deans Mill Treatment Plant	SW	5	Deans Mill FP Eff. Tap	EP	23909 MR001	4/6/2015 201504070285AM	PFHxS	0.03 EPA 537	<	SE4	AM	1 CT
CT1370011	Aquarion Water Co. of CT - Mystic	L	36548 Deans Mill Treatment Plant	SW	5	Deans Mill FP Eff. Tap	EP	23909 MR001	4/6/2015 201504070285AM	PFNA	0.02 EPA 537	<	SE4	AM	1 CT
CT1370011	Aquarion Water Co. of CT - Mystic	L	36548 Deans Mill Treatment Plant	SW	5	Deans Mill FP Eff. Tap	EP	23909 MR001	4/6/2015 201504070285AM	PFOS	0.04 EPA 537	<	SE4	AM	1 CT
CT1370011	Aquarion Water Co. of CT - Mystic	L	36548 Deans Mill Treatment Plant	SW	5	Deans Mill FP Eff. Tap	EP	23909 MR001	10/6/2014 201410070394AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT1370011	Aquarion Water Co. of CT - Mystic	L	36548 Deans Mill Treatment Plant	SW	5	Deans Mill FP Eff. Tap	EP	23909 MR001	10/6/2014 201410070394AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT1370011	Aquarion Water Co. of CT - Mystic	L	36548 Deans Mill Treatment Plant	SW	5	Deans Mill FP Eff. Tap	EP	23909 MR001	10/6/2014 201410070394AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT1370011	Aquarion Water Co. of CT - Mystic	L	36548 Deans Mill Treatment Plant	SW	5	Deans Mill FP Eff. Tap	EP	23909 MR001	10/6/2014 201410070394AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT1370011	Aquarion Water Co. of CT - Mystic	L	36548 Deans Mill Treatment Plant	SW	5	Deans Mill FP Eff. Tap	EP	23909 MR001	10/6/2014 201410070394AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT1370011	Aquarion Water Co. of CT - Mystic	L	36548 Deans Mill Treatment Plant	SW	5	Deans Mill FP Eff. Tap	EP	23909 MR001	10/6/2014 201410070394AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT1370011	Aquarion Water Co. of CT - Mystic	L	36548 Deans Mill Treatment Plant	SW	5	Deans Mill FP Eff. Tap	EP	23909 MR001	1/5/2015 201501060303AM	PFHxS	0.03 EPA 537	<	SE3	AM	1 CT
CT1370011	Aquarion Water Co. of CT - Mystic	L	36548 Deans Mill Treatment Plant	SW	5	Deans Mill FP Eff. Tap	EP	23909 MR001	1/5/2015 201501060303AM	PFNA	0.02 EPA 537	<	SE3	AM	1 CT
CT1370011	Aquarion Water Co. of CT - Mystic	L	36548 Deans Mill Treatment Plant	SW	5	Deans Mill FP Eff. Tap	EP	23909 MR001	1/5/2015 201501060303AM	PFOS	0.04 EPA 537	<	SE3	AM	1 CT
CT1370011	Aquarion Water Co. of CT - Mystic	L	36548 Deans Mill Treatment Plant	SW	5	Deans Mill FP Eff. Tap	EP	23909 MR001	1/5/2015 201501060303AM	PFHpA	0.01 EPA 537	<	SE3	AM	1 CT
CT1370011	Aquarion Water Co. of CT - Mystic	L	36548 Deans Mill Treatment Plant	SW	5	Deans Mill FP Eff. Tap	EP	23909 MR001	1/5/2015 201501060303AM	PFBS	0.09 EPA 537	<	SE3	AM	1 CT
CT1370011	Aquarion Water Co. of CT - Mystic	L	36548 Deans Mill Treatment Plant	SW	5	Deans Mill FP Eff. Tap	EP	23909 MR001	1/5/2015 201501060303AM	PFOA	0.02 EPA 537	<	SE3	AM	1 CT
CT1430011	Torrington Water Company	L	37964 Torrington Filtration Plant	SW	3	Entry Point	EP	24095 MR001	12/14/2015 3374112	PFOS	0.04 EPA 537	<	SE4	AM	1 CT
CT1430011	Torrington Water Company	L	37964 Torrington Filtration Plant	SW	3	Entry Point	EP	24095 MR001	12/14/2015 3374112	PFHxS	0.03 EPA 537	<	SE4	AM	1 CT
CT1430011	Torrington Water Company	L	37964 Torrington Filtration Plant	SW	3	Entry Point	EP	24095 MR001	12/14/2015 3374112	PFNA	0.02 EPA 537	<	SE4	AM	1 CT
CT1430011	Torrington Water Company	L	37964 Torrington Filtration Plant	SW	3	Entry Point	EP	24095 MR001	3/9/2015 3201578	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT1430011	Torrington Water Company	L	37964 Torrington Filtration Plant	SW	3	Entry Point	EP	24095 MR001	3/9/2015 3201578	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT1430011	Torrington Water Company	L	37964 Torrington Filtration Plant	SW	3	Entry Point	EP	24095 MR001	12/14/2015 3374112	PFHpA	0.01 EPA 537	<	SE4	AM	1 CT
CT1430011	Torrington Water Company	L	37964 Torrington Filtration Plant	SW	3	Entry Point	EP	24095 MR001	6/8/2015 3257367	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT1430011	Torrington Water Company	L	37964 Torrington Filtration Plant	SW	3	Entry Point	EP	24095 MR001	12/14/2015 3374112	PFBS	0.09 EPA 537	<	SE4	AM	1 CT
CT1430011	Torrington Water Company	L	37964 Torrington Filtration Plant	SW	3	Entry Point	EP	24095 MR001	6/8/2015 3257367	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT1430011	Torrington Water Company	L	37964 Torrington Filtration Plant	SW	3	Entry Point	EP	24095 MR001	6/8/2015 3257367	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT1430011	Torrington Water Company	L	37964 Torrington Filtration Plant	SW	3	Entry Point	EP	24095 MR001	6/8/2015 3257367	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT1430011	Torrington Water Company	L	37964 Torrington Filtration Plant	SW	3	Entry Point	EP	24095 MR001	6/8/2015 3257367	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT1430011	Torrington Water Company	L	37964 Torrington Filtration Plant	SW	3	Entry Point	EP	24095 MR001	6/8/2015 3257367	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT1430011	Torrington Water Company	L	37964 Torrington Filtration Plant	SW	3	Entry Point	EP	24095 MR001	12/14/2015 3374112	PFOA	0.02 EPA 537	<	SE4	AM	1 CT
CT1430011	Torrington Water Company	L	37964 Torrington Filtration Plant	SW	3	Entry Point	EP	24095 MR001	3/9/2015 3201578	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT1430011	Torrington Water Company	L	37964 Torrington Filtration Plant	SW	3	Entry Point	EP	24095 MR001	9/14/2015 3321226	PFBS	0.09 EPA 537	<	SE3	AM	1 CT
CT1430011	Torrington Water Company	L	37964 Torrington Filtration Plant	SW	3	Entry Point	EP	24095 MR001	3/9/2015 3201578	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT1430011	Torrington Water Company	L	37964 Torrington Filtration Plant	SW	3	Entry Point	EP	24095 MR001	3/9/2015 3201578	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT1430011	Torrington Water Company	L	37964 Torrington Filtration Plant	SW	3	Entry Point	EP	24095 MR001	3/9/2015 3201578	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT1430011	Torrington Water Company	L	37964 Torrington Filtration Plant	SW	3	Entry Point	EP	24095 MR001	9/14/2015 3321226	PFHpA	0.01 EPA 537	<	SE3	AM	1 CT
CT1430011	Torrington Water Company	L	37964 Torrington Filtration Plant	SW	3	Entry Point	EP	24095 MR001	9/14/2015 3321226	PFHxS	0.03 EPA 537	<	SE3	AM	1 CT
CT1430011	Torrington Water Company	L	37964 Torrington Filtration Plant	SW	3	Entry Point	EP	24095 MR001	9/14/2015 3321226	PFNA	0.02 EPA 537	<	SE3	AM	1 CT
CT1430011	Torrington Water Company	L	37964 Torrington Filtration Plant	SW	3	Entry Point	EP	24095 MR001	9/14/2015 3321226	PFOS	0.04 EPA 537	<	SE3	AM	1 CT
CT1430011	Torrington Water Company	L	37964 Torrington Filtration Plant	SW	3	Entry Point	EP	24095 MR001	9/14/2015 3321226	PFOA	0.02 EPA 537	<	SE3	AM	1 CT
CT1480011	Wallingford Water Department	L	36562 Pistapaug Pond Treatment Plant	SW	5	Entry Point	EP	24190 MR001	4/1/2014 35132663001AM	PFOA	0.02 EPA 537	<	SE4	AM	1 CT
CT1480011	Wallingford Water Department	L	36562 Pistapaug Pond Treatment Plant	SW	5	Entry Point	EP	24190 MR001	4/1/2014 35132663001AM	PFNA	0.02 EPA 537	<	SE4	AM	1 CT
CT1480011	Wallingford Water Department	L	36562 Pistapaug Pond Treatment Plant	SW	5	Entry Point	EP	24190 MR001	10/8/2013 35111726001AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT1480011	Wallingford Water Department	L	36562 Pistapaug Pond Treatment Plant	SW	5	Entry Point	EP	24190 MR001	10/8/2013 35111726001AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT1480011	Wallingford Water Department	L	36562 Pistapaug Pond Treatment Plant	SW	5	Entry Point	EP	24190 MR001	10/8/2013 35111726001AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT1480011	Wallingford Water Department	L	36562 Pistapaug Pond Treatment Plant	SW	5	Entry Point	EP	24190 MR001	10/8/2013 35111726001AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT1480011	Wallingford Water Department	L	36562 Pistapaug Pond Treatment Plant	SW	5	Entry Point	EP	24190 MR001	10/8/2013 35111726001AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT1480011	Wallingford Water Department	L	36562 Pistapaug Pond Treatment Plant	SW	5	Entry Point	EP	24190 MR001	7/29/2013 35102390001AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT1480011	Wallingford Water Department	L	36562 Pistapaug Pond Treatment Plant	SW	5	Entry Point	EP	24190 MR001	7/29/2013 35102390001AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT1480011	Wallingford Water Department	L	36562 Pistapaug Pond Treatment Plant	SW	5	Entry Point	EP	24190 MR001	7/29/2013 35102390001AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT1480011	Wallingford Water Department	L	36562 Pistapaug Pond Treatment Plant	SW	5	Entry Point	EP	24190 MR001	7/29/2013 35102390001AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT1480011	Wallingford Water Department	L	36562 Pistapaug Pond Treatment Plant	SW	5	Entry Point	EP	24190 MR001	7/29/2013 35102390001AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT1480011	Wallingford Water Department	L	36562 Pistapaug Pond Treatment Plant	SW	5	Entry Point	EP	24190 MR001	7/29/2013 35102390001AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT1480011	Wallingford Water Department	L	36562 Pistapaug Pond Treatment Plant	SW	5	Entry Point	EP	24190 MR001	4/1/2014 35132663001AM	PFOS	0.04 EPA 537	<	SE4	AM	1 CT
CT1480011	Wallingford Water Department	L	36562 Pistapaug Pond Treatment Plant	SW	5	Entry Point	EP	24190 MR001	4/1/2014 35132663001AM	PFHxS	0.03 EPA 537	<	SE4	AM	1 CT
CT1480011	Wallingford Water Department	L	36562 Pistapaug Pond Treatment Plant	SW	5	Entry Point	EP	24190 MR001	4/1/2014 35132663001AM	PFHpA	0.01 EPA 537	<	SE4	AM	1 CT
CT1480011	Wallingford Water Department	L	36562 Pistapaug Pond Treatment Plant	SW	5	Entry Point	EP	24190 MR001	4/1/2014 35132663001AM	PFBS	0.09 EPA 537	<	SE4	AM	1 CT
CT1480011	Wallingford Water Department	L	36563 Oak Street Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR002	1/22/2014 35123713001AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT1480011	Wallingford Water Department	L	36562 Pistapaug Pond Treatment Plant	SW	5	Entry Point	EP	24190 MR001	10/8/2013 35111726001AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT1480011	Wallingford Water Department	L	36562 Pistapaug Pond Treatment Plant	SW	5	Entry Point	EP	24190 MR001	1/21/2014 35123700001AM	PFHpA	0.01 EPA 537	<	SE3	AM	1 CT
CT1480011	Wallingford Water Department	L	36562 Pistapaug Pond Treatment Plant	SW	5	Entry Point	EP	24190 MR001	1/21/2014 35123700001AM	PFBS	0.09 EPA 537	<	SE3	AM	1 CT
CT1480011	Wallingford Water Department	L	36562 Pistapaug Pond Treatment Plant	SW	5	Entry Point	EP	24190 MR001	1/21/2014 35123700001AM	PFNA	0.02 EPA 537	<	SE3	AM	1 CT
CT1480011	Wallingford Water Department	L	36562 Pistapaug Pond Treatment Plant	SW	5	Entry Point	EP	24190 MR001	1/21/2014 35123700001AM	PFOS	0.04 EPA 537	<	SE3	AM	1 CT
CT1480011	Wallingford Water Department	L	36562 Pistapaug Pond Treatment Plant	SW	5	Entry Point	EP	24190 MR001	1/21/2014 35123700001AM	PFOA	0.02 EPA 537	<	SE3	AM	1 CT
CT1480011	Wallingford Water Department	L	36562 Pistapaug Pond Treatment Plant	SW	5	Entry Point	EP	24190 MR001	1/21/2014 35123700001AM	PFHxS	0.03 EPA 537	<	SE3	AM	1 CT
CT1480011	Wallingford Water Department	L	36564 Ridgeland Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR003	7/29/2013 35102396001AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT1480011	Wallingford Water Department	L	36564 Ridgeland Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR003	7/29/2013 35102396001AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT1480011	Wallingford Water Department	L	36564 Ridgeland Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR003	7/29/2013 35102396001AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT1480011	Wallingford Water Department	L	36564 Ridgeland Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR003	7/29/2013 35102396001AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT1480011	Wallingford Water Department	L	36564 Ridgeland Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR003	7/29/2013 35102396001AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT1480011	Wallingford Water Department	L	36564 Ridgeland Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR003	7/29/2013 35102396001AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT1480011	Wallingford Water Department	L	36564 Ridgeland Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR003	2/19/2014 35127228004AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT1480011	Wallingford Water Department	L	36564 Ridgeland Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR003	2/19/2014 35127228004AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT1480011	Wallingford Water Department	L	36564 Ridgeland Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR003	2/19/2014 35127228004AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT1480011	Wallingford Water Department	L	36564 Ridgeland Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR003	2/19/2014 35127228004AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT1480011	Wallingford Water Department	L	36563 Oak Street Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR002	7/29/2013 35102394001AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT1480011	Wallingford Water Department	L	36563 Oak Street Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR002	7/29/2013 35102394001AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT1480011	Wallingford Water Department	L	36563 Oak Street Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR002	7/29/2013 35102394001AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT1480011	Wallingford Water Department	L	36563 Oak Street Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR002	7/29/2013 35102394001AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT1480011	Wallingford Water Department	L	36563 Oak Street Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR002	1/22/2014 35123713001AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT1480011	Wallingford Water Department	L	36563 Oak Street Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR002	1/22/2014 35123713001AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT1480011	Wallingford Water Department	L	36563 Oak Street Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR002	1/22/2014 35123713001AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT1480011	Wallingford Water Department	L	36563 Oak Street Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR002	1/22/2014 35123713001AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT1480011	Wallingford Water Department	L	36564 Ridgeland Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR003	2/19/2014 35127228004AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT1480011	Wallingford Water Department	L	36563 Oak Street Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR002	1/22/2014 35123713001AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT1480011	Wallingford Water Department	L	36564 Ridgeland Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR003	2/19/2014 35127228004AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT1480011	Wallingford Water Department	L	36563 Oak Street Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR002	7/29/2013 35102394001AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT1480011	Wallingford Water Department	L	36563 Oak Street Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR002	7/29/2013 35102394001AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT1030021	Norwalk Second Taxing District	L	36480 Filtration Plant	SW	5	Entry Point	EP	22868 MR001	7/7/2014 200399543	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT1030021	Norwalk Second Taxing District	L	36480 Filtration Plant	SW	5	Entry Point	EP	22868 MR001	1/5/2015 200410398	PFBS	0.09 EPA 537	<	SE3	AM	1 CT
CT1030021	Norwalk Second Taxing District	L	36480 Filtration Plant	SW	5	Entry Point	EP	22868 MR001	7/7/2014 200399543	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT1030021	Norwalk Second Taxing District	L	36480 Filtration Plant	SW	5	Entry Point	EP	22868 MR001	7/7/2014 200399543	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT1030021	Norwalk Second Taxing District	L	36480 Filtration Plant	SW	5	Entry Point	EP	22868 MR001	7/7/2014 200399543	PFOA	0.02 EPA 537	<	SE1	AM	1 CT

CT1030021	Norwalk Second Taxing District	L	36480 Filtration Plant	SW	5	Entry Point	EP	22868 MR001	7/7/2014 200399543	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT1030021	Norwalk Second Taxing District	L	36480 Filtration Plant	SW	5	Entry Point	EP	22868 MR001	7/7/2014 200399543	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT1030021	Norwalk Second Taxing District	L	36480 Filtration Plant	SW	5	Entry Point	EP	22868 MR001	10/6/2014 200405956	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT1030021	Norwalk Second Taxing District	L	36480 Filtration Plant	SW	5	Entry Point	EP	22868 MR001	1/5/2015 200410398	PFHpA	0.01 EPA 537	<	SE3	AM	1 CT
CT1030021	Norwalk Second Taxing District	L	36480 Filtration Plant	SW	5	Entry Point	EP	22868 MR001	1/5/2015 200410398	PFHxS	0.03 EPA 537	<	SE3	AM	1 CT
CT1030021	Norwalk Second Taxing District	L	36480 Filtration Plant	SW	5	Entry Point	EP	22868 MR001	10/6/2014 200405956	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT1030021	Norwalk Second Taxing District	L	36480 Filtration Plant	SW	5	Entry Point	EP	22868 MR001	10/6/2014 200405956	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT1030021	Norwalk Second Taxing District	L	36480 Filtration Plant	SW	5	Entry Point	EP	22868 MR001	10/6/2014 200405956	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT1030021	Norwalk Second Taxing District	L	36480 Filtration Plant	SW	5	Entry Point	EP	22868 MR001	10/6/2014 200405956	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT1030021	Norwalk Second Taxing District	L	36480 Filtration Plant	SW	5	Entry Point	EP	22868 MR001	1/5/2015 200410398	PFNA	0.02 EPA 537	<	SE3	AM	1 CT
CT1030021	Norwalk Second Taxing District	L	36480 Filtration Plant	SW	5	Entry Point	EP	22868 MR001	1/5/2015 200410398	PFOS	0.04 EPA 537	<	SE3	AM	1 CT
CT1030021	Norwalk Second Taxing District	L	36480 Filtration Plant	SW	5	Entry Point	EP	22868 MR001	1/5/2015 200410398	PFOA	0.02 EPA 537	<	SE3	AM	1 CT
CT1030021	Norwalk Second Taxing District	L	36480 Filtration Plant	SW	5	Entry Point	EP	22868 MR001	10/6/2014 200405956	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0590011	Groton Utilities	L	11031 Poquonnock Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	7/21/2014 201407230794AM	PFOA	0.02 EPA 537	<	SE4	AM	1 CT
CT0590011	Groton Utilities	L	11031 Poquonnock Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	7/21/2014 201407230794AM	PFOS	0.04 EPA 537	<	SE4	AM	1 CT
CT0590011	Groton Utilities	L	11031 Poquonnock Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	7/21/2014 201407230794AM	PFBS	0.09 EPA 537	<	SE4	AM	1 CT
CT0590011	Groton Utilities	L	11031 Poquonnock Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	7/21/2014 201407230794AM	PFHpA	0.01 EPA 537	<	SE4	AM	1 CT
CT0590011	Groton Utilities	L	11031 Poquonnock Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	7/21/2014 201407230794AM	PFHxS	0.03 EPA 537	<	SE4	AM	1 CT
CT0590011	Groton Utilities	L	11031 Poquonnock Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	7/21/2014 201407230794AM	PFNA	0.02 EPA 537	<	SE4	AM	1 CT
CT0590011	Groton Utilities	L	11031 Poquonnock Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	4/23/2014 201404240448AM	PFBS	0.09 EPA 537	<	SE3	AM	1 CT
CT0590011	Groton Utilities	L	11031 Poquonnock Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	10/9/2013 201310110409AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0590011	Groton Utilities	L	11031 Poquonnock Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	10/9/2013 201310110409AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0590011	Groton Utilities	L	11031 Poquonnock Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	1/15/2014 201401160337AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0590011	Groton Utilities	L	11031 Poquonnock Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	1/15/2014 201401160337AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0590011	Groton Utilities	L	11031 Poquonnock Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	1/15/2014 201401160337AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0590011	Groton Utilities	L	11031 Poquonnock Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	1/15/2014 201401160337AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0590011	Groton Utilities	L	11031 Poquonnock Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	10/9/2013 201310110409AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0590011	Groton Utilities	L	11031 Poquonnock Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	10/9/2013 201310110409AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0590011	Groton Utilities	L	11031 Poquonnock Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	10/9/2013 201310110409AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0590011	Groton Utilities	L	11031 Poquonnock Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	1/15/2014 201401160337AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0590011	Groton Utilities	L	11031 Poquonnock Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	10/9/2013 201310110409AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0590011	Groton Utilities	L	11031 Poquonnock Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	4/23/2014 201404240448AM	PFHpA	0.01 EPA 537	<	SE3	AM	1 CT
CT0590011	Groton Utilities	L	11031 Poquonnock Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	4/23/2014 201404240448AM	PFHxS	0.03 EPA 537	<	SE3	AM	1 CT
CT0590011	Groton Utilities	L	11031 Poquonnock Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	4/23/2014 201404240448AM	PFNA	0.02 EPA 537	<	SE3	AM	1 CT
CT0590011	Groton Utilities	L	11031 Poquonnock Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	4/23/2014 201404240448AM	PFOS	0.04 EPA 537	<	SE3	AM	1 CT
CT0590011	Groton Utilities	L	11031 Poquonnock Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	4/23/2014 201404240448AM	PFOA	0.02 EPA 537	<	SE3	AM	1 CT
CT0590011	Groton Utilities	L	11031 Poquonnock Treatment Plant	SW	5	Entry Point	EP	99001 DSMRT1	1/15/2014 201401160337AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	48077 Charles House Wells #4 & #5	GW	3	Entry Point	EP	20902 MR001	8/26/2013 201308270171AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	48077 Charles House Wells #4 & #5	GW	3	Entry Point	EP	20902 MR001	8/26/2013 201308270171AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	48077 Charles House Wells #4 & #5	GW	3	Entry Point	EP	20902 MR001	8/26/2013 201308270171AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	48077 Charles House Wells #4 & #5	GW	3	Entry Point	EP	20902 MR001	8/26/2013 201308270171AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	48929 Metropolitan District Intertie	SW	EP001	EPTDS from Metropolitan District	EP	20902 MR001	2/12/2014 201402130399AM	PFHpA	0.01 EPA 537	<	SE3	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	48929 Metropolitan District Intertie	SW	EP001	EPTDS from Metropolitan District	EP	20902 MR001	2/12/2014 201402130399AM	PFHxS	0.03 EPA 537	<	SE3	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	48929 Metropolitan District Intertie	SW	EP001	EPTDS from Metropolitan District	EP	20902 MR001	2/12/2014 201402130399AM	PFBS	0.09 EPA 537	<	SE3	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	48077 Charles House Wells #4 & #5	GW	3	Entry Point	EP	20902 MR001	8/26/2013 201308270171AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	48077 Charles House Wells #4 & #5	GW	3	Entry Point	EP	20902 MR001	8/26/2013 201308270171AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	48077 Charles House Wells #4 & #5	GW	3	Entry Point	EP	20902 MR001	2/12/2014 201402130401AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	48077 Charles House Wells #4 & #5	GW	3	Entry Point	EP	20902 MR001	2/12/2014 201402130401AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	48929 Metropolitan District Intertie	SW	EP001	EPTDS from Metropolitan District	EP	20902 MR001	2/12/2014 201402130399AM	PFNA	0.02 EPA 537	<	SE3	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	46138 Pondwood Well	GW	3	Entry Point	EP	20902 MR001	8/26/2013 201308270259AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	48077 Charles House Wells #4 & #5	GW	3	Entry Point	EP	20902 MR001	2/12/2014 201402130401AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	48077 Charles House Wells #4 & #5	GW	3	Entry Point	EP	20902 MR001	2/12/2014 201402130401AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	48077 Charles House Wells #4 & #5	GW	3	Entry Point	EP	20902 MR001	2/12/2014 201402130401AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	48077 Charles House Wells #4 & #5	GW	3	Entry Point	EP	20902 MR001	2/12/2014 201402130401AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	48929 Metropolitan District Intertie	SW	EP001	EPTDS from Metropolitan District	EP	20902 MR001	8/26/2013 201308270311AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	48929 Metropolitan District Intertie	SW	EP001	EPTDS from Metropolitan District	EP	20902 MR001	8/26/2013 201308270311AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	48929 Metropolitan District Intertie	SW	EP001	EPTDS from Metropolitan District	EP	20902 MR001	5/14/2014 201405150199AM	PFHxS	0.03 EPA 537	<	SE4	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	48929 Metropolitan District Intertie	SW	EP001	EPTDS from Metropolitan District	EP	20902 MR001	8/26/2013 201308270311AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	48929 Metropolitan District Intertie	SW	EP001	EPTDS from Metropolitan District	EP	20902 MR001	8/26/2013 201308270311AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	48929 Metropolitan District Intertie	SW	EP001	EPTDS from Metropolitan District	EP	20902 MR001	5/14/2014 201405150199AM	PFBS	0.09 EPA 537	<	SE4	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	48929 Metropolitan District Intertie	SW	EP001	EPTDS from Metropolitan District	EP	20902 MR001	5/14/2014 201405150199AM	PFOA	0.02 EPA 537	<	SE4	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	46138 Pondwood Well	GW	3	Entry Point	EP	20902 MR001	8/26/2013 201308270259AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	48929 Metropolitan District Intertie	SW	EP001	EPTDS from Metropolitan District	EP	20902 MR001	5/14/2014 201405150199AM	PFOS	0.04 EPA 537	<	SE4	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	48929 Metropolitan District Intertie	SW	EP001	EPTDS from Metropolitan District	EP	20902 MR001	5/14/2014 201405150199AM	PFHpA	0.01 EPA 537	<	SE4	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	48929 Metropolitan District Intertie	SW	EP001	EPTDS from Metropolitan District	EP	20902 MR001	11/18/2013 201311190136AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	48929 Metropolitan District Intertie	SW	EP001	EPTDS from Metropolitan District	EP	20902 MR001	11/18/2013 201311190136AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	48929 Metropolitan District Intertie	SW	EP001	EPTDS from Metropolitan District	EP	20902 MR001	11/18/2013 201311190136AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	48929 Metropolitan District Intertie	SW	EP001	EPTDS from Metropolitan District	EP	20902 MR001	11/18/2013 201311190136AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	48929 Metropolitan District Intertie	SW	EP001	EPTDS from Metropolitan District	EP	20902 MR001	11/18/2013 201311190136AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	48929 Metropolitan District Intertie	SW	EP001	EPTDS from Metropolitan District	EP	20902 MR001	8/26/2013 201308270311AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	48929 Metropolitan District Intertie	SW	EP001	EPTDS from Metropolitan District	EP	20902 MR001	11/18/2013 201311190136AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	48929 Metropolitan District Intertie	SW	EP001	EPTDS from Metropolitan District	EP	20902 MR001	2/12/2014 201402130399AM	PFOA	0.02 EPA 537	<	SE3	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	48929 Metropolitan District Intertie	SW	EP001	EPTDS from Metropolitan District	EP	20902 MR001	8/26/2013 201308270311AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	48929 Metropolitan District Intertie	SW	EP001	EPTDS from Metropolitan District	EP	20902 MR001	2/12/2014 201402130399AM	PFOS	0.04 EPA 537	<	SE3	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	38646 Charles House Wells #1, #2 & #3	GW	3	Entry Point	EP	20902 MR001	2/12/2014 201402130387AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	38646 Charles House Wells #1, #2 & #3	GW	3	Entry Point	EP	20902 MR001	2/12/2014 201402130387AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	38646 Charles House Wells #1, #2 & #3	GW	3	Entry Point	EP	20902 MR001	8/26/2013 201308270191AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	38646 Charles House Wells #1, #2 & #3	GW	3	Entry Point	EP	20902 MR001	8/26/2013 201308270191AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	38646 Charles House Wells #1, #2 & #3	GW	3	Entry Point	EP	20902 MR001	8/26/2013 201308270191AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	38646 Charles House Wells #1, #2 & #3	GW	3	Entry Point	EP	20902 MR001	8/26/2013 201308270191AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	38646 Charles House Wells #1, #2 & #3	GW	3	Entry Point	EP	20902 MR001	8/26/2013 201308270191AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	38646 Charles House Wells #1, #2 & #3	GW	3	Entry Point	EP	20902 MR001	8/26/2013 201308270191AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	38646 Charles House Wells #1, #2 & #3	GW	3	Entry Point	EP	20902 MR001	2/12/2014 201402130387AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	48929 Metropolitan District Intertie	SW	EP001	EPTDS from Metropolitan District	EP	20902 MR001	5/14/2014 201405150199AM	PFNA	0.02 EPA 537	<	SE4	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	46138 Pondwood Well	GW	3	Entry Point	EP	20902 MR001	8/26/2013 201308270259AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	38646 Charles House Wells #1, #2 & #3	GW	3	Entry Point	EP	20902 MR001	2/12/2014 201402130387AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	38646 Charles House Wells #1, #2 & #3	GW	3	Entry Point	EP	20902 MR001	2/12/2014 201402130387AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	38646 Charles House Wells #1, #2 & #3	GW	3	Entry Point	EP	20902 MR001	2/12/2014 201402130387AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	46138 Pondwood Well	GW	3	Entry Point	EP	20902 MR001	2/12/2014 201402130345AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	46138 Pondwood Well	GW	3	Entry Point	EP	20902 MR001	2/12/2014 201402130345AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	46138 Pondwood Well	GW	3	Entry Point	EP	20902 MR001	2/12/2014 201402130345AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	46138 Pondwood Well	GW	3	Entry Point	EP	20902 MR001	2/12/2014 201402130345AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	46138 Pondwood Well	GW	3	Entry Point	EP	20902 MR001	2/12/2014 201402130345AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	46138 Pondwood Well	GW	3	Entry Point	EP	20902 MR001	8/26/2013 201308270259AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	46138 Pondwood Well	GW	3	Entry Point	EP	20902 MR001	8/26/2013 201308270259AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	46138 Pondwood Well	GW	3	Entry Point	EP	20902 MR001	2/12/2014 201402130345AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	46138 Pondwood Well	GW	3	Entry Point	EP	20902 MR001	8/26/2013 201308270259AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	46136 CTSS Well	GW	3	Entry Point	EP	20902 MR001	2/12/2014 201402130347AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	46136 CTSS Well	GW	3	Entry Point	EP	20902 MR001	2/12/2014 201402130347AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	46136 CTSS Well	GW	3	Entry Point	EP	20902 MR001	2/12/2014 201402130347AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	46136 CTSS Well	GW	3	Entry Point	EP	20902 MR001	2/12/2014 201402130347AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	46136 CTSS Well	GW	3	Entry Point	EP	20902 MR001	2/12/2014 201402130347AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	46136 CTSS Well	GW	3	Entry Point	EP	20902 MR001	2/12/2014 201402130347AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	46136 CTSS Well	GW	3	Entry Point	EP	20902 MR001	8/26/2013 201308270314AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	46136 CTSS Well	GW	3	Entry Point	EP	20902 MR001	8/26/2013 201308270314AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	46136 CTSS Well	GW	3	Entry Point	EP	20902 MR001	8/26/2013 201308270314AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	46136 CTSS Well	GW	3	Entry Point	EP	20902 MR001	8/26/2013 201308270314AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	46136 CTSS Well	GW	3	Entry Point	EP	20902 MR001	8/26/2013 201308270314AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0520011	CT Water Co. - Unionville System	L	46136 CTSS Well	GW	3	Entry Point	EP	20902 MR001	8/26/2013 201308270314AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	39001 Well #2	GW	3	Entry Point	EP	19155 MR001	1/27/2014 201401280242AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	39001 Well #2	GW	3	Entry Point	EP	19155 MR001	1/27/2014 201401280242AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	39001 Well #2	GW	3	Entry Point	EP	19155 MR001	1/27/2014 201401280242AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	39001 Well #2	GW	3	Entry Point	EP	19155 MR001	1/27/2014 201401280242AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	39001 Well #2	GW	3	Entry Point	EP	19155 MR001	1/27/2014 201401280242AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	39001 Well #2	GW	3	Entry Point	EP	19155 MR001	1/27/2014 201401280242AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	46117 Well #3	GW	3	Entry Point	EP	19155 MR002	7/31/2013 201308010341AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	39001 Well #2	GW	3	Entry Point	EP	19155 MR001	7/31/2013 201308010321AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	39001 Well #2	GW	3	Entry Point	EP	19155 MR001	7/31/2013 201308010321AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	39001 Well #2	GW	3	Entry Point	EP	19155 MR001	7/31/2013 201308010321AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	39001 Well #2	GW	3	Entry Point	EP	19155 MR001	7/31/2013 201308010321AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	39001 Well #2	GW	3	Entry Point	EP	19155 MR001	7/31/2013 201308010321AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	39001 Well #2	GW	3	Entry Point	EP	19155 MR001	7/31/2013 201308010321AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	46118 Well #4	GW	3	Entry Point	EP	19155 MR003	7/31/2013 201308010335AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	46118 Well #4	GW	3	Entry Point	EP	19155 MR003	7/31/2013 201308010335AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	46118 Well #4	GW	3	Entry Point	EP	19155 MR003	7/31/2013 201308010335AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	46118 Well #4	GW	3	Entry Point	EP	19155 MR003	7/31/2013 201308010335AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT

CT0040011	Avon Water Co.	L	46117 Well #3	GW	3	Entry Point	EP	19155 MR002	7/31/2013 201308010341AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	46117 Well #3	GW	3	Entry Point	EP	19155 MR002	7/31/2013 201308010341AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	46117 Well #3	GW	3	Entry Point	EP	19155 MR002	7/31/2013 201308010341AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	46117 Well #3	GW	3	Entry Point	EP	19155 MR002	7/31/2013 201308010341AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	46117 Well #3	GW	3	Entry Point	EP	19155 MR002	1/27/2014 201401280264AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	46117 Well #3	GW	3	Entry Point	EP	19155 MR002	1/27/2014 201401280264AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	46117 Well #3	GW	3	Entry Point	EP	19155 MR002	1/27/2014 201401280264AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	46117 Well #3	GW	3	Entry Point	EP	19155 MR002	1/27/2014 201401280264AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	46117 Well #3	GW	3	Entry Point	EP	19155 MR002	1/27/2014 201401280264AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	46117 Well #3	GW	3	Entry Point	EP	19155 MR002	1/27/2014 201401280264AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	46117 Well #3	GW	3	Entry Point	EP	19155 MR002	7/31/2013 201308010341AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	46118 Well #4	GW	3	Entry Point	EP	19155 MR003	7/31/2013 201308010335AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	46121 Well #7	GW	3	Entry Point	EP	19155 MR006	1/27/2014 201401280221AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	46122 Well #8	GW	3	Entry Point	EP	19155 MR007	7/31/2013 201308010421AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	46122 Well #8	GW	3	Entry Point	EP	19155 MR007	7/31/2013 201308010421AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	46122 Well #8	GW	3	Entry Point	EP	19155 MR007	7/31/2013 201308010421AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	46122 Well #8	GW	3	Entry Point	EP	19155 MR007	7/31/2013 201308010421AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	46122 Well #8	GW	3	Entry Point	EP	19155 MR007	7/31/2013 201308010421AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	46122 Well #8	GW	3	Entry Point	EP	19155 MR007	7/31/2013 201308010421AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	46121 Well #7	GW	3	Entry Point	EP	19155 MR006	7/30/2013 201308010339AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	46121 Well #7	GW	3	Entry Point	EP	19155 MR006	1/27/2014 201401280221AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	46121 Well #7	GW	3	Entry Point	EP	19155 MR006	1/27/2014 201401280221AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	46122 Well #8	GW	3	Entry Point	EP	19155 MR007	1/27/2014 201401280240AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	46121 Well #7	GW	3	Entry Point	EP	19155 MR006	1/27/2014 201401280221AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	46121 Well #7	GW	3	Entry Point	EP	19155 MR006	1/27/2014 201401280221AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	46121 Well #7	GW	3	Entry Point	EP	19155 MR006	1/27/2014 201401280221AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	50090 Well #9	GW	3	Entry Point	EP	19155 MR009	1/27/2014 201401280266AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	46122 Well #8	GW	3	Entry Point	EP	19155 MR007	1/27/2014 201401280240AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	50090 Well #9	GW	3	Entry Point	EP	19155 MR009	7/31/2013 201308010418AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	50090 Well #9	GW	3	Entry Point	EP	19155 MR009	1/27/2014 201401280266AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	50090 Well #9	GW	3	Entry Point	EP	19155 MR009	1/27/2014 201401280266AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	50090 Well #9	GW	3	Entry Point	EP	19155 MR009	1/27/2014 201401280266AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	50090 Well #9	GW	3	Entry Point	EP	19155 MR009	1/27/2014 201401280266AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	50090 Well #9	GW	3	Entry Point	EP	19155 MR009	1/27/2014 201401280266AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	46118 Well #4	GW	3	Entry Point	EP	19155 MR003	7/31/2013 201308010335AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	50090 Well #9	GW	3	Entry Point	EP	19155 MR009	7/31/2013 201308010418AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	46122 Well #8	GW	3	Entry Point	EP	19155 MR007	1/27/2014 201401280240AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	46122 Well #8	GW	3	Entry Point	EP	19155 MR007	1/27/2014 201401280240AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	46122 Well #8	GW	3	Entry Point	EP	19155 MR007	1/27/2014 201401280240AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	46122 Well #8	GW	3	Entry Point	EP	19155 MR007	1/27/2014 201401280240AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	50090 Well #9	GW	3	Entry Point	EP	19155 MR009	7/31/2013 201308010418AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	50090 Well #9	GW	3	Entry Point	EP	19155 MR009	7/31/2013 201308010418AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	50090 Well #9	GW	3	Entry Point	EP	19155 MR009	7/31/2013 201308010418AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	50090 Well #9	GW	3	Entry Point	EP	19155 MR009	7/31/2013 201308010418AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	46119 Well #5	GW	3	Entry Point	EP	19155 MR004	1/27/2014 201401280268AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	46119 Well #5	GW	3	Entry Point	EP	19155 MR004	7/31/2013 201308010405AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	46119 Well #5	GW	3	Entry Point	EP	19155 MR004	7/31/2013 201308010405AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	46119 Well #5	GW	3	Entry Point	EP	19155 MR004	7/31/2013 201308010405AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	46119 Well #5	GW	3	Entry Point	EP	19155 MR004	7/31/2013 201308010405AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	46119 Well #5	GW	3	Entry Point	EP	19155 MR004	7/31/2013 201308010405AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	46119 Well #5	GW	3	Entry Point	EP	19155 MR004	1/27/2014 201401280268AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	46119 Well #5	GW	3	Entry Point	EP	19155 MR004	1/27/2014 201401280268AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	46119 Well #5	GW	3	Entry Point	EP	19155 MR004	1/27/2014 201401280268AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	46119 Well #5	GW	3	Entry Point	EP	19155 MR004	1/27/2014 201401280268AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	46119 Well #5	GW	3	Entry Point	EP	19155 MR004	7/31/2013 201308010405AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	46121 Well #7	GW	3	Entry Point	EP	19155 MR006	7/30/2013 201308010339AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	46118 Well #4	GW	3	Entry Point	EP	19155 MR003	1/27/2014 201401280232AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	46118 Well #4	GW	3	Entry Point	EP	19155 MR003	1/27/2014 201401280232AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	46118 Well #4	GW	3	Entry Point	EP	19155 MR003	1/27/2014 201401280232AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	46118 Well #4	GW	3	Entry Point	EP	19155 MR003	1/27/2014 201401280232AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	46118 Well #4	GW	3	Entry Point	EP	19155 MR003	1/27/2014 201401280232AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	46118 Well #4	GW	3	Entry Point	EP	19155 MR003	1/27/2014 201401280232AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	46120 Well #6	GW	3	Entry Point	EP	19155 MR005	1/27/2014 201401280228AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	46120 Well #6	GW	3	Entry Point	EP	19155 MR005	1/27/2014 201401280228AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	46120 Well #6	GW	3	Entry Point	EP	19155 MR005	1/27/2014 201401280228AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	46120 Well #6	GW	3	Entry Point	EP	19155 MR005	1/27/2014 201401280228AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	46121 Well #7	GW	3	Entry Point	EP	19155 MR006	7/30/2013 201308010339AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	46121 Well #7	GW	3	Entry Point	EP	19155 MR006	7/30/2013 201308010339AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	46121 Well #7	GW	3	Entry Point	EP	19155 MR006	7/30/2013 201308010339AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	46121 Well #7	GW	3	Entry Point	EP	19155 MR006	7/30/2013 201308010339AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	46120 Well #6	GW	3	Entry Point	EP	19155 MR005	1/27/2014 201401280228AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	46120 Well #6	GW	3	Entry Point	EP	19155 MR005	1/27/2014 201401280228AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	46119 Well #5	GW	3	Entry Point	EP	19155 MR004	1/27/2014 201401280268AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0040011	Avon Water Co.	L	46120 Well #6	GW	3	Entry Point	EP	19155 MR005	7/31/2013 201308010397AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	46120 Well #6	GW	3	Entry Point	EP	19155 MR005	7/31/2013 201308010397AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	46120 Well #6	GW	3	Entry Point	EP	19155 MR005	7/31/2013 201308010397AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	46120 Well #6	GW	3	Entry Point	EP	19155 MR005	7/31/2013 201308010397AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	46120 Well #6	GW	3	Entry Point	EP	19155 MR005	7/31/2013 201308010397AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0040011	Avon Water Co.	L	46120 Well #6	GW	3	Entry Point	EP	19155 MR005	7/31/2013 201308010397AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0330011	Cromwell Fire District Water Department	L	90001 Treatment Plant	GW	SP1	Entry Point	EP	20184 MR001	5/19/2015 3245262	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0330011	Cromwell Fire District Water Department	L	90001 Treatment Plant	GW	SP1	Entry Point	EP	20184 MR001	5/19/2015 3245262	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0330011	Cromwell Fire District Water Department	L	90001 Treatment Plant	GW	SP1	Entry Point	EP	20184 MR001	5/19/2015 3245262	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0330011	Cromwell Fire District Water Department	L	90001 Treatment Plant	GW	SP1	Entry Point	EP	20184 MR001	5/19/2015 3245262	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0330011	Cromwell Fire District Water Department	L	90001 Treatment Plant	GW	SP1	Entry Point	EP	20184 MR001	5/19/2015 3245262	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0330011	Cromwell Fire District Water Department	L	90001 Treatment Plant	GW	SP1	Entry Point	EP	20184 MR001	5/19/2015 3245262	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0330011	Cromwell Fire District Water Department	L	90001 Treatment Plant	GW	SP1	Entry Point	EP	20184 MR001	11/13/2014 3139462	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0330011	Cromwell Fire District Water Department	L	90001 Treatment Plant	GW	SP1	Entry Point	EP	20184 MR001	11/13/2014 3139462	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0330011	Cromwell Fire District Water Department	L	90001 Treatment Plant	GW	SP1	Entry Point	EP	20184 MR001	11/13/2014 3139462	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0330011	Cromwell Fire District Water Department	L	90001 Treatment Plant	GW	SP1	Entry Point	EP	20184 MR001	11/13/2014 3139462	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0330011	Cromwell Fire District Water Department	L	90001 Treatment Plant	GW	SP1	Entry Point	EP	20184 MR001	11/13/2014 3139462	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0330011	Cromwell Fire District Water Department	L	90001 Treatment Plant	GW	SP1	Entry Point	EP	20184 MR001	11/13/2014 3139462	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48253 Aquarion - Stamford Intertie	SW	EP002	Post Rd Station	EP	20389 MR002	7/15/2014 201407160543AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48253 Aquarion - Stamford Intertie	SW	EP002	Post Rd Station	EP	20389 MR002	7/15/2014 201407160543AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48253 Aquarion - Stamford Intertie	SW	EP002	Post Rd Station	EP	20389 MR002	7/15/2014 201407160543AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48253 Aquarion - Stamford Intertie	SW	EP002	Post Rd Station	EP	20389 MR002	7/15/2014 201407160543AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48253 Aquarion - Stamford Intertie	SW	EP002	Post Rd Station	EP	20389 MR002	7/15/2014 201407160543AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48253 Aquarion - Stamford Intertie	SW	EP002	Post Rd Station	EP	20389 MR002	7/15/2014 201407160543AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48251 Aquarion - Main Intertie	SW	EP001	Hollow Tree Ridge Rd SS	EP	20389 MR001	10/14/2014 201410150090AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48251 Aquarion - Main Intertie	SW	EP001	Hollow Tree Ridge Rd SS	EP	20389 MR001	4/1/2015 201504020187AM	PFNA	0.02 EPA 537	<	SE4	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48251 Aquarion - Main Intertie	SW	EP001	Hollow Tree Ridge Rd SS	EP	20389 MR001	4/1/2015 201504020187AM	PFHxS	0.03 EPA 537	<	SE4	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48251 Aquarion - Main Intertie	SW	EP001	Hollow Tree Ridge Rd SS	EP	20389 MR001	4/1/2015 201504020187AM	PFHpA	0.01 EPA 537	<	SE4	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48251 Aquarion - Main Intertie	SW	EP001	Hollow Tree Ridge Rd SS	EP	20389 MR001	4/1/2015 201504020187AM	PFBS	0.09 EPA 537	<	SE4	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48251 Aquarion - Main Intertie	SW	EP001	Hollow Tree Ridge Rd SS	EP	20389 MR001	10/14/2014 201410150090AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48251 Aquarion - Main Intertie	SW	EP001	Hollow Tree Ridge Rd SS	EP	20389 MR001	10/14/2014 201410150090AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48251 Aquarion - Main Intertie	SW	EP001	Hollow Tree Ridge Rd SS	EP	20389 MR001	10/14/2014 201410150090AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48251 Aquarion - Main Intertie	SW	EP001	Hollow Tree Ridge Rd SS	EP	20389 MR001	10/14/2014 201410150090AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48251 Aquarion - Main Intertie	SW	EP001	Hollow Tree Ridge Rd SS	EP	20389 MR001	10/14/2014 201410150090AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48253 Aquarion - Stamford Intertie	SW	EP002	Post Rd Station	EP	20389 MR002	4/1/2015 201504020167AM	PFNA	0.02 EPA 537	<	SE4	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48253 Aquarion - Stamford Intertie	SW	EP002	Post Rd Station	EP	20389 MR002	4/1/2015 201504020167AM	PFOS	0.04 EPA 537	<	SE4	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48253 Aquarion - Stamford Intertie	SW	EP002	Post Rd Station	EP	20389 MR002	1/14/2015 201501150515AM	PFOA	0.02 EPA 537	<	SE3	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48253 Aquarion - Stamford Intertie	SW	EP002	Post Rd Station	EP	20389 MR002	1/14/2015 201501150515AM	PFNA	0.02 EPA 537	<	SE3	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48253 Aquarion - Stamford Intertie	SW	EP002	Post Rd Station	EP	20389 MR002	1/14/2015 201501150515AM	PFHxS	0.03 EPA 537	<	SE3	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48253 Aquarion - Stamford Intertie	SW	EP002	Post Rd Station	EP	20389 MR002	1/14/2015 201501150515AM	PFHpA	0.01 EPA 537	<	SE3	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48253 Aquarion - Stamford Intertie	SW	EP002	Post Rd Station	EP	20389 MR002	1/14/2015 201501150515AM	PFBS	0.09 EPA 537	<	SE3	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48253 Aquarion - Stamford Intertie	SW	EP002	Post Rd Station	EP	20389 MR002	4/1/2015 201504020167AM	PFHpA	0.01 EPA 537	<	SE4	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48253 Aquarion - Stamford Intertie	SW	EP002	Post Rd Station	EP	20389 MR002	1/14/2015 201501150515AM	PFOS	0.04 EPA 537	<	SE3	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48253 Aquarion - Stamford Intertie	SW	EP002	Post Rd Station	EP	20389 MR002	4/1/2015 201504020167AM	PFHxS	0.03 EPA 537	<	SE4	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48253 Aquarion - Stamford Intertie	SW	EP002	Post Rd Station	EP	20389 MR002	4/1/2015 201504020167AM	PFOA	0.02 EPA 537	<	SE4	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48253 Aquarion - Stamford Intertie	SW	EP002	Post Rd Station	EP	20389 MR002	4/1/2015 201504020167AM	PFBS	0.09 EPA 537	<	SE4	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48251 Aquarion - Main Intertie	SW	EP001	Hollow Tree Ridge Rd SS	EP	20389 MR001	1/14/2015 201501150658AM	PFHxS	0.03 EPA 537	<	SE3	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48251 Aquarion - Main Intertie	SW	EP001	Hollow Tree Ridge Rd SS	EP	20389 MR001	1/14/2015 201501150658AM	PFBS	0.09 EPA 537	<	SE3	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48251 Aquarion - Main Intertie	SW	EP001	Hollow Tree Ridge Rd SS	EP	20389 MR001	1/14/2015 201501150658AM	PFHpA	0.01 EPA 537	<	SE3	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48251 Aquarion - Main Intertie	SW	EP001	Hollow Tree Ridge Rd SS	EP	20389 MR001	1/14/2015 201501150658AM	PFNA	0.02 EPA 537	<	SE3	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48251 Aquarion - Main Intertie	SW	EP001	Hollow Tree Ridge Rd SS	EP	20389 MR001	4/1/2015 201504020187AM	PFOS	0.04 EPA 537	<	SE4	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48251 Aquarion - Main Intertie	SW	EP001	Hollow Tree Ridge Rd SS	EP	20389 MR001	4/1/2015 201504020187AM	PFOA	0.02 EPA 537	<	SE4	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48251 Aquarion - Main Intertie	SW	EP001	Hollow Tree Ridge Rd SS	EP	20389 MR001	1/14/2015 201501150658AM	PFOS	0.04 EPA 537	<	SE3	AM	1 CT

CT0350011	Aquarion Water Co. of CT - Noroton	L	48251 Aquarion - Main Intertie	SW	EP001	Hollow Tree Ridge Rd SS	EP	20389 MR001	7/15/2014 201407160486AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48251 Aquarion - Main Intertie	SW	EP001	Hollow Tree Ridge Rd SS	EP	20389 MR001	7/15/2014 201407160486AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48251 Aquarion - Main Intertie	SW	EP001	Hollow Tree Ridge Rd SS	EP	20389 MR001	7/15/2014 201407160486AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48251 Aquarion - Main Intertie	SW	EP001	Hollow Tree Ridge Rd SS	EP	20389 MR001	1/14/2015 201501150658AM	PFOA	0.02 EPA 537	<	SE3	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48251 Aquarion - Main Intertie	SW	EP001	Hollow Tree Ridge Rd SS	EP	20389 MR001	7/15/2014 201407160486AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48251 Aquarion - Main Intertie	SW	EP001	Hollow Tree Ridge Rd SS	EP	20389 MR001	7/15/2014 201407160486AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0350011	Aquarion Water Co. of CT - Noroton	L	48251 Aquarion - Main Intertie	SW	EP001	Hollow Tree Ridge Rd SS	EP	20389 MR001	7/15/2014 201407160486AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0450011	East Lyme Water & Sewer Commission	L	47254 Well 6	GW	3	Well 6 EPTDS	EP	20765 MR001	5/27/2015 35191409001AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0450011	East Lyme Water & Sewer Commission	L	47254 Well 6	GW	3	Well 6 EPTDS	EP	20765 MR001	5/27/2015 35191409001AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0450011	East Lyme Water & Sewer Commission	L	47254 Well 6	GW	3	Well 6 EPTDS	EP	20765 MR001	5/27/2015 35191409001AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0450011	East Lyme Water & Sewer Commission	L	47254 Well 6	GW	3	Well 6 EPTDS	EP	20765 MR001	5/27/2015 35191409001AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0450011	East Lyme Water & Sewer Commission	L	47254 Well 6	GW	3	Well 6 EPTDS	EP	20765 MR001	5/27/2015 35191409001AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0450011	East Lyme Water & Sewer Commission	L	47254 Well 6	GW	3	Well 6 EPTDS	EP	20765 MR001	5/27/2015 35191409001AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT1520071	Waterford WPCA	L	24283 New London Water Intertie	SW	5	EPTDS from New London Water	EP	35912 MR001	4/8/2015 3220972	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT1520071	Waterford WPCA	L	24283 New London Water Intertie	SW	5	EPTDS from New London Water	EP	35912 MR001	4/8/2015 3220972	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT1520071	Waterford WPCA	L	24283 New London Water Intertie	SW	5	EPTDS from New London Water	EP	35912 MR001	4/8/2015 3220972	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT1520071	Waterford WPCA	L	24283 New London Water Intertie	SW	5	EPTDS from New London Water	EP	35912 MR001	4/8/2015 3220972	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT1520071	Waterford WPCA	L	24283 New London Water Intertie	SW	5	EPTDS from New London Water	EP	35912 MR001	4/8/2015 3220972	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT1520071	Waterford WPCA	L	24283 New London Water Intertie	SW	5	EPTDS from New London Water	EP	35912 MR001	4/8/2015 3220972	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT1520071	Waterford WPCA	L	24283 New London Water Intertie	SW	5	EPTDS from New London Water	EP	35912 MR001	10/7/2015 3336898	PFOA	0.02 EPA 537	<	SE4	AM	1 CT
CT1520071	Waterford WPCA	L	24283 New London Water Intertie	SW	5	EPTDS from New London Water	EP	35912 MR001	10/7/2015 3336898	PFOS	0.04 EPA 537	<	SE4	AM	1 CT
CT1520071	Waterford WPCA	L	24283 New London Water Intertie	SW	5	EPTDS from New London Water	EP	35912 MR001	1/21/2015 3174589	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT1520071	Waterford WPCA	L	24283 New London Water Intertie	SW	5	EPTDS from New London Water	EP	35912 MR001	1/21/2015 3174589	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT1520071	Waterford WPCA	L	24283 New London Water Intertie	SW	5	EPTDS from New London Water	EP	35912 MR001	1/21/2015 3174589	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT1520071	Waterford WPCA	L	24283 New London Water Intertie	SW	5	EPTDS from New London Water	EP	35912 MR001	1/21/2015 3174589	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT1520071	Waterford WPCA	L	24283 New London Water Intertie	SW	5	EPTDS from New London Water	EP	35912 MR001	1/21/2015 3174589	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT1520071	Waterford WPCA	L	24283 New London Water Intertie	SW	5	EPTDS from New London Water	EP	35912 MR001	10/7/2015 3336898	PFHpA	0.01 EPA 537	<	SE4	AM	1 CT
CT1520071	Waterford WPCA	L	24283 New London Water Intertie	SW	5	EPTDS from New London Water	EP	35912 MR001	1/21/2015 3174589	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT1520071	Waterford WPCA	L	24283 New London Water Intertie	SW	5	EPTDS from New London Water	EP	35912 MR001	10/7/2015 3336898	PFBS	0.09 EPA 537	<	SE4	AM	1 CT
CT1520071	Waterford WPCA	L	24283 New London Water Intertie	SW	5	EPTDS from New London Water	EP	35912 MR001	10/7/2015 3336898	PFNA	0.02 EPA 537	<	SE4	AM	1 CT
CT1520071	Waterford WPCA	L	24283 New London Water Intertie	SW	5	EPTDS from New London Water	EP	35912 MR001	10/7/2015 3336898	PFHxS	0.03 EPA 537	<	SE4	AM	1 CT
CT1520071	Waterford WPCA	L	24283 New London Water Intertie	SW	5	EPTDS from New London Water	EP	35912 MR001	7/9/2015 3277164	PFOS	0.04 EPA 537	<	SE3	AM	1 CT
CT1520071	Waterford WPCA	L	24283 New London Water Intertie	SW	5	EPTDS from New London Water	EP	35912 MR001	7/9/2015 3277164	PFNA	0.02 EPA 537	<	SE3	AM	1 CT
CT1520071	Waterford WPCA	L	24283 New London Water Intertie	SW	5	EPTDS from New London Water	EP	35912 MR001	7/9/2015 3277164	PFHxS	0.03 EPA 537	<	SE3	AM	1 CT
CT1520071	Waterford WPCA	L	24283 New London Water Intertie	SW	5	EPTDS from New London Water	EP	35912 MR001	7/9/2015 3277164	PFHpA	0.01 EPA 537	<	SE3	AM	1 CT
CT1520071	Waterford WPCA	L	24283 New London Water Intertie	SW	5	EPTDS from New London Water	EP	35912 MR001	7/9/2015 3277164	PFBS	0.09 EPA 537	<	SE3	AM	1 CT
CT1520071	Waterford WPCA	L	24283 New London Water Intertie	SW	5	EPTDS from New London Water	EP	35912 MR001	7/9/2015 3277164	PFOA	0.02 EPA 537	<	SE3	AM	1 CT
CT1630011	Windham Waterworks	L	36586 Willimantic Water Purification Plant	SW	5	Entry Point	EP	24463 MR001	2/11/2015 3186056	PFHpA	0.01 EPA 537	<	SE3	AM	1 CT
CT1630011	Windham Waterworks	L	36586 Willimantic Water Purification Plant	SW	5	Entry Point	EP	24463 MR001	2/11/2015 3186056	PFOS	0.04 EPA 537	<	SE3	AM	1 CT
CT1630011	Windham Waterworks	L	36586 Willimantic Water Purification Plant	SW	5	Entry Point	EP	24463 MR001	2/11/2015 3186056	PFBS	0.09 EPA 537	<	SE3	AM	1 CT
CT1630011	Windham Waterworks	L	36586 Willimantic Water Purification Plant	SW	5	Entry Point	EP	24463 MR001	2/11/2015 3186056	PFHxS	0.03 EPA 537	<	SE3	AM	1 CT
CT1630011	Windham Waterworks	L	36586 Willimantic Water Purification Plant	SW	5	Entry Point	EP	24463 MR001	2/11/2015 3186056	PFNA	0.02 EPA 537	<	SE3	AM	1 CT
CT1630011	Windham Waterworks	L	36586 Willimantic Water Purification Plant	SW	5	Entry Point	EP	24463 MR001	10/6/2014 3117933	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT1630011	Windham Waterworks	L	36586 Willimantic Water Purification Plant	SW	5	Entry Point	EP	24463 MR001	10/6/2014 3117933	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT1630011	Windham Waterworks	L	36586 Willimantic Water Purification Plant	SW	5	Entry Point	EP	24463 MR001	10/6/2014 3117933	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT1630011	Windham Waterworks	L	36586 Willimantic Water Purification Plant	SW	5	Entry Point	EP	24463 MR001	10/6/2014 3117933	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT1630011	Windham Waterworks	L	36586 Willimantic Water Purification Plant	SW	5	Entry Point	EP	24463 MR001	10/6/2014 3117933	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT1630011	Windham Waterworks	L	36586 Willimantic Water Purification Plant	SW	5	Entry Point	EP	24463 MR001	10/6/2014 3117933	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT1630011	Windham Waterworks	L	36586 Willimantic Water Purification Plant	SW	5	Entry Point	EP	24463 MR001	5/20/2015 3247220	PFOS	0.04 EPA 537	<	SE4	AM	1 CT
CT1630011	Windham Waterworks	L	36586 Willimantic Water Purification Plant	SW	5	Entry Point	EP	24463 MR001	2/11/2015 3186056	PFOA	0.02 EPA 537	<	SE3	AM	1 CT
CT1630011	Windham Waterworks	L	36586 Willimantic Water Purification Plant	SW	5	Entry Point	EP	24463 MR001	5/20/2015 3247220	PFOA	0.02 EPA 537	<	SE4	AM	1 CT
CT1630011	Windham Waterworks	L	36586 Willimantic Water Purification Plant	SW	5	Entry Point	EP	24463 MR001	5/20/2015 3247220	PFNA	0.02 EPA 537	<	SE4	AM	1 CT
CT1630011	Windham Waterworks	L	36586 Willimantic Water Purification Plant	SW	5	Entry Point	EP	24463 MR001	5/20/2015 3247220	PFHxS	0.03 EPA 537	<	SE4	AM	1 CT
CT1630011	Windham Waterworks	L	36586 Willimantic Water Purification Plant	SW	5	Entry Point	EP	24463 MR001	5/20/2015 3247220	PFHpA	0.01 EPA 537	<	SE4	AM	1 CT
CT1630011	Windham Waterworks	L	36586 Willimantic Water Purification Plant	SW	5	Entry Point	EP	24463 MR001	5/20/2015 3247220	PFBS	0.09 EPA 537	<	SE4	AM	1 CT
CT1630011	Windham Waterworks	L	36586 Willimantic Water Purification Plant	SW	5	Entry Point	EP	24463 MR001	11/17/2014 3140527	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT1630011	Windham Waterworks	L	36586 Willimantic Water Purification Plant	SW	5	Entry Point	EP	24463 MR001	11/17/2014 3140527	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT1630011	Windham Waterworks	L	36586 Willimantic Water Purification Plant	SW	5	Entry Point	EP	24463 MR001	11/17/2014 3140527	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT1630011	Windham Waterworks	L	36586 Willimantic Water Purification Plant	SW	5	Entry Point	EP	24463 MR001	11/17/2014 3140527	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT1630011	Windham Waterworks	L	36586 Willimantic Water Purification Plant	SW	5	Entry Point	EP	24463 MR001	11/17/2014 3140527	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT1630011	Windham Waterworks	L	36586 Willimantic Water Purification Plant	SW	5	Entry Point	EP	24463 MR001	11/17/2014 3140527	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0170011	Bristol Water Department	L	46056 Well 2A	GW	2A	EPTDS from Well 2A	EP	99002 MR005	7/7/2014 201407080383AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0170011	Bristol Water Department	L	46056 Well 2A	GW	2A	EPTDS from Well 2A	EP	99002 MR005	7/7/2014 201407080383AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0170011	Bristol Water Department	L	46056 Well 2A	GW	2A	EPTDS from Well 2A	EP	99002 MR005	7/7/2014 201407080383AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0170011	Bristol Water Department	L	46056 Well 2A	GW	2A	EPTDS from Well 2A	EP	99002 MR005	7/7/2014 201407080383AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0170011	Bristol Water Department	L	46055 Wells 3, 4, & 5	GW	3	EPTDS from Wells 3, 4 & 5	EP	99001 MR004	7/7/2014 201407080356AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0170011	Bristol Water Department	L	46055 Wells 3, 4, & 5	GW	3	EPTDS from Wells 3, 4 & 5	EP	99001 MR004	7/7/2014 201407080356AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0170011	Bristol Water Department	L	46055 Wells 3, 4, & 5	GW	3	EPTDS from Wells 3, 4 & 5	EP	99001 MR004	7/7/2014 201407080356AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0170011	Bristol Water Department	L	46055 Wells 3, 4, & 5	GW	3	EPTDS from Wells 3, 4 & 5	EP	99001 MR004	7/7/2014 201407080356AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0170011	Bristol Water Department	L	46055 Wells 3, 4, & 5	GW	3	EPTDS from Wells 3, 4 & 5	EP	99001 MR004	7/7/2014 201407080356AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0170011	Bristol Water Department	L	46055 Wells 3, 4, & 5	GW	3	EPTDS from Wells 3, 4 & 5	EP	99001 MR004	7/7/2014 201407080356AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0170011	Bristol Water Department	L	46056 Well 2A	GW	2A	EPTDS from Well 2A	EP	99002 MR005	7/7/2014 201407080383AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0170011	Bristol Water Department	L	46056 Well 2A	GW	2A	EPTDS from Well 2A	EP	99002 MR005	7/7/2014 201407080383AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0170011	Bristol Water Department	L	46056 Well 2A	GW	2A	EPTDS from Well 2A	EP	99002 MR005	1/6/2014 201401070098AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0170011	Bristol Water Department	L	46056 Well 2A	GW	2A	EPTDS from Well 2A	EP	99002 MR005	1/6/2014 201401070098AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0170011	Bristol Water Department	L	46056 Well 2A	GW	2A	EPTDS from Well 2A	EP	99002 MR005	1/6/2014 201401070098AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0170011	Bristol Water Department	L	46056 Well 2A	GW	2A	EPTDS from Well 2A	EP	99002 MR005	1/6/2014 201401070098AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0170011	Bristol Water Department	L	46056 Well 2A	GW	2A	EPTDS from Well 2A	EP	99002 MR005	1/6/2014 201401070098AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0170011	Bristol Water Department	L	46056 Well 2A	GW	2A	EPTDS from Well 2A	EP	99002 MR005	1/6/2014 201401070098AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0170011	Bristol Water Department	L	46053 Well 1	GW	3	EPTDS from Well 1	EP	99001 MR003	1/6/2014 201401070092AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0170011	Bristol Water Department	L	46053 Well 1	GW	3	EPTDS from Well 1	EP	99001 MR003	1/6/2014 201401070092AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0170011	Bristol Water Department	L	46053 Well 1	GW	3	EPTDS from Well 1	EP	99001 MR003	1/6/2014 201401070092AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0170011	Bristol Water Department	L	46053 Well 1	GW	3	EPTDS from Well 1	EP	99001 MR003	1/6/2014 201401070092AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0170011	Bristol Water Department	L	46053 Well 1	GW	3	EPTDS from Well 1	EP	99001 MR003	1/6/2014 201401070092AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0170011	Bristol Water Department	L	46053 Well 1	GW	3	EPTDS from Well 1	EP	99001 MR003	1/6/2014 201401070092AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0170011	Bristol Water Department	L	36228 Filter Plant 1	SW	5	EPTDS from Filter Plant 1	EP	19525 MR001	1/6/2014 201401070094AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0170011	Bristol Water Department	L	36228 Filter Plant 1	SW	5	EPTDS from Filter Plant 1	EP	19525 MR001	7/7/2014 201407090847AM	PFOS	0.04 EPA 537	<	SE3	AM	1 CT
CT0170011	Bristol Water Department	L	36228 Filter Plant 1	SW	5	EPTDS from Filter Plant 1	EP	19525 MR001	7/7/2014 201407090847AM	PFHpA	0.01 EPA 537	<	SE3	AM	1 CT
CT0170011	Bristol Water Department	L	36228 Filter Plant 1	SW	5	EPTDS from Filter Plant 1	EP	19525 MR001	7/7/2014 201407090847AM	PFHxS	0.03 EPA 537	<	SE3	AM	1 CT
CT0170011	Bristol Water Department	L	36228 Filter Plant 1	SW	5	EPTDS from Filter Plant 1	EP	19525 MR001	7/7/2014 201407090847AM	PFOA	0.02 EPA 537	<	SE3	AM	1 CT
CT0170011	Bristol Water Department	L	36228 Filter Plant 1	SW	5	EPTDS from Filter Plant 1	EP	19525 MR001	7/7/2014 201407090847AM	PFBS	0.09 EPA 537	<	SE3	AM	1 CT
CT0170011	Bristol Water Department	L	36228 Filter Plant 1	SW	5	EPTDS from Filter Plant 1	EP	19525 MR001	7/7/2014 201407090847AM	PFNA	0.02 EPA 537	<	SE3	AM	1 CT
CT0170011	Bristol Water Department	L	46055 Wells 3, 4, & 5	GW	3	EPTDS from Wells 3, 4 & 5	EP	99001 MR004	1/6/2014 201401070100AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0170011	Bristol Water Department	L	46055 Wells 3, 4, & 5	GW	3	EPTDS from Wells 3, 4 & 5	EP	99001 MR004	1/6/2014 201401070100AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0170011	Bristol Water Department	L	46055 Wells 3, 4, & 5	GW	3	EPTDS from Wells 3, 4 & 5	EP	99001 MR004	1/6/2014 201401070100AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0170011	Bristol Water Department	L	46055 Wells 3, 4, & 5	GW	3	EPTDS from Wells 3, 4 & 5	EP	99001 MR004	1/6/2014 201401070100AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0170011	Bristol Water Department	L	46055 Wells 3, 4, & 5	GW	3	EPTDS from Wells 3, 4 & 5	EP	99001 MR004	1/6/2014 201401070100AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0170011	Bristol Water Department	L	46055 Wells 3, 4, & 5	GW	3	EPTDS from Wells 3, 4 & 5	EP	99001 MR004	1/6/2014 201401070100AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0170011	Bristol Water Department	L	36228 Filter Plant 1	SW	5	EPTDS from Filter Plant 1	EP	19525 MR001	1/6/2014 201401070094AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0170011	Bristol Water Department	L	46053 Well 1	GW	3	EPTDS from Well 1	EP	99001 MR003	7/7/2014 201407080354AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0170011	Bristol Water Department	L	46053 Well 1	GW	3	EPTDS from Well 1	EP	99001 MR003	7/7/2014 201407080354AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0170011	Bristol Water Department	L	46053 Well 1	GW	3	EPTDS from Well 1	EP	99001 MR003	7/7/2014 201407080354AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0170011	Bristol Water Department	L	46053 Well 1	GW	3	EPTDS from Well 1	EP	99001 MR003	7/7/2014 201407080354AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0170011	Bristol Water Department	L	46053 Well 1	GW	3	EPTDS from Well 1	EP	99001 MR003	7/7/2014 201407080354AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0170011	Bristol Water Department	L	46053 Well 1	GW	3	EPTDS from Well 1	EP	99001 MR003	7/7/2014 201407080354AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0170011	Bristol Water Department	L	36228 Filter Plant 1	SW	5	EPTDS from Filter Plant 1	EP	19525 MR001	4/2/2014 201404030420AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0170011	Bristol Water Department	L	36228 Filter Plant 1	SW	5	EPTDS from Filter Plant 1	EP	19525 MR001	4/2/2014 201404030420AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0170011	Bristol Water Department	L	36228 Filter Plant 1	SW	5	EPTDS from Filter Plant 1	EP	19525 MR001	4/2/2014 201404030420AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0170011	Bristol Water Department	L	36228 Filter Plant 1	SW	5	EPTDS from Filter Plant 1	EP	19525 MR001	1/6/2014 201401070094AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0170011	Bristol Water Department	L	36228 Filter Plant 1	SW	5	EPTDS from Filter Plant 1	EP	19525 MR001	4/2/2014 201404030420AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0170011	Bristol Water Department	L	36228 Filter Plant 1	SW	5	EPTDS from Filter Plant 1	EP	19525 MR001	10/6/2014 201410070315AM	PFHpA	0.01 EPA 537	<	SE4	AM	1 CT
CT0170011	Bristol Water Department	L	36228 Filter Plant 1	SW	5	EPTDS from Filter Plant 1	EP	19525 MR001	1/6/2014 201401070094AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0170011	Bristol Water Department	L	36228 Filter Plant 1	SW	5	EPTDS from Filter Plant 1	EP	19525 MR001	1/6/2014 201401070094AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0170011	Bristol Water Department	L	36228 Filter Plant 1	SW	5	EPTDS from Filter Plant 1	EP	19525 MR001	1/6/2014 201401070094AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0170011	Bristol Water Department	L	36228 Filter Plant 1	SW	5	EPTDS from Filter Plant 1	EP	19525 MR001	10/6/2014 201410070315AM	PFHxS	0.03 EPA 537	<	SE4	AM	1 CT
CT0170011	Bristol Water Department	L	36228 Filter Plant 1	SW	5	EPTDS from Filter Plant 1	EP	19525 MR001	4/2/2014 201404030420AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0170011	Bristol Water Department	L	36228 Filter Plant 1	SW	5	EPTDS from Filter Plant 1	EP	19525 MR001	4/2/2014 201404030420AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0170011	Bristol Water Department	L	36228 Filter Plant 1	SW	5	EPTDS from Filter Plant 1	EP	19525 MR001	10/6/2014 201410070315AM	PFBS	0.09 EPA 537	<	SE4	AM	1 CT
CT0170011	Bristol Water Department	L	36228 Filter Plant 1	SW	5	EPTDS from Filter Plant 1	EP	19525 MR001	10/6/2014 201410070315AM	PFOS	0.04 EPA 537	<	SE4	AM	1 CT
CT0170011	Bristol Water Department	L	36228 Filter Plant 1	SW	5	EPTDS from Filter Plant 1	EP	19525 MR001	10/6/2014 201410070315AM	PFOA	0.02 EPA 537	<	SE4	AM	1 CT
CT0170011	Bristol Water Department	L	36228 Filter Plant 1	SW	5	EPTDS from Filter Plant 1	EP	19525 MR001	10/6/2014 201410070315AM	PFNA	0.02 EPA 537	<	SE4	AM	1 CT
CT0800011	Meriden Water Division	L	36396 Elmere Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR002	2/11/2014 2971668	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36396 Elmere Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR002	2/11/2014 2971668	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36396 Elmere Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR002	2/11/2014 2971668	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36396 Elmere Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR002	11/12/2014 3137935	PFBS	0.09 EPA 537	<	SE4	AM	1 CT
CT0800011	Meriden Water Division	L	36396 Elmere Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR002	11/12/2014 3137935	PFHpA	0.01 EPA 537	<	SE4	AM	1 CT

CT0800011	Meriden Water Division	L	36396 Elmere Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR002	11/12/2014 3137935	PFHxS	0.03 EPA 537	<	SE4	AM	1 CT
CT0800011	Meriden Water Division	L	36396 Elmere Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR002	11/12/2014 3137935	PFNA	0.02 EPA 537	<	SE4	AM	1 CT
CT0800011	Meriden Water Division	L	36396 Elmere Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR002	11/12/2014 3137935	PFOS	0.04 EPA 537	<	SE4	AM	1 CT
CT0800011	Meriden Water Division	L	36396 Elmere Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR002	2/11/2014 2971668	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36396 Elmere Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR002	11/12/2014 3137935	PFOA	0.02 EPA 537	<	SE4	AM	1 CT
CT0800011	Meriden Water Division	L	36396 Elmere Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR002	2/11/2014 2971668	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36396 Elmere Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR002	2/11/2014 2971668	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36396 Elmere Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR002	8/12/2014 3081382	PFOA	0.02 EPA 537	<	SE3	AM	1 CT
CT0800011	Meriden Water Division	L	36396 Elmere Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR002	8/12/2014 3081382	PFOS	0.04 EPA 537	<	SE3	AM	1 CT
CT0800011	Meriden Water Division	L	36396 Elmere Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR002	8/12/2014 3081382	PFHxS	0.03 EPA 537	<	SE3	AM	1 CT
CT0800011	Meriden Water Division	L	36396 Elmere Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR002	8/12/2014 3081382	PFNA	0.02 EPA 537	<	SE3	AM	1 CT
CT0800011	Meriden Water Division	L	36395 Merimere Water Treatment Plant	SW	5	Entry Point	EP	21944 MR002	8/14/2014 3083465	PFBS	0.09 EPA 537	<	SE3	AM	1 CT
CT0800011	Meriden Water Division	L	36395 Merimere Water Treatment Plant	SW	5	Entry Point	EP	21944 MR002	11/12/2014 3137924	PFHxS	0.03 EPA 537	<	SE4	AM	1 CT
CT0800011	Meriden Water Division	L	36395 Merimere Water Treatment Plant	SW	5	Entry Point	EP	21944 MR002	8/14/2014 3083465	PFHxS	0.03 EPA 537	<	SE3	AM	1 CT
CT0800011	Meriden Water Division	L	36395 Merimere Water Treatment Plant	SW	5	Entry Point	EP	21944 MR002	11/12/2014 3137924	PFHpA	0.01 EPA 537	<	SE4	AM	1 CT
CT0800011	Meriden Water Division	L	36395 Merimere Water Treatment Plant	SW	5	Entry Point	EP	21944 MR002	11/12/2014 3137924	PFOA	0.02 EPA 537	<	SE4	AM	1 CT
CT0800011	Meriden Water Division	L	36395 Merimere Water Treatment Plant	SW	5	Entry Point	EP	21944 MR002	11/12/2014 3137924	PFBS	0.09 EPA 537	<	SE4	AM	1 CT
CT0800011	Meriden Water Division	L	36395 Merimere Water Treatment Plant	SW	5	Entry Point	EP	21944 MR002	8/14/2014 3083465	PFHpA	0.01 EPA 537	<	SE3	AM	1 CT
CT0800011	Meriden Water Division	L	36395 Merimere Water Treatment Plant	SW	5	Entry Point	EP	21944 MR002	11/12/2014 3137924	PFOS	0.04 EPA 537	<	SE4	AM	1 CT
CT0800011	Meriden Water Division	L	36396 Elmere Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR002	5/14/2014 3026080	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36396 Elmere Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR002	5/14/2014 3026080	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36396 Elmere Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR002	5/14/2014 3026080	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36396 Elmere Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR002	5/14/2014 3026080	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36396 Elmere Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR002	5/14/2014 3026080	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36396 Elmere Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR002	5/14/2014 3026080	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36395 Merimere Water Treatment Plant	SW	5	Entry Point	EP	21944 MR002	8/14/2014 3083465	PFNA	0.02 EPA 537	<	SE3	AM	1 CT
CT0800011	Meriden Water Division	L	36395 Merimere Water Treatment Plant	SW	5	Entry Point	EP	21944 MR002	8/14/2014 3083465	PFOS	0.04 EPA 537	<	SE3	AM	1 CT
CT0800011	Meriden Water Division	L	36395 Merimere Water Treatment Plant	SW	5	Entry Point	EP	21944 MR002	8/14/2014 3083465	PFOA	0.02 EPA 537	<	SE3	AM	1 CT
CT0800011	Meriden Water Division	L	36397 Bradley Hubbard Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR004	12/16/2014 3157191	PFOA	0.02 EPA 537	<	SE4	AM	1 CT
CT0800011	Meriden Water Division	L	36397 Bradley Hubbard Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR004	12/16/2014 3157191	PFHxS	0.03 EPA 537	<	SE4	AM	1 CT
CT0800011	Meriden Water Division	L	36397 Bradley Hubbard Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR004	12/16/2014 3157191	PFOS	0.04 EPA 537	<	SE4	AM	1 CT
CT0800011	Meriden Water Division	L	36397 Bradley Hubbard Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR004	12/16/2014 3157191	PFNA	0.02 EPA 537	<	SE4	AM	1 CT
CT0800011	Meriden Water Division	L	36397 Bradley Hubbard Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR004	12/16/2014 3157191	PFBS	0.09 EPA 537	<	SE4	AM	1 CT
CT0800011	Meriden Water Division	L	36397 Bradley Hubbard Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR004	12/16/2014 3157191	PFHpA	0.01 EPA 537	<	SE4	AM	1 CT
CT0800011	Meriden Water Division	L	36398 Evansville Water Treatment Plant	GW	5	IESWTR - Entry Point	EP	99001 MR006	3/11/2014 2990228	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36398 Evansville Water Treatment Plant	GW	5	IESWTR - Entry Point	EP	99001 MR006	3/11/2014 2990228	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36398 Evansville Water Treatment Plant	GW	5	IESWTR - Entry Point	EP	99001 MR006	3/11/2014 2990228	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36398 Evansville Water Treatment Plant	GW	5	IESWTR - Entry Point	EP	99001 MR006	3/11/2014 2990228	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36398 Evansville Water Treatment Plant	GW	5	IESWTR - Entry Point	EP	99001 MR006	3/11/2014 2990228	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36393 Broad Brook Water Treatment Plant	SW	5	Entry Point	EP	21944 MR001	7/9/2013 2854694	PFBS	0.09 EPA 537	<	SE3	AM	1 CT
CT0800011	Meriden Water Division	L	36398 Evansville Water Treatment Plant	GW	5	IESWTR - Entry Point	EP	99001 MR006	9/9/2014 3100397	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36398 Evansville Water Treatment Plant	GW	5	IESWTR - Entry Point	EP	99001 MR006	9/9/2014 3100397	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36398 Evansville Water Treatment Plant	GW	5	IESWTR - Entry Point	EP	99001 MR006	9/9/2014 3100397	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36398 Evansville Water Treatment Plant	GW	5	IESWTR - Entry Point	EP	99001 MR006	9/9/2014 3100397	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36398 Evansville Water Treatment Plant	GW	5	IESWTR - Entry Point	EP	99001 MR006	9/9/2014 3100397	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36398 Evansville Water Treatment Plant	GW	5	IESWTR - Entry Point	EP	99001 MR006	9/9/2014 3100397	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36397 Bradley Hubbard Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR004	5/14/2014 3026107	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36397 Bradley Hubbard Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR004	5/14/2014 3026107	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36397 Bradley Hubbard Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR004	5/14/2014 3026107	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36397 Bradley Hubbard Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR004	5/14/2014 3026107	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36397 Bradley Hubbard Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR004	5/14/2014 3026107	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36397 Bradley Hubbard Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR004	2/11/2014 2971743	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36397 Bradley Hubbard Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR004	2/11/2014 2971743	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36397 Bradley Hubbard Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR004	2/11/2014 2971743	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36397 Bradley Hubbard Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR004	5/14/2014 3026107	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36396 Elmere Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR002	8/12/2014 3081382	PFBS	0.09 EPA 537	<	SE3	AM	1 CT
CT0800011	Meriden Water Division	L	36396 Elmere Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR002	8/12/2014 3081382	PFHpA	0.01 EPA 537	<	SE3	AM	1 CT
CT0800011	Meriden Water Division	L	36397 Bradley Hubbard Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR004	2/11/2014 2971743	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36397 Bradley Hubbard Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR004	8/14/2014 3083497	PFHpA	0.01 EPA 537	<	SE3	AM	1 CT
CT0800011	Meriden Water Division	L	36397 Bradley Hubbard Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR004	8/14/2014 3083497	PFHxS	0.03 EPA 537	<	SE3	AM	1 CT
CT0800011	Meriden Water Division	L	36397 Bradley Hubbard Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR004	8/14/2014 3083497	PFNA	0.02 EPA 537	<	SE3	AM	1 CT
CT0800011	Meriden Water Division	L	36397 Bradley Hubbard Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR004	8/14/2014 3083497	PFOS	0.04 EPA 537	<	SE3	AM	1 CT
CT0800011	Meriden Water Division	L	36397 Bradley Hubbard Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR004	8/14/2014 3083497	PFBS	0.09 EPA 537	<	SE3	AM	1 CT
CT0800011	Meriden Water Division	L	36397 Bradley Hubbard Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR004	8/14/2014 3083497	PFOA	0.02 EPA 537	<	SE3	AM	1 CT
CT0800011	Meriden Water Division	L	36397 Bradley Hubbard Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR004	2/11/2014 2971743	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36397 Bradley Hubbard Water Treatment Plant	SW	5	IESWTR - Entry Point	EP	21944 MR004	2/11/2014 2971743	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36393 Broad Brook Water Treatment Plant	SW	5	Entry Point	EP	21944 MR001	4/9/2013 2807816	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36393 Broad Brook Water Treatment Plant	SW	5	Entry Point	EP	21944 MR001	4/9/2013 2807816	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36393 Broad Brook Water Treatment Plant	SW	5	Entry Point	EP	21944 MR001	4/9/2013 2807816	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36393 Broad Brook Water Treatment Plant	SW	5	Entry Point	EP	21944 MR001	4/9/2013 2807816	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36393 Broad Brook Water Treatment Plant	SW	5	Entry Point	EP	21944 MR001	4/9/2013 2807816	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36393 Broad Brook Water Treatment Plant	SW	5	Entry Point	EP	21944 MR001	4/9/2013 2807816	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36393 Broad Brook Water Treatment Plant	SW	5	Entry Point	EP	21944 MR001	1/23/2013 2768823	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36393 Broad Brook Water Treatment Plant	SW	5	Entry Point	EP	21944 MR001	7/9/2013 2854694	PFOA	0.02 EPA 537	<	SE3	AM	1 CT
CT0800011	Meriden Water Division	L	36393 Broad Brook Water Treatment Plant	SW	5	Entry Point	EP	21944 MR001	7/9/2013 2854694	PFOS	0.04 EPA 537	<	SE3	AM	1 CT
CT0800011	Meriden Water Division	L	36393 Broad Brook Water Treatment Plant	SW	5	Entry Point	EP	21944 MR001	7/9/2013 2854694	PFHxS	0.03 EPA 537	<	SE3	AM	1 CT
CT0800011	Meriden Water Division	L	36393 Broad Brook Water Treatment Plant	SW	5	Entry Point	EP	21944 MR001	7/9/2013 2854694	PFNA	0.02 EPA 537	<	SE3	AM	1 CT
CT0800011	Meriden Water Division	L	36393 Broad Brook Water Treatment Plant	SW	5	Entry Point	EP	21944 MR001	7/9/2013 2854694	PFHpA	0.01 EPA 537	<	SE3	AM	1 CT
CT0800011	Meriden Water Division	L	36393 Broad Brook Water Treatment Plant	SW	5	Entry Point	EP	21944 MR001	1/23/2013 2768823	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36393 Broad Brook Water Treatment Plant	SW	5	Entry Point	EP	21944 MR001	1/23/2013 2768823	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36393 Broad Brook Water Treatment Plant	SW	5	Entry Point	EP	21944 MR001	1/23/2013 2768823	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36393 Broad Brook Water Treatment Plant	SW	5	Entry Point	EP	21944 MR001	1/23/2013 2768823	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36393 Broad Brook Water Treatment Plant	SW	5	Entry Point	EP	21944 MR001	1/23/2013 2768823	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36395 Merimere Water Treatment Plant	SW	5	Entry Point	EP	21944 MR002	5/14/2014 3026049	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36395 Merimere Water Treatment Plant	SW	5	Entry Point	EP	21944 MR002	5/14/2014 3026049	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36395 Merimere Water Treatment Plant	SW	5	Entry Point	EP	21944 MR002	5/14/2014 3026049	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36395 Merimere Water Treatment Plant	SW	5	Entry Point	EP	21944 MR002	5/14/2014 3026049	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36394 Platt Lincoln Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR005	3/12/2014 2990245	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36394 Platt Lincoln Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR005	3/12/2014 2990245	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36394 Platt Lincoln Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR005	3/12/2014 2990245	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36395 Merimere Water Treatment Plant	SW	5	Entry Point	EP	21944 MR002	5/14/2014 3026049	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36394 Platt Lincoln Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR005	3/12/2014 2990245	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36394 Platt Lincoln Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR005	3/12/2014 2990245	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36395 Merimere Water Treatment Plant	SW	5	Entry Point	EP	21944 MR002	11/12/2014 3137924	PFNA	0.02 EPA 537	<	SE4	AM	1 CT
CT0800011	Meriden Water Division	L	36395 Merimere Water Treatment Plant	SW	5	Entry Point	EP	21944 MR002	2/11/2014 2971705	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36395 Merimere Water Treatment Plant	SW	5	Entry Point	EP	21944 MR002	5/14/2014 3026049	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36395 Merimere Water Treatment Plant	SW	5	Entry Point	EP	21944 MR002	2/11/2014 2971705	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36395 Merimere Water Treatment Plant	SW	5	Entry Point	EP	21944 MR002	2/11/2014 2971705	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36395 Merimere Water Treatment Plant	SW	5	Entry Point	EP	21944 MR002	2/11/2014 2971705	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36395 Merimere Water Treatment Plant	SW	5	Entry Point	EP	21944 MR002	2/11/2014 2971705	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36395 Merimere Water Treatment Plant	SW	5	Entry Point	EP	21944 MR002	2/11/2014 2971705	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36393 Broad Brook Water Treatment Plant	SW	5	Entry Point	EP	21944 MR001	10/8/2013 2909985	PFHpA	0.01 EPA 537	<	SE4	AM	1 CT
CT0800011	Meriden Water Division	L	36393 Broad Brook Water Treatment Plant	SW	5	Entry Point	EP	21944 MR001	10/8/2013 2909985	PFHxS	0.03 EPA 537	<	SE4	AM	1 CT
CT0800011	Meriden Water Division	L	36393 Broad Brook Water Treatment Plant	SW	5	Entry Point	EP	21944 MR001	10/8/2013 2909985	PFNA	0.02 EPA 537	<	SE4	AM	1 CT
CT0800011	Meriden Water Division	L	36393 Broad Brook Water Treatment Plant	SW	5	Entry Point	EP	21944 MR001	10/8/2013 2909985	PFBS	0.09 EPA 537	<	SE4	AM	1 CT
CT0800011	Meriden Water Division	L	36393 Broad Brook Water Treatment Plant	SW	5	Entry Point	EP	21944 MR001	10/8/2013 2909985	PFOA	0.02 EPA 537	<	SE4	AM	1 CT
CT0800011	Meriden Water Division	L	36393 Broad Brook Water Treatment Plant	SW	5	Entry Point	EP	21944 MR001	10/8/2013 2909985	PFOS	0.04 EPA 537	<	SE4	AM	1 CT
CT0800011	Meriden Water Division	L	36394 Platt Lincoln Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR005	3/12/2014 2990245	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36394 Platt Lincoln Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR005	9/9/2014 3100412	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36394 Platt Lincoln Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR005	9/9/2014 3100412	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36394 Platt Lincoln Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR005	9/9/2014 3100412	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36394 Platt Lincoln Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR005	9/9/2014 3100412	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36394 Platt Lincoln Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR005	9/9/2014 3100412	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36394 Platt Lincoln Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR005	9/9/2014 3100412	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36400 Columbus Park Well Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR008	9/9/2014 3100343	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36400 Columbus Park Well Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR008	9/9/2014 3100343	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36400 Columbus Park Well Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR008	9/9/2014 3100343	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36400 Columbus Park Well Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR008	9/9/2014 3100343	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36400 Columbus Park Well Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR008	9/9/2014 3100343	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36400 Columbus Park Well Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR008	3/11/2014 2990047	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36400 Columbus Park Well Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR008	9/9/2014 3100343	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36399 Mule Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR007	9/9/2014 3100368	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36399 Mule Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR007	9/9/2014 3100368	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36399 Mule Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR007	9/9/2014 3100368	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36399 Mule Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR007	9/9/2014 3100368	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36399 Mule Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR007	9/9/2014 3100368	PFBS	0.09 EPA 537	<	SE2	AM	1 CT

CT0800011	Meriden Water Division	L	36398 Evansville Water Treatment Plant	GW	5	IESWTR - Entry Point	EP	99001 MR006	3/11/2014 2990228	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36400 Columbus Park Well Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR008	3/11/2014 2990047	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36399 Mule Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR007	9/9/2014 3100368	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0800011	Meriden Water Division	L	36400 Columbus Park Well Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR008	3/11/2014 2990047	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36400 Columbus Park Well Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR008	3/11/2014 2990047	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36400 Columbus Park Well Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR008	3/11/2014 2990047	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36400 Columbus Park Well Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR008	3/11/2014 2990047	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36399 Mule Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR007	3/11/2014 2990125	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36399 Mule Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR007	3/11/2014 2990125	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36399 Mule Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR007	3/11/2014 2990125	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36399 Mule Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR007	3/11/2014 2990125	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36399 Mule Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR007	3/11/2014 2990125	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0800011	Meriden Water Division	L	36399 Mule Treatment Station	GW	5	IESWTR - Entry Point	EP	99001 MR007	3/11/2014 2990125	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0890011	New Britain Water Department	L	36427 Shuttle Meadow WTP	SW	5	Entry Point	EP	22356 MR001	8/18/2015 200422986	PFOA	0.02 EPA 537	<	SE4	AM	1 CT
CT0890011	New Britain Water Department	L	36427 Shuttle Meadow WTP	SW	5	Entry Point	EP	22356 MR001	5/21/2015 200417249	PFOA	0.02 EPA 537	<	SE3	AM	1 CT
CT0890011	New Britain Water Department	L	36427 Shuttle Meadow WTP	SW	5	Entry Point	EP	22356 MR001	8/18/2015 200422986	PFOS	0.04 EPA 537	<	SE4	AM	1 CT
CT0890011	New Britain Water Department	L	36427 Shuttle Meadow WTP	SW	5	Entry Point	EP	22356 MR001	8/18/2015 200422986	PFHxS	0.03 EPA 537	<	SE4	AM	1 CT
CT0890011	New Britain Water Department	L	36427 Shuttle Meadow WTP	SW	5	Entry Point	EP	22356 MR001	2/24/2015 200412629	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0890011	New Britain Water Department	L	36427 Shuttle Meadow WTP	SW	5	Entry Point	EP	22356 MR001	8/18/2015 200422986	PFBS	0.09 EPA 537	<	SE4	AM	1 CT
CT0890011	New Britain Water Department	L	36427 Shuttle Meadow WTP	SW	5	Entry Point	EP	22356 MR001	2/24/2015 200412629	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0890011	New Britain Water Department	L	36427 Shuttle Meadow WTP	SW	5	Entry Point	EP	22356 MR001	2/24/2015 200412629	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0890011	New Britain Water Department	L	36427 Shuttle Meadow WTP	SW	5	Entry Point	EP	22356 MR001	2/24/2015 200412629	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0890011	New Britain Water Department	L	36427 Shuttle Meadow WTP	SW	5	Entry Point	EP	22356 MR001	2/24/2015 200412629	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0890011	New Britain Water Department	L	36427 Shuttle Meadow WTP	SW	5	Entry Point	EP	22356 MR001	2/24/2015 200412629	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0890011	New Britain Water Department	L	36427 Shuttle Meadow WTP	SW	5	Entry Point	EP	22356 MR001	8/18/2015 200422986	PFNA	0.02 EPA 537	<	SE4	AM	1 CT
CT0890011	New Britain Water Department	L	36427 Shuttle Meadow WTP	SW	5	Entry Point	EP	22356 MR001	11/13/2014 200407983	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0890011	New Britain Water Department	L	36427 Shuttle Meadow WTP	SW	5	Entry Point	EP	22356 MR001	11/13/2014 200407983	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0890011	New Britain Water Department	L	36427 Shuttle Meadow WTP	SW	5	Entry Point	EP	22356 MR001	11/13/2014 200407983	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0890011	New Britain Water Department	L	36427 Shuttle Meadow WTP	SW	5	Entry Point	EP	22356 MR001	11/13/2014 200407983	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0890011	New Britain Water Department	L	36427 Shuttle Meadow WTP	SW	5	Entry Point	EP	22356 MR001	11/13/2014 200407983	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0890011	New Britain Water Department	L	36427 Shuttle Meadow WTP	SW	5	Entry Point	EP	22356 MR001	11/13/2014 200407983	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0890011	New Britain Water Department	L	36427 Shuttle Meadow WTP	SW	5	Entry Point	EP	22356 MR001	8/18/2015 200422986	PFHpA	0.01 EPA 537	<	SE4	AM	1 CT
CT0890011	New Britain Water Department	L	36427 Shuttle Meadow WTP	SW	5	Entry Point	EP	22356 MR001	5/21/2015 200417249	PFHpA	0.01 EPA 537	<	SE3	AM	1 CT
CT0890011	New Britain Water Department	L	36427 Shuttle Meadow WTP	SW	5	Entry Point	EP	22356 MR001	5/21/2015 200417249	PFBS	0.09 EPA 537	<	SE3	AM	1 CT
CT0890011	New Britain Water Department	L	36427 Shuttle Meadow WTP	SW	5	Entry Point	EP	22356 MR001	5/21/2015 200417249	PFHxS	0.03 EPA 537	<	SE3	AM	1 CT
CT0890011	New Britain Water Department	L	36427 Shuttle Meadow WTP	SW	5	Entry Point	EP	22356 MR001	5/21/2015 200417249	PFOS	0.04 EPA 537	<	SE3	AM	1 CT
CT0890011	New Britain Water Department	L	36427 Shuttle Meadow WTP	SW	5	Entry Point	EP	22356 MR001	5/21/2015 200417249	PFNA	0.02 EPA 537	<	SE3	AM	1 CT
CT0770021	Manchester Water Department	L	36371 Globe Hollow Water Treatment Plant	SW	GHTREAT	Entry Point	EP	21757 MR001	9/16/2014 35155693001AM	PFHxS	0.03 EPA 537	<	SE3	AM	1 CT
CT0770021	Manchester Water Department	L	36371 Globe Hollow Water Treatment Plant	SW	GHTREAT	Entry Point	EP	21757 MR001	9/16/2014 35155693001AM	PFHpA	0.01 EPA 537	<	SE3	AM	1 CT
CT0770021	Manchester Water Department	L	36371 Globe Hollow Water Treatment Plant	SW	GHTREAT	Entry Point	EP	21757 MR001	9/16/2014 35155693001AM	PFBS	0.09 EPA 537	<	SE3	AM	1 CT
CT0770021	Manchester Water Department	L	36371 Globe Hollow Water Treatment Plant	SW	GHTREAT	Entry Point	EP	21757 MR001	9/16/2014 35155693001AM	PFNA	0.02 EPA 537	<	SE3	AM	1 CT
CT0770021	Manchester Water Department	L	36371 Globe Hollow Water Treatment Plant	SW	GHTREAT	Entry Point	EP	21757 MR001	12/15/2014 35168214001AM	PFBS	0.09 EPA 537	<	SE4	AM	1 CT
CT0770021	Manchester Water Department	L	36371 Globe Hollow Water Treatment Plant	SW	GHTREAT	Entry Point	EP	21757 MR001	6/17/2014 35142680001AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36371 Globe Hollow Water Treatment Plant	SW	GHTREAT	Entry Point	EP	21757 MR001	12/15/2014 35168214001AM	PFHpA	0.01 EPA 537	<	SE4	AM	1 CT
CT0770021	Manchester Water Department	L	36371 Globe Hollow Water Treatment Plant	SW	GHTREAT	Entry Point	EP	21757 MR001	6/17/2014 35142680001AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36371 Globe Hollow Water Treatment Plant	SW	GHTREAT	Entry Point	EP	21757 MR001	6/17/2014 35142680001AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36371 Globe Hollow Water Treatment Plant	SW	GHTREAT	Entry Point	EP	21757 MR001	6/17/2014 35142680001AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36371 Globe Hollow Water Treatment Plant	SW	GHTREAT	Entry Point	EP	21757 MR001	6/17/2014 35142680001AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36371 Globe Hollow Water Treatment Plant	SW	GHTREAT	Entry Point	EP	21757 MR001	9/16/2014 35155693001AM	PFOS	0.04 EPA 537	<	SE3	AM	1 CT
CT0770021	Manchester Water Department	L	36371 Globe Hollow Water Treatment Plant	SW	GHTREAT	Entry Point	EP	21757 MR001	9/16/2014 35155693001AM	PFOA	0.02 EPA 537	<	SE3	AM	1 CT
CT0770021	Manchester Water Department	L	36372 Well 3 Treatment Plant	GW	3	EP-WELL 3	EP	21757 MR001	3/3/2014 35128814001AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36371 Globe Hollow Water Treatment Plant	SW	GHTREAT	Entry Point	EP	21757 MR001	6/17/2014 35142680001AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36371 Globe Hollow Water Treatment Plant	SW	GHTREAT	Entry Point	EP	21757 MR001	12/15/2014 35168214001AM	PFNA	0.02 EPA 537	<	SE4	AM	1 CT
CT0770021	Manchester Water Department	L	36371 Globe Hollow Water Treatment Plant	SW	GHTREAT	Entry Point	EP	21757 MR001	12/15/2014 35168214001AM	PFOS	0.04 EPA 537	<	SE4	AM	1 CT
CT0770021	Manchester Water Department	L	36371 Globe Hollow Water Treatment Plant	SW	GHTREAT	Entry Point	EP	21757 MR001	12/15/2014 35168214001AM	PFOA	0.02 EPA 537	<	SE4	AM	1 CT
CT0770021	Manchester Water Department	L	36371 Globe Hollow Water Treatment Plant	SW	GHTREAT	Entry Point	EP	21757 MR001	3/3/2014 35128814005AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36371 Globe Hollow Water Treatment Plant	SW	GHTREAT	Entry Point	EP	21757 MR001	3/3/2014 35128814005AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36371 Globe Hollow Water Treatment Plant	SW	GHTREAT	Entry Point	EP	21757 MR001	3/3/2014 35128814005AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36371 Globe Hollow Water Treatment Plant	SW	GHTREAT	Entry Point	EP	21757 MR001	3/3/2014 35128814005AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36371 Globe Hollow Water Treatment Plant	SW	GHTREAT	Entry Point	EP	21757 MR001	3/3/2014 35128814005AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36371 Globe Hollow Water Treatment Plant	SW	GHTREAT	Entry Point	EP	21757 MR001	3/3/2014 35128814005AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36371 Globe Hollow Water Treatment Plant	SW	GHTREAT	Entry Point	EP	21757 MR001	12/15/2014 35168214001AM	PFHxS	0.03 EPA 537	<	SE4	AM	1 CT
CT0770021	Manchester Water Department	L	36377 Well 10 Treatment Plant	GW	3	EP-WELL10	EP	21757 MR001	3/31/2014 35132407001AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36377 Well 10 Treatment Plant	GW	3	EP-WELL10	EP	21757 MR001	3/31/2014 35132407001AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36375 Wells 6, 7 & 8 Treatment Plant	GW	WELL678T	EP-WELL6,7,8	EP	99001 MR002	3/4/2014 35128919003AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36377 Well 10 Treatment Plant	GW	3	EP-WELL10	EP	21757 MR001	9/10/2014 35154778001AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36377 Well 10 Treatment Plant	GW	3	EP-WELL10	EP	21757 MR001	9/10/2014 35154778001AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36377 Well 10 Treatment Plant	GW	3	EP-WELL10	EP	21757 MR001	9/10/2014 35154778001AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36377 Well 10 Treatment Plant	GW	3	EP-WELL10	EP	21757 MR001	3/31/2014 35132407001AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36377 Well 10 Treatment Plant	GW	3	EP-WELL10	EP	21757 MR001	9/10/2014 35154778001AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36377 Well 10 Treatment Plant	GW	3	EP-WELL10	EP	21757 MR001	3/31/2014 35132407001AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36377 Well 10 Treatment Plant	GW	3	EP-WELL10	EP	21757 MR001	3/31/2014 35132407001AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36377 Well 10 Treatment Plant	GW	3	EP-WELL10	EP	21757 MR001	3/31/2014 35132407001AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36377 Well 10 Treatment Plant	GW	3	EP-WELL10	EP	21757 MR001	9/10/2014 35154778001AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36375 Wells 6, 7 & 8 Treatment Plant	GW	WELL678T	EP-WELL6,7,8	EP	99001 MR002	9/9/2014 35154734003AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36375 Wells 6, 7 & 8 Treatment Plant	GW	WELL678T	EP-WELL6,7,8	EP	99001 MR002	3/4/2014 35128919003AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36375 Wells 6, 7 & 8 Treatment Plant	GW	WELL678T	EP-WELL6,7,8	EP	99001 MR002	3/4/2014 35128919003AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36375 Wells 6, 7 & 8 Treatment Plant	GW	WELL678T	EP-WELL6,7,8	EP	99001 MR002	9/9/2014 35154734003AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36375 Wells 6, 7 & 8 Treatment Plant	GW	WELL678T	EP-WELL6,7,8	EP	99001 MR002	3/4/2014 35128919003AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36375 Wells 6, 7 & 8 Treatment Plant	GW	WELL678T	EP-WELL6,7,8	EP	99001 MR002	9/9/2014 35154734003AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36375 Wells 6, 7 & 8 Treatment Plant	GW	WELL678T	EP-WELL6,7,8	EP	99001 MR002	9/9/2014 35154734003AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36375 Wells 6, 7 & 8 Treatment Plant	GW	WELL678T	EP-WELL6,7,8	EP	99001 MR002	9/9/2014 35154734003AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36378 Well 11 Treatment Plant	GW	3	EP-WELL11	EP	21757 MR001	9/10/2014 35154778003AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36378 Well 11 Treatment Plant	GW	3	EP-WELL11	EP	21757 MR001	9/10/2014 35154778003AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36378 Well 11 Treatment Plant	GW	3	EP-WELL11	EP	21757 MR001	9/10/2014 35154778003AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36378 Well 11 Treatment Plant	GW	3	EP-WELL11	EP	21757 MR001	9/10/2014 35154778003AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36378 Well 11 Treatment Plant	GW	3	EP-WELL11	EP	21757 MR001	9/10/2014 35154778003AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36378 Well 11 Treatment Plant	GW	3	EP-WELL11	EP	21757 MR001	9/10/2014 35154778003AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36378 Well 11 Treatment Plant	GW	3	EP-WELL11	EP	21757 MR001	3/31/2014 35132407003AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36378 Well 11 Treatment Plant	GW	3	EP-WELL11	EP	21757 MR001	3/31/2014 35132407003AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36377 Well 10 Treatment Plant	GW	3	EP-WELL10	EP	21757 MR001	9/10/2014 35154778001AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36375 Wells 6, 7 & 8 Treatment Plant	GW	WELL678T	EP-WELL6,7,8	EP	99001 MR002	3/4/2014 35128919003AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36378 Well 11 Treatment Plant	GW	3	EP-WELL11	EP	21757 MR001	3/31/2014 35132407003AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36378 Well 11 Treatment Plant	GW	3	EP-WELL11	EP	21757 MR001	3/31/2014 35132407003AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36378 Well 11 Treatment Plant	GW	3	EP-WELL11	EP	21757 MR001	3/31/2014 35132407003AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36378 Well 11 Treatment Plant	GW	3	EP-WELL11	EP	21757 MR001	3/31/2014 35132407003AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36373 Well 4 Treatment Plant	GW	3	EP-WELL4	EP	21757 MR001	3/3/2014 35128814003AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36373 Well 4 Treatment Plant	GW	3	EP-WELL4	EP	21757 MR001	3/3/2014 35128814003AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36373 Well 4 Treatment Plant	GW	3	EP-WELL4	EP	21757 MR001	9/8/2014 35154373003AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36373 Well 4 Treatment Plant	GW	3	EP-WELL4	EP	21757 MR001	3/3/2014 35128814003AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36373 Well 4 Treatment Plant	GW	3	EP-WELL4	EP	21757 MR001	9/8/2014 35154373003AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36373 Well 4 Treatment Plant	GW	3	EP-WELL4	EP	21757 MR001	3/3/2014 35128814003AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36373 Well 4 Treatment Plant	GW	3	EP-WELL4	EP	21757 MR001	3/3/2014 35128814003AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36373 Well 4 Treatment Plant	GW	3	EP-WELL4	EP	21757 MR001	3/3/2014 35128814003AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36375 Wells 6, 7 & 8 Treatment Plant	GW	WELL678T	EP-WELL6,7,8	EP	99001 MR002	9/9/2014 35154734003AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36372 Well 3 Treatment Plant	GW	3	EP-WELL 3	EP	21757 MR001	9/8/2014 35154373001AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36372 Well 3 Treatment Plant	GW	3	EP-WELL 3	EP	21757 MR001	3/3/2014 35128814001AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36372 Well 3 Treatment Plant	GW	3	EP-WELL 3	EP	21757 MR001	3/3/2014 35128814001AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36372 Well 3 Treatment Plant	GW	3	EP-WELL 3	EP	21757 MR001	3/3/2014 35128814001AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36372 Well 3 Treatment Plant	GW	3	EP-WELL 3	EP	21757 MR001	3/3/2014 35128814001AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36372 Well 3 Treatment Plant	GW	3	EP-WELL 3	EP	21757 MR001	3/3/2014 35128814001AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36372 Well 3 Treatment Plant	GW	3	EP-WELL 3	EP	21757 MR001	9/8/2014 35154373001AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36372 Well 3 Treatment Plant	GW	3	EP-WELL 3	EP	21757 MR001	9/8/2014 35154373001AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36372 Well 3 Treatment Plant	GW	3	EP-WELL 3	EP	21757 MR001	9/8/2014 35154373001AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36372 Well 3 Treatment Plant	GW	3	EP-WELL 3	EP	21757 MR001	9/8/2014 35154373001AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36372 Well 3 Treatment Plant	GW	3	EP-WELL 3	EP	21757 MR001	9/8/2014 35154373001AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36373 Well 4 Treatment Plant	GW	3	EP-WELL4	EP	21757 MR001	9/8/2014 35154373003AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36374 Well 5 Treatment Plant	GW	3	EP-WELL5	EP	99001 MR002	9/9/2014 35154734001AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36374 Well 5 Treatment Plant	GW	3	EP-WELL5	EP	99001 MR002	9/9/2014 35154734001AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36374 Well 5 Treatment Plant	GW	3	EP-WELL5	EP	99001 MR002	3/4/2014 35128919001AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36374 Well 5 Treatment Plant	GW	3	EP-WELL5	EP	99001 MR002	9/9/2014 35154734001AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36374 Well 5 Treatment Plant	GW	3	EP-WELL5	EP	99001 MR002	9/9/2014 35154734001AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36374 Well 5 Treatment Plant	GW	3	EP-WELL5	EP	99001 MR002	3/4/2014 35128919001AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36374 Well 5 Treatment Plant	GW	3	EP-WELL5	EP	99001 MR002	9/9/2014 35154734001AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36375 Wells 6, 7 & 8 Treatment Plant	GW	WELL678T	EP-WELL6,7,8	EP	99001 MR002	3/4/2014 35128919003AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36374 Well 5 Treatment Plant	GW	3	EP-WELL5	EP	99001 MR002	9/9/2014 35154734001AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT

CT0770021	Manchester Water Department	L	36373 Well 4 Treatment Plant	GW	3	EP-WELL4	EP	21757 MR001	9/8/2014 35154373003AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36373 Well 4 Treatment Plant	GW	3	EP-WELL4	EP	21757 MR001	9/8/2014 35154373003AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36373 Well 4 Treatment Plant	GW	3	EP-WELL4	EP	21757 MR001	9/8/2014 35154373003AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0770021	Manchester Water Department	L	36374 Well 5 Treatment Plant	GW	3	EP-WELL5	EP	99001 MR002	3/4/2014 35128919001AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36374 Well 5 Treatment Plant	GW	3	EP-WELL5	EP	99001 MR002	3/4/2014 35128919001AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36374 Well 5 Treatment Plant	GW	3	EP-WELL5	EP	99001 MR002	3/4/2014 35128919001AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0770021	Manchester Water Department	L	36374 Well 5 Treatment Plant	GW	3	EP-WELL5	EP	99001 MR002	3/4/2014 35128919001AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36318 Putnam Lake Filter Plant	SW	5	Putnam Res. FP Eff. Tap	EP	21079 MR001	10/16/2014 201410180110AM	PFHxS	0.03 EPA 537	<	SE3	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36318 Putnam Lake Filter Plant	SW	5	Putnam Res. FP Eff. Tap	EP	21079 MR001	10/16/2014 201410180110AM	PFBS	0.09 EPA 537	<	SE3	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36318 Putnam Lake Filter Plant	SW	5	Putnam Res. FP Eff. Tap	EP	21079 MR001	10/16/2014 201410180110AM	PFNA	0.02 EPA 537	<	SE3	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36318 Putnam Lake Filter Plant	SW	5	Putnam Res. FP Eff. Tap	EP	21079 MR001	10/16/2014 201410180110AM	PFOS	0.04 EPA 537	<	SE3	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36318 Putnam Lake Filter Plant	SW	5	Putnam Res. FP Eff. Tap	EP	21079 MR001	10/16/2014 201410180110AM	PFOA	0.02 EPA 537	<	SE3	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36318 Putnam Lake Filter Plant	SW	5	Putnam Res. FP Eff. Tap	EP	21079 MR001	10/16/2014 201410180110AM	PFHpA	0.01 EPA 537	<	SE3	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36318 Putnam Lake Filter Plant	SW	5	Putnam Res. FP Eff. Tap	EP	21079 MR001	7/7/2014 201407080373AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36318 Putnam Lake Filter Plant	SW	5	Putnam Res. FP Eff. Tap	EP	21079 MR001	7/7/2014 201407080373AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36318 Putnam Lake Filter Plant	SW	5	Putnam Res. FP Eff. Tap	EP	21079 MR001	4/1/2014 201404020466AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36318 Putnam Lake Filter Plant	SW	5	Putnam Res. FP Eff. Tap	EP	21079 MR001	7/7/2014 201407080373AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36318 Putnam Lake Filter Plant	SW	5	Putnam Res. FP Eff. Tap	EP	21079 MR001	7/7/2014 201407080373AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36318 Putnam Lake Filter Plant	SW	5	Putnam Res. FP Eff. Tap	EP	21079 MR001	7/7/2014 201407080373AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36318 Putnam Lake Filter Plant	SW	5	Putnam Res. FP Eff. Tap	EP	21079 MR001	7/7/2014 201407080373AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36318 Putnam Lake Filter Plant	SW	5	Putnam Res. FP Eff. Tap	EP	21079 MR001	4/1/2014 201404020466AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36318 Putnam Lake Filter Plant	SW	5	Putnam Res. FP Eff. Tap	EP	21079 MR001	4/1/2014 201404020466AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36318 Putnam Lake Filter Plant	SW	5	Putnam Res. FP Eff. Tap	EP	21079 MR001	4/1/2014 201404020466AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36318 Putnam Lake Filter Plant	SW	5	Putnam Res. FP Eff. Tap	EP	21079 MR001	4/1/2014 201404020466AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36318 Putnam Lake Filter Plant	SW	5	Putnam Res. FP Eff. Tap	EP	21079 MR001	2/4/2015 201502050741AM	PFNA	0.02 EPA 537	<	SE4	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36318 Putnam Lake Filter Plant	SW	5	Putnam Res. FP Eff. Tap	EP	21079 MR001	2/4/2015 201502050741AM	PFOS	0.04 EPA 537	<	SE4	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36318 Putnam Lake Filter Plant	SW	5	Putnam Res. FP Eff. Tap	EP	21079 MR001	2/4/2015 201502050741AM	PFHxS	0.03 EPA 537	<	SE4	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36318 Putnam Lake Filter Plant	SW	5	Putnam Res. FP Eff. Tap	EP	21079 MR001	2/4/2015 201502050741AM	PFHpA	0.01 EPA 537	<	SE4	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36318 Putnam Lake Filter Plant	SW	5	Putnam Res. FP Eff. Tap	EP	21079 MR001	2/4/2015 201502050741AM	PFBS	0.09 EPA 537	<	SE4	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36318 Putnam Lake Filter Plant	SW	5	Putnam Res. FP Eff. Tap	EP	21079 MR001	2/4/2015 201502050741AM	PFOA	0.02 EPA 537	<	SE4	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36319 Mianus River Filter Plant	SW	5	Mianus Res. FP Eff. Tap	EP	21079 MR002	7/7/2014 201407080377AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36319 Mianus River Filter Plant	SW	5	Mianus Res. FP Eff. Tap	EP	21079 MR002	10/16/2014 201410180094AM	PFOA	0.02 EPA 537	<	SE3	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36319 Mianus River Filter Plant	SW	5	Mianus Res. FP Eff. Tap	EP	21079 MR002	10/16/2014 201410180094AM	PFOS	0.04 EPA 537	<	SE3	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36319 Mianus River Filter Plant	SW	5	Mianus Res. FP Eff. Tap	EP	21079 MR002	10/16/2014 201410180094AM	PFNA	0.02 EPA 537	<	SE3	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36319 Mianus River Filter Plant	SW	5	Mianus Res. FP Eff. Tap	EP	21079 MR002	10/16/2014 201410180094AM	PFHxS	0.03 EPA 537	<	SE3	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36319 Mianus River Filter Plant	SW	5	Mianus Res. FP Eff. Tap	EP	21079 MR002	10/16/2014 201410180094AM	PFHpA	0.01 EPA 537	<	SE3	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36319 Mianus River Filter Plant	SW	5	Mianus Res. FP Eff. Tap	EP	21079 MR002	7/7/2014 201407080377AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36319 Mianus River Filter Plant	SW	5	Mianus Res. FP Eff. Tap	EP	21079 MR002	10/16/2014 201410180094AM	PFBS	0.09 EPA 537	<	SE3	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36319 Mianus River Filter Plant	SW	5	Mianus Res. FP Eff. Tap	EP	21079 MR002	7/7/2014 201407080377AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36319 Mianus River Filter Plant	SW	5	Mianus Res. FP Eff. Tap	EP	21079 MR002	7/7/2014 201407080377AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36319 Mianus River Filter Plant	SW	5	Mianus Res. FP Eff. Tap	EP	21079 MR002	7/7/2014 201407080377AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36318 Putnam Lake Filter Plant	SW	5	Putnam Res. FP Eff. Tap	EP	21079 MR001	4/1/2014 201404020466AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36319 Mianus River Filter Plant	SW	5	Mianus Res. FP Eff. Tap	EP	21079 MR002	7/7/2014 201407080377AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36319 Mianus River Filter Plant	SW	5	Mianus Res. FP Eff. Tap	EP	21079 MR002	4/1/2014 201404020496AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36319 Mianus River Filter Plant	SW	5	Mianus Res. FP Eff. Tap	EP	21079 MR002	4/1/2014 201404020496AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36319 Mianus River Filter Plant	SW	5	Mianus Res. FP Eff. Tap	EP	21079 MR002	4/1/2014 201404020496AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36319 Mianus River Filter Plant	SW	5	Mianus Res. FP Eff. Tap	EP	21079 MR002	2/4/2015 201502050737AM	PFOA	0.02 EPA 537	<	SE4	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36319 Mianus River Filter Plant	SW	5	Mianus Res. FP Eff. Tap	EP	21079 MR002	4/1/2014 201404020496AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36319 Mianus River Filter Plant	SW	5	Mianus Res. FP Eff. Tap	EP	21079 MR002	4/1/2014 201404020496AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36319 Mianus River Filter Plant	SW	5	Mianus Res. FP Eff. Tap	EP	21079 MR002	4/1/2014 201404020496AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36319 Mianus River Filter Plant	SW	5	Mianus Res. FP Eff. Tap	EP	21079 MR002	2/4/2015 201502050737AM	PFBS	0.09 EPA 537	<	SE4	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36319 Mianus River Filter Plant	SW	5	Mianus Res. FP Eff. Tap	EP	21079 MR002	2/4/2015 201502050737AM	PFHpA	0.01 EPA 537	<	SE4	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36319 Mianus River Filter Plant	SW	5	Mianus Res. FP Eff. Tap	EP	21079 MR002	2/4/2015 201502050737AM	PFHxS	0.03 EPA 537	<	SE4	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36319 Mianus River Filter Plant	SW	5	Mianus Res. FP Eff. Tap	EP	21079 MR002	2/4/2015 201502050737AM	PFNA	0.02 EPA 537	<	SE4	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	36319 Mianus River Filter Plant	SW	5	Mianus Res. FP Eff. Tap	EP	21079 MR002	2/4/2015 201502050737AM	PFOS	0.04 EPA 537	<	SE4	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	21080 Stamford Intertie	SW	05024	Hyatt Regency	EP	21079 MR003	7/7/2014 201407080375AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	21080 Stamford Intertie	SW	05024	Hyatt Regency	EP	21079 MR003	1/6/2015 201501070580AM	PFOA	0.02 EPA 537	<	SE4	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	21080 Stamford Intertie	SW	05024	Hyatt Regency	EP	21079 MR003	1/6/2015 201501070580AM	PFOS	0.04 EPA 537	<	SE4	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	21080 Stamford Intertie	SW	05024	Hyatt Regency	EP	21079 MR003	1/6/2015 201501070580AM	PFNA	0.02 EPA 537	<	SE4	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	21080 Stamford Intertie	SW	05024	Hyatt Regency	EP	21079 MR003	1/6/2015 201501070580AM	PFHxS	0.03 EPA 537	<	SE4	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	21080 Stamford Intertie	SW	05024	Hyatt Regency	EP	21079 MR003	1/6/2015 201501070580AM	PFHpA	0.01 EPA 537	<	SE4	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	21080 Stamford Intertie	SW	05024	Hyatt Regency	EP	21079 MR003	1/6/2015 201501070580AM	PFBS	0.09 EPA 537	<	SE4	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	21080 Stamford Intertie	SW	05024	Hyatt Regency	EP	21079 MR003	7/7/2014 201407080375AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	21080 Stamford Intertie	SW	05024	Hyatt Regency	EP	21079 MR003	7/7/2014 201407080375AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	21080 Stamford Intertie	SW	05024	Hyatt Regency	EP	21079 MR003	7/7/2014 201407080375AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	21080 Stamford Intertie	SW	05024	Hyatt Regency	EP	21079 MR003	7/7/2014 201407080375AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	21080 Stamford Intertie	SW	05024	Hyatt Regency	EP	21079 MR003	7/7/2014 201407080375AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	21080 Stamford Intertie	SW	05024	Hyatt Regency	EP	21079 MR003	4/1/2014 201404020547AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	21080 Stamford Intertie	SW	05024	Hyatt Regency	EP	21079 MR003	4/1/2014 201404020547AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	21080 Stamford Intertie	SW	05024	Hyatt Regency	EP	21079 MR003	4/1/2014 201404020547AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	21080 Stamford Intertie	SW	05024	Hyatt Regency	EP	21079 MR003	4/1/2014 201404020547AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	21080 Stamford Intertie	SW	05024	Hyatt Regency	EP	21079 MR003	4/1/2014 201404020547AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	21080 Stamford Intertie	SW	05024	Hyatt Regency	EP	21079 MR003	10/16/2014 201410180096AM	PFOS	0.04 EPA 537	<	SE3	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	21080 Stamford Intertie	SW	05024	Hyatt Regency	EP	21079 MR003	10/16/2014 201410180096AM	PFBS	0.09 EPA 537	<	SE3	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	21080 Stamford Intertie	SW	05024	Hyatt Regency	EP	21079 MR003	10/16/2014 201410180096AM	PFHpA	0.01 EPA 537	<	SE3	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	21080 Stamford Intertie	SW	05024	Hyatt Regency	EP	21079 MR003	10/16/2014 201410180096AM	PFHxS	0.03 EPA 537	<	SE3	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	21080 Stamford Intertie	SW	05024	Hyatt Regency	EP	21079 MR003	4/1/2014 201404020547AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	21080 Stamford Intertie	SW	05024	Hyatt Regency	EP	21079 MR003	10/16/2014 201410180096AM	PFNA	0.02 EPA 537	<	SE3	AM	1 CT
CT0570011	Aquarion Water Co. of CT - Greenwich	L	21080 Stamford Intertie	SW	05024	Hyatt Regency	EP	21079 MR003	10/16/2014 201410180096AM	PFOA	0.02 EPA 537	<	SE3	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	46125 Hunt Wellfield	GW	3	Entry Point	EP	20824 MR001	6/17/2013 201306180153AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	46125 Hunt Wellfield	GW	3	Entry Point	EP	20824 MR001	6/17/2013 201306180153AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	46125 Hunt Wellfield	GW	3	Entry Point	EP	20824 MR001	6/17/2013 201306180153AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	46125 Hunt Wellfield	GW	3	Entry Point	EP	20824 MR001	12/2/2013 201312030338AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	46125 Hunt Wellfield	GW	3	Entry Point	EP	20824 MR001	12/2/2013 201312030338AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	46125 Hunt Wellfield	GW	3	Entry Point	EP	20824 MR001	12/2/2013 201312030338AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	46125 Hunt Wellfield	GW	3	Entry Point	EP	20824 MR001	6/17/2013 201306180153AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	46125 Hunt Wellfield	GW	3	Entry Point	EP	20824 MR001	12/2/2013 201312030338AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	46125 Hunt Wellfield	GW	3	Entry Point	EP	20824 MR001	12/2/2013 201312030338AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	46125 Hunt Wellfield	GW	3	Entry Point	EP	20824 MR001	6/17/2013 201306180153AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	46125 Hunt Wellfield	GW	3	Entry Point	EP	20824 MR001	6/17/2013 201306180153AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	46125 Hunt Wellfield	GW	3	Entry Point	EP	20824 MR001	12/2/2013 201312030338AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36298 Rockville Water Treatment Plant	SW	5	Entry Point	EP	20824 MR001	12/19/2013 201312200095AM	PFHpA	0.01 EPA 537	<	SE3	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36298 Rockville Water Treatment Plant	SW	5	Entry Point	EP	20824 MR001	12/19/2013 201312200095AM	PFNA	0.02 EPA 537	<	SE3	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36298 Rockville Water Treatment Plant	SW	5	Entry Point	EP	20824 MR001	12/19/2013 201312200095AM	PFOS	0.04 EPA 537	<	SE3	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36298 Rockville Water Treatment Plant	SW	5	Entry Point	EP	20824 MR001	12/19/2013 201312200095AM	PFHxS	0.03 EPA 537	<	SE3	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36298 Rockville Water Treatment Plant	SW	5	Entry Point	EP	20824 MR001	12/19/2013 201312200095AM	PFOA	0.02 EPA 537	<	SE3	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36298 Rockville Water Treatment Plant	SW	5	Entry Point	EP	20824 MR001	12/19/2013 201312200095AM	PFBS	0.09 EPA 537	<	SE3	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	46132 Spring Lots Wellfield	GW	3	Entry Point	EP	20824 MR001	12/2/2013 201312030340AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	46132 Spring Lots Wellfield	GW	3	Entry Point	EP	20824 MR001	6/17/2013 201306180145AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	46132 Spring Lots Wellfield	GW	3	Entry Point	EP	20824 MR001	6/17/2013 201306180145AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	46132 Spring Lots Wellfield	GW	3	Entry Point	EP	20824 MR001	12/2/2013 201312030340AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	46132 Spring Lots Wellfield	GW	3	Entry Point	EP	20824 MR001	12/2/2013 201312030340AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	46132 Spring Lots Wellfield	GW	3	Entry Point	EP	20824 MR001	12/2/2013 201312030340AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	46132 Spring Lots Wellfield	GW	3	Entry Point	EP	20824 MR001	12/2/2013 201312030340AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	46132 Spring Lots Wellfield	GW	3	Entry Point	EP	20824 MR001	6/17/2013 201306180145AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	46132 Spring Lots Wellfield	GW	3	Entry Point	EP	20824 MR001	6/17/2013 201306180145AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	46132 Spring Lots Wellfield	GW	3	Entry Point	EP	20824 MR001	6/17/2013 201306180145AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	46132 Spring Lots Wellfield	GW	3	Entry Point	EP	20824 MR001	6/17/2013 201306180145AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	46126 Powder Hollow Wellfield	GW	3	Entry Point	EP	20824 MR001	12/2/2013 201312030327AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	46126 Powder Hollow Wellfield	GW	3	Entry Point	EP	20824 MR001	12/2/2013 201312030327AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	46126 Powder Hollow Wellfield	GW	3	Entry Point	EP	20824 MR001	12/2/2013 201312030327AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	46126 Powder Hollow Wellfield	GW	3	Entry Point	EP	20824 MR001	12/2/2013 201312030327AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	46126 Powder Hollow Wellfield	GW	3	Entry Point	EP	20824 MR001	6/17/2013 201306180139AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	46126 Powder Hollow Wellfield	GW	3	Entry Point	EP	20824 MR001	12/2/2013 201312030327AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	46126 Powder Hollow Wellfield	GW	3	Entry Point	EP	20824 MR001	12/2/2013 201312030327AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	46132 Spring Lots Wellfield	GW	3	Entry Point	EP	20824 MR001	12/2/2013 201312030340AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	46126 Powder Hollow Wellfield	GW	3	Entry Point	EP	20824 MR001	6/17/2013 201306180139AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	46126 Powder Hollow Wellfield	GW	3	Entry Point	EP	20824 MR001	6/17/2013 201306180139AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	46126 Powder Hollow Wellfield	GW	3	Entry Point	EP	20824 MR001	6/17/2013 201306180139AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	46126 Powder Hollow Wellfield	GW	3	Entry Point	EP	20824 MR001	6/17/2013 201306180139AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	46126 Powder Hollow Wellfield	GW	3	Entry Point	EP	20824 MR001	6/17/2013 201306180139AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36292 Vernon Well #5	GW	5	Entry Point	EP	20824 MR001	12/3/2013 201312040752AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36292 Vernon Well #5	GW	5	Entry Point	EP	20824 MR001	6/17/2013 201306180160AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36292 Vernon Well #5	GW	5	Entry Point	EP	20824 MR001	6/17/2013 201306180160AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36292 Vernon Well #5	GW	5	Entry Point	EP	20824 MR001	6/17/2013 201306180160AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36292 Vernon Well #5	GW	5	Entry Point	EP	20824 MR001	12/3/2013 201312040752AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT

CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36294 Mapleton Station	GW	5	Entry Point	EP	20824 MR001	6/13/2013 201306140129AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36292 Vernon Well #5	GW	5	Entry Point	EP	20824 MR001	6/17/2013 201306180160AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36292 Vernon Well #5	GW	5	Entry Point	EP	20824 MR001	6/17/2013 201306180160AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36292 Vernon Well #5	GW	5	Entry Point	EP	20824 MR001	12/3/2013 201312040752AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36292 Vernon Well #5	GW	5	Entry Point	EP	20824 MR001	12/3/2013 201312040752AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36292 Vernon Well #5	GW	5	Entry Point	EP	20824 MR001	12/3/2013 201312040752AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36292 Vernon Well #5	GW	5	Entry Point	EP	20824 MR001	6/17/2013 201306180160AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36292 Vernon Well #5	GW	5	Entry Point	EP	20824 MR001	12/3/2013 201312040752AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36298 Rockville Water Treatment Plant	SW	5	Entry Point	EP	20824 MR001	3/17/2014 201403180213AM	PFHpA	0.01 EPA 537	<	SE4	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36298 Rockville Water Treatment Plant	SW	5	Entry Point	EP	20824 MR001	9/9/2013 201309100270AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36298 Rockville Water Treatment Plant	SW	5	Entry Point	EP	20824 MR001	9/9/2013 201309100270AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36298 Rockville Water Treatment Plant	SW	5	Entry Point	EP	20824 MR001	9/9/2013 201309100270AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36298 Rockville Water Treatment Plant	SW	5	Entry Point	EP	20824 MR001	9/9/2013 201309100270AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36298 Rockville Water Treatment Plant	SW	5	Entry Point	EP	20824 MR001	3/17/2014 201403180213AM	PFHxS	0.03 EPA 537	<	SE4	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36298 Rockville Water Treatment Plant	SW	5	Entry Point	EP	20824 MR001	3/17/2014 201403180213AM	PFNA	0.02 EPA 537	<	SE4	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36298 Rockville Water Treatment Plant	SW	5	Entry Point	EP	20824 MR001	3/17/2014 201403180213AM	PFOS	0.04 EPA 537	<	SE4	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36298 Rockville Water Treatment Plant	SW	5	Entry Point	EP	20824 MR001	3/17/2014 201403180213AM	PFOA	0.02 EPA 537	<	SE4	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36298 Rockville Water Treatment Plant	SW	5	Entry Point	EP	20824 MR001	9/9/2013 201309100270AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36298 Rockville Water Treatment Plant	SW	5	Entry Point	EP	20824 MR001	6/13/2013 201306140131AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36298 Rockville Water Treatment Plant	SW	5	Entry Point	EP	20824 MR001	6/13/2013 201306140131AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36298 Rockville Water Treatment Plant	SW	5	Entry Point	EP	20824 MR001	6/13/2013 201306140131AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36298 Rockville Water Treatment Plant	SW	5	Entry Point	EP	20824 MR001	9/9/2013 201309100270AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36298 Rockville Water Treatment Plant	SW	5	Entry Point	EP	20824 MR001	6/13/2013 201306140131AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36298 Rockville Water Treatment Plant	SW	5	Entry Point	EP	20824 MR001	6/13/2013 201306140131AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36294 Mapleton Station	GW	5	Entry Point	EP	20824 MR001	6/13/2013 201306140129AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36294 Mapleton Station	GW	5	Entry Point	EP	20824 MR001	6/13/2013 201306140129AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36294 Mapleton Station	GW	5	Entry Point	EP	20824 MR001	6/13/2013 201306140129AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36298 Rockville Water Treatment Plant	SW	5	Entry Point	EP	20824 MR001	6/13/2013 201306140131AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36294 Mapleton Station	GW	5	Entry Point	EP	20824 MR001	6/13/2013 201306140129AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36294 Mapleton Station	GW	5	Entry Point	EP	20824 MR001	6/13/2013 201306140129AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36298 Rockville Water Treatment Plant	SW	5	Entry Point	EP	20824 MR001	3/17/2014 201403180213AM	PFBS	0.09 EPA 537	<	SE4	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36294 Mapleton Station	GW	5	Entry Point	EP	20824 MR001	12/19/2013 201312200107AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36294 Mapleton Station	GW	5	Entry Point	EP	20824 MR001	12/19/2013 201312200107AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36294 Mapleton Station	GW	5	Entry Point	EP	20824 MR001	12/19/2013 201312200107AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36294 Mapleton Station	GW	5	Entry Point	EP	20824 MR001	12/19/2013 201312200107AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36294 Mapleton Station	GW	5	Entry Point	EP	20824 MR001	12/19/2013 201312200107AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0473011	CT Water Co. - Northn. Reg., Westn. Sys.	L	36294 Mapleton Station	GW	5	Entry Point	EP	20824 MR001	12/19/2013 201312200107AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0340011	Danbury Water Department	L	38771 Margerie Treatment Plant	SW	3	Entry Point	EP	20232 MR001	11/19/2014 35165597001AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0340011	Danbury Water Department	L	38771 Margerie Treatment Plant	SW	3	Entry Point	EP	20232 MR001	11/19/2014 35165597001AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0340011	Danbury Water Department	L	38771 Margerie Treatment Plant	SW	3	Entry Point	EP	20232 MR001	11/19/2014 35165597001AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0340011	Danbury Water Department	L	38771 Margerie Treatment Plant	SW	3	Entry Point	EP	20232 MR001	11/19/2014 35165597001AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0340011	Danbury Water Department	L	38771 Margerie Treatment Plant	SW	3	Entry Point	EP	20232 MR001	11/19/2014 35165597001AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0340011	Danbury Water Department	L	46152 West Lake Treatment Plant	SW	3	Entry Point	EP	20232 MR002	2/11/2015 35175705003AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0340011	Danbury Water Department	L	46152 West Lake Treatment Plant	SW	3	Entry Point	EP	20232 MR002	2/11/2015 35175705003AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0340011	Danbury Water Department	L	46152 West Lake Treatment Plant	SW	3	Entry Point	EP	20232 MR002	2/11/2015 35175705003AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0340011	Danbury Water Department	L	46152 West Lake Treatment Plant	SW	3	Entry Point	EP	20232 MR002	2/11/2015 35175705003AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0340011	Danbury Water Department	L	46152 West Lake Treatment Plant	SW	3	Entry Point	EP	20232 MR002	2/11/2015 35175705003AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0340011	Danbury Water Department	L	38771 Margerie Treatment Plant	SW	3	Entry Point	EP	20232 MR001	5/21/2015 35190094001AM	PFBS	0.09 EPA 537	<	SE3	AM	1 CT
CT0340011	Danbury Water Department	L	46152 West Lake Treatment Plant	SW	3	Entry Point	EP	20232 MR002	2/11/2015 35175705003AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0340011	Danbury Water Department	L	38771 Margerie Treatment Plant	SW	3	Entry Point	EP	20232 MR001	5/21/2015 35190094001AM	PFOS	0.04 EPA 537	<	SE3	AM	1 CT
CT0340011	Danbury Water Department	L	38771 Margerie Treatment Plant	SW	3	Entry Point	EP	20232 MR001	5/21/2015 35190094001AM	PFNA	0.02 EPA 537	<	SE3	AM	1 CT
CT0340011	Danbury Water Department	L	38771 Margerie Treatment Plant	SW	3	Entry Point	EP	20232 MR001	5/21/2015 35190094001AM	PFHxS	0.03 EPA 537	<	SE3	AM	1 CT
CT0340011	Danbury Water Department	L	46152 West Lake Treatment Plant	SW	3	Entry Point	EP	20232 MR002	5/21/2015 35190094003AM	PFHpA	0.01 EPA 537	<	SE3	AM	1 CT
CT0340011	Danbury Water Department	L	38771 Margerie Treatment Plant	SW	3	Entry Point	EP	20232 MR001	11/19/2014 35165597001AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0340011	Danbury Water Department	L	46152 West Lake Treatment Plant	SW	3	Entry Point	EP	20232 MR002	5/21/2015 35190094003AM	PFBS	0.09 EPA 537	<	SE3	AM	1 CT
CT0340011	Danbury Water Department	L	46152 West Lake Treatment Plant	SW	3	Entry Point	EP	20232 MR002	5/21/2015 35190094003AM	PFHxS	0.03 EPA 537	<	SE3	AM	1 CT
CT0340011	Danbury Water Department	L	46152 West Lake Treatment Plant	SW	3	Entry Point	EP	20232 MR002	11/19/2014 35165597003AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0340011	Danbury Water Department	L	46152 West Lake Treatment Plant	SW	3	Entry Point	EP	20232 MR002	11/19/2014 35165597003AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0340011	Danbury Water Department	L	46152 West Lake Treatment Plant	SW	3	Entry Point	EP	20232 MR002	11/19/2014 35165597003AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0340011	Danbury Water Department	L	46152 West Lake Treatment Plant	SW	3	Entry Point	EP	20232 MR002	8/26/2015 35205368003AM	PFHpA	0.01 EPA 537	<	SE4	AM	1 CT
CT0340011	Danbury Water Department	L	46152 West Lake Treatment Plant	SW	3	Entry Point	EP	20232 MR002	5/21/2015 35190094003AM	PFNA	0.02 EPA 537	<	SE3	AM	1 CT
CT0340011	Danbury Water Department	L	46152 West Lake Treatment Plant	SW	3	Entry Point	EP	20232 MR002	11/19/2014 35165597003AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0340011	Danbury Water Department	L	46152 West Lake Treatment Plant	SW	3	Entry Point	EP	20232 MR002	11/19/2014 35165597003AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0340011	Danbury Water Department	L	38771 Margerie Treatment Plant	SW	3	Entry Point	EP	20232 MR001	5/21/2015 35190094001AM	PFOA	0.02 EPA 537	<	SE3	AM	1 CT
CT0340011	Danbury Water Department	L	46152 West Lake Treatment Plant	SW	3	Entry Point	EP	20232 MR002	11/19/2014 35165597003AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0340011	Danbury Water Department	L	46152 West Lake Treatment Plant	SW	3	Entry Point	EP	20232 MR002	8/26/2015 35205368003AM	PFOS	0.04 EPA 537	<	SE4	AM	1 CT
CT0340011	Danbury Water Department	L	46152 West Lake Treatment Plant	SW	3	Entry Point	EP	20232 MR002	8/26/2015 35205368003AM	PFHxS	0.03 EPA 537	<	SE4	AM	1 CT
CT0340011	Danbury Water Department	L	46152 West Lake Treatment Plant	SW	3	Entry Point	EP	20232 MR002	8/26/2015 35205368003AM	PFBS	0.09 EPA 537	<	SE4	AM	1 CT
CT0340011	Danbury Water Department	L	46152 West Lake Treatment Plant	SW	3	Entry Point	EP	20232 MR002	8/26/2015 35205368003AM	PFNA	0.02 EPA 537	<	SE4	AM	1 CT
CT0340011	Danbury Water Department	L	46152 West Lake Treatment Plant	SW	3	Entry Point	EP	20232 MR002	5/21/2015 35190094003AM	PFOA	0.02 EPA 537	<	SE3	AM	1 CT
CT0340011	Danbury Water Department	L	46152 West Lake Treatment Plant	SW	3	Entry Point	EP	20232 MR002	8/26/2015 35205368003AM	PFOA	0.02 EPA 537	<	SE4	AM	1 CT
CT0340011	Danbury Water Department	L	46152 West Lake Treatment Plant	SW	3	Entry Point	EP	20232 MR002	5/21/2015 35190094003AM	PFOS	0.04 EPA 537	<	SE3	AM	1 CT
CT0340011	Danbury Water Department	L	38771 Margerie Treatment Plant	SW	3	Entry Point	EP	20232 MR001	2/11/2015 35175705001AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0340011	Danbury Water Department	L	38771 Margerie Treatment Plant	SW	3	Entry Point	EP	20232 MR001	8/26/2015 35205368001AM	PFOA	0.02 EPA 537	<	SE4	AM	1 CT
CT0340011	Danbury Water Department	L	38771 Margerie Treatment Plant	SW	3	Entry Point	EP	20232 MR001	8/26/2015 35205368001AM	PFNA	0.02 EPA 537	<	SE4	AM	1 CT
CT0340011	Danbury Water Department	L	38771 Margerie Treatment Plant	SW	3	Entry Point	EP	20232 MR001	8/26/2015 35205368001AM	PFHxS	0.03 EPA 537	<	SE4	AM	1 CT
CT0340011	Danbury Water Department	L	38771 Margerie Treatment Plant	SW	3	Entry Point	EP	20232 MR001	8/26/2015 35205368001AM	PFHpA	0.01 EPA 537	<	SE4	AM	1 CT
CT0340011	Danbury Water Department	L	38771 Margerie Treatment Plant	SW	3	Entry Point	EP	20232 MR001	8/26/2015 35205368001AM	PFBS	0.09 EPA 537	<	SE4	AM	1 CT
CT0340011	Danbury Water Department	L	38771 Margerie Treatment Plant	SW	3	Entry Point	EP	20232 MR001	2/11/2015 35175705001AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0340011	Danbury Water Department	L	38771 Margerie Treatment Plant	SW	3	Entry Point	EP	20232 MR001	8/26/2015 35205368001AM	PFOS	0.04 EPA 537	<	SE4	AM	1 CT
CT0340011	Danbury Water Department	L	38771 Margerie Treatment Plant	SW	3	Entry Point	EP	20232 MR001	5/21/2015 35190094001AM	PFHpA	0.01 EPA 537	<	SE3	AM	1 CT
CT0340011	Danbury Water Department	L	38771 Margerie Treatment Plant	SW	3	Entry Point	EP	20232 MR001	2/11/2015 35175705001AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0340011	Danbury Water Department	L	38771 Margerie Treatment Plant	SW	3	Entry Point	EP	20232 MR001	2/11/2015 35175705001AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0340011	Danbury Water Department	L	38771 Margerie Treatment Plant	SW	3	Entry Point	EP	20232 MR001	2/11/2015 35175705001AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0340011	Danbury Water Department	L	38771 Margerie Treatment Plant	SW	3	Entry Point	EP	20232 MR001	2/11/2015 35175705001AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	48251 Aquarion - Main Intertie	SW	02071	Woodway MP	EP	99003 DSMRT3	9/8/2015 201509090336AM	PFNA	0.02 EPA 537	<	SE4	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	48251 Aquarion - Main Intertie	SW	02071	Woodway MP	EP	99003 DSMRT3	9/8/2015 201509090336AM	PFHpA	0.01 EPA 537	<	SE4	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	48251 Aquarion - Main Intertie	SW	02071	Woodway MP	EP	99003 DSMRT3	9/8/2015 201509090336AM	PFOS	0.04 EPA 537	<	SE4	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	48251 Aquarion - Main Intertie	SW	02071	Woodway MP	EP	99003 DSMRT3	9/8/2015 201509090336AM	PFBS	0.09 EPA 537	<	SE4	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	48251 Aquarion - Main Intertie	SW	02071	Woodway MP	EP	99003 DSMRT3	9/8/2015 201509090336AM	PFOA	0.02 EPA 537	<	SE4	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	48251 Aquarion - Main Intertie	SW	02071	Woodway MP	EP	99003 DSMRT3	9/8/2015 201509090336AM	PFHxS	0.03 EPA 537	<	SE4	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	48251 Aquarion - Main Intertie	SW	02071	Woodway MP	EP	99003 DSMRT3	6/1/2015 201506020356AM	PFHxS	0.03 EPA 537	<	SE3	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	48251 Aquarion - Main Intertie	SW	02071	Woodway MP	EP	99003 DSMRT3	3/2/2015 201503030264AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	48251 Aquarion - Main Intertie	SW	02071	Woodway MP	EP	99003 DSMRT3	3/2/2015 201503030264AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	48251 Aquarion - Main Intertie	SW	02071	Woodway MP	EP	99003 DSMRT3	3/2/2015 201503030264AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	48251 Aquarion - Main Intertie	SW	02071	Woodway MP	EP	99003 DSMRT3	3/2/2015 201503030264AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	48251 Aquarion - Main Intertie	SW	02071	Woodway MP	EP	99003 DSMRT3	3/2/2015 201503030264AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	48251 Aquarion - Main Intertie	SW	02071	Woodway MP	EP	99003 DSMRT3	6/1/2015 201506020356AM	PFHpA	0.01 EPA 537	<	SE3	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	48251 Aquarion - Main Intertie	SW	02071	Woodway MP	EP	99003 DSMRT3	6/1/2015 201506020356AM	PFOA	0.02 EPA 537	<	SE3	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	48251 Aquarion - Main Intertie	SW	02071	Woodway MP	EP	99003 DSMRT3	6/1/2015 201506020356AM	PFNA	0.02 EPA 537	<	SE3	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	48251 Aquarion - Main Intertie	SW	02071	Woodway MP	EP	99003 DSMRT3	6/1/2015 201506020356AM	PFOS	0.04 EPA 537	<	SE3	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	48251 Aquarion - Main Intertie	SW	02071	Woodway MP	EP	99003 DSMRT3	6/1/2015 201506020356AM	PFBS	0.09 EPA 537	<	SE3	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	36546 Stamford Water Treatment Plant	SW	5	Stamford Res. FP Stamford Eff. Tap	EP	99002 DSMRT2	3/2/2015 201503030430AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	36546 Stamford Water Treatment Plant	SW	5	Stamford Res. FP Stamford Eff. Tap	EP	99002 DSMRT2	3/2/2015 201503030430AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	36546 Stamford Water Treatment Plant	SW	5	Stamford Res. FP Stamford Eff. Tap	EP	99002 DSMRT2	3/2/2015 201503030430AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	36546 Stamford Water Treatment Plant	SW	5	Stamford Res. FP Stamford Eff. Tap	EP	99002 DSMRT2	3/2/2015 201503030430AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	36546 Stamford Water Treatment Plant	SW	5	Stamford Res. FP Stamford Eff. Tap	EP	99002 DSMRT2	3/2/2015 201503030430AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	36546 Stamford Water Treatment Plant	SW	5	Stamford Res. FP Stamford Eff. Tap	EP	99002 DSMRT2	3/2/2015 201503030430AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	36546 Stamford Water Treatment Plant	SW	5	Stamford Res. FP Stamford Eff. Tap	EP	99002 DSMRT2	6/1/2015 201506020352AM	PFHxS	0.03 EPA 537	<	SE3	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	36546 Stamford Water Treatment Plant	SW	5	Stamford Res. FP Stamford Eff. Tap	EP	99002 DSMRT2	6/1/2015 201506020352AM	PFOA	0.02 EPA 537	<	SE3	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	36546 Stamford Water Treatment Plant	SW	5	Stamford Res. FP Stamford Eff. Tap	EP	99002 DSMRT2	6/1/2015 201506020352AM	PFOS	0.04 EPA 537	<	SE3	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	36546 Stamford Water Treatment Plant	SW	5	Stamford Res. FP Stamford Eff. Tap	EP	99002 DSMRT2	6/1/2015 201506020352AM	PFNA	0.02 EPA 537	<	SE3	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	36546 Stamford Water Treatment Plant	SW	5	Stamford Res. FP Stamford Eff. Tap	EP	99002 DSMRT2	6/1/2015 201506020352AM	PFHpA	0.01 EPA 537	<	SE3	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	36546 Stamford Water Treatment Plant	SW	5	Stamford Res. FP Stamford Eff. Tap	EP	99002 DSMRT2	12/3/2014 201412040318AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	48251 Aquarion - Main Intertie	SW	02071	Woodway MP	EP	99003 DSMRT3	3/2/2015 201503030264AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	36546 Stamford Water Treatment Plant	SW	5	Stamford Res. FP Stamford Eff. Tap	EP	99002 DSMRT2	12/3/2014 201412040318AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	36546 Stamford Water Treatment Plant	SW	5	Stamford Res. FP Stamford Eff. Tap	EP	99002 DSMRT2	12/3/2014 201412040318AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	36546 Stamford Water Treatment Plant	SW	5	Stamford Res. FP Stamford Eff. Tap	EP	99002 DSMRT2	12/3/2014 201412040318AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	36546 Stamford Water Treatment Plant	SW	5	Stamford Res. FP Stamford Eff. Tap	EP	99002 DSMRT2	12/3/2014 201412040318AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	36546 Stamford Water Treatment Plant	SW	5	Stamford Res. FP Stamford Eff. Tap	EP	99002 DSMRT2	12/3/2014 201412040318AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	48251 Aquarion - Main Intertie	SW	02071	Woodway MP	EP	99003 DSMRT3	12/3/2014 201412040252AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	48251 Aquarion - Main Intertie	SW	02071	Woodway MP	EP	99003 DSMRT3	12/3/2014 201412040252AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	48251 Aquarion - Main Intertie	SW	02071	Woodway MP	EP	99003 DSMRT3	12/3/2014 201412040252AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	48251 Aquarion - Main Intertie	SW	02071	Woodway MP	EP	99003 DSMRT3	12/3/2014 201412040252AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	48251 Aquarion - Main Intertie	SW	02071	Woodway MP	EP	99003 DSMRT3	12/3/2014 201412040252AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	48251 Aquarion - Main Intertie	SW	02071	Woodway MP	EP	99003 DSMRT3	12/3/2014 201412040252AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT

CT1350011	Aquarion Water Co. of CT - Stamford	L	36546	Stamford Water Treatment Plant	SW	5	Stamford Res. FP Stamford Eff. Tap	EP	99002	DSMRT2	6/1/2015	201506020352AM	PFBS	0.09	EPA 537	<	SE3	AM	1	CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	36546	Stamford Water Treatment Plant	SW	5	Stamford Res. FP Stamford Eff. Tap	EP	99002	DSMRT2	9/8/2015	201509090316AM	PFOS	0.04	EPA 537	<	SE4	AM	1	CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	36546	Stamford Water Treatment Plant	SW	5	Stamford Res. FP Stamford Eff. Tap	EP	99002	DSMRT2	9/8/2015	201509090316AM	PFOA	0.02	EPA 537	<	SE4	AM	1	CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	36546	Stamford Water Treatment Plant	SW	5	Stamford Res. FP Stamford Eff. Tap	EP	99002	DSMRT2	9/8/2015	201509090316AM	PFNA	0.02	EPA 537	<	SE4	AM	1	CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	36546	Stamford Water Treatment Plant	SW	5	Stamford Res. FP Stamford Eff. Tap	EP	99002	DSMRT2	9/8/2015	201509090316AM	PFHxS	0.03	EPA 537	<	SE4	AM	1	CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	36546	Stamford Water Treatment Plant	SW	5	Stamford Res. FP Stamford Eff. Tap	EP	99002	DSMRT2	9/8/2015	201509090316AM	PFHpA	0.01	EPA 537	<	SE4	AM	1	CT
CT1350011	Aquarion Water Co. of CT - Stamford	L	36546	Stamford Water Treatment Plant	SW	5	Stamford Res. FP Stamford Eff. Tap	EP	99002	DSMRT2	9/8/2015	201509090316AM	PFBS	0.09	EPA 537	<	SE4	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36226	Hemlocks Water Treatment Plant	SW	5	Hemlocks Res. FP Tank Eff. Tap	EP	99004	DSMRT3	7/15/2013	201307160452AM	PFBS	0.09	EPA 537	<	SE1	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36226	Hemlocks Water Treatment Plant	SW	5	Hemlocks Res. FP Tank Eff. Tap	EP	99004	DSMRT3	7/15/2013	201307160452AM	PFOS	0.04	EPA 537	<	SE1	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36226	Hemlocks Water Treatment Plant	SW	5	Hemlocks Res. FP Tank Eff. Tap	EP	99004	DSMRT3	7/15/2013	201307160452AM	PFOA	0.02	EPA 537	<	SE1	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36226	Hemlocks Water Treatment Plant	SW	5	Hemlocks Res. FP Tank Eff. Tap	EP	99004	DSMRT3	10/7/2013	201310080217AM	PFOS	0.04	EPA 537	<	SE2	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36226	Hemlocks Water Treatment Plant	SW	5	Hemlocks Res. FP Tank Eff. Tap	EP	99004	DSMRT3	7/15/2013	201307160452AM	PFNA	0.02	EPA 537	<	SE1	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36226	Hemlocks Water Treatment Plant	SW	5	Hemlocks Res. FP Tank Eff. Tap	EP	99004	DSMRT3	7/15/2013	201307160452AM	PFHxS	0.03	EPA 537	<	SE1	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36226	Hemlocks Water Treatment Plant	SW	5	Hemlocks Res. FP Tank Eff. Tap	EP	99004	DSMRT3	7/15/2013	201307160452AM	PFHpA	0.01	EPA 537	<	SE1	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36226	Hemlocks Water Treatment Plant	SW	5	Hemlocks Res. FP Tank Eff. Tap	EP	99004	DSMRT3	10/7/2013	201310080217AM	PFBS	0.09	EPA 537	<	SE2	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36226	Hemlocks Water Treatment Plant	SW	5	Hemlocks Res. FP Tank Eff. Tap	EP	99004	DSMRT3	10/7/2013	201310080217AM	PFHxS	0.03	EPA 537	<	SE2	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36226	Hemlocks Water Treatment Plant	SW	5	Hemlocks Res. FP Tank Eff. Tap	EP	99004	DSMRT3	10/7/2013	201310080217AM	PFNA	0.02	EPA 537	<	SE2	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36226	Hemlocks Water Treatment Plant	SW	5	Hemlocks Res. FP Tank Eff. Tap	EP	99004	DSMRT3	10/7/2013	201310080217AM	PFOA	0.02	EPA 537	<	SE2	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36226	Hemlocks Water Treatment Plant	SW	5	Hemlocks Res. FP Tank Eff. Tap	EP	99004	DSMRT3	4/1/2014	201404020493AM	PFOS	0.04	EPA 537	<	SE4	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36226	Hemlocks Water Treatment Plant	SW	5	Hemlocks Res. FP Tank Eff. Tap	EP	99004	DSMRT3	4/1/2014	201404020493AM	PFBS	0.09	EPA 537	<	SE4	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36226	Hemlocks Water Treatment Plant	SW	5	Hemlocks Res. FP Tank Eff. Tap	EP	99004	DSMRT3	4/1/2014	201404020493AM	PFHpA	0.01	EPA 537	<	SE4	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36226	Hemlocks Water Treatment Plant	SW	5	Hemlocks Res. FP Tank Eff. Tap	EP	99004	DSMRT3	4/1/2014	201404020493AM	PFNA	0.02	EPA 537	<	SE4	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36226	Hemlocks Water Treatment Plant	SW	5	Hemlocks Res. FP Tank Eff. Tap	EP	99004	DSMRT3	4/1/2014	201404020493AM	PFOA	0.02	EPA 537	<	SE4	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36226	Hemlocks Water Treatment Plant	SW	5	Hemlocks Res. FP Tank Eff. Tap	EP	99004	DSMRT3	4/1/2014	201404020493AM	PFHxS	0.03	EPA 537	<	SE4	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36220	Easton Water Treatment Plant	SW	5	Easton Lake Res. FP Tank Eff. Tap	EP	99002	DSMRT1	10/7/2013	201310080207AM	PFOS	0.04	EPA 537	<	SE2	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36220	Easton Water Treatment Plant	SW	5	Easton Lake Res. FP Tank Eff. Tap	EP	99002	DSMRT1	10/7/2013	201310080207AM	PFNA	0.02	EPA 537	<	SE2	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36220	Easton Water Treatment Plant	SW	5	Easton Lake Res. FP Tank Eff. Tap	EP	99002	DSMRT1	10/7/2013	201310080207AM	PFHxS	0.03	EPA 537	<	SE2	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36220	Easton Water Treatment Plant	SW	5	Easton Lake Res. FP Tank Eff. Tap	EP	99002	DSMRT1	10/7/2013	201310080207AM	PFHpA	0.01	EPA 537	<	SE2	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36220	Easton Water Treatment Plant	SW	5	Easton Lake Res. FP Tank Eff. Tap	EP	99002	DSMRT1	10/7/2013	201310080207AM	PFBS	0.09	EPA 537	<	SE2	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36220	Easton Water Treatment Plant	SW	5	Easton Lake Res. FP Tank Eff. Tap	EP	99002	DSMRT1	10/7/2013	201310080207AM	PFOA	0.02	EPA 537	<	SE2	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36220	Easton Water Treatment Plant	SW	5	Easton Lake Res. FP Tank Eff. Tap	EP	99002	DSMRT1	1/6/2014	201401070140AM	PFOA	0.02	EPA 537	<	SE3	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36220	Easton Water Treatment Plant	SW	5	Easton Lake Res. FP Tank Eff. Tap	EP	99002	DSMRT1	1/6/2014	201401070140AM	PFOS	0.04	EPA 537	<	SE3	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36220	Easton Water Treatment Plant	SW	5	Easton Lake Res. FP Tank Eff. Tap	EP	99002	DSMRT1	1/6/2014	201401070140AM	PFNA	0.02	EPA 537	<	SE3	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36220	Easton Water Treatment Plant	SW	5	Easton Lake Res. FP Tank Eff. Tap	EP	99002	DSMRT1	1/6/2014	201401070140AM	PFHxS	0.03	EPA 537	<	SE3	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36220	Easton Water Treatment Plant	SW	5	Easton Lake Res. FP Tank Eff. Tap	EP	99002	DSMRT1	1/6/2014	201401070140AM	PFHpA	0.01	EPA 537	<	SE3	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36220	Easton Water Treatment Plant	SW	5	Easton Lake Res. FP Tank Eff. Tap	EP	99002	DSMRT1	1/6/2014	201401070140AM	PFBS	0.09	EPA 537	<	SE3	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36220	Easton Water Treatment Plant	SW	5	Easton Lake Res. FP Tank Eff. Tap	EP	99002	DSMRT1	7/15/2013	201307160480AM	PFHpA	0.01	EPA 537	<	SE1	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36226	Hemlocks Water Treatment Plant	SW	5	Hemlocks Res. FP Tank Eff. Tap	EP	99004	DSMRT3	1/6/2014	201401070142AM	PFOA	0.02	EPA 537	<	SE3	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36226	Hemlocks Water Treatment Plant	SW	5	Hemlocks Res. FP Tank Eff. Tap	EP	99004	DSMRT3	1/6/2014	201401070142AM	PFOS	0.04	EPA 537	<	SE3	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36226	Hemlocks Water Treatment Plant	SW	5	Hemlocks Res. FP Tank Eff. Tap	EP	99004	DSMRT3	10/7/2013	201310080217AM	PFHpA	0.01	EPA 537	<	SE2	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36226	Hemlocks Water Treatment Plant	SW	5	Hemlocks Res. FP Tank Eff. Tap	EP	99004	DSMRT3	1/6/2014	201401070142AM	PFNA	0.02	EPA 537	<	SE3	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36226	Hemlocks Water Treatment Plant	SW	5	Hemlocks Res. FP Tank Eff. Tap	EP	99004	DSMRT3	1/6/2014	201401070142AM	PFHxS	0.03	EPA 537	<	SE3	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36226	Hemlocks Water Treatment Plant	SW	5	Hemlocks Res. FP Tank Eff. Tap	EP	99004	DSMRT3	1/6/2014	201401070142AM	PFHpA	0.01	EPA 537	<	SE3	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36226	Hemlocks Water Treatment Plant	SW	5	Hemlocks Res. FP Tank Eff. Tap	EP	99004	DSMRT3	1/6/2014	201401070142AM	PFBS	0.09	EPA 537	<	SE3	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	706	Coleytown Wellfield TP	GW	3	Coleytown Wells TP Eff. Tap	EP	99005	00344	6/18/2014	201406190248AM	PFNA	0.02	EPA 537	<	SE2	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	706	Coleytown Wellfield TP	GW	3	Coleytown Wells TP Eff. Tap	EP	99005	00344	6/18/2014	201406190248AM	PFBS	0.09	EPA 537	<	SE2	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	706	Coleytown Wellfield TP	GW	3	Coleytown Wells TP Eff. Tap	EP	99005	00344	7/17/2013	201307180551AM	PFNA	0.02	EPA 537	<	SE1	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	706	Coleytown Wellfield TP	GW	3	Coleytown Wells TP Eff. Tap	EP	99005	00344	7/17/2013	201307180551AM	PFOA	0.02	EPA 537	<	SE1	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	706	Coleytown Wellfield TP	GW	3	Coleytown Wells TP Eff. Tap	EP	99005	00344	6/18/2014	201406190248AM	PFOS	0.04	EPA 537	<	SE2	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	706	Coleytown Wellfield TP	GW	3	Coleytown Wells TP Eff. Tap	EP	99005	00344	7/17/2013	201307180551AM	PFHxS	0.03	EPA 537	<	SE1	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	706	Coleytown Wellfield TP	GW	3	Coleytown Wells TP Eff. Tap	EP	99005	00344	7/17/2013	201307180551AM	PFHpA	0.01	EPA 537	<	SE1	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	706	Coleytown Wellfield TP	GW	3	Coleytown Wells TP Eff. Tap	EP	99005	00344	7/17/2013	201307180551AM	PFBS	0.09	EPA 537	<	SE1	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36219	Trap Falls Water Treatment Plant	SW	5	Trap Falls Res. FP Eff. Tap	EP	99003	DSMRT2	7/15/2013	201307160499AM	PFOA	0.02	EPA 537	<	SE1	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	706	Coleytown Wellfield TP	GW	3	Coleytown Wells TP Eff. Tap	EP	99005	00344	6/18/2014	201406190248AM	PFHxS	0.03	EPA 537	<	SE2	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36219	Trap Falls Water Treatment Plant	SW	5	Trap Falls Res. FP Eff. Tap	EP	99003	DSMRT2	7/15/2013	201307160499AM	PFHpA	0.01	EPA 537	<	SE1	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36219	Trap Falls Water Treatment Plant	SW	5	Trap Falls Res. FP Eff. Tap	EP	99003	DSMRT2	7/15/2013	201307160499AM	PFOS	0.04	EPA 537	<	SE1	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36219	Trap Falls Water Treatment Plant	SW	5	Trap Falls Res. FP Eff. Tap	EP	99003	DSMRT2	7/15/2013	201307160499AM	PFHxS	0.03	EPA 537	<	SE1	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36219	Trap Falls Water Treatment Plant	SW	5	Trap Falls Res. FP Eff. Tap	EP	99003	DSMRT2	7/15/2013	201307160499AM	PFBS	0.09	EPA 537	<	SE1	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	706	Coleytown Wellfield TP	GW	3	Coleytown Wells TP Eff. Tap	EP	99005	00344	6/18/2014	201406190248AM	PFOA	0.02	EPA 537	<	SE2	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	706	Coleytown Wellfield TP	GW	3	Coleytown Wells TP Eff. Tap	EP	99005	00344	6/18/2014	201406190248AM	PFHpA	0.01	EPA 537	<	SE2	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	704	Westport Wellfield TP	GW	00344	Westport Wells TP Eff Tap	EP	99005	00344	9/24/2013	201309250088AM	PFHxS	0.03	EPA 537	<	SE1	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	704	Westport Wellfield TP	GW	00344	Westport Wells TP Eff Tap	EP	99005	00344	9/24/2013	201309250088AM	PFOA	0.02	EPA 537	<	SE1	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	704	Westport Wellfield TP	GW	00344	Westport Wells TP Eff Tap	EP	99005	00344	9/24/2013	201309250088AM	PFNA	0.02	EPA 537	<	SE1	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	704	Westport Wellfield TP	GW	00344	Westport Wells TP Eff Tap	EP	99005	00344	9/24/2013	201309250088AM	PFHpA	0.01	EPA 537	<	SE1	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	704	Westport Wellfield TP	GW	00344	Westport Wells TP Eff Tap	EP	99005	00344	9/24/2013	201309250088AM	PFBS	0.09	EPA 537	<	SE1	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	704	Westport Wellfield TP	GW	00344	Westport Wells TP Eff Tap	EP	99005	00344	6/18/2014	201406190250AM	PFHxS	0.03	EPA 537	<	SE2	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	704	Westport Wellfield TP	GW	00344	Westport Wells TP Eff Tap	EP	99005	00344	9/24/2013	201309250088AM	PFOS	0.04	EPA 537	<	SE1	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	704	Westport Wellfield TP	GW	00344	Westport Wells TP Eff Tap	EP	99005	00344	6/18/2014	201406190250AM	PFNA	0.02	EPA 537	<	SE2	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	704	Westport Wellfield TP	GW	00344	Westport Wells TP Eff Tap	EP	99005	00344	6/18/2014	201406190250AM	PFBS	0.09	EPA 537	<	SE2	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	706	Coleytown Wellfield TP	GW	3	Coleytown Wells TP Eff. Tap	EP	99005	00344	7/17/2013	201307180551AM	PFOS	0.04	EPA 537	<	SE1	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	704	Westport Wellfield TP	GW	00344	Westport Wells TP Eff Tap	EP	99005	00344	6/18/2014	201406190250AM	PFOA	0.02	EPA 537	<	SE2	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	704	Westport Wellfield TP	GW	00344	Westport Wells TP Eff Tap	EP	99005	00344	6/18/2014	201406190250AM	PFOS	0.04	EPA 537	<	SE2	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	704	Westport Wellfield TP	GW	00344	Westport Wells TP Eff Tap	EP	99005	00344	6/18/2014	201406190250AM	PFHpA	0.01	EPA 537	<	SE2	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36220	Easton Water Treatment Plant	SW	5	Easton Lake Res. FP Tank Eff. Tap	EP	99002	DSMRT1	7/15/2013	201307160480AM	PFOA	0.02	EPA 537	<	SE1	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36219	Trap Falls Water Treatment Plant	SW	5	Trap Falls Res. FP Eff. Tap	EP	99003	DSMRT2	1/6/2014	201401070102AM	PFOA	0.02	EPA 537	<	SE3	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36219	Trap Falls Water Treatment Plant	SW	5	Trap Falls Res. FP Eff. Tap	EP	99003	DSMRT2	1/6/2014	201401070102AM	PFNA	0.02	EPA 537	<	SE3	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36219	Trap Falls Water Treatment Plant	SW	5	Trap Falls Res. FP Eff. Tap	EP	99003	DSMRT2	1/6/2014	201401070102AM	PFHpA	0.01	EPA 537	<	SE3	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36219	Trap Falls Water Treatment Plant	SW	5	Trap Falls Res. FP Eff. Tap	EP	99003	DSMRT2	1/6/2014	201401070102AM	PFBS	0.09	EPA 537	<	SE3	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36219	Trap Falls Water Treatment Plant	SW	5	Trap Falls Res. FP Eff. Tap	EP	99003	DSMRT2	1/6/2014	201401070102AM	PFOS	0.04	EPA 537	<	SE3	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36220	Easton Water Treatment Plant	SW	5	Easton Lake Res. FP Tank Eff. Tap	EP	99002	DSMRT1	4/1/2014	201404020551AM	PFHpA	0.01	EPA 537	<	SE4	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36220	Easton Water Treatment Plant	SW	5	Easton Lake Res. FP Tank Eff. Tap	EP	99002	DSMRT1	4/1/2014	201404020551AM	PFOA	0.02	EPA 537	<	SE4	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36220	Easton Water Treatment Plant	SW	5	Easton Lake Res. FP Tank Eff. Tap	EP	99002	DSMRT1	7/15/2013	201307160480AM	PFOS	0.04	EPA 537	<	SE1	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36220	Easton Water Treatment Plant	SW	5	Easton Lake Res. FP Tank Eff. Tap	EP	99002	DSMRT1	7/15/2013	201307160480AM	PFNA	0.02	EPA 537	<	SE1	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36220	Easton Water Treatment Plant	SW	5	Easton Lake Res. FP Tank Eff. Tap	EP	99002	DSMRT1	7/15/2013	201307160480AM	PFBS	0.09	EPA 537	<	SE1	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36220	Easton Water Treatment Plant	SW	5	Easton Lake Res. FP Tank Eff. Tap	EP	99002	DSMRT1	4/1/2014	201404020551AM	PFBS	0.09	EPA 537	<	SE4	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36220	Easton Water Treatment Plant	SW	5	Easton Lake Res. FP Tank Eff. Tap	EP	99002	DSMRT1	4/1/2014	201404020551AM	PFHxS	0.03	EPA 537	<	SE4	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36220	Easton Water Treatment Plant	SW	5	Easton Lake Res. FP Tank Eff. Tap	EP	99002	DSMRT1	4/1/2014	201404020551AM	PFNA	0.02	EPA 537	<	SE4	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36220	Easton Water Treatment Plant	SW	5	Easton Lake Res. FP Tank Eff. Tap	EP	99002	DSMRT1	4/1/2014	201404020551AM	PFOS	0.04	EPA 537	<	SE4	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36219	Trap Falls Water Treatment Plant	SW	5	Trap Falls Res. FP Eff. Tap	EP	99003	DSMRT2	10/7/2013	201310080165AM	PFBS	0.09	EPA 537	<	SE2	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36219	Trap Falls Water Treatment Plant	SW	5	Trap Falls Res. FP Eff. Tap	EP	99003	DSMRT2	4/1/2014	201404020545AM	PFOS	0.04	EPA 537	<	SE4	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36219	Trap Falls Water Treatment Plant	SW	5	Trap Falls Res. FP Eff. Tap	EP	99003	DSMRT2	4/1/2014	201404020545AM	PFHpA	0.01	EPA 537	<	SE4	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36219	Trap Falls Water Treatment Plant	SW	5	Trap Falls Res. FP Eff. Tap	EP	99003	DSMRT2	4/1/2014	201404020545AM	PFNA	0.02	EPA 537	<	SE4	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36220	Easton Water Treatment Plant	SW	5	Easton Lake Res. FP Tank Eff. Tap	EP	99002	DSMRT1	7/15/2013	201307160480AM	PFHxS	0.03	EPA 537	<	SE1	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36219	Trap Falls Water Treatment Plant	SW	5	Trap Falls Res. FP Eff. Tap	EP	99003	DSMRT2	7/15/2013	201307160499AM	PFNA	0.02	EPA 537	<	SE1	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36219	Trap Falls Water Treatment Plant	SW	5	Trap Falls Res. FP Eff. Tap	EP	99003	DSMRT2	4/1/2014	201404020545AM	PFHxS	0.03	EPA 537	<	SE4	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36219	Trap Falls Water Treatment Plant	SW	5	Trap Falls Res. FP Eff. Tap	EP	99003	DSMRT2	4/1/2014	201404020545AM	PFBS	0.09	EPA 537	<	SE4	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36219	Trap Falls Water Treatment Plant	SW	5	Trap Falls Res. FP Eff. Tap	EP	99003	DSMRT2	4/1/2014	201404020545AM	PFOA	0.02	EPA 537	<	SE4	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36219	Trap Falls Water Treatment Plant	SW	5	Trap Falls Res. FP Eff. Tap	EP	99003	DSMRT2	1/6/2014	201401070102AM	PFHxS	0.03	EPA 537	<	SE3	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36219	Trap Falls Water Treatment Plant	SW	5	Trap Falls Res. FP Eff. Tap	EP	99003	DSMRT2	10/7/2013	201310080165AM	PFOS	0.04	EPA 537	<	SE2	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36219	Trap Falls Water Treatment Plant	SW	5	Trap Falls Res. FP Eff. Tap	EP	99003	DSMRT2	10/7/2013	201310080165AM	PFHxS	0.03	EPA 537	<	SE2	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36219	Trap Falls Water Treatment Plant	SW	5	Trap Falls Res. FP Eff. Tap	EP	99003	DSMRT2	10/7/2013	201310080165AM	PFHpA	0.01	EPA 537	<	SE2	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36219	Trap Falls Water Treatment Plant	SW	5	Trap Falls Res. FP Eff. Tap	EP	99003	DSMRT2	10/7/2013	201310080165AM	PFOA	0.02	EPA 537	<	SE2	AM	1	CT
CT0150011	Aquarion Water Co. of CT - Main System	L	36219	Trap Falls Water Treatment Plant	SW	5	Trap Falls Res. FP Eff. Tap	EP	99003	DSMRT2	10/7/2013	201310080165AM	PFNA	0.02	EPA 537	<	SE2	AM	1	CT
CT1510011	Waterbury Water Department	L	36573	Water Treatment Plant	SW	5	Entry Point	EP	99001	DSMRT1	7/16/2014	200399942	PFHpA	0.01	EPA 537	<	SE1	AM	1	CT
CT1510011	Waterbury Water Department	L	36573	Water Treatment Plant	SW	5	Entry Point	EP	99001	DSMRT1	7/16/2014	200399942	PFOS	0.04	EPA 537	<	SE1	AM	1	CT
CT1510011	Waterbury Water Department	L	36573	Water Treatment Plant	SW	5	Entry Point	EP	99001	DSMRT1	10/16/2014	200406350	PFOA	0.02	EPA 537	<	SE2	AM	1	CT
CT1510011	Waterbury Water Department	L	36573	Water Treatment Plant	SW	5	Entry Point	EP	99001	DSMRT1	10/16/2014	200406350	PFOS	0.04	EPA 537	<	SE2	AM	1	CT
CT1510011	Waterbury Water Department	L	36573	Water Treatment Plant	SW	5	Entry Point	EP	99001	DSMRT1	7/16/2014	200399942	PFHxS	0.03	EPA 537	<	SE1	AM	1	CT
CT1510011	Waterbury Water Department	L	36573	Water Treatment Plant	SW	5	Entry Point	EP	99001	DSMRT1	7/16/2014	200399942	PFBS	0.09	EPA 537	<	SE1	AM	1	CT
CT1510011	Waterbury Water Department	L	36573	Water Treatment Plant	SW	5	Entry Point	EP	99001	DSMRT1	1/22/2015	200411021	PFBS	0.09	EPA 537	<	SE3	AM	1	CT
CT1510011	Waterbury Water Department	L	36573	Water Treatment Plant	SW	5	Entry Point	EP	99001	DSMRT1	10/16/2014	200406350	PFNA	0.02	EPA 537	<	SE2	AM	1	CT
CT1510011	Waterbury Water Department	L	36573	Water Treatment Plant	SW	5	Entry Point	EP	99001	DSMRT1	1/22/2015	200411021	PFHpA	0.01	EPA 537	<	SE3	AM	1	CT
CT1510011	Waterbury Water Department	L	36573	Water Treatment Plant	SW	5	Entry Point	EP	99001	DSMRT1	7/16/2014	200399942	PFOA	0.02	EPA 537	<	SE1	AM	1	CT
CT1510011	Waterbury Water Department	L	36573	Water Treatment Plant	SW	5	Entry Point	EP	99001	DSMRT1	10/16/2014	200406350	PFHxS	0.03	EPA 537	<	SE2	AM	1	CT
CT1510011	Waterbury Water Department	L	36573	Water Treatment Plant	SW	5	Entry Point	EP	99001	DSMRT1	10/16/2014	200406350	PFBS	0.09	EPA 537	<	SE2	AM	1	CT
CT1510011	Waterbury Water Department	L	36573	Water Treatment Plant	SW	5	Entry Point	EP	99001	DSMRT1	7/16/2014	200399942	PFNA	0.02	EPA 537	<	SE1	AM	1	CT
CT1510011	Waterbury Water Department	L	36573	Water Treatment Plant	SW	5	Entry Point	EP	99001	DSMRT1	10/16/2014	200406350	PFHpA	0.01	EPA 537	<	SE2	AM	1	CT
CT1510011	Waterbury Water Department	L	36573	Water Treatment Plant	SW	5	Entry Point	EP	99001	DSMRT1	1/22/2015	200411021	PFNA	0.02	EPA 537	<	SE3	AM	1	CT
CT1510011	Waterbury Water Department	L	36573	Water Treatment Plant	SW	5	Entry Point	EP	99001	DSMRT1	1/22/2015	200411021	PFOS	0.04	EPA 537	<	SE3	AM	1	CT
CT1510011	Waterbury Water Department	L	36573	Water Treatment Plant	SW	5	Entry Point	EP	99001	DSMRT1	1/22/2015	200411021	PFOA	0.02	EPA 537	<	SE3	AM	1	CT
CT1510011	Waterbury Water Department	L	36573	Water Treatment Plant	SW	5	Entry Point	EP	99001	DSMRT1	1/22/2015	200411021	PFHxS	0.03	EPA 537	<	SE3	AM	1	CT
CT1510011	Waterbury Water Department	L	36573	Water Treatment Plant	SW	5	Entry Point	EP	99001	DSMRT1	4/22/2015	200415506	PFHpA	0.01	EPA 537	<	SE4	AM	1	CT
CT1510011	Waterbury Water Department	L	36573	Water Treatment Plant	SW	5	Entry Point	EP	99001	DSMRT1	4/22/2015	200415506	PFOA	0.02	EPA 537	<	SE4	AM	1	CT
CT1510011	Waterbury Water Department	L	36573	Water Treatment Plant	SW	5	Entry Point	EP	99001	DSMRT1	4/22/2015	200415506	PFOS	0.04	EPA 537	<	SE4	AM	1	CT
CT1510011	Waterbury Water Department	L	36573	Water Treatment Plant	SW	5	Entry Point	EP	99001	DSMRT1	4/22/2015	200415506	PFHxS	0.03	EPA 537	<	SE4	AM	1	CT
CT1510011	Waterbury Water Department	L	36573	Water Treatment Plant	SW	5	Entry Point	EP	99001	DSMRT1	4/22/2015	200415506	PFNA	0.02	EPA 537	<	SE4	AM	1	CT

CT1510011	Waterbury Water Department	L	36573	Water Treatment Plant	SW	5	Entry Point	EP	99001	DSMRT1	4/22/2015	200415506	PFBS	0.09	EPA 537	<	SE4	AM	1 CT
CT0930011	Regional Water Authority	L	36440	Lake Saltonstall Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT7	1/21/2014	200389833 A	PFOS	0.04	EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36440	Lake Saltonstall Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT7	4/29/2014	200394919	PFNA	0.02	EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36440	Lake Saltonstall Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT7	4/29/2014	200394919	PFHxS	0.03	EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36440	Lake Saltonstall Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT7	4/29/2014	200394919	PFHpA	0.01	EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36440	Lake Saltonstall Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT7	1/21/2014	200389833 A	PFHxS	0.03	EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36440	Lake Saltonstall Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT7	1/21/2014	200389833 A	PFBS	0.09	EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36440	Lake Saltonstall Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT7	1/21/2014	200389833 A	PFOA	0.02	EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36440	Lake Saltonstall Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT7	1/21/2014	200389833 A	PFNA	0.02	EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36440	Lake Saltonstall Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT7	1/21/2014	200389833 A	PFHpA	0.01	EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36440	Lake Saltonstall Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT7	7/15/2014	200399799	PFOS	0.04	EPA 537	<	SE3	AM	1 CT
CT0930011	Regional Water Authority	L	36440	Lake Saltonstall Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT7	10/21/2014	200406627	PFNA	0.02	EPA 537	<	SE4	AM	1 CT
CT0930011	Regional Water Authority	L	36440	Lake Saltonstall Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT7	10/21/2014	200406627	PFOA	0.02	EPA 537	<	SE4	AM	1 CT
CT0930011	Regional Water Authority	L	36440	Lake Saltonstall Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT7	7/15/2014	200399799	PFOA	0.02	EPA 537	<	SE3	AM	1 CT
CT0930011	Regional Water Authority	L	36440	Lake Saltonstall Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT7	4/29/2014	200394919	PFBS	0.09	EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36440	Lake Saltonstall Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT7	7/15/2014	200399799	PFNA	0.02	EPA 537	<	SE3	AM	1 CT
CT0930011	Regional Water Authority	L	36440	Lake Saltonstall Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT7	7/15/2014	200399799	PFHpA	0.01	EPA 537	<	SE3	AM	1 CT
CT0930011	Regional Water Authority	L	36440	Lake Saltonstall Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT7	7/15/2014	200399799	PFHxS	0.03	EPA 537	<	SE3	AM	1 CT
CT0930011	Regional Water Authority	L	36441	Lake Gaillard Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT2	7/15/2014	200399798	PFHpA	0.01	EPA 537	<	SE3	AM	1 CT
CT0930011	Regional Water Authority	L	36440	Lake Saltonstall Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT7	10/21/2014	200406627	PFOS	0.04	EPA 537	<	SE4	AM	1 CT
CT0930011	Regional Water Authority	L	36440	Lake Saltonstall Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT7	10/21/2014	200406627	PFHpA	0.01	EPA 537	<	SE4	AM	1 CT
CT0930011	Regional Water Authority	L	36440	Lake Saltonstall Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT7	10/21/2014	200406627	PFBS	0.09	EPA 537	<	SE4	AM	1 CT
CT0930011	Regional Water Authority	L	36440	Lake Saltonstall Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT7	4/29/2014	200394919	PFOS	0.04	EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36440	Lake Saltonstall Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT7	10/21/2014	200406627	PFHxS	0.03	EPA 537	<	SE4	AM	1 CT
CT0930011	Regional Water Authority	L	36441	Lake Gaillard Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT2	1/21/2014	200389835 A	PFOS	0.04	EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36441	Lake Gaillard Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT2	1/21/2014	200389835 A	PFHpA	0.01	EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36441	Lake Gaillard Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT2	1/21/2014	200389835 A	PFNA	0.02	EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36441	Lake Gaillard Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT2	1/21/2014	200389835 A	PFOA	0.02	EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36441	Lake Gaillard Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT2	1/21/2014	200389835 A	PFBS	0.09	EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36441	Lake Gaillard Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT2	10/21/2014	200406625	PFHxS	0.03	EPA 537	<	SE4	AM	1 CT
CT0930011	Regional Water Authority	L	36441	Lake Gaillard Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT2	10/21/2014	200406625	PFNA	0.02	EPA 537	<	SE4	AM	1 CT
CT0930011	Regional Water Authority	L	36441	Lake Gaillard Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT2	10/21/2014	200406625	PFOA	0.02	EPA 537	<	SE4	AM	1 CT
CT0930011	Regional Water Authority	L	36441	Lake Gaillard Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT2	4/29/2014	200394914	PFHpA	0.01	EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36441	Lake Gaillard Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT2	10/21/2014	200406625	PFOS	0.04	EPA 537	<	SE4	AM	1 CT
CT0930011	Regional Water Authority	L	36441	Lake Gaillard Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT2	1/21/2014	200389835 A	PFHxS	0.03	EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36441	Lake Gaillard Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT2	7/15/2014	200399798	PFNA	0.02	EPA 537	<	SE3	AM	1 CT
CT0930011	Regional Water Authority	L	36441	Lake Gaillard Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT2	4/29/2014	200394914	PFNA	0.02	EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36441	Lake Gaillard Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT2	4/29/2014	200394914	PFHxS	0.03	EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36441	Lake Gaillard Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT2	4/29/2014	200394914	PFOS	0.04	EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36441	Lake Gaillard Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT2	4/29/2014	200394914	PFOA	0.02	EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36441	Lake Gaillard Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT2	4/29/2014	200394914	PFBS	0.09	EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36441	Lake Gaillard Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT2	10/21/2014	200406625	PFHpA	0.01	EPA 537	<	SE4	AM	1 CT
CT0930011	Regional Water Authority	L	36439	West River Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT10	4/29/2014	200394923	PFOA	0.02	EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36439	West River Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT10	4/29/2014	200394923	PFNA	0.02	EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36439	West River Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT10	4/29/2014	200394923	PFHxS	0.03	EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36439	West River Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT10	4/29/2014	200394923	PFHpA	0.01	EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36439	West River Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT10	4/29/2014	200394923	PFBS	0.09	EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36439	West River Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT10	7/15/2014	200399792	PFHxS	0.03	EPA 537	<	SE3	AM	1 CT
CT0930011	Regional Water Authority	L	36439	West River Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT10	10/21/2014	200406619	PFHxS	0.03	EPA 537	<	SE4	AM	1 CT
CT0930011	Regional Water Authority	L	36439	West River Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT10	10/21/2014	200406619	PFHpA	0.01	EPA 537	<	SE4	AM	1 CT
CT0930011	Regional Water Authority	L	36439	West River Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT10	10/21/2014	200406619	PFBS	0.09	EPA 537	<	SE4	AM	1 CT
CT0930011	Regional Water Authority	L	36439	West River Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT10	7/15/2014	200399792	PFNA	0.02	EPA 537	<	SE3	AM	1 CT
CT0930011	Regional Water Authority	L	36439	West River Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT10	7/15/2014	200399792	PFOS	0.04	EPA 537	<	SE3	AM	1 CT
CT0930011	Regional Water Authority	L	36439	West River Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT10	7/15/2014	200399792	PFOA	0.02	EPA 537	<	SE3	AM	1 CT
CT0930011	Regional Water Authority	L	36439	West River Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT10	7/15/2014	200399792	PFBS	0.09	EPA 537	<	SE3	AM	1 CT
CT0930011	Regional Water Authority	L	36439	West River Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT10	7/15/2014	200399792	PFHpA	0.01	EPA 537	<	SE3	AM	1 CT
CT0930011	Regional Water Authority	L	36439	West River Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT10	4/29/2014	200394923	PFOS	0.04	EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36440	Lake Saltonstall Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT7	7/15/2014	200399799	PFBS	0.09	EPA 537	<	SE3	AM	1 CT
CT0930011	Regional Water Authority	L	36439	West River Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT10	1/22/2014	200389861 A	PFOA	0.02	EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36439	West River Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT10	10/21/2014	200406619	PFOS	0.04	EPA 537	<	SE4	AM	1 CT
CT0930011	Regional Water Authority	L	36440	Lake Saltonstall Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT7	4/29/2014	200394919	PFOA	0.02	EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36439	West River Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT10	10/21/2014	200406619	PFOA	0.02	EPA 537	<	SE4	AM	1 CT
CT0930011	Regional Water Authority	L	36439	West River Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT10	1/22/2014	200389861 A	PFBS	0.09	EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36439	West River Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT10	1/22/2014	200389861 A	PFHpA	0.01	EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36439	West River Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT10	1/22/2014	200389861 A	PFOS	0.04	EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36439	West River Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT10	1/22/2014	200389861 A	PFHxS	0.03	EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36439	West River Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT10	1/22/2014	200389861 A	PFNA	0.02	EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36439	West River Water Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT10	10/21/2014	200406619	PFNA	0.02	EPA 537	<	SE4	AM	1 CT
CT0930011	Regional Water Authority	L	49792	Lake Whitney Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT8	10/21/2014	200406621	PFHpA	0.01	EPA 537	<	SE4	AM	1 CT
CT0930011	Regional Water Authority	L	49792	Lake Whitney Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT8	10/21/2014	200406621	PFHxS	0.03	EPA 537	<	SE4	AM	1 CT
CT0930011	Regional Water Authority	L	49792	Lake Whitney Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT8	10/21/2014	200406621	PFNA	0.02	EPA 537	<	SE4	AM	1 CT
CT0930011	Regional Water Authority	L	49792	Lake Whitney Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT8	10/21/2014	200406621	PFOA	0.02	EPA 537	<	SE4	AM	1 CT
CT0930011	Regional Water Authority	L	49792	Lake Whitney Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT8	10/21/2014	200406621	PFBS	0.09	EPA 537	<	SE4	AM	1 CT
CT0930011	Regional Water Authority	L	49792	Lake Whitney Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT8	10/21/2014	200406621	PFOS	0.04	EPA 537	<	SE4	AM	1 CT
CT0930011	Regional Water Authority	L	49792	Lake Whitney Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT8	7/15/2014	200399797	PFHpA	0.01	EPA 537	<	SE3	AM	1 CT
CT0930011	Regional Water Authority	L	49792	Lake Whitney Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT8	4/29/2014	200394927	PFNA	0.02	EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	49792	Lake Whitney Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT8	1/21/2014	200389837 A	PFHxS	0.03	EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	49792	Lake Whitney Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT8	4/29/2014	200394927	PFBS	0.09	EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	49792	Lake Whitney Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT8	4/29/2014	200394927	PFHpA	0.01	EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	49792	Lake Whitney Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT8	4/29/2014	200394927	PFOA	0.02	EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	49792	Lake Whitney Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT8	4/29/2014	200394927	PFHxS	0.03	EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	49792	Lake Whitney Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT8	1/21/2014	200389837 A	PFNA	0.02	EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	49792	Lake Whitney Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT8	7/15/2014	200399797	PFBS	0.09	EPA 537	<	SE3	AM	1 CT
CT0930011	Regional Water Authority	L	49792	Lake Whitney Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT8	1/21/2014	200389837 A	PFBS	0.09	EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	49792	Lake Whitney Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT8	1/21/2014	200389837 A	PFOS	0.04	EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	49792	Lake Whitney Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT8	1/21/2014	200389837 A	PFHpA	0.01	EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	49792	Lake Whitney Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT8	1/21/2014	200389837 A	PFOA	0.02	EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36453	Seymour Well	GW	3	Entry Point	EP	99001	DSMRT13	7/15/2014	200399800	PFNA	0.02	EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36453	Seymour Well	GW	3	Entry Point	EP	99001	DSMRT13	7/15/2014	200399800	PFOS	0.04	EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36453	Seymour Well	GW	3	Entry Point	EP	99001	DSMRT13	1/21/2014	200389853 A	PFHxS	0.03	EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36453	Seymour Well	GW	3	Entry Point	EP	99001	DSMRT13	1/21/2014	200389853 A	PFHpA	0.01	EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36453	Seymour Well	GW	3	Entry Point	EP	99001	DSMRT13	1/21/2014	200389853 A	PFOS	0.04	EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36453	Seymour Well	GW	3	Entry Point	EP	99001	DSMRT13	7/15/2014	200399800	PFHxS	0.03	EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36453	Seymour Well	GW	3	Entry Point	EP	99001	DSMRT13	1/21/2014	200389853 A	PFBS	0.09	EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36453	Seymour Well	GW	3	Entry Point	EP	99001	DSMRT13	7/15/2014	200399800	PFOA	0.02	EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	49792	Lake Whitney Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT8	7/15/2014	200399797	PFOA	0.02	EPA 537	<	SE3	AM	1 CT
CT0930011	Regional Water Authority	L	49792	Lake Whitney Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT8	7/15/2014	200399797	PFOS	0.04	EPA 537	<	SE3	AM	1 CT
CT0930011	Regional Water Authority	L	49792	Lake Whitney Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT8	7/15/2014	200399797	PFNA	0.02	EPA 537	<	SE3	AM	1 CT
CT0930011	Regional Water Authority	L	49792	Lake Whitney Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT8	7/15/2014	200399797	PFHxS	0.03	EPA 537	<	SE3	AM	1 CT
CT0930011	Regional Water Authority	L	36453	Seymour Well	GW	3	Entry Point	EP	99001	DSMRT13	7/15/2014	200399800	PFHpA	0.01	EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	49792	Lake Whitney Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT8	4/29/2014	200394927	PFOS	0.04	EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36441	Lake Gaillard Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT2	10/21/2014	200406625	PFBS	0.09	EPA 537	<	SE4	AM	1 CT
CT0930011	Regional Water Authority	L	36446	South Sleeping Giant Wellfield TS	GW	3	Entry Point	EP	99001	DSMRT4	1/21/2014	200389841 A	PFHxS	0.03	EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36446	South Sleeping Giant Wellfield TS	GW	3	Entry Point	EP	99001	DSMRT4	1/21/2014	200389841 A	PFOS	0.04	EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36446	South Sleeping Giant Wellfield TS	GW	3	Entry Point	EP	99001	DSMRT4	1/21/2014	200389841 A	PFNA	0.02	EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36446	South Sleeping Giant Wellfield TS	GW	3	Entry Point	EP	99001	DSMRT4	7/15/2014	200399796	PFOA	0.02	EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36446	South Sleeping Giant Wellfield TS	GW	3	Entry Point	EP	99001	DSMRT4	1/21/2014	200389841 A	PFOA	0.02	EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36446	South Sleeping Giant Wellfield TS	GW	3	Entry Point	EP	99001	DSMRT4	7/15/2014	200399796	PFNA	0.02	EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36446	South Sleeping Giant Wellfield TS	GW	3	Entry Point	EP	99001	DSMRT4	1/21/2014	200389841 A	PFBS	0.09	EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36446	South Sleeping Giant Wellfield TS	GW	3	Entry Point	EP	99001	DSMRT4	1/21/2014	200389841 A	PFHpA	0.01	EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36449	South Cheshire Wellfield TS	GW	3	Entry Point	EP	99001	DSMRT1	1/21/2014	200389845 A	PFNA	0.02	EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36449	South Cheshire Wellfield TS	GW	3	Entry Point	EP	99001	DSMRT1	1/21/2014	200389845 A	PFBS	0.09	EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36449	South Cheshire Wellfield TS	GW	3	Entry Point	EP	99001	DSMRT1	1/21/2014	200389845 A	PFHxS	0.03	EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36446	South Sleeping Giant Wellfield TS	GW	3	Entry Point	EP	99001	DSMRT4	7/15/2014	200399796	PFHxS	0.03	EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36446	South Sleeping Giant Wellfield TS	GW	3	Entry Point	EP	99001	DSMRT4	7/15/2014	200399796	PFHpA	0.01	EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36446	South Sleeping Giant Wellfield TS	GW	3	Entry Point	EP	99001	DSMRT4	7/15/2014	200399796	PFBS	0.09	EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36446	South Sleeping Giant Wellfield TS	GW	3	Entry Point	EP	99001	DSMRT4	7/15/2014	200399796	PFOS	0.04	EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36441	Lake Gaillard Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT2	7/15/2014	200399798	PFBS	0.09	EPA 537	<	SE3	AM	1 CT
CT0930011	Regional Water Authority	L	36445	North Sleeping Giant Wellfield TS	GW	3	Entry Point	EP	99001	DSMRT5	1/21/2014	200389839 A	PFNA	0.02	EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36445	North Sleeping Giant Wellfield TS	GW	3	Entry Point	EP	99001	DSMRT5	7/15/2014	200399795	PFHxS	0.03	EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36441	Lake Gaillard Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT2	7/15/2014	200399798	PFHxS	0.03	EPA 537	<	SE3	AM	1 CT
CT0930011	Regional Water Authority	L	36441	Lake Gaillard Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT2	7/15/2014	200399798	PFOA	0.02	EPA 537	<	SE3	AM	1 CT
CT0930011	Regional Water Authority	L	36441	Lake Gaillard Treatment Plant	SW	3	Entry Point	EP	99001	DSMRT2	7/15/2014	200399798	PFOS	0.04	EPA 537	<	SE3	AM	1 CT
CT0930011	Regional Water Authority	L	36445	North Sleeping Giant Wellfield TS	GW	3	Entry Point	EP	99001	DSMRT5	7/15/2014	200399795	PFBS	0.09	EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36445	North Sleeping Giant Wellfield TS	GW	3	Entry Point	EP	99001	DSMRT5	7/15/2014	200399795	PFOS	0.04	EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36445	North Sleeping Giant Wellfield TS	GW	3	Entry Point	EP	99001	DSMRT5	7/15/2014	200399795	PFHpA	0.01	EPA 537	<	SE2	AM	1 CT

CT0930011	Regional Water Authority	L	36445 North Sleeping Giant Wellfield TS	GW	3	Entry Point	EP	99001 DSMRT5	1/21/2014 200389839 A	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36445 North Sleeping Giant Wellfield TS	GW	3	Entry Point	EP	99001 DSMRT5	7/15/2014 200399795	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36445 North Sleeping Giant Wellfield TS	GW	3	Entry Point	EP	99001 DSMRT5	1/21/2014 200389839 A	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36445 North Sleeping Giant Wellfield TS	GW	3	Entry Point	EP	99001 DSMRT5	1/21/2014 200389839 A	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36445 North Sleeping Giant Wellfield TS	GW	3	Entry Point	EP	99001 DSMRT5	1/21/2014 200389839 A	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36445 North Sleeping Giant Wellfield TS	GW	3	Entry Point	EP	99001 DSMRT5	7/15/2014 200399795	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36445 North Sleeping Giant Wellfield TS	GW	3	Entry Point	EP	99001 DSMRT5	1/21/2014 200389839 A	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36452 Derby Well #1	GW	3	Entry Point	EP	99001 DSMRT12	7/15/2014 200399801	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36452 Derby Well #1	GW	3	Entry Point	EP	99001 DSMRT12	7/15/2014 200399801	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36452 Derby Well #1	GW	3	Entry Point	EP	99001 DSMRT12	7/15/2014 200399801	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36452 Derby Well #1	GW	3	Entry Point	EP	99001 DSMRT12	7/15/2014 200399801	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36452 Derby Well #1	GW	3	Entry Point	EP	99001 DSMRT12	7/15/2014 200399801	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36452 Derby Well #1	GW	3	Entry Point	EP	99001 DSMRT12	7/15/2014 200399801	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36449 South Cheshire Wellfield TS	GW	3	Entry Point	EP	99001 DSMRT1	1/21/2014 200389845 A	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36450 North Cheshire Wellfield TS	GW	3	Entry Point	EP	99001 DSMRT9	7/15/2014 200399793	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36452 Derby Well #1	GW	3	Entry Point	EP	99001 DSMRT12	1/21/2014 200389855 A	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36453 Seymour Well	GW	3	Entry Point	EP	99001 DSMRT13	1/21/2014 200389853 A	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36453 Seymour Well	GW	3	Entry Point	EP	99001 DSMRT13	7/15/2014 200399800	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36453 Seymour Well	GW	3	Entry Point	EP	99001 DSMRT13	1/21/2014 200389853 A	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36452 Derby Well #1	GW	3	Entry Point	EP	99001 DSMRT12	1/21/2014 200389855 A	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36452 Derby Well #1	GW	3	Entry Point	EP	99001 DSMRT12	1/21/2014 200389855 A	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36452 Derby Well #1	GW	3	Entry Point	EP	99001 DSMRT12	1/21/2014 200389855 A	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36452 Derby Well #1	GW	3	Entry Point	EP	99001 DSMRT12	1/21/2014 200389855 A	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36452 Derby Well #1	GW	3	Entry Point	EP	99001 DSMRT12	1/21/2014 200389855 A	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36449 South Cheshire Wellfield TS	GW	3	Entry Point	EP	99001 DSMRT1	7/15/2014 200399794	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36449 South Cheshire Wellfield TS	GW	3	Entry Point	EP	99001 DSMRT1	7/15/2014 200399794	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36449 South Cheshire Wellfield TS	GW	3	Entry Point	EP	99001 DSMRT1	7/15/2014 200399794	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36449 South Cheshire Wellfield TS	GW	3	Entry Point	EP	99001 DSMRT1	7/15/2014 200399794	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36449 South Cheshire Wellfield TS	GW	3	Entry Point	EP	99001 DSMRT1	7/15/2014 200399794	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36449 South Cheshire Wellfield TS	GW	3	Entry Point	EP	99001 DSMRT1	7/15/2014 200399794	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36449 South Cheshire Wellfield TS	GW	3	Entry Point	EP	99001 DSMRT1	1/21/2014 200389845 A	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36450 North Cheshire Wellfield TS	GW	3	Entry Point	EP	99001 DSMRT9	7/15/2014 200399793	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36450 North Cheshire Wellfield TS	GW	3	Entry Point	EP	99001 DSMRT9	7/15/2014 200399793	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36450 North Cheshire Wellfield TS	GW	3	Entry Point	EP	99001 DSMRT9	7/15/2014 200399793	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36450 North Cheshire Wellfield TS	GW	3	Entry Point	EP	99001 DSMRT9	7/15/2014 200399793	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36449 South Cheshire Wellfield TS	GW	3	Entry Point	EP	99001 DSMRT1	1/21/2014 200389845 A	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36450 North Cheshire Wellfield TS	GW	3	Entry Point	EP	99001 DSMRT9	7/15/2014 200399793	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0930011	Regional Water Authority	L	36450 North Cheshire Wellfield TS	GW	3	Entry Point	EP	99001 DSMRT9	1/21/2014 200389843 A	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36450 North Cheshire Wellfield TS	GW	3	Entry Point	EP	99001 DSMRT9	1/21/2014 200389843 A	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36450 North Cheshire Wellfield TS	GW	3	Entry Point	EP	99001 DSMRT9	1/21/2014 200389843 A	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36450 North Cheshire Wellfield TS	GW	3	Entry Point	EP	99001 DSMRT9	1/21/2014 200389843 A	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36450 North Cheshire Wellfield TS	GW	3	Entry Point	EP	99001 DSMRT9	1/21/2014 200389843 A	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0930011	Regional Water Authority	L	36450 North Cheshire Wellfield TS	GW	3	Entry Point	EP	99001 DSMRT9	1/21/2014 200389843 A	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0640011	Metropolitan District Commission	L	38570 West Hartford - Large Basin	SW	3	Entry Point	EP	21347 MDC025	4/8/2014 201404090441AM	PFNA	0.02 EPA 537	<	SE4	AM	1 CT
CT0640011	Metropolitan District Commission	L	38570 West Hartford - Large Basin	SW	3	Entry Point	EP	21347 MDC025	4/8/2014 201404090441AM	PFOS	0.04 EPA 537	<	SE4	AM	1 CT
CT0640011	Metropolitan District Commission	L	38570 West Hartford - Large Basin	SW	3	Entry Point	EP	21347 MDC025	4/8/2014 201404090441AM	PFOA	0.02 EPA 537	<	SE4	AM	1 CT
CT0640011	Metropolitan District Commission	L	46098 Bloomfield	SW	3	Entry Point	EP	21347 MDC047	1/7/2014 201401080426AM	PFOS	0.04 EPA 537	<	SE3	AM	1 CT
CT0640011	Metropolitan District Commission	L	46098 Bloomfield	SW	3	Entry Point	EP	21347 MDC047	1/7/2014 201401080426AM	PFBS	0.09 EPA 537	<	SE3	AM	1 CT
CT0640011	Metropolitan District Commission	L	46098 Bloomfield	SW	3	Entry Point	EP	21347 MDC047	1/7/2014 201401080426AM	PFOA	0.02 EPA 537	<	SE3	AM	1 CT
CT0640011	Metropolitan District Commission	L	46098 Bloomfield	SW	3	Entry Point	EP	21347 MDC047	1/7/2014 201401080426AM	PFNA	0.02 EPA 537	<	SE3	AM	1 CT
CT0640011	Metropolitan District Commission	L	46098 Bloomfield	SW	3	Entry Point	EP	21347 MDC047	1/7/2014 201401080426AM	PFHpA	0.01 EPA 537	<	SE3	AM	1 CT
CT0640011	Metropolitan District Commission	L	38570 West Hartford - Large Basin	SW	3	Entry Point	EP	21347 MDC025	4/8/2014 201404090441AM	PFHxS	0.03 EPA 537	<	SE4	AM	1 CT
CT0640011	Metropolitan District Commission	L	38570 West Hartford - Large Basin	SW	3	Entry Point	EP	21347 MDC025	4/8/2014 201404090441AM	PFBS	0.09 EPA 537	<	SE4	AM	1 CT
CT0640011	Metropolitan District Commission	L	38570 West Hartford - Large Basin	SW	3	Entry Point	EP	21347 MDC025	4/8/2014 201404090441AM	PFHpA	0.01 EPA 537	<	SE4	AM	1 CT
CT0640011	Metropolitan District Commission	L	38570 West Hartford - Large Basin	SW	3	Entry Point	EP	21347 MDC025	1/7/2014 201401080380AM	PFOA	0.02 EPA 537	<	SE3	AM	1 CT
CT0640011	Metropolitan District Commission	L	38570 West Hartford - Large Basin	SW	3	Entry Point	EP	21347 MDC025	1/7/2014 201401080380AM	PFOS	0.04 EPA 537	<	SE3	AM	1 CT
CT0640011	Metropolitan District Commission	L	38570 West Hartford - Large Basin	SW	3	Entry Point	EP	21347 MDC025	1/7/2014 201401080380AM	PFNA	0.02 EPA 537	<	SE3	AM	1 CT
CT0640011	Metropolitan District Commission	L	38570 West Hartford - Large Basin	SW	3	Entry Point	EP	21347 MDC025	1/7/2014 201401080380AM	PFBS	0.09 EPA 537	<	SE3	AM	1 CT
CT0640011	Metropolitan District Commission	L	38570 West Hartford - Large Basin	SW	3	Entry Point	EP	21347 MDC025	1/7/2014 201401080380AM	PFHpA	0.01 EPA 537	<	SE3	AM	1 CT
CT0640011	Metropolitan District Commission	L	38570 West Hartford - Large Basin	SW	3	Entry Point	EP	21347 MDC025	10/9/2013 201310100588AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0640011	Metropolitan District Commission	L	38570 West Hartford - Large Basin	SW	3	Entry Point	EP	21347 MDC025	10/9/2013 201310100588AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0640011	Metropolitan District Commission	L	38570 West Hartford - Large Basin	SW	3	Entry Point	EP	21347 MDC025	10/9/2013 201310100588AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0640011	Metropolitan District Commission	L	38570 West Hartford - Large Basin	SW	3	Entry Point	EP	21347 MDC025	10/9/2013 201310100588AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0640011	Metropolitan District Commission	L	38570 West Hartford - Large Basin	SW	3	Entry Point	EP	21347 MDC025	10/9/2013 201310100588AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0640011	Metropolitan District Commission	L	38570 West Hartford - Large Basin	SW	3	Entry Point	EP	21347 MDC025	10/9/2013 201310100588AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0640011	Metropolitan District Commission	L	38570 West Hartford - Large Basin	SW	3	Entry Point	EP	21347 MDC025	1/7/2014 201401080380AM	PFHxS	0.03 EPA 537	<	SE3	AM	1 CT
CT0640011	Metropolitan District Commission	L	46098 Bloomfield	SW	3	Entry Point	EP	21347 MDC047	4/8/2014 201404090429AM	PFOA	0.02 EPA 537	<	SE4	AM	1 CT
CT0640011	Metropolitan District Commission	L	46098 Bloomfield	SW	3	Entry Point	EP	21347 MDC047	4/8/2014 201404090429AM	PFHpA	0.01 EPA 537	<	SE4	AM	1 CT
CT0640011	Metropolitan District Commission	L	46098 Bloomfield	SW	3	Entry Point	EP	21347 MDC047	10/30/2013 201310310171AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0640011	Metropolitan District Commission	L	46098 Bloomfield	SW	3	Entry Point	EP	21347 MDC047	10/30/2013 201310310171AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0640011	Metropolitan District Commission	L	46098 Bloomfield	SW	3	Entry Point	EP	21347 MDC047	10/30/2013 201310310171AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0640011	Metropolitan District Commission	L	46098 Bloomfield	SW	3	Entry Point	EP	21347 MDC047	10/30/2013 201310310171AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0640011	Metropolitan District Commission	L	46098 Bloomfield	SW	3	Entry Point	EP	21347 MDC047	10/30/2013 201310310171AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0640011	Metropolitan District Commission	L	46098 Bloomfield	SW	3	Entry Point	EP	21347 MDC047	10/30/2013 201310310171AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0640011	Metropolitan District Commission	L	46098 Bloomfield	SW	3	Entry Point	EP	21347 MDC047	4/8/2014 201404090429AM	PFBS	0.09 EPA 537	<	SE4	AM	1 CT
CT0640011	Metropolitan District Commission	L	46098 Bloomfield	SW	3	Entry Point	EP	21347 MDC047	4/8/2014 201404090429AM	PFOS	0.04 EPA 537	<	SE4	AM	1 CT
CT0640011	Metropolitan District Commission	L	46098 Bloomfield	SW	3	Entry Point	EP	21347 MDC047	4/8/2014 201404090429AM	PFHxS	0.03 EPA 537	<	SE4	AM	1 CT
CT0640011	Metropolitan District Commission	L	46098 Bloomfield	SW	3	Entry Point	EP	21347 MDC047	4/8/2014 201404090429AM	PFNA	0.02 EPA 537	<	SE4	AM	1 CT
CT0640011	Metropolitan District Commission	L	46098 Bloomfield	SW	3	Entry Point	EP	21347 MDC047	7/17/2013 201307180544AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0640011	Metropolitan District Commission	L	46098 Bloomfield	SW	3	Entry Point	EP	21347 MDC047	7/17/2013 201307180544AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0640011	Metropolitan District Commission	L	46098 Bloomfield	SW	3	Entry Point	EP	21347 MDC047	1/7/2014 201401080426AM	PFHxS	0.03 EPA 537	<	SE3	AM	1 CT
CT0640011	Metropolitan District Commission	L	46098 Bloomfield	SW	3	Entry Point	EP	21347 MDC047	7/17/2013 201307180544AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0640011	Metropolitan District Commission	L	46098 Bloomfield	SW	3	Entry Point	EP	21347 MDC047	7/17/2013 201307180544AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0640011	Metropolitan District Commission	L	46098 Bloomfield	SW	3	Entry Point	EP	21347 MDC047	7/17/2013 201307180544AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0640011	Metropolitan District Commission	L	46098 Bloomfield	SW	3	Entry Point	EP	21347 MDC047	7/17/2013 201307180544AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0640011	Metropolitan District Commission	L	38569 West Hartford - Small Basin	SW	3	Entry Point	EP	21347 MDC025	7/17/2013 201307180742AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0640011	Metropolitan District Commission	L	38569 West Hartford - Small Basin	SW	3	Entry Point	EP	21347 MDC025	1/7/2014 201401080365AM	PFNA	0.02 EPA 537	<	SE3	AM	1 CT
CT0640011	Metropolitan District Commission	L	38569 West Hartford - Small Basin	SW	3	Entry Point	EP	21347 MDC025	1/7/2014 201401080365AM	PFHxS	0.03 EPA 537	<	SE3	AM	1 CT
CT0640011	Metropolitan District Commission	L	38569 West Hartford - Small Basin	SW	3	Entry Point	EP	21347 MDC025	1/7/2014 201401080365AM	PFHpA	0.01 EPA 537	<	SE3	AM	1 CT
CT0640011	Metropolitan District Commission	L	38569 West Hartford - Small Basin	SW	3	Entry Point	EP	21347 MDC025	7/17/2013 201307180742AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0640011	Metropolitan District Commission	L	38569 West Hartford - Small Basin	SW	3	Entry Point	EP	21347 MDC025	7/17/2013 201307180742AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0640011	Metropolitan District Commission	L	38569 West Hartford - Small Basin	SW	3	Entry Point	EP	21347 MDC025	7/17/2013 201307180742AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0640011	Metropolitan District Commission	L	38569 West Hartford - Small Basin	SW	3	Entry Point	EP	21347 MDC025	7/17/2013 201307180742AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0640011	Metropolitan District Commission	L	38569 West Hartford - Small Basin	SW	3	Entry Point	EP	21347 MDC025	7/17/2013 201307180742AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0640011	Metropolitan District Commission	L	38569 West Hartford - Small Basin	SW	3	Entry Point	EP	21347 MDC025	1/7/2014 201401080365AM	PFBS	0.09 EPA 537	<	SE3	AM	1 CT
CT0640011	Metropolitan District Commission	L	38569 West Hartford - Small Basin	SW	3	Entry Point	EP	21347 MDC025	4/8/2014 201404090495AM	PFHxS	0.03 EPA 537	<	SE4	AM	1 CT
CT0640011	Metropolitan District Commission	L	38569 West Hartford - Small Basin	SW	3	Entry Point	EP	21347 MDC025	4/8/2014 201404090495AM	PFBS	0.09 EPA 537	<	SE4	AM	1 CT
CT0640011	Metropolitan District Commission	L	38570 West Hartford - Large Basin	SW	3	Entry Point	EP	21347 MDC025	7/17/2013 201307180553AM	PFHxS	0.03 EPA 537	<	SE1	AM	1 CT
CT0640011	Metropolitan District Commission	L	38569 West Hartford - Small Basin	SW	3	Entry Point	EP	21347 MDC025	4/8/2014 201404090495AM	PFOS	0.04 EPA 537	<	SE4	AM	1 CT
CT0640011	Metropolitan District Commission	L	38569 West Hartford - Small Basin	SW	3	Entry Point	EP	21347 MDC025	4/8/2014 201404090495AM	PFOA	0.02 EPA 537	<	SE4	AM	1 CT
CT0640011	Metropolitan District Commission	L	38569 West Hartford - Small Basin	SW	3	Entry Point	EP	21347 MDC025	4/8/2014 201404090495AM	PFHpA	0.01 EPA 537	<	SE4	AM	1 CT
CT0640011	Metropolitan District Commission	L	38570 West Hartford - Large Basin	SW	3	Entry Point	EP	21347 MDC025	7/17/2013 201307180553AM	PFNA	0.02 EPA 537	<	SE1	AM	1 CT
CT0640011	Metropolitan District Commission	L	38570 West Hartford - Large Basin	SW	3	Entry Point	EP	21347 MDC025	7/17/2013 201307180553AM	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0640011	Metropolitan District Commission	L	38570 West Hartford - Large Basin	SW	3	Entry Point	EP	21347 MDC025	7/17/2013 201307180553AM	PFOA	0.02 EPA 537	<	SE1	AM	1 CT
CT0640011	Metropolitan District Commission	L	38570 West Hartford - Large Basin	SW	3	Entry Point	EP	21347 MDC025	7/17/2013 201307180553AM	PFHpA	0.01 EPA 537	<	SE1	AM	1 CT
CT0640011	Metropolitan District Commission	L	38569 West Hartford - Small Basin	SW	3	Entry Point	EP	21347 MDC025	1/7/2014 201401080365AM	PFOA	0.02 EPA 537	<	SE3	AM	1 CT
CT0640011	Metropolitan District Commission	L	38570 West Hartford - Large Basin	SW	3	Entry Point	EP	21347 MDC025	7/17/2013 201307180553AM	PFOS	0.04 EPA 537	<	SE1	AM	1 CT
CT0640011	Metropolitan District Commission	L	38569 West Hartford - Small Basin	SW	3	Entry Point	EP	21347 MDC025	1/7/2014 201401080365AM	PFOS	0.04 EPA 537	<	SE3	AM	1 CT
CT0640011	Metropolitan District Commission	L	38569 West Hartford - Small Basin	SW	3	Entry Point	EP	21347 MDC025	10/9/2013 201310100586AM	PFOA	0.02 EPA 537	<	SE2	AM	1 CT
CT0640011	Metropolitan District Commission	L	38569 West Hartford - Small Basin	SW	3	Entry Point	EP	21347 MDC025	4/8/2014 201404090495AM	PFNA	0.02 EPA 537	<	SE4	AM	1 CT
CT0640011	Metropolitan District Commission	L	38569 West Hartford - Small Basin	SW	3	Entry Point	EP	21347 MDC025	10/9/2013 201310100586AM	PFHxS	0.03 EPA 537	<	SE2	AM	1 CT
CT0640011	Metropolitan District Commission	L	38569 West Hartford - Small Basin	SW	3	Entry Point	EP	21347 MDC025	10/9/2013 201310100586AM	PFOS	0.04 EPA 537	<	SE2	AM	1 CT
CT0640011	Metropolitan District Commission	L	38569 West Hartford - Small Basin	SW	3	Entry Point	EP	21347 MDC025	10/9/2013 201310100586AM	PFNA	0.02 EPA 537	<	SE2	AM	1 CT
CT0640011	Metropolitan District Commission	L	38569 West Hartford - Small Basin	SW	3	Entry Point	EP	21347 MDC025	10/9/2013 201310100586AM	PFHpA	0.01 EPA 537	<	SE2	AM	1 CT
CT0640011	Metropolitan District Commission	L	38569 West Hartford - Small Basin	SW	3	Entry Point	EP	21347 MDC025	10/9/2013 201310100586AM	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT1170352	Redding Elementary School	S	90001 Filler Tank	GW	EP001	Filler Tank Faucet	EP	99001 MR001	1/8/2013 100181P	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT1530011	Watertown Fire District	S	90001 Hart Farm Wellfield	GW	EP001	Pump Station Sink	EP	99001 MR001	2/19/2013 100351P	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT1170352	Redding Elementary School	S	90001 Filler Tank	GW	EP001	Filler Tank Faucet	EP	99001 MR001	9/9/2013 101608P	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT1530011	Watertown Fire District	S	90001 Hart Farm Wellfield	GW	EP001	Pump Station Sink	EP	99001 MR001	8/19/2013 101897Q	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT0261031	CTWC - Shoreline Region, Chester System	S	90001 Williams WTP	SW	EP001	EP from Williams WTP	EP	99001 MR001	1/21/2014 103699P	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0261031	CTWC - Shoreline Region, Chester System	S	90002 Dennison Well	GW	EP002	EP from Dennison Well	EP	99001 MR001	1/21/2014 103699P	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0261031	CTWC - Shoreline Region, Chester System	S	90001 Williams WTP	SW	EP001	EP from Williams WTP	EP	99001 MR001	5/6/2014 106556P	PFBS	0.09 EPA 537	<	SE2	AM	1 CT
CT1219113	Indianfield Cooperative Campground	S	90001 Wells #1 & #2	GW	EP001	Post Tank Sample Tap	EP	99001 MR001	5/19/2014 106927P	PFBS	0.09 EPA 537	<	SE1	AM	1 CT
CT0261031	CTWC - Shoreline Region, Chester System	S	90001 Williams WTP	SW	EP001	EP from Williams WTP	EP	99001 MR001	7/21/2014 107769P	PFBS	0.09 EPA 537	<	SE3	AM	1 CT
CT0261031	CTWC - Shoreline Region, Chester System	S	90002 Dennison Well	GW	EP002	EP from Dennison Well	EP	99001 MR001	7/21/2014 107770P	PFBS	0.09 EPA 537	<	SE3	AM	1 CT
CT0261031	CTWC - Shoreline Region, Chester System	S	90001 Williams WTP	SW	EP001	EP from Williams WTP	EP	99001 MR001	10/20/2014 109406P	PFBS	0.09 EPA 537	<	SE4	AM	1 CT

CT0900133	St. Luke's School Athletic Center	S	90001	Athletic Center	GW	EP001	#1 Underground	EP	99001	MR001	5/5/2015 113212Q	PFBS	0.09	EPA 537	<	SE1	AM	1 CT
CT1219113	Indianfield Cooperative Campground	S	90001	Wells #1 & #2	GW	EP001	Post Tank Sample Tap	EP	99001	MR001	6/7/2015 113614R	PFBS	0.09	EPA 537	<	SE2	AM	1 CT
CT1341192	Red Balloon Daycare	S	90001	Office	GW	EP001	EP from Office	EP	99001	MR001	6/9/2015 113630Q	PFBS	0.09	EPA 537	<	SE1	AM	1 CT
CT0900133	St. Luke's School Athletic Center	S	90001	Athletic Center	GW	EP001	#1 Underground	EP	99001	MR001	11/3/2015 116033Q	PFBS	0.09	EPA 537	<	SE2	AM	1 CT
CT1341192	Red Balloon Daycare	S	90001	Office	GW	EP001	EP from Office	EP	99001	MR001	11/30/2015 116259Q	PFBS	0.09	EPA 537	<	SE2	AM	1 CT
CT1170352	Redding Elementary School	S	90001	Filler Tank	GW	EP001	Filler Tank Faucet	EP	99001	MR001	1/8/2013 100181P	PFHpA	0.01	EPA 537	<	SE1	AM	1 CT
CT1530011	Watertown Fire District	S	90001	Hart Farm Wellfield	GW	EP001	Pump Station Sink	EP	99001	MR001	2/19/2013 100351P	PFHpA	0.01	EPA 537	<	SE1	AM	1 CT
CT1170352	Redding Elementary School	S	90001	Filler Tank	GW	EP001	Filler Tank Faucet	EP	99001	MR001	9/9/2013 101608P	PFHpA	0.01	EPA 537	<	SE2	AM	1 CT
CT1530011	Watertown Fire District	S	90001	Hart Farm Wellfield	GW	EP001	Pump Station Sink	EP	99001	MR001	8/19/2013 101897Q	PFHpA	0.01	EPA 537	<	SE2	AM	1 CT
CT0261031	CTWC - Shoreline Region, Chester System	S	90001	Williams WTP	SW	EP001	EP from Williams WTP	EP	99001	MR001	1/21/2014 103698P	PFHpA	0.01	EPA 537	<	SE1	AM	1 CT
CT0261031	CTWC - Shoreline Region, Chester System	S	90002	Dennison Well	GW	EP002	EP from Dennison Well	EP	99001	MR001	1/21/2014 103699P	PFHpA	0.01	EPA 537	<	SE1	AM	1 CT
CT0261031	CTWC - Shoreline Region, Chester System	S	90001	Williams WTP	SW	EP001	EP from Williams WTP	EP	99001	MR001	5/6/2014 106556P	PFHpA	0.01	EPA 537	<	SE2	AM	1 CT
CT1219113	Indianfield Cooperative Campground	S	90001	Wells #1 & #2	GW	EP001	Post Tank Sample Tap	EP	99001	MR001	5/19/2014 106927P	PFHpA	0.01	EPA 537	<	SE1	AM	1 CT
CT0261031	CTWC - Shoreline Region, Chester System	S	90001	Williams WTP	SW	EP001	EP from Williams WTP	EP	99001	MR001	7/21/2014 107769P	PFHpA	0.01	EPA 537	<	SE3	AM	1 CT
CT0261031	CTWC - Shoreline Region, Chester System	S	90002	Dennison Well	GW	EP002	EP from Dennison Well	EP	99001	MR001	7/21/2014 107770P	PFHpA	0.01	EPA 537	<	SE3	AM	1 CT
CT0261031	CTWC - Shoreline Region, Chester System	S	90001	Williams WTP	SW	EP001	EP from Williams WTP	EP	99001	MR001	10/20/2014 109406P	PFHpA	0.01	EPA 537	<	SE4	AM	1 CT
CT0900133	St. Luke's School Athletic Center	S	90001	Athletic Center	GW	EP001	#1 Underground	EP	99001	MR001	5/5/2015 113212Q	PFHpA	0.01	EPA 537	<	SE1	AM	1 CT
CT1219113	Indianfield Cooperative Campground	S	90001	Wells #1 & #2	GW	EP001	Post Tank Sample Tap	EP	99001	MR001	6/7/2015 113614R	PFHpA	0.01	EPA 537	<	SE2	AM	1 CT
CT1341192	Red Balloon Daycare	S	90001	Office	GW	EP001	EP from Office	EP	99001	MR001	6/9/2015 113630Q	PFHpA	0.01	EPA 537	<	SE1	AM	1 CT
CT0900133	St. Luke's School Athletic Center	S	90001	Athletic Center	GW	EP001	#1 Underground	EP	99001	MR001	11/3/2015 116033Q	PFHpA	0.01	EPA 537	<	SE2	AM	1 CT
CT1341192	Red Balloon Daycare	S	90001	Office	GW	EP001	EP from Office	EP	99001	MR001	11/30/2015 116259Q	PFHpA	0.01	EPA 537	<	SE2	AM	1 CT
CT1170352	Redding Elementary School	S	90001	Filler Tank	GW	EP001	Filler Tank Faucet	EP	99001	MR001	1/8/2013 100181P	PFHxS	0.03	EPA 537	<	SE1	AM	1 CT
CT1530011	Watertown Fire District	S	90001	Hart Farm Wellfield	GW	EP001	Pump Station Sink	EP	99001	MR001	2/19/2013 100351P	PFHxS	0.03	EPA 537	<	SE1	AM	1 CT
CT1170352	Redding Elementary School	S	90001	Filler Tank	GW	EP001	Filler Tank Faucet	EP	99001	MR001	9/9/2013 101608P	PFHxS	0.03	EPA 537	<	SE2	AM	1 CT
CT1530011	Watertown Fire District	S	90001	Hart Farm Wellfield	GW	EP001	Pump Station Sink	EP	99001	MR001	8/19/2013 101897Q	PFHxS	0.03	EPA 537	<	SE2	AM	1 CT
CT0261031	CTWC - Shoreline Region, Chester System	S	90001	Williams WTP	SW	EP001	EP from Williams WTP	EP	99001	MR001	1/21/2014 103698P	PFHxS	0.03	EPA 537	<	SE1	AM	1 CT
CT0261031	CTWC - Shoreline Region, Chester System	S	90002	Dennison Well	GW	EP002	EP from Dennison Well	EP	99001	MR001	1/21/2014 103699P	PFHxS	0.03	EPA 537	<	SE1	AM	1 CT
CT0261031	CTWC - Shoreline Region, Chester System	S	90001	Williams WTP	SW	EP001	EP from Williams WTP	EP	99001	MR001	5/6/2014 106556P	PFHxS	0.03	EPA 537	<	SE2	AM	1 CT
CT1219113	Indianfield Cooperative Campground	S	90001	Wells #1 & #2	GW	EP001	Post Tank Sample Tap	EP	99001	MR001	5/19/2014 106927P	PFHxS	0.03	EPA 537	<	SE1	AM	1 CT
CT0261031	CTWC - Shoreline Region, Chester System	S	90001	Williams WTP	SW	EP001	EP from Williams WTP	EP	99001	MR001	7/21/2014 107769P	PFHxS	0.03	EPA 537	<	SE3	AM	1 CT
CT0261031	CTWC - Shoreline Region, Chester System	S	90002	Dennison Well	GW	EP002	EP from Dennison Well	EP	99001	MR001	7/21/2014 107770P	PFHxS	0.03	EPA 537	<	SE3	AM	1 CT
CT0261031	CTWC - Shoreline Region, Chester System	S	90001	Williams WTP	SW	EP001	EP from Williams WTP	EP	99001	MR001	10/20/2014 109406P	PFHxS	0.03	EPA 537	<	SE4	AM	1 CT
CT0900133	St. Luke's School Athletic Center	S	90001	Athletic Center	GW	EP001	#1 Underground	EP	99001	MR001	5/5/2015 113212Q	PFHxS	0.03	EPA 537	<	SE1	AM	1 CT
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CT1341192	Red Balloon Daycare	S	90001	Office	GW	EP001	EP from Office	EP	99001	MR001	6/9/2015 113630Q	PFHxS	0.03	EPA 537	<	SE1	AM	1 CT
CT0900133	St. Luke's School Athletic Center	S	90001	Athletic Center	GW	EP001	#1 Underground	EP	99001	MR001	11/3/2015 116033Q	PFHxS	0.03	EPA 537	<	SE2	AM	1 CT
CT1341192	Red Balloon Daycare	S	90001	Office	GW	EP001	EP from Office	EP	99001	MR001	11/30/2015 116259Q	PFHxS	0.03	EPA 537	<	SE2	AM	1 CT
CT1170352	Redding Elementary School	S	90001	Filler Tank	GW	EP001	Filler Tank Faucet	EP	99001	MR001	1/8/2013 100181P	PFNA	0.02	EPA 537	<	SE1	AM	1 CT
CT1530011	Watertown Fire District	S	90001	Hart Farm Wellfield	GW	EP001	Pump Station Sink	EP	99001	MR001	2/19/2013 100351P	PFNA	0.02	EPA 537	<	SE1	AM	1 CT
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CT0261031	CTWC - Shoreline Region, Chester System	S	90002	Dennison Well	GW	EP002	EP from Dennison Well	EP	99001	MR001	7/21/2014 107770P	PFNA	0.02	EPA 537	<	SE3	AM	1 CT
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Appendix B
Preliminary Assessment Documentation

Appendix B.1
Interview Records

PA Interview Questionnaire - Other

Facility: Windsor Locks AASF
Interviewer:
Date/Time:

Interviewee: Seargent Major Anthony Savino **Title:** Command Sergeant Major **Phone Number:** 860-292-4513 **Email:** anthony.v.savino3.mil@mail.mil	Can your name/role be used in the PA Report? (Y) or N Can you recommend anyone we can interview? (Y) or N Tom Kopcyk

Roles or activities with the Facility/Years working at the Facility:

31 years with CTARNG

PFAS Use: Identify accidental/intentional release locations, time frame of release, frequency of releases, storage container size (maintenance, fire training, firefighting, buildings with suppression systems (as builts), fueling stations, crash sites, pest management, recreational, dining facilities, metals plating, or waterproofing). How are materials ordered/purchased/disposed/shared with others?

- No fires or emergency response in 31 year tenure.
  - A minor heater fire occurred that was put out using water. Bradley FD responded to put out the fire.
- Windsor Locks AASF relies upon Bradley Airport FD for emergency response. A mutual aid agreement may be available.
- Nearest CTARNG FD is stationed in East Lyme, CT and may have an agreement to perform response in that town.
- AFFF is currently stored in a storage room between the two hangars. The tank connects to suppression systems in each hangar. The AFFF suppression has not been used in 31 years.
- Other handheld extinguishers and mobile containers contain dry chemicals, such as Purple K. Former mobile units contained Trimex solution.
- Fire training has occurred at the Wash Rack using former mobile containers that contained Trimex.

Known Uses
Use
Procurement
Disposition
Storage (Mixed)
Storage (Solution)
Inventory, Off-Spec
Containment
SOP on Filling
Leaking Vehicles
Nozzle and Suppression System Testing
Dining Facilities
Vehicle Washing
Ramp Washing
Fuel Spill Washing and Fueling Stations
Chrome Plating or Waterproofing

PA Interview Questionnaire - Other

Facility:_____
Interviewer:_____
Date/Time:_____

- Fire training at the wash rack involved igniting a wash pan containing a flammable liquid, and using AFFF (trimex) from mobile units to extinguish the fire. These are practice burns.
- Discharged AFFF would be captured in the Wash Rack area and sprayed down the wash rack drain using water.

Redacted

[redacted]

- Hands on Fire training by CTARNG also occurs (less regularly, frequency unknown) at the CT Fire Academy facility on the Far side of the airfield. Practice burns are performed in full PPE.
- Water from the Southe hanger floor drain and Wash Rack drain flows to an OWS, then passes to stormwater / sewer water.
- Regular inspections of fire extinguishers are performed by the Fire Marshall at Windsor Locks, James Reed or Tom Kopcyk.
- Tom Kopcyk supervises / performs Wash Rack fire training.
  ↳ Unavailable at the time of the site visit.
- During training at the Fire Academy, the Fire Academy ~~performed~~ & provided their own materials.
- Air National Guard, occupying a parcel at Bradley Airport, have an emergency response agreement with the Town of Granby, CT.

Fire Marshall email = Thomas.Kopcyk.mil@mail.mil

PA Interview Questionnaire - Other

Chief Lerette

Facility: Windsor Locks AASF
Interviewer: Joe Witte
Date/Time: 7-26-2018

Tenure with CTARNG : 1990- present

Title : Chief Warrant Officer

Email / Phone Number : jason.b.lerette.mil@mail.mil / 860-292-4554

- No emergency responce necessary for CTARNG fires in his tenure.
- Fire training, i.e. practice burns, do occur at the Wash Rack semi-regularly, roughly once per year. Sometimes soap & water is used to suppress fire, previously trimex has been used.
- Previously, AFFF was also disposed of in the south Hangar by discharging to the south Hangar floor drain. The South Hangar is Windsor Locks AASF building 152.
- No records were kept for Wash Rack fire training or trimex discharge events to the hangar floor drain.
- During discharge / wash rack would typically include approximately six mobile extinguishers containing 30 gallons of a water / AFFF dilution. The discharge flows through the OWS and DPW, then to stormwater.
- Unsure what was in mobile AFFF extinguishers used. 3M solution was stored at the facility but never known to have been used.
- Recommended interviewing James Reed, who participates in fire suppression maintenance activities.

PA Interview Questionnaire - Other

James Reed

Facility: Windsor Locks ARSF
Interviewer: Joe Witte
Date/Time: 7-26-2018

Tenure with CTARNG: 1998 - Present

Title: Avionics Small Shops Chief

Email / Phone Number: James.a.Reed10.mil @ mail.mil

- No known fire incidents on CTARNG property
- During Wash Rack / Hangar discharge events, up to 10 mobile extinguishers may have been emptied. Units contained 30-gal of AFFF dilution in water. 1 extinguisher only contained soap and water.
- Wash rack / hangar discharges occurred approximately between 2003-2015, once per year, but not likely to have occurred all years
- Trimex was likely used during events.
- All old mobile containers were given to the CT Fire Academy, approximately 3 years ago.
- During any training events at the Fire Academy, no materials were brought from CTARNG to be used.
- During the latter years of AFFF discharge, 4 mobile units that had been Condemned were not used.
- One of the AFFF solutions used during wash rack practice burns may have been a winter, "sub-40°", version of AFFF.
- An official fire training demonstration, either by the CT Fire Academy or a vendor/supplier (potentially Trimex), also occurred at the Wash Rack between 3-5 years ago.
- Bradley Airport FD responds to emergencies for all entities in the airport vicinity.

Appendix B.2
Visual Site Inspection Checklists

Visual Site Inspection Checklist

Names(s) of people performing VSI: J. Witte, W. Gee, J. Martin

Recorded by: J. Witte

ARNG Contact: W. Gee, B. Packer

Date and Time: 7-26-2018

Method of visit (walking, driving, adjacent): Walking

Source/Release Information

Site Name / Area Name / Unique ID: South Hangar / Building 152

Site / Area Acreage:

Historic Site Use (Brief Description): Hangar

Current Site Use (Brief Description): Hangar

Physical barriers or access restrictions: AASF perimeter gate

1. Was PFAS used (or spilled) at the site/area? **Y / N**

   1a. If yes, document how PFAS was used and usage time (e.g., fire fighting training 2001 to 2014):

   Approx. once per year up to 10 30-gal mobile extinguishers were discharged to the floor drain between 2003-2015.

2. Has usage been documented? **Y / N**

   2a. If yes, keep a record (place electronic files on a disk):

3. What types of businesses are located near the site? **Industrial / Commercial / Plating / Waterproofing / Residential**

   3a. Indicate what businesses are located near the site

   Airport, AASF, Bombardier, CT Fire Academy

4. Is this site located at an airport/flightline? **Y / N**

   4a. If yes, provide a description of the airport/flightline tenants:

   Bradley International Airport has many tenants

Visual Survey Inspection Log

Other Significant Site Features:

1. Does the facility have a fire suppression system? Y / N

1a. If yes, indicate which type of AFFF has been used:

National Foam 3%

1b. If yes, describe maintenance schedule/leaks:

Storage tank emptied by a contractor at unknown frequency

1c. If yes, how often is the AFFF replaced:

Unknown. CTARNG working to provide information

1d. If yes, does the facility have floor drains and where do they lead? Can we obtain an as built drawing?

Yes. Drains lead to an OWS, then DPW, then public stormwater

Transport / Pathway Information

Migration Potential:

1. Does site/area drainage flow off installation? Y / N

1a. If so, note observation and location:

Unknown location.

2. Is there channelized flow within the site/area? Y / N

2a. If so, please note observation and location:

Except for floor drain

3. Are monitoring or drinking water wells located near the site? Y / N

3a. If so, please note the location:

4. Are surface water intakes located near the site? Y / N

4a. If so, please note the location:

5. Can wind dispersion information be obtained? Y / N

5a. If so, please note and observe the location.

6. Does an adjacent non-ARNG PFAS source exist? Y / N

6a. If so, please note the source and location.

Bombardier is a potential candidate

6b. Will off-site reconnaissance be conducted? Y / N

Potentially.

Visual Survey Inspection Log

Significant Topographical Features:

1. Has the infrastructure changed at the site/area? Y / N

1a. If so, please describe change (ex. Structures no longer exist):

2. Is the site/area vegetated? Y / N

2a. If not vegetated, briefly describe the site/area composition:

3. Does the site or area exhibit evidence of erosion? Y / N

3a. If yes, describe the location and extent of the erosion:

4. Does the site/area exhibit any areas of ponding or standing water? Y / N

4a. If yes, describe the location and extent of the ponding:

Receptor Information

1. Is access to the site restricted? Y / N

1a. If so, please note to what extent:

AASF Perimeter fence, hangar walls

2. Who can access the site? **Site Workers / Construction Workers / Trespassers / Residential / Recreational Users / Ecological**

2a. Circle all that apply, note any not covered above:

CTARNG staff

3. Are residential areas located near the site? Y / N

3a. If so, please note the location/distance:

4. Are any schools/day care centers located near the site? Y / N

4a. If so, please note the location/distance/type:

5. Are any wetlands located near the site? Y / N

5a. If so, please note the location/distance/type:

Visual Survey Inspection Log

Additional Notes

Photographic Log

Photo ID/Name	Date & Location	Photograph Description

Visual Site Inspection Checklist

Names(s) of people performing VSI: J. Witte, J. Martin, W. Gee

Recorded by: J. Witte

ARNG Contact: W. Gee, B. Packer

Date and Time: 7-26-2018

Method of visit (walking, driving, adjacent):

Source/Release Information

Site Name / Area Name / Unique ID: Wash Rack

Site / Area Acreage:

Historic Site Use (Brief Description): Wash Rack

Current Site Use (Brief Description): Same as above

Physical barriers or access restrictions: AASF perimeter fence

1. Was PFAS used (or spilled) at the site/area? **Y / N**

   1a. If yes, document how PFAS was used and usage time (e.g., fire fighting training 2001 to 2014):

   Practice burns occurred and were extinguished between 2003-2015

2. Has usage been documented? **Y / N**

   2a. If yes, keep a record (place electronic files on a disk):

   No. Same usage rate as the south hangar.

3. What types of businesses are located near the site? **Industrial / Commercial / Plating / Waterproofing / Residential**

   3a. Indicate what businesses are located near the site

   Airport, Bombardier, CT Fire Academy,

4. Is this site located at an airport/flightline? **Y / N**

   4a. If yes, provide a description of the airport/flightline tenants:

   Bradley Airport has many tenants

Visual Survey Inspection Log

Other Significant Site Features:

1. Does the facility have a fire suppression system? Y / N

1a. If yes, indicate which type of AFFF has been used:

1b. If yes, describe maintenance schedule/leaks:

No regular maintenance

1c. If yes, how often is the AFFF replaced:

Unknown

1d. If yes, does the facility have floor drains and where do they lead? Can we obtain an as built drawing?

Yes drains lead to same OWS as south hangar

Transport / Pathway Information

Migration Potential:

1. Does site/area drainage flow off installation? Y / N

1a. If so, note observation and location:

Unknown location

2. Is there channelized flow within the site/area? Y / N

2a. If so, please note observation and location:

Except floor drain

3. Are monitoring or drinking water wells located near the site? Y / N

3a. If so, please note the location:

4. Are surface water intakes located near the site? Y / N

4a. If so, please note the location:

5. Can wind dispersion information be obtained? Y / N

5a. If so, please note and observe the location.

6. Does an adjacent non-ARNG PFAS source exist? Y / N

6a. If so, please note the source and location.

Bombardier is a potential candidate

6b. Will off-site reconnaissance be conducted? Y / N

Potentially

Visual Survey Inspection Log

Significant Topographical Features:

1. Has the infrastructure changed at the site/area? Y / N

1a. If so, please describe change (ex. Structures no longer exist):

2. Is the site/area vegetated? Y / N

2a. If not vegetated, briefly describe the site/area composition:

3. Does the site or area exhibit evidence of erosion? Y / N

3a. If yes, describe the location and extent of the erosion:

4. Does the site/area exhibit any areas of ponding or standing water? Y / N

4a. If yes, describe the location and extent of the ponding:

Receptor Information

1. Is access to the site restricted? Y / N

1a. If so, please note to what extent:

CTARNG AASF Perimeter fence

2. Who can access the site? **Site Workers / Construction Workers / Trespassers / Residential / Recreational Users / Ecological**

2a. Circle all that apply, note any not covered above:

CTARNG staff

3. Are residential areas located near the site? Y / N

3a. If so, please note the location/distance:

4. Are any schools/day care centers located near the site? Y / N

4a. If so, please note the location/distance/type:

5. Are any wetlands located near the site? Y / N

5a. If so, please note the location/distance/type:

Visual Survey Inspection Log

Additional Notes

_____

_____

_____

_____

_____

_____

Photographic Log

Photo ID/Name	Date & Location	Photograph Description

Visual Site Inspection Checklist

Names(s) of people performing VSI: J. Witte, J. Martin, W. Gee, Chief Lerette

Recorded by: J. Witte

ARNG Contact: W. Gee, B. Packer

Date and Time: 7-26-2018

Method of visit (walking, driving, adjacent): Walking

Source/Release Information

Site Name / Area Name / Unique ID: "Foam Room" between Hangars

Site / Area Acreage:

Historic Site Use (Brief Description): AFFF storage tank / Fire suppression storage room

Current Site Use (Brief Description): Same as above

Physical barriers or access restrictions: CTARNG AASF perimeter fence, hangar walls

1. Was PFAS used (or spilled) at the site/area? **Y / N**

   1a. If yes, document how PFAS was used and usage time (e.g., fire fighting training 2001 to 2014):

   Stored in a 400-gal tank, never discharged

2. Has usage been documented? **Y / N**

   2a. If yes, keep a record (place electronic files on a disk):

   The storage tank is emptied and re-filled by a contractor on a fixed basis

3. What types of businesses are located near the site? **Industrial / Commercial / Plating / Waterproofing / Residential**

   3a. Indicate what businesses are located near the site

   Airport, bombardier, CT Fire Academy

4. Is this site located at an airport/flightline? **Y / N**

   4a. If yes, provide a description of the airport/flightline tenants:

   Many tenants at Bradley International Airport

Visual Survey Inspection Log

Other Significant Site Features:

1. Does the facility have a fire suppression system? Y / N

1a. If yes, indicate which type of AFFF has been used:

The "Foam Room" stores AFFF in a large tank connected to fire suppression in the two adjacent hangars

1b. If yes, describe maintenance schedule/leaks:

CTARNG will work to provide this information

1c. If yes, how often is the AFFF replaced:

Same as above

1d. If yes, does the facility have floor drains and where do they lead? Can we obtain an as built drawing?

The hangar drains lead to OWS's, DPW, then public stormwater

Transport / Pathway Information

Migration Potential:

1. Does site/area drainage flow off installation? Y / N

1a. If so, note observation and location:

Same as above

2. Is there channelized flow within the site/area? Y / N

2a. If so, please note observation and location:

See above

3. Are monitoring or drinking water wells located near the site? Y / N

3a. If so, please note the location:

4. Are surface water intakes located near the site? Y / N

4a. If so, please note the location:

5. Can wind dispersion information be obtained? Y / N

5a. If so, please note and observe the location.

6. Does an adjacent non-ARNG PFAS source exist? Y / N

6a. If so, please note the source and location.

Bombardier is a potential candidate

6b. Will off-site reconnaissance be conducted? Y / N

Potentially

Visual Survey Inspection Log

Significant Topographical Features:

1. Has the infrastructure changed at the site/area? Y / N

1a. If so, please describe change (ex. Structures no longer exist):

WLRC was constructed between 2012-2014

2. Is the site/area vegetated? Y / N

2a. If not vegetated, briefly describe the site/area composition:

3. Does the site or area exhibit evidence of erosion? Y / N

3a. If yes, describe the location and extent of the erosion:

4. Does the site/area exhibit any areas of ponding or standing water? Y / N

4a. If yes, describe the location and extent of the ponding:

Receptor Information

1. Is access to the site restricted? Y / N

1a. If so, please note to what extent:

CTARNG AASF perimeter fence

2. Who can access the site? **Site Workers / Construction Workers / Trespassers / Residential / Recreational Users / Ecological**

2a. Circle all that apply, note any not covered above:

CTARNG staff

3. Are residential areas located near the site? Y / N

3a. If so, please note the location/distance:

4. Are any schools/day care centers located near the site? Y / N

4a. If so, please note the location/distance/type:

5. Are any wetlands located near the site? Y / N

5a. If so, please note the location/distance/type:

Visual Survey Inspection Log

Additional Notes

Photographic Log

Photo ID/Name	Date & Location	Photograph Description

Visual Site Inspection Checklist

Names(s) of people performing VSI: J. Witte, W. Gee, J. Martin, J. Acienti

Recorded by: J. Witte

ARNG Contact: W. Gee, B. Packer

Date and Time: 7-26-2018

Method of visit (walking, driving, adjacent): Walking

Source/Release Information

Site Name / Area Name / Unique ID: Hazardous Material Room

Site / Area Acreage:

Historic Site Use (Brief Description): Hazardous material storage

Current Site Use (Brief Description): Same as above

Physical barriers or access restrictions: AASF perimeter gate, hazardous material area gate

1. Was PFAS used (or spilled) at the site/area? Y / N

1a. If yes, document how PFAS was used and usage time (e.g., fire fighting training 2001 to 2014):

2. Has usage been documented? Y / N

2a. If yes, keep a record (place electronic files on a disk):

Record of disposal of AFFF kept as manifest from 2016

3. What types of businesses are located near the site? **Industrial / Commercial / Plating / Waterproofing / Residential**

3a. Indicate what businesses are located near the site

AASF, Airport, Bombardier, CT Fire Academy

4. Is this site located at an airport/flightline? Y / N

4a. If yes, provide a description of the airport/flightline tenants:

Bradley Airport is an international public airport. This site is isolated from other tenants.

Visual Survey Inspection Log

Other Significant Site Features:

1. Does the facility have a fire suppression system? Y / N

1a. If yes, indicate which type of AFFF has been used:

1b. If yes, describe maintenance schedule/leaks:

1c. If yes, how often is the AFFF replaced:

AFFF was only stored here prior to offsite disposal

1d. If yes, does the facility have floor drains and where do they lead? Can we obtain an as built drawing?

Transport / Pathway Information

Migration Potential:

1. Does site/area drainage flow off installation? Y / N

1a. If so, note observation and location:

Secondary containment at the site prevents

2. Is there channelized flow within the site/area? Y / N

2a. If so, please note observation and location:

3. Are monitoring or drinking water wells located near the site? Y / N

3a. If so, please note the location:

4. Are surface water intakes located near the site? Y / N

4a. If so, please note the location:

5. Can wind dispersion information be obtained? Y / N

5a. If so, please note and observe the location.

NA

6. Does an adjacent non-ARNG PFAS source exist? Y / N

6a. If so, please note the source and location.

Potentially, Bombardier is adjacent to the south.

6b. Will off-site reconnaissance be conducted? Y / N

If a contact is available.

Visual Survey Inspection Log

Significant Topographical Features:

1. Has the infrastructure changed at the site/area? Y / N

1a. If so, please describe change (ex. Structures no longer exist):

2. Is the site/area vegetated? Y / N

2a. If not vegetated, briefly describe the site/area composition:

3. Does the site or area exhibit evidence of erosion? Y / N

3a. If yes, describe the location and extent of the erosion:

4. Does the site/area exhibit any areas of ponding or standing water? Y / N

4a. If yes, describe the location and extent of the ponding:

When rainfall occurs, water pools at SW corner

Receptor Information

1. Is access to the site restricted? Y / N

1a. If so, please note to what extent: AASF gate, Airport gate, site gate around haz. mat. storage area

2. Who can access the site? **Site Workers / Construction Workers / Trespassers / Residential / Recreational Users / Ecological**

2a. Circle all that apply, note any not covered above:

CTARNG staff

3. Are residential areas located near the site? Y / N

3a. If so, please note the location/distance:

4. Are any schools/day care centers located near the site? Y / N

4a. If so, please note the location/distance/type:

5. Are any wetlands located near the site? Y / N

5a. If so, please note the location/distance/type:

Visual Survey Inspection Log

Additional Notes

Photographic Log

Photo ID/Name	Date & Location	Photograph Description

Visual Site Inspection Checklist

Names(s) of people performing VSI: J. Witte, J. Martin, W. Gee

Recorded by: J. Witte

ARNG Contact: W. Gee, B. Packer

Date and Time: 7-26-2018

Method of visit (walking, driving, adjacent): Walking

Source/Release Information

Site Name / Area Name / Unique ID: North Hangar

Site / Area Acreage:

Historic Site Use (Brief Description): Hangar

Current Site Use (Brief Description): Same as above

Physical barriers or access restrictions: CTARNG AASF perimeter fence

1. Was PFAS used (or spilled) at the site/area? Y (N)

   1a. If yes, document how PFAS was used and usage time (e.g., fire fighting training 2001 to 2014):

2. Has usage been documented? Y (N)

   2a. If yes, keep a record (place electronic files on a disk):

3. What types of businesses are located near the site? **Industrial / Commercial / Plating / Waterproofing / Residential**

   3a. Indicate what businesses are located near the site

   Airport, Bombardier, CT Fire Academy

4. Is this site located at an airport/flightline? (Y) N

   4a. If yes, provide a description of the airport/flightline tenants:

   Many tenants at Bradley International Airport

Visual Survey Inspection Log

Other Significant Site Features:

1. Does the facility have a fire suppression system? Y / N

1a. If yes, indicate which type of AFFF has been used:

National Foam 3%

1b. If yes, describe maintenance schedule/leaks:

Storage tank maintenance unknown

1c. If yes, how often is the AFFF replaced:

Same as South hangar

1d. If yes, does the facility have floor drains and where do they lead? Can we obtain an as built drawing?

To an OWS, DPW, then stormwater/sewer water

Transport / Pathway Information

Migration Potential:

1. Does site/area drainage flow off installation? Y / N

1a. If so, note observation and location:

Same as south hangar

2. Is there channelized flow within the site/area? Y / N

2a. If so, please note observation and location:

3. Are monitoring or drinking water wells located near the site? Y / N

3a. If so, please note the location:

4. Are surface water intakes located near the site? Y / N

4a. If so, please note the location:

5. Can wind dispersion information be obtained? Y / N

5a. If so, please note and observe the location.

6. Does an adjacent non-ARNG PFAS source exist? Y / N

6a. If so, please note the source and location.

Potentially Bombardier

6b. Will off-site reconnaissance be conducted? Y / N

Potentially

Visual Survey Inspection Log

Significant Topographical Features:

1. Has the infrastructure changed at the site/area? Y / N

1a. If so, please describe change (ex. Structures no longer exist):

WLRC constructed between 2012-2014

2. Is the site/area vegetated? Y / N

2a. If not vegetated, briefly describe the site/area composition:

3. Does the site or area exhibit evidence of erosion? Y / N

3a. If yes, describe the location and extent of the erosion:

4. Does the site/area exhibit any areas of ponding or standing water? Y / N

4a. If yes, describe the location and extent of the ponding:

Receptor Information

1. Is access to the site restricted? Y / N

1a. If so, please note to what extent:

Perimeter fence, hangar walls

2. Who can access the site? **Site Workers / Construction Workers / Trespassers / Residential / Recreational Users / Ecological**

2a. Circle all that apply, note any not covered above:

CTARNG staff

3. Are residential areas located near the site? Y / N

3a. If so, please note the location/distance:

4. Are any schools/day care centers located near the site? Y / N

4a. If so, please note the location/distance/type:

5. Are any wetlands located near the site? Y / N

5a. If so, please note the location/distance/type:

Visual Survey Inspection Log

Additional Notes

Photographic Log

Photo ID/Name	Date & Location	Photograph Description

Appendix B.3
Preliminary Conceptual Site Model Information

Preliminary Assessment – Conceptual Site Model Information

Site Name: Windsor Locks AASF, CT

Why has this location been identified as a site?

The facility is an ARNG AASF located adjacent to a public airport. It primarily operates as a helicopter service and fueling station. AFFF is commonly stored/used at facilities of this kind.

Are there any other activities nearby that could also impact this location?

Bradley International Airport has numerous aviation industry tenants that use unknown fire suppression techniques. Additionally, the CT Fire Academy and CTANG operate facilities in the vicinity of the AASF.

Training Events

Have any training events with AFFF occurred at this site? Yes

If so, how often? Approximately once per year from 2003-2015

How much material was used? Is it documented? CTARNG staff speculate that between 6 and 10 fire extinguishers sprayed 30 gallons of 3% AFFF per training event.

Identify Potential Pathways: Do we have enough information to fully understand over land surface water flow, groundwater flow, and geological formations on and around the facility? Any direct pathways to larger water bodies?

Surface Water:

Surface water flow direction? North towards Spencer Brook

Average rainfall? 45.85 inches

Any flooding during rainy season? Yes, east closer to the Connecticut River; unlikely at the facility

Direct or indirect pathway to ditches? Direct pathway to wetlands

Direct or indirect pathway to larger bodies of water? Onsite wetlands discharge to Spencer Brook and the CT River

Does surface water pond any place on site? Yes, wetlands on the eastern portion of the facility

Any impoundment areas or retention ponds? Wetlands

Any NPDES location points near the site? Permitted discharge occurs to the AASF wetlands

How does surface water drain on and around the flight line? To the AASF wetlands, or Spencer Brook west of the facility

Preliminary Assessment – Conceptual Site Model Information

Groundwater:

Groundwater flow direction? Presumably north/northeast

Depth to groundwater? 3-11 ft bgs

Uses (agricultural, drinking water, irrigation)? No known groundwater use

Any groundwater treatment systems? None

Any groundwater monitoring well locations near the site? None known

Is groundwater used for drinking water? No

Are there drinking water supply wells on installation? No

Do they serve off-post populations? No

Are there off-post drinking water wells downgradient? No

Waste Water Treatment Plant:

Has the installation ever had a WWTP, past or present? No

If so, do we understand the process and which water is/was treated at the plant? NA

Do we understand the fate of sludge waste? No sludge waste

Is surface water from potential contaminated sites treated? No

Equipment Rinse Water

1. Is firefighting equipment washed? Where does the rinse water go? Firefighting equipment has been tested at the Wash Rack and Building 152, which drain to the wetland.

2. Are nozzles tested? How often are nozzles tested? Where are nozzles tested? Are nozzles cleaned after use? Where does the rinse water flow after cleaning nozzles?

Testing occurred once per year at the sites mentioned above. The facility has no fire trucks.

3. Other?

Preliminary Assessment – Conceptual Site Model Information

Identify Potential Receptors:

Site Worker - Yes

Construction Worker - Yes

Recreational User - Yes (potential off-facility user of Spencer Brook for recreation)

Residential - Yes (potential off-facility user of Spencer Brook for recreation)

Child - Yes (potential off-facility user of Spencer Brook for recreation)

Ecological - Yes (eco receptors in wetland or Spencer Brook)

Note what is located near by the site (e.g. daycare, schools, hospitals, churches, agricultural, livestock)?

Aviation industry tenants of Bradley International Airport

Documentation

Ask for Engineering drawings (if applicable). Eingineering drawing available in SPCCP

Has there been a reconstruction or changes to the drainage system? When did that occur?

None known.

Appendix C
Photographic Log

APPENDIX C – Photographic Log

Army National Guard, Preliminary Assessment for PFAS	Windsor Locks AASF	Hartford County, Connecticut

Photograph No. 1

Description:

View of the Wash Rack facing northeast towards the south hangar, Building 152.

Photograph No. 2

Description:

View of the HEMTT staging area in the southern portion of facility property facing southwest.

APPENDIX C – Photographic Log

Army National Guard, Preliminary Assessment for PFAS	Windsor Locks AASF	Hartford County, Connecticut

Photograph No. 3

Description:

View of the taxiway to the Bradley International Airport facing west. The tower pictured in the background is adjacent to the Connecticut Fire Academy training areas.

Photograph No. 4

Description:

900 gallon tank containing National Foam Aerolite 3% AFFF product in the AFFF Tank Storage Room be tween the north and south hangars.

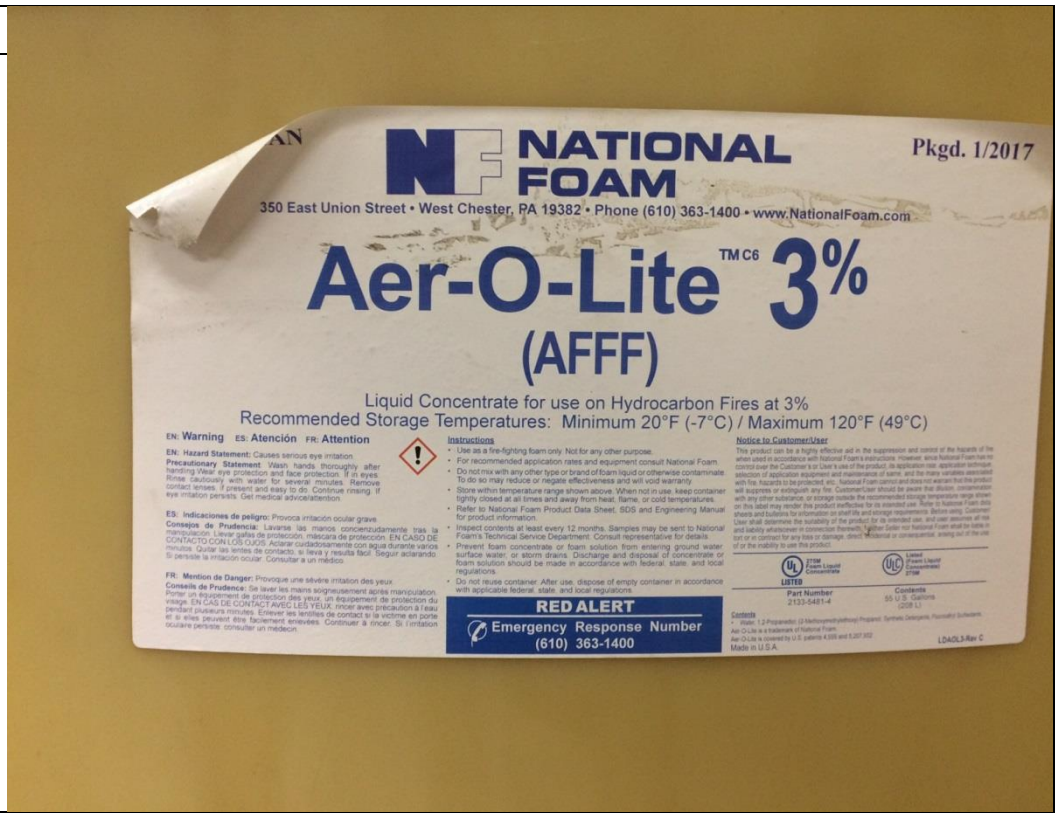
APPENDIX C – Photographic Log

Army National Guard, Preliminary Assessment for PFAS	Windsor Locks AASF	Hartford County, Connecticut

Photograph No. 5

Description:

900 gallon tank containing National Foam Aerolite 3% AFFF product in the AFFF Tank Storage Room be tween the north and south hangars.



Photograph No. 6

Description:

Floor drain in the AFFF Tank Storage Room between the north and south hangars stor ing a 900 gallon tank contain ing National
Foam Aerolite 3% AFFF product. The drain connects to an OWS and discharges to stormwater sewers.

APPENDIX C – Photographic Log

Army National Guard, Preliminary Assessment for PFAS	Windsor Locks AASF	Hartford County, Connecticut

Photograph No. 7

Description:

Dry chemical handheld fire extinguisher stored in the south hangar, Building 152.

Photograph No. 8

Description:

Floor drains in the south hangar, Building 152; view facing west towards the runway.

APPENDIX C – Photographic Log

Army National Guard, Preliminary Assessment for PFAS	Windsor Locks AASF	Hartford County, Connecticut

Photograph No. 9

Description:

View facing north of the parking aprons west of the north and south hangars. The Windsor Locks Readiness Center is visible to the northeast in the background.

Photograph No. 10

Description:

View of the Wash Rack facing west. Mobile fire extinguisher containing dry chemical visible on southern side of the Wash Rack.

APPENDIX C – Photographic Log

Army National Guard, Preliminary Assessment for PFAS	Windsor Locks AASF	Hartford County, Connecticut

Photograph No. 11

Description:

Mobile dry chemical fire extinguisher staged at the Wash Rack.

Photograph No. 11

Description:

Label on the mobile fire extinguisher staged at the Wash Rack indicating the contents include Potassium Bicarbonate, Barium Sulfate, and Mica.

APPENDIX C – Photographic Log

Army National Guard, Preliminary Assessment for PFAS	Windsor Locks AASF	Hartford County, Connecticut

Photograph No. 13

Description:

View facing southeast of the OWS area south of Building 152.

Photograph No. 12

Description:

Hazardous waste storage area west of Building 152; view facing west.

APPENDIX C – Photographic Log

Army National Guard, Preliminary Assessment for PFAS	Windsor Locks AASF	Hartford County, Connecticut

Photograph No. 15

Description:

Secondary containment around hazardous waste storage area; view facing west.

Photograph No. 13

Description:

Materials stored inside the hazardous waste storage area building.

APPENDIX C – Photographic Log

Army National Guard, Preliminary Assessment for PFAS	Windsor Locks AASF	Hartford County, Connecticut

Photograph No. 17

Description:

The Connecticut Fire Academy located approximately 0.5 miles west of the Windsor Locks AASF.

Photograph No. 14

Description:

Training facility at the Connecticut Fire Academy approximately 0.5 miles west of Windsor Locks AASF.

APPENDIX C – Photographic Log

Army National Guard, Preliminary Assessment for PFAS	Windsor Locks AASF	Hartford County, Connecticut

Photograph No. 19

Description:

Training facility at the Connecticut Fire Academy approximately 0.5 miles west of Windsor Locks AASF.

Photograph No. 20

Description:

Bradley International Airport maintenance facility located adjacent to Windsor Locks AASF to the south.