FINAL Preliminary Assessment Report Peoria Army Aviation Support Facility #3, Peoria, Illinois

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

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Prepared for:



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Acronyms and Abbreviations

AASF Army Aviation Support Facility
AECOM AECOM Technical Services, Inc.
AFFF aqueous film forming foam

AOI Area of Interest

ARNG Army National Guard

AST aboveground storage tank

ANG Air National Guard
bgs below ground surface
CE Civil engineering

CERCLA Comprehensive Environmental Response, Compensation, and Liability

Act

CSM conceptual site model

EDR™ Environmental Data Resources, Inc.™
ERP Environmental Restoration Program

°F degrees Fahrenheit FTA fire training area

ILARNG Illinois Army National Guard ILANG Illinois Air National Guard

HA Health Advisory

PA Preliminary Assessment

PFAS per- and poly-fluoroalkyl substances

PFOA perfluorooctanoic acid

PFOS perfluorooctanesulfonic acid POL Petroleum, Oil, and Lubricants

SI Site Inspection US United States

USACE United States Army Corps of Engineers

USEPA United States Environmental Protection Agency

UST Underground storage tank
VSI visual site inspection

Executive Summary

The Army National Guard (ARNG) is performing Preliminary Assessments (PAs) and Site Inspections (SIs) for Perfluorooctanesulfonic acid (PFOS) and Perfluorooctanoic acid (PFOA) Impacted Sites at ARNG Facilities Nationwide. A PA for per- and polyfluoroalkyl substances (PFAS)-containing materials was completed for the Peoria Army Aviation Support Facility #3 (AASF) in Peoria, Illinois, to assess potential PFAS release areas and exposure pathways to receptors. The AASF is constructed on a parcel of land that has been operated by the Illinois ARNG (ILARNG) from 1997 to present. Prior to the use by the ILARNG, the Illinois Air National Guard (ILANG) occupied the land. The performance of this PA included the following tasks:

- Reviewed available administrative record documents and Environmental Data Resources, Inc. (EDR)™ report packages to obtain information relevant to potential PFAS releases, such as: drinking water well locations, historical aerial photographs, Sanborn maps, and environmental compliance actions in the area surrounding the facility;
- Conducted a site visit 5 November 2019 and completed visual site inspections at locations where PFAS-containing materials were suspected of being stored, used, or disposed;
- Interviewed current ILARNG personnel and ILARNG environmental managers;
- Identified Area(s) of Interest (AOIs) and developed a preliminary conceptual site model (CSM) to summarize potential source-pathway-receptor linkages of potential PFAS in soil, groundwater, surface water, and sediment for each AOI.

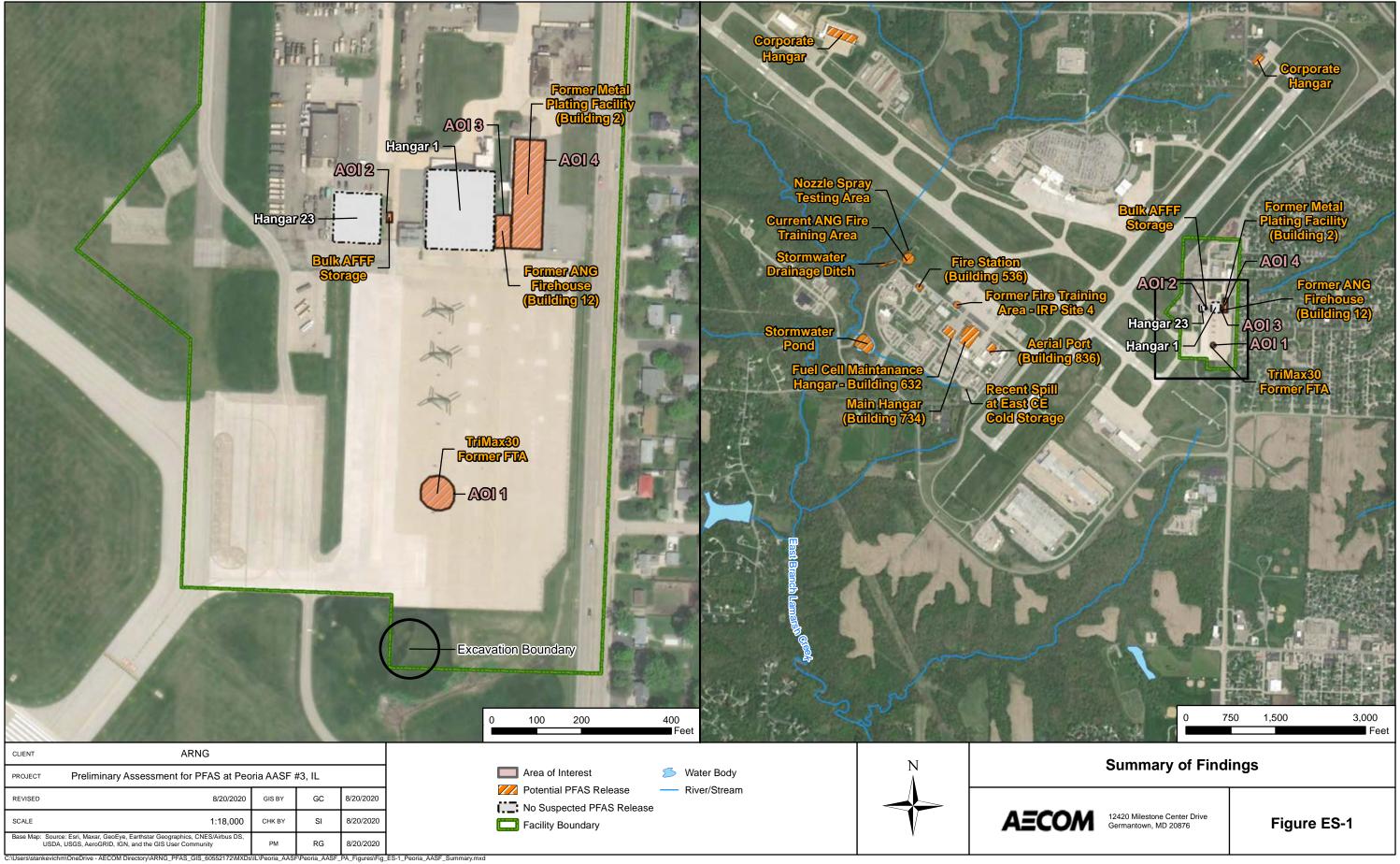
Four AOIs related to potential PFAS releases was identified at the AASF during the PA. The AOIs are shown on **Figure ES-1** and described below in **Table ES-1**:

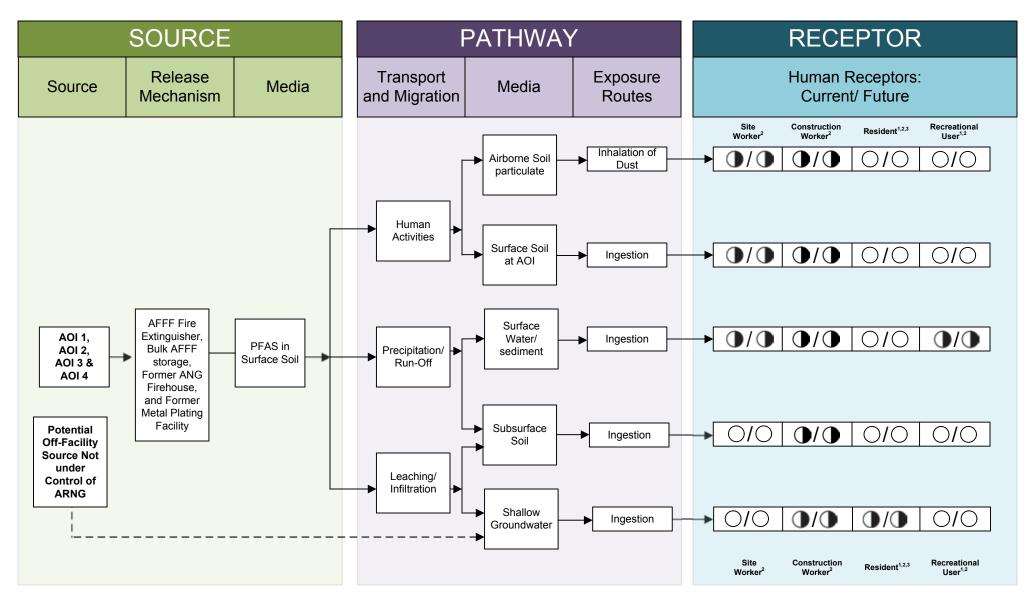
Table ES-1: AOIs at Peoria AASF #3

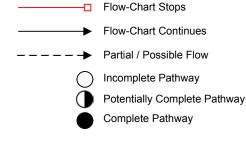
Area of Interest	Name	Used by	Potential Release Dates
AOI 1	Tri-Max 30™ Former FTA	ILARNG	2000 – 2002
AOI 2	Bulk AFFF Storage	ILARNG	late 1990s – 2005
AOI 3	Former ANG Firehouse	ILANG	1970 – 1994
AOI 4	Former Metal Plating Facility	ILANG	1940s – 1990s

Based on potential PFAS release at these AOIs, there is potential for exposure to PFAS contamination in media at or near the facility. The preliminary CSM for the AASF is shown on **Figure ES-2**, which presents the potential receptors and media impacted. Based on the United States Environmental Protection Agency (USEPA) Unregulated Contaminant Monitoring Rule 3 data, it was indicated that no PFAS were detected in a public water system above the USEPA Health Advisory within 20 miles of the facility. PFAS analyses performed in 2016 had method detection limits that were higher than currently achievable. Thus, it is possible that low concentrations of PFAS were not detected during the UCMR3 but might be detected if analyzed today.

1







Notes:

- 1. The resident and recreational user receptors refer to an off-facility resident and off-facility recreational user, respectively.
- 2. Dermal contact exposure pathway is incomplete for PFAS.
- 3. Off-facility residents whose drinking water may be sourced from the Illinois River.

Figure ES-2

Preliminary Conceptual Site Model
Peoria AASF #3, Illinois

1. Introduction

1.1 Authority and Purpose

The Army National Guard (ARNG) G9 is the lead agency in performing *Preliminary Assessments* (*PAs*) and Site Inspections (SIs) for Perfluorooctanesulfonic acid (PFOS) and Perfluorooctanoic acid (PFOA) at Impacted Sites at ARNG Facilities Nationwide. This work is supported by the United States (US) Army Corps of Engineers (USACE) Baltimore District and their contractor AECOM Technical Services, Inc. (AECOM) 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 facilities that used per- and poly-fluoroalkyl substances (PFAS) (a suite of related chemicals), primarily in the form of aqueous film forming foam (AFFF) released as part of firefighting activities, although other PFAS sources 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. PFAS formulations contain highly diverse mixtures of compounds. Thus, the fate of PFAS compounds in the environment varies. 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. The State of Illinois does not currently have drinking water or soil standards for PFAS.

This report presents the findings of a PA for PFAS-containing materials at the Peoria Illinois Army Aviation Support Facility #3 (AASF) (also referred to as the "facility") in Peoria, Illinois, 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 Part 300), and Army requirements and guidance.

This PA documents the known locations where PFAS may have been released into the environment at the AASF. 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 available administrative record documents and Environmental Data Resources, Inc. (EDR)[™] report packages to obtain information relevant to potential PFAS releases, such as: drinking water well locations, historical aerial photographs, Sanborn maps, and environmental compliance actions in the area surrounding the facility;
- Conducted a site visit on 5 November 2019 and completed visual site inspections (VSIs) at locations where PFAS-containing materials were suspected of being stored, used, or disposed;
- Interviewed current Illinois ARNG (ILARNG) personnel, ILARNG environmental managers, and operations staff

Identified Area(s) of Interest (AOIs) and developed a preliminary conceptual site model (CSM) to summarize potential source-pathway-receptor linkages of potential PFAS in soil, groundwater, surface water, and sediment 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 sections and descriptions of each are:

- **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 fire training areas (FTAs) at the facility identified during the site visit
- **Section 3 Non-Fire Training Areas:** describes other locations of potential PFAS releases at the facility identified during the site visit
- **Section 4 Emergency Response Areas:** describes areas of potential PFAS release at the facility, specifically in response to emergency situations
- **Section 5 Adjacent Sources:** describes sources of potential 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 for the AOIs and the facility
- Section 7 –Conclusions: summarizes the data findings and presents the conclusions of the PΔ
- 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

The AASF is in Peoria County, approximately 5 miles southwest of Peoria, Illinois (**Figure 1-1**). The AASF is adjacent to General Wayne A. Downing Peoria International Airport. The installation is accessible from the west via South Airport Road.

The AASF is constructed on a parcel of land that has been leased to the ARNG for a term beginning in 1997 and ending in 2055, from the Metropolitan Airport Authority of Peoria (**Appendix A**). From 1947 to 1994, the Illinois Air National Guard (ILANG) operated the facility. In 1994, the ILANG moved all assets to a new location across the runway less than a mile west from the AASF. Prior to the lease in 1997, the ILARNG used some buildings and tents at the facility, although it was considered ILANG property.

The AASF is approximately 44 acres, and currently includes one hangar, a building with connected offices and dry parts storage, a small expanse of tarmac south of the hangar, a mobile fuel tanker parking pad (providing containment), Petroleum, Oil, and Lubricants (POL) storage sheds, and a parking lot for employee's personal vehicles. In recent years, there has been some construction that has taken place at the AASF. Hangar 23 was demolished sometime between

2012 and 2013 and is currently a concrete pad. Also, the concrete was replaced primarily on the west and south side of the ramp area in 2017.

1.5 Facility Environmental Setting

The AASF is within the Illinois River Valley, which is characterized by glacial sediments. The facility is bordered to the north and east by residential and commercial areas and bordered to the south and west by agricultural land. The AASF is within a mile of the East Branch of the Lamarsh Creek and within 4 miles of the Illinois River. The elevation of the facility is approximately 509 feet above mean sea level.

1.5.1 Geology

The AASF lays within central Illinois which is underlain by Pleistocene (Cenozoic-era) glacial-fluvial sediments. The sediment type and thickness are highly variable in this area. Thick sequences of glacial and glacial-fluvial sediments are found in the valleys, and thinner sequences of mainly glacial tills and loess are found on the plateaus. Bedrock units in the Peoria area have a declining slope to the south-southwest. The uppermost bedrock units in the area are Pennsylvanian-aged rocks of the McLeansboro Group, Carbondale Formation, and Tradewater Formation, which typically consist of interbedded limestones, shales, and sandstones. Coal seams are commonly found within these strata. Pennsylvanian-aged rocks are underlain by a regional unconformity, which overlies Mississippian- to Ordovician-aged shale, limestone, and dolostone throughout central Illinois (Leidos, 2015).

1.5.2 Hydrogeology

Regional groundwater occurs in two primary aquifer systems, located within the Pleistocene- and Paleozoic-aged aquifers. The most important aquifer for municipal and industrial use in Peoria County is the Kansan Sankoty Sand, which is typically first encountered between 15 and 20 feet below ground surface (bgs). This aquifer comes within approximately 1.5 miles of the facility to the east of the airport. Groundwater in the area also can be obtained from wells as deep as 350 feet bgs in Pennsylvanian-aged sandstone, coal, and fractured shale; however, wells are generally not drilled into these rocks due to the poor water quality and high mineral content. Groundwater near the facility occurs in a shallow aquifer at depths ranging from 3 to 12 feet bgs. Groundwater flow generally reflects surface topography with a flow to the south at an average hydraulic gradient of 0.013 (Leidos, 2015). The groundwater near the facility flows to the southeast towards the Illinois River.

There are no wells located within the boundary of the AASF; however, there are several unknown wells within a two-mile radius surrounding the facility (**Figure 1-2**). The State of Illinois does not provide specific well type information (i.e. domestic well, industrial well, etc.). Drinking water for the AASF is supplied by the City of Bartonville, which sources water groundwater wells from the San Koty Aquifer, and surface water from the Illinois River (Illinois American Water, 2018). The USEPA Unregulated Contaminant Monitoring Rule 3 (UCMR3) data indicate that PFOS/PFOA were not detected in a public water system above the USEPA HA within a 20-mile radius of the facility. PFAS analyses performed in 2016 had method detection limits that were higher than currently achievable. Thus, it is possible that low concentrations of PFAS were not detected during the UCMR3 but might be detected if analyzed today.

1.5.3 Hydrology

The AASF is on a plateau west of and approximately 200 feet above the Illinois River (**Figure 1-3**). The land surface slopes gently to the east on the flight apron and to the north and east away

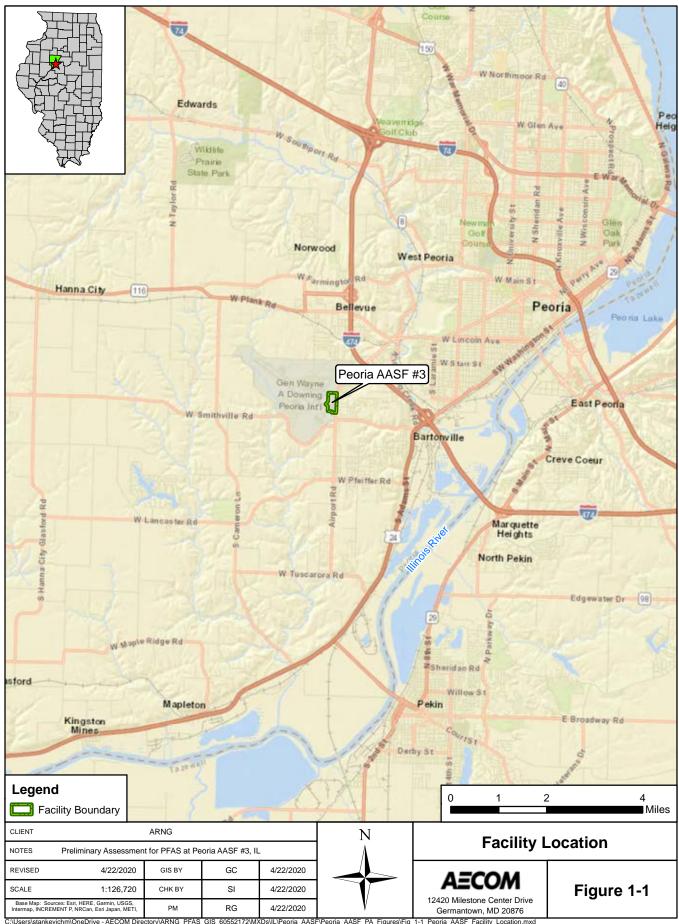
from the apron in the northern portion of the property. There are numerous drainage ditches and storm sewers that collect and channel surface water either south toward the East Branch of Lamarsh Creek, or east toward Kickapoo Creek. Both creeks discharge to the Illinois River, which is approximately 3 miles to the east and south of the AASF (URS Group Inc., 2009).

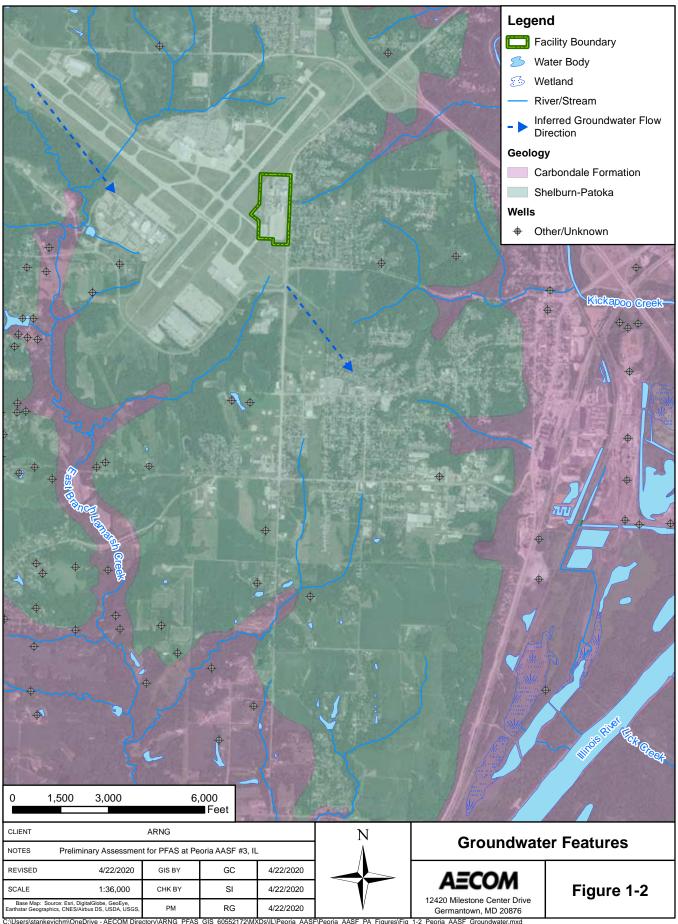
1.5.4 Climate

The climate at the AASF consists of four clearly separated seasons, with long, warm summers and freezing, snowy, cloudy, windy winters. Temperatures can reach highs of 86 degrees Fahrenheit (°F) in the summer months, to lows of 17 °F in winter months. The average annual temperature is 51.8 °F. Average precipitation is 36.45 inches of rain (World Climate, 2019).

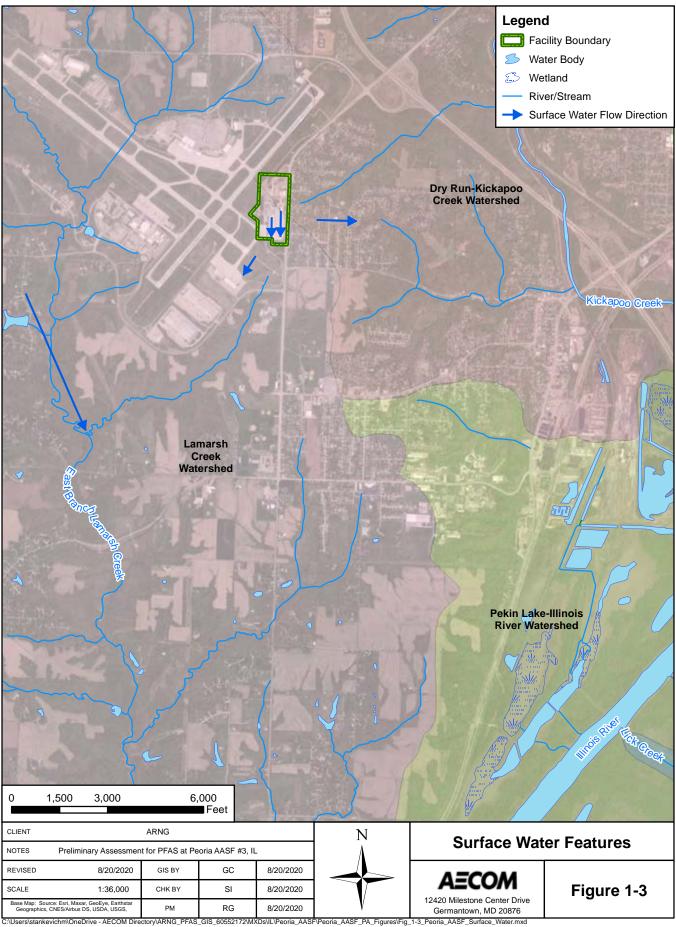
1.5.5 Current and Future Land Use

The AASF is a controlled access facility with public roads and is adjacent to the Peoria International Airport. Reasonably anticipated future land use is not expected to change from the current land use; however, future infrastructure improvements, land acquisitions, and land use controls at the Peoria International Airport are unknown.





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2. Fire Training Areas

One FTA where PFAS was potentially released was identified during the PA. A description of the FTA is presented below, and the FTA is shown on **Figure 2-1**. Interview records appear in **Appendix B**. Photographs appear in **Appendix C**.

2.1 Tri-Max 30™ Former FTA

In the late 1990's, three Tri-Max 30[™] fire extinguisher units filled with AFFF arrived at the AASF. The concentration of AFFF in the Tri-Max 30[™] fire extinguishers are unknown. There was one training event for the Tri-Max 30[™] units that occurred between 2000 and 2002. During this event, one Tri-Max 30[™] fire extinguisher was discharged on the ramp area between Pad 5 and 6. The geographic coordinates are 40°39'32.68"N and 89°40'53.94"W. Runoff from the ramp flows south into the grassy area immediately adjacent to the ramp, and into a ditch which drains into the stormwater system that leads to the East Branch of the Lamarsh Creek, which ultimately discharges into the Illinois River. The remaining Tri-Max 30[™] fire extinguishers at the facility were never used and did not undergo hydrostatic testing while at the facility. In 2004 or 2005, all the Tri-Max 30[™] fire extinguishers were removed from the AASF and sent to Principal Federal Official at Camp Lincoln, IL. Purple K has since replaced the Tri-Max 30[™] fire extinguishers.

Surface water flows south off the ramp, and directly onto the adjacent grassy area to the south. Historically, this grassy area is an Environmental Restoration Program (ERP) site where multiple environmental investigations and excavations have taken place since 2000. This ERP site was formerly used as a POL storage facility containing underground storage tanks (USTs) and associated piping as well as a drum storage area. The soil and groundwater at the site were contaminated with benzene, petroleum, and chlorinated volatile organic compounds. The ERP site has been excavated three times since 2000 and the excavation boundary is shown on **Figure 2-1**. In 2012, the final remedial action resulted in removal, treatment, and disposal of soil within the excavation boundary to a non-hazardous waste landfill. The excavation boundary had a diameter of approximately 150 feet and extended to 23 feet below ground surface. The excavation site was backfilled with gravel and clean soil (AECOM, 2013).



3. Non-Fire Training Areas

In addition to FTAs, the PA evaluated areas where PFAS-containing materials may have been broadly used, stored, or disposed. This may include buildings with fire suppression systems, paint booths, AFFF storage areas, and areas of compliance demonstrations. Information on these features obtained during the PA are included in **Appendices A** and **B**. Four non-FTAs were identified at the AASF. A description of each non-FTA is presented below, and the non-FTA is shown on **Figure 3-1**.

3.1 Hangars 1 and 23

Hangars 1 and 23 were built in 1946 with no fire suppressions systems. The geographical coordinates are 40°39'38.90"N and 89°40'53.54"W, and 40°39'38.65"N and 89°40'56.47"W, respectively. In approximately 2012, Hangar 23 was demolished and is currently a vacant concrete pad. Hangar 1 is equipped with floor drains that lead to an oil/water separator, then to the Greater Peoria sanitary Waste Water Treatment Plant (WWTP). There were drains on the concrete apron and ramp area south of the hangars, that lead to the oil/water separator then to the Greater Peoria sanitary WWTP; however, in the mid 1990s, all the ramp drains were capped. Overland surface water flows to the grassy area south of the ramp areas.

3.2 Bulk AFFF Storage

When the Tri-Max 30TM fire extinguishers arrived at the facility in the late 1990's, three 6-gallon drums of bulk AFFF concentrate with an unknown concentration, were stored in the POL Building. The geographical coordinates are 40°39'38.68"N and 89°40'55.56"W. There were no reports of the drums leaking or spilling AFFF at the facility. No information was available on the type or concentration of the AFFF stored in the drums. During the VSI, the 6-gallon drums of AFFF were not observed at the facility. It is unknown if the drums of AFFF were removed from the facility when the Tri-Max 30TM fire extinguishers were taken to Camp Lincoln in approximately 2004 or 2005. There are no drains in the POL Building.

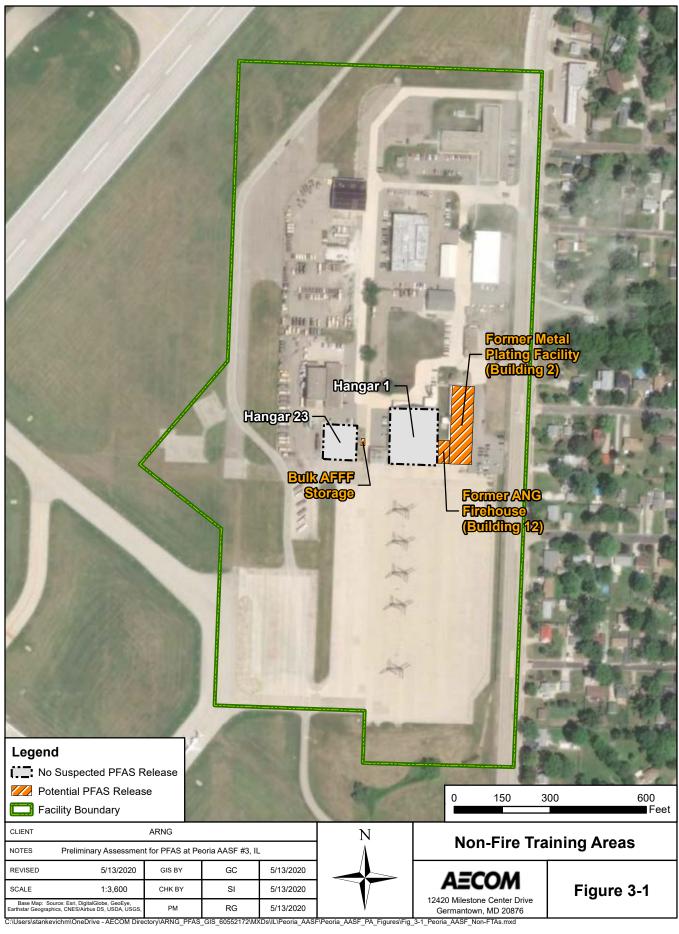
3.3 Former ANG Firehouse (Building 12)

Before the ILARNG occupied the AASF in 1997, Building 12 was utilized as a firehouse by the ILANG. The geographical coordinates are 40°39'38.44"N and 89°40'52.31"W. It is reported that multiple firetrucks with AFFF were stored in the building. The operations conducted by ILANG at the Firehouse are unknown; no information was available regarding the number of firetrucks stored in the building, the type or concentration of AFFF used in the firetrucks, if the ILANG responded to any emergencies or incidents on the facility, the frequency of nozzle testing, where firetrucks were washed, or if fire training activities were conducted at the facility. It was reported that the use of AFFF was introduced to the ILANG in the 1970s (**Appendix A**); therefore, it is presumed that AFFF was used in the firetrucks and underwent annual nozzle testing. Since 1997, Building 12 has not been used as a firehouse, and no firetrucks or AFFF have been stored at the facility. Building 12 is equipped with floor drains that lead to an oil/water separator, then to the Greater Peoria sanitary WWTP.

3.4 Former Metal Plating Facility (Building 2)

From the 1940s to 1990s, Building 2 was utilized as a metal plating facility. The geographical coordinates are 40°39'38.53"N and 89°40'51.64"W. Multiple metals were used in the plating and electroplating process such as chromium, cadmium, and zinc. Plating operations commonly involve PFAS-containing mist suppressants to reduce the risk of metal fires. There is no

knowledge of any AFFF-related activities at this building and it is possible that PFAS-containing materials were used or stored at some point in Building 2. The waste created from the metal plating process was disposed of in the sinks and building drains. It is reported that all drains lead to an oil/water separator and ultimately to the Greater Peoria sanitary WWTP.



4. Emergency Response Areas

No emergency response areas or incidents were identified within the AASF during the PA through interviews (**Appendix B**), or historical document review (**Appendix A**). The ILANG Fire Department provides fire emergency services for the AASF and Peoria International Airport.

5. Adjacent Sources

Twelve off-site PFAS sources adjacent to the AASF were identified during the PA through document review and interviews (**Appendix A** and **Appendix B**). A SI was completed at the 182nd Airlift Wing of the ILANG at Peoria International Airport, Peoria, Illinois (Amec Foster Wheeler, 2018). **Table 5-1** summarizes the findings of the SI and **Figure 5-1** presents the location of potential adjacent source areas.

5.1 ILANG

The ILANG has been located on the Peoria International Airport property since June 1947 when the unit was originally organized as the 169th Fighter Squadron. The ILANG leases approximately 91 acres in the southwest portion of the Peoria International Airport (Amec Foster Wheeler, 2018). Due to ILANG's extensive history at the Peoria International Airport, many buildings have been identified as possible adjacent sources. It is known that many of the buildings have stored AFFF or emergency vehicles that held AFFF, and that there has been use and discharge of AFFF on the premises.

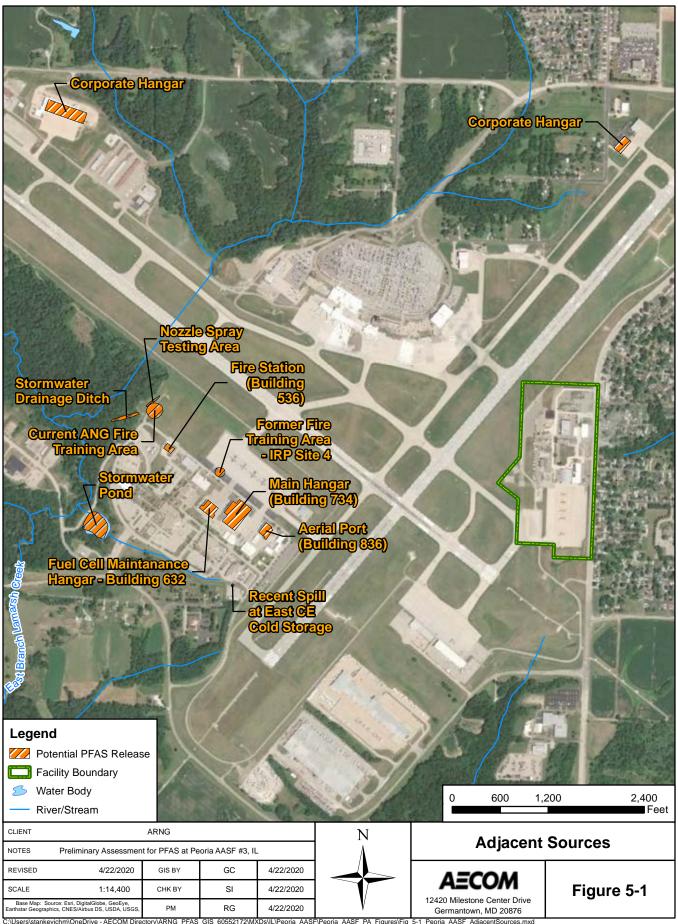
Table 5-1: ILANG Adjacent Sources

Area	Description	SI Findings
Current ANG Fire Training Area	Current fire training area. AFFF is used approximately once a year for fire training exercises.	PFAS contamination levels in groundwater exceeded USEPA Health Advisory (HA) screening criteria. Further groundwater sampling is proposed.
Former Fire Training Area – IRP Site 4	Former fire training area.	PFAS contamination levels in groundwater exceeded USEPA HA screening criteria. Further groundwater sampling is proposed.
Main Hangar (Building 734)	Hangar with AFFF Fire Suppression System utilizing a 1,000-gallon aboveground storage tank (AST).	PFAS contamination levels in groundwater exceeded USEPA HA screening criteria. Further groundwater sampling is proposed.
Fuel Cell Maintenance Hangar – Building 632	Maintenance Hangar with AFFF Fire Suppression System utilizing a 500-gallon AST.	PFAS contamination levels in groundwater exceeded USEPA HA screening criteria. Further groundwater sampling is proposed.
Recent Spill at CE Cold Storage	Storage area where a 55-gallon drum of AFFF was spilled.	PFAS contamination levels in groundwater exceeded USEPA HA screening criteria. Further groundwater sampling is proposed.

Area	Description	SI Findings
Fire Station (Building 536)	Fire Station where vehicles with AFFF are stored.	PFAS contamination levels in groundwater exceeded USEPA HA screening criteria. Further groundwater sampling is proposed.
Aerial Port (Building 836)	Previously used as maintenance hangar with AFFF Fire Suppression System.	PFAS contamination levels in groundwater exceeded USEPA HA screening criteria. Further groundwater sampling is proposed.
Nozzle Spray Testing Area	Area where nozzles are tested using AFFF.	PFAS contamination levels in soil and groundwater exceeded USEPA HA screening criteria. Further soil and groundwater sampling are proposed.
Stormwater Drainage Ditch	Drainage pathway for north portion of the base including suspect potential release location.	PFAS contamination levels in surface water exceeded USEPA HA screening criteria. Further surface water sampling is proposed.
Stormwater Pond	Collection area for stormwater draining off the southern portion of the Base.	PFAS contamination levels in groundwater and surface water exceeded USEPA HA screening criteria. Further ground and surface water sampling are proposed.

5.2 Corporate Hangars

Two private corporate hangars are located near the AASF. One is located approximately 0.85 miles northeast of the AASF and one is located approximately 1.5 miles northwest of the facility. Both corporate hangars are located upgradient of the facility. Based on interviewees, the corporate hangars have a fire suppression system; however, the type of fire suppressant used in the fire suppression systems is unknown. The corporate hangars have been identified as a potential adjacent source due to the possibility that the fire suppression system contains AFFF. No additional information for the corporate hangar was available during the site visit.



6. Preliminary Conceptual Site Model

Based on the PA findings, four AOIs were identified at the AASF: AOI 1 Tri Max 30™ Former FTA, AOI 2 Bulk AFFF Storage, AOI 3 Former ANG Firehouse (Building 12), and AOI 4 Former Metal Plating Facility (Building 2). The location of the AOIs are shown on **Figure 6-1**. The following sections describe the CSM components and the specific CSMs developed for each AOI. The CSM identifies the three components necessary for a potentially complete exposure pathway: (1) source, (2) pathway, (3) receptor. If any of these elements are missing, the pathway is considered incomplete.

6.1 Pathways

In general, the potential PFAS exposure pathways are ingestion and inhalation. 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 (National Ground Water Association, 2018).

AFFF releases identified at the AASF occurred on paved surfaces. Releases to the paved surfaces could have migrated a short distance onto the surrounding surface soil. Ground-disturbing activities in these grassy areas as well as, beneath the paved surfaces may result in potential exposure to surface soils via ingestion and inhalation of dust particles. AFFF releases to the paved surfaces could have infiltrated the subsurface via cracks in the pavement or joints between areas that are paved with different materials. Ground-disturbing activities may result in potential exposure to subsurface soils and groundwater via ingestion. PFAS are water soluble and can migrate readily from soil to groundwater via leaching. Drinking water for the AASF is supplied by the City of Bartonville, which sources water from groundwater wells, and from surface water in the Illinois River, which is approximately 3 miles downgradient to the east and southeast of the facility. Additionally, it is possible unregistered, private, domestic wells exist downgradient of the identified AOIs which may result in potential exposure via ingestion of groundwater.

Based on the surface water flow direction, potential releases may have ultimately drained off the ramp area to the grass on the south side of the AASF. Overland surface water flows to the south of the grass area and into the stormwater system which discharges to the Illinois River. Additionally, there is a grassy ditch that runs along the east side of the facility. This may result in potential exposure via ingestion of surface water and sediment.

6.2 Receptors

Receptors include site workers, construction workers, off-facility recreational users and off-facility residents. These receptors as they pertain to the facility are described below:

- Site workers typically work at or use the site and may come into contact with the surface soils, sediment, and surface water.
- Construction workers are considered workers who represent a utility worker or other worker who would be exposed to surface and/or subsurface conditions through ground-disturbing activities.
- Off-facility recreational users typically identify a person who may recreationally use an offfacility area that may be affected by a PFAS release from the facility. Off-facility recreational users could be exposed to sediment and surface water during recreational use.

 Off-facility residents identify receptors who occupy properties outside of the AASF. Off-facility residents may come into contact with groundwater using unregistered, private, domestic wells.

The preliminary CSM for the AASF indicates which specific receptors could potentially be exposed to PFAS. The preliminary CSMs for all AOIs are shown on **Figure 6-2**, **Figure 6-3**, and **Figure 6-4**.

6.3 AOI 1 Tri-Max 30™ Former FTA

In the late 1990's, three Tri-Max 30[™] fire extinguishers arrived at the AASF. One training event for the Tri-Max 30[™] extinguishers occurred sometime between 2000 and 2002. During this event, one Tri-Max 30[™] fire extinguisher was discharged on the ramp area between Pad 5 and 6. Runoff from the ramp flows south into the grassy area immediately adjacent to the ramp, and ultimately into a ditch which drains into the stormwater system and to the Illinois River. Potential PFAS exposure pathways resulting from releases at AOI 1 are presented in **Figure 6-2** and described in **Table 6-1**:

Table 6-1 Exposure Pathways at AOI 1

Pathway	Receptor
Surface Soil	Considered a potentially complete pathway to site workers and construction workers via ingestion or inhalation of dust.
Subsurface Soil	Considered a potentially complete pathway to construction workers via ingestion or inhalation of dust.
Surface Water and Sediment	Considered a potentially complete pathway to site workers, construction workers, and off-facility recreational users via ingestion.
Groundwater	Considered a potentially complete pathway to off-facility residents and construction workers via ingestion.

6.4 AOI 2 Bulk AFFF Storage

When the Tri-Max 30[™] fire extinguishers arrived at the facility in the late 1990's, three 6-gallon drums of bulk AFFF concentrate were stored in the POL Building. No information was available on the type or concentration of the AFFF stored in the drums. During the VSI, the 6-gallon drums of AFFF were not observed at the facility. It is unknown if the drums of AFFF were removed from the facility when the Tri-Max 30[™] fire extinguishers were taken to Camp Lincoln in approximately 2004 or 2005. There are no drains in the POL Building; however, there is grass/dirt in the surrounding area. Therefore, if any spills occurred, surface soil and subsurface soil could potentially be impacted. Additionally, PFAS are water soluble and can migrate readily from soil to groundwater via leaching. Potential PFAS exposure pathways resulting from potential releases at AOI 2 are presented in **Figure 6-3** and described in **Table 6-2**:

Table 6-2 Exposure Pathways at AOI 2 and AOI 3

Pathway	Receptor
Surface Soil	Considered a potentially complete pathway to site workers and construction workers via ingestion or inhalation of dust.
Subsurface Soil	Considered a potentially complete pathway to construction workers via ingestion or inhalation of dust.

	sidered a potentially complete pathway to off-facility residents and truction workers via ingestion.
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6.5 AOI 3 Former ANG Firehouse (Building 12)

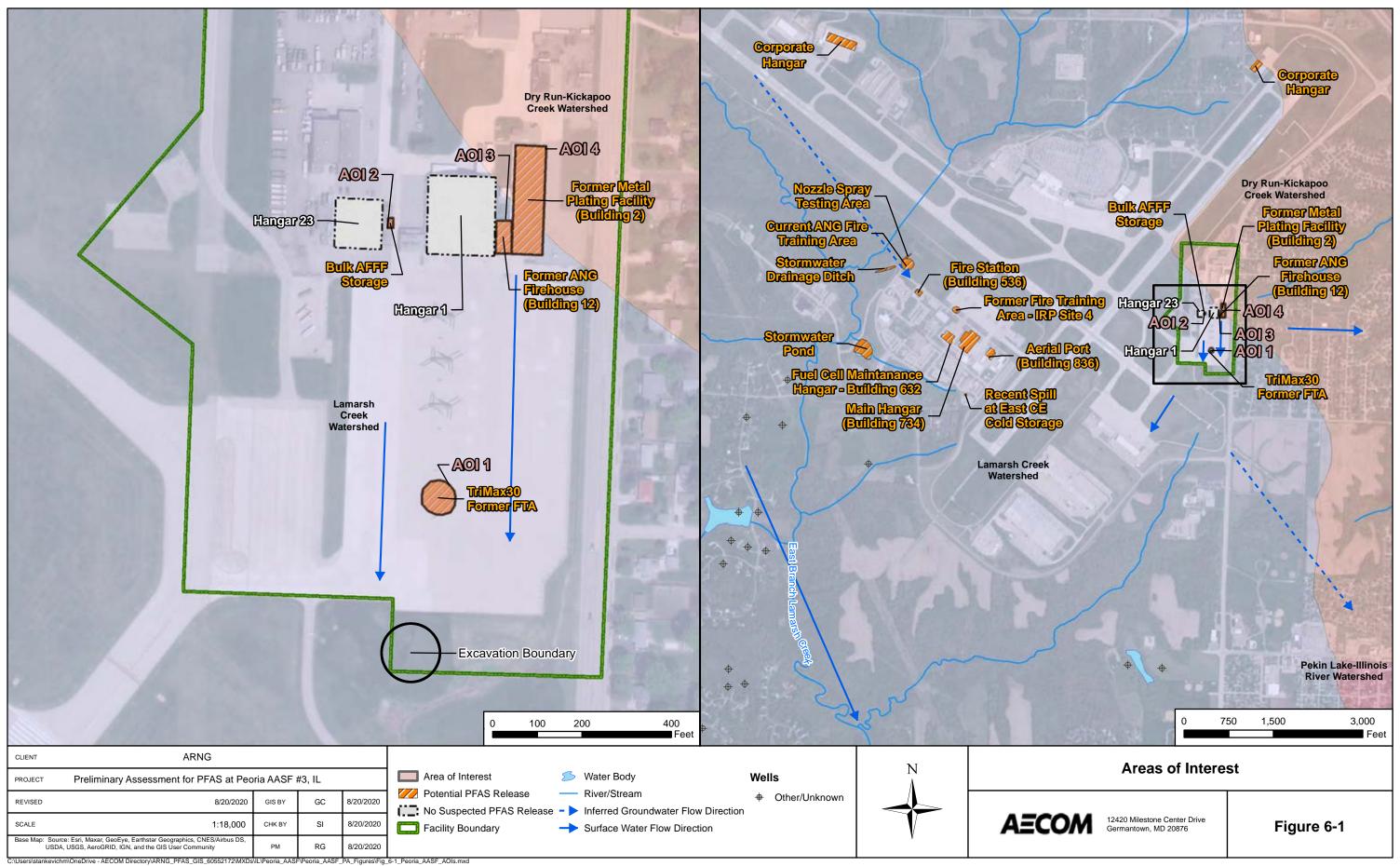
Before the ILARNG occupied the AASF in 1997, Building 12 was utilized as a firehouse by the ILANG. The operations conducted by ILANG at the Firehouse are unknown. The ILANG has been located on the Peoria International Airport property since 1947. Because AFFF was introduced to the ANG in the 1970s and based on findings of the SI (Amec Foster Wheeler, 2018) at the current ILANG location, it is presumed that AFFF was used in the firetrucks and underwent annual nozzle testing prior to 1997. PFAS are water soluble and can migrate readily from soil to groundwater via leaching. Potential PFAS exposure pathways resulting from releases at AOI 3 are presented in **Figure 6-3** and described in **Table 6-2**.

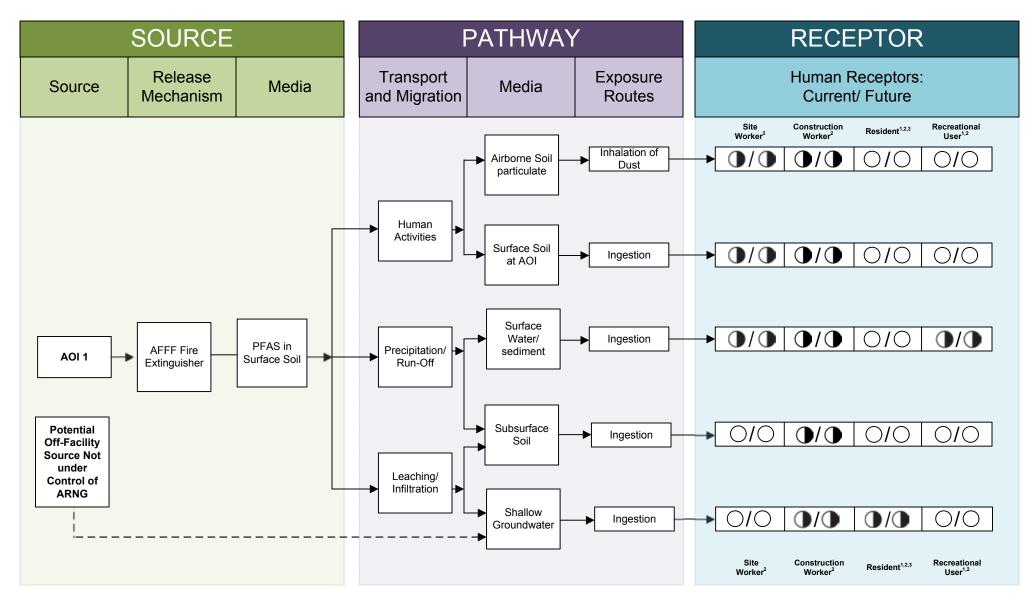
6.6 AOI 4 Former Metal Plating Facility (Building 2)

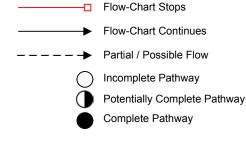
Building 2 was utilized as a metal plating facility. Plating operations commonly involve PFAS-containing mist suppressants to reduce the risk of metal fires. There is no knowledge of any AFFF-related activities at this building and it is possible that PFAS-containing materials were used or stored at some point in Building 2. The waste created from the metal plating process was disposed of in the sinks and building drains. It is reported that all drains lead to an oil/water separator and ultimately to the Greater Peoria sanitary WWTP. There is potential that PFAS containing materials could infiltrate through cracks in the drains and piping system. Potential PFAS exposure pathways resulting from potential releases at AOI 4 are present in **Figure 6-4** and described in **Table 6-3**:

Table 6-3 Exposure Pathways at AOI 4

Pathway	Receptor
Subsurface Soil	Considered a potentially complete pathway to construction workers via ingestion or inhalation of dust.
Groundwater	Considered a potentially complete pathway to off-facility residents and construction workers via ingestion.





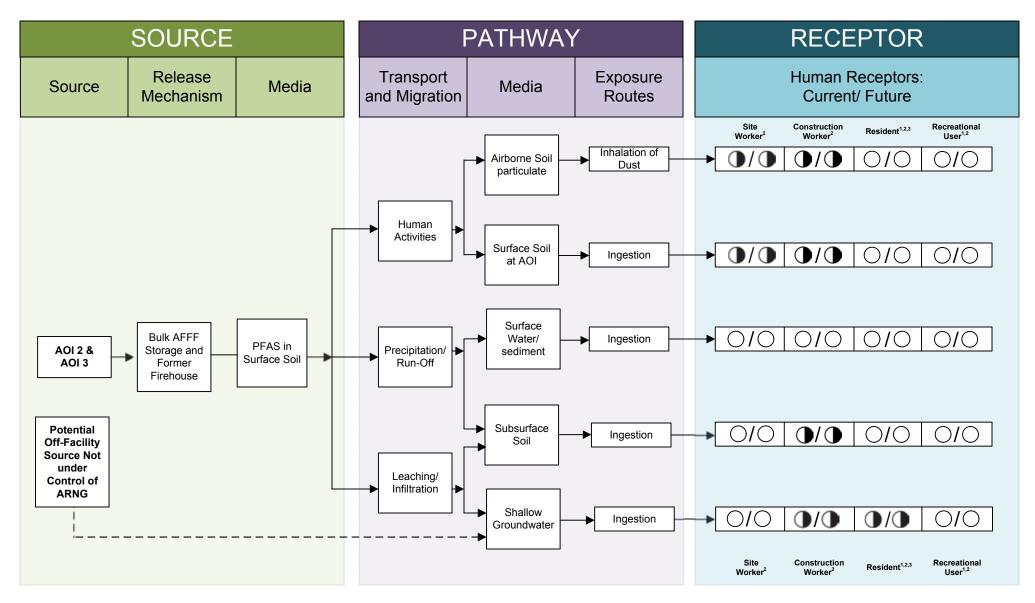


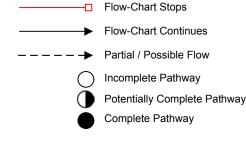
Notes:

- 1. The resident and recreational user receptors refer to an off-facility resident and off-facility recreational user, respectively.
- 2. Dermal contact exposure pathway is incomplete for PFAS.
- 3. Off-facility residents whose drinking water may be sourced from the Illinois River.

Figure 6-2

Preliminary Conceptual Site Model AOI 1 Tri-Max 30TM Former FTA



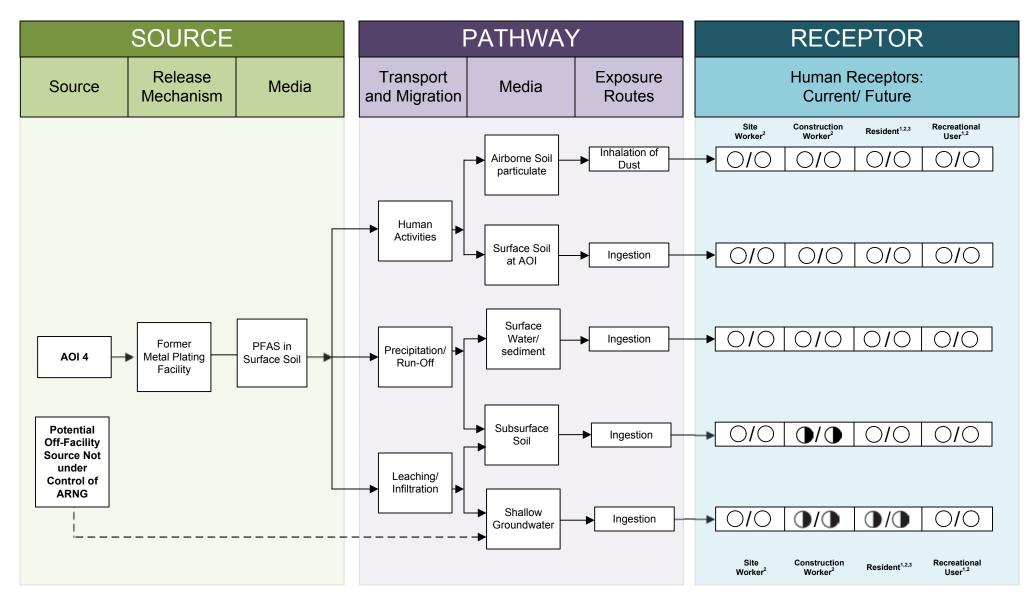


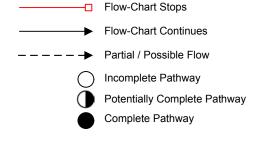
Notes:

- 1. The resident and recreational user receptors refer to an off-facility resident and off-facility recreational user, respectively.
- 2. Dermal contact exposure pathway is incomplete for PFAS.
- 3. Off-facility residents whose drinking water may be sourced from the Illinois River.

Figure 6-3

Preliminary Conceptual Site Model
AOI 2 Bulk AFFF Storage and AOI 3 Former ANG Firehouse (Building
12)





Notes:

- 1. The resident and recreational user receptors refer to an off-facility resident and off-facility recreational user, respectively.
- 2. Dermal contact exposure pathway is incomplete for PFAS.
- 3. Off-facility residents whose drinking water may be sourced from the Illinois River.

Figure 6-4

Preliminary Conceptual Site Model AOI 4 Former Metal Plating Facility (Building 2)

7. Conclusions

This report presents a summary of available information gathered during the PA on the use and storage of AFFF and other PFAS-related activities at the AASF. The PA findings are based on the information presented in **Appendix A** and **Appendix B**.

7.1 Findings

Four AOIs related to potential PFAS release were identified (**Table 7-1**) at the AASF during the PA (**Figure 7-1**).

Table 7-1: AOIs at Peoria AASF #3

Area of Interest	Name	Used by	Potential Release Dates
AOI 1	Tri-Max 30™ Former FTA	ILARNG	2000 – 2002
AOI 2	Bulk AFFF Storage	ILARNG	late 1990s – 2005
AOI 3	Former ANG Firehouse (Building 12)	ILANG	1970 – 1994
AOI 4	Former Metal Plating Facility (Building 2)	ILANG	1940s – 1990s

Based on potential PFAS release at these AOIs, there is potential for exposure to PFAS contamination in media at or near the facility. The preliminary CSMs for the AASF are shown on **Figure 6-2**, **Figure 6-3**, and **Figure 6-4**, which presents the potential receptors and media impacted.

The following area discussed in **Section 2** through **Section 5** were determined to have no suspected PFAS releases (**Table 7-2**).

Table 7-2: No Suspected Release Areas

No Suspected Release Area	Used by	Rationale for No Suspected Release Determination
Hangar 1 and Hanger 23	ILARNG	There is no fire suppression system located inside the hangar.

7.2 Uncertainties

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 the facility. Historically, documentation of PFAS use was not required because PFAS were considered benign. Therefore, records were not typically kept by the facility or available during the PA on the use of PFAS in training, firefighting, or other non-traditional activities, or on its disposition.

The conclusions of this PA are based on all available information, including: previous environmental reports, EDRs™, observations made during the VSI, and interviews. Interviews of personnel with direct knowledge of a facility generally provided the most useful insights regarding a facility's historical and current PFAS-containing materials. Sometimes the provided information was vague or conflicted with other sources. 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, dates of release, volume of releases, and the concentration of AFFF used. 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, retired and current personnel were interviewed, multiple persons were interviewed for the same potential source area, and potential source areas were visually inspected. **Table 7-3** summarizes the uncertainties associated with the PA.

Table 7-3: Uncertainties

Area of Interest	Source of Uncertainty	
Peoria AASF #3	Exact knowledge of activities that took place prior to 1997 when the ILARNG took over operations at the facility are unknown.	
AOI 1 and AOI 2	The exact date when the Tri-Max 30 [™] fire extinguishers and bulk AFFF were removed from the facility is unknown.	
AOI 3	The operations conducted by ILANG are unknown; no information was available regarding the number of firetrucks stored in the building, the type or concentration of AFFF used in the firetrucks, if the ILANG responded to any emergencies or incidents on the facility, the frequency of nozzle testing, where firetrucks were washed, or if fire training activities were conducted at the facility.	
AOI 4	First-hand knowledge of the exact dates, activities, and materials used during the metal plating procedures are unknown. The Former Metal Plating Facility was active before ILARNG took possession of the building.	

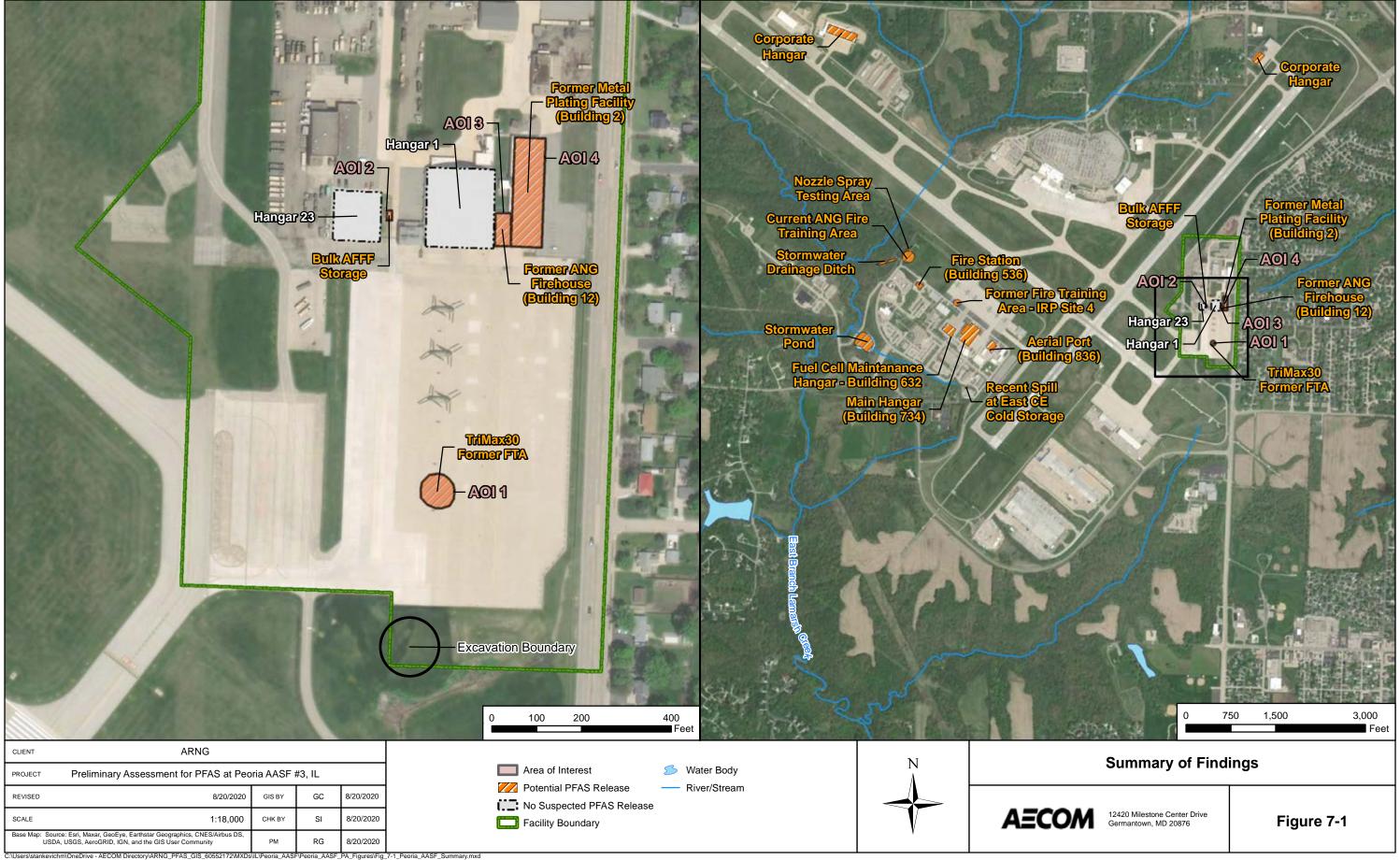
7.3 Potential Future Actions

Interviews and records (covering 1989 to present) indicate that current or former ARNG activities may have resulted in potential PFAS releases at the four AOIs identified during the PA. Based on the CSMs developed for AOI 1 and AOI 3, there is potential for receptors to be exposed to PFAS contamination in soil, groundwater, surface water, and sediment. **Table 7-4** summarizes the rationale used to determine if the AOIs should be considered for further investigation under the CERCLA process and undergo a SI.

ARNG evaluates the need for an SI at the AASF based on the potential receptors, the potential migration of PFAS contamination off the facility, and the availability of resources.

Table 7-4: PA Findings Summary

Area of Interest	AOI Location	Rationale	Potential Future Action
AOI 1 Tri-Max 30™ Former FTA	40°39'32.68"N 89°40'53.94"W	One Tri-Max 30 [™] was discharged on the ramp area of the facility. The PFAS released could have runoff into the grassy area immediately south of the ramp area and drained into the stormwater sewer system.	Proceed to an SI, focus on soil, groundwater, surface water, and sediment.
AOI 2 Bulk AFFF Storage	40°39'38.68"N 89°40'55.56"W	Three 6-gallon drums of bulk AFFF concentrate were stored in the POL Building. There were no reports of the AFFF spilling or leaking and the building has no floor drains.	Proceed to an SI, focus on soil, and groundwater.
AOI 3 Former ANG Firehouse	40°39'38.44"N 89°40'52.31"W	Building was utilized as a firehouse by the ILANG. It is presumed that AFFF was used in the firetrucks and underwent annual nozzle testing prior to 1997.	Proceed to an SI, focus on soil, and groundwater.
AOI 4 Former Metal Plating Facility (Building 2)	40°39'38.53"N 89°40'51.64"W	Plating operations commonly involve PFAS-containing mist suppressants to reduce the risk of metal fires. The waste created from the metal plating process was disposed of in the sinks and building drains, which leads to an oil/water separator and ultimately to the Greater Peoria sanitary WWTP.	Proceed to an SI, focus on soil, and groundwater.



8. References

AECOM Technical Services, Inc. 2013. Remedial Action Completion and Site Closure Report for Installation Restoration Program Site 5. December.

Amec Foster Wheeler. 2018. Site Inspection Report for Perfluorinated Compounds at the Illinois Air National Guard, Peoria Air National Guard Base, Peoria, Illinois. October.

Illinois American Water. 2018. 2018 Annual Water Quality Report.

Leidos, 2015. Final Preliminary Assessment/Site Investigation Report for Compliance Restoration Program Illinois Air National Guard General Wayne A. Downing Peoria International Airport, Peoria, Illinois. May

National Ground Water Association (NGWA). 2018. Groundwater and PFAS: State of Knowledge and Practice. January.

United States Environmental Protection Agency (USEPA). 1991. Guidance for Performing Preliminary Assessments under CERCLA. September.

URS Group, Inc. 2009. Final Community Involvement Plan for the 182d Airlift Wing. February.

World Climate. 2019. Available at http://www.worldclimate.com/climate/us/illinois/peoria.

Appendix A Data Resources

Data Resources will be provided separately on CD. Data Resources for Peoria AASF #3, Illinois.

Peoria AASF #3 Leases, Licenses, and Permits

1997 ILARNG Peoria AASF #3 Lease

Peoria AASF #3 Documentation

- 2009 Final Community Involvement Plan for the 182d Airlift Wing ILANG
- 2017 NPDES Permit No: ILR005059
- 2017 Letter from Illinois Environmental Protection Agency regarding the repaid of the concrete apron and approach
- 2018 Peoria Air National Guard Base Illinois Air National Guard PFAS SI
- 2019 AASF #3 Peoria Airport Spill Prevention Control and Countermeasure Plan
- 2019 AASF #3 Peoria Airport Storm Water Pollution Prevention Plan

EDR Report

• 2019 Peoria AASF #3 EDR Report

AMENDMENT NO. 3

LICENSE NO. DACA27-3-97-85

GENERAL WAYNE A. DOWNING PEORIA INTERNATIONAL AIRPORT, IL

THIS AMENDMENT NO. 3 granted by the SECRETARY OF THE ARMY, hereinafter referred to as the Government, to the STATE OF ILLINOIS, hereinafter referred to as the grantee, WITNESSETH THAT:

WHEREAS, on the 20th day of March 1998, the Government granted revocable License No. DACA27-3-97-85 to the grantee for use of land located at General Wayne A. Downing Peoria International Airport, Illinois for a term beginning 1 October 1997 and ending on 30 September 2055 for Army National Guard purposes. The Government leases this land from the Metropolitan Airport Authority of Peoria under Lease No. DA-11-032-ENG-3803; and

WHEREAS, the basic license was amended by Amendment No. 1, dated 2 February 1999, to delete 0.658 acres from the premises; and,

WHEREAS, the basic license was amended by Amendment No. 2, dated 6 July 2011, to update legal description and map; and,

WHEREAS, the Government has requested to add 5.4 acres to the basic license.

WHEREAS, it has been determined that continued use is in the best interest of the Government.

NOW THEREFORE, License No. DACA27-3-97-85 is hereby amended in the following particulars, but in no others:

That land description Exhibit A-3 (Legal Description) be added and Exhibit A-2 (Map) be deleted in its entirety and replaced with Exhibit A-4 (Map) consisting of 49.41 acres, attached to and made a part hereof.

THAT ALL OTHER TERMS AND CONDITIONS of the license shall remain in full force and effect.

AMENDMENT NO 3. TO LICENSE NO. DACA27-3-97-85 GREATER PEORIA AIRPORT, IL

IN WITNESS WHEREOF, I have hereunto set my hand by authority of the Secretary of the Army, this 3rd day of May, 2018.

THE UNITED STATES OF AMERICA

Veronica A. Hiriams

Real Estate Contracting Officer

Louisville District, Corps of Engineers

The above Amendment No. 3, together with all the conditions and provisions thereof, is hereby accepted this 4Hday of man

STATE OF ILLINOIS

RICHARD J. HAYES JR. Major General, ILARNG

The Adjutant General

PEORIA ARMY AVIATION SUPPORT FACILITY # 3 MILITARY RESERVATION PEORIA COUNTY, ILLINOIS

- 10 5 S F-73 v. .

LAND DESCRIPTION

Situate in the State of Illinois, County of Peoria, part of the Northeast ¼ of Section 22 and the Northwest ¼ of Section 23, Township 8 North, Range 7 East, of the 4th Principal Meridian, and more particularly described as follows:

Commencing at the northeast corner of said Northeast ¼ of Section 22; thence along the east line of the Northeast ¼ of said Section 22

South 00 degrees 26 minutes 52 seconds West 1,135.96 feet; thence

North 90 degrees 00 minutes 00 seconds West 52.37 feet to a concrete monument on the westerly right-of-way line of Airport Road and on the common boundary of Tract No. 100LE, being the Point of Beginning; thence with said common boundary:

North 90 degrees 00 minutes 00 seconds West 558.93 feet to a 1/2-inch iron pin; thence leaving said common boundary

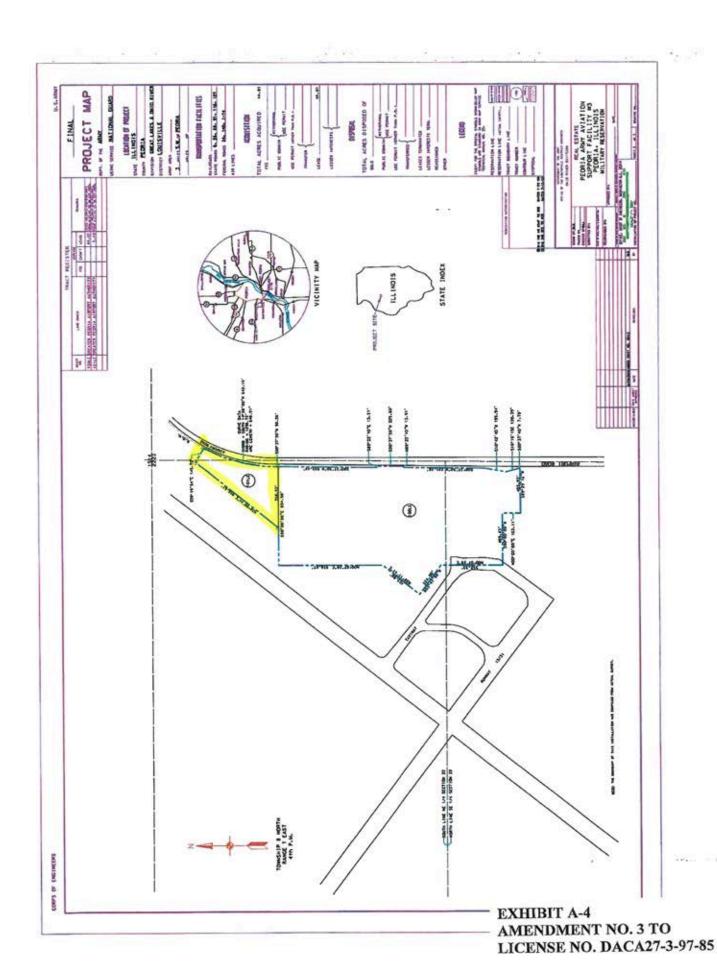
North 38 degrees 50 minutes 44 seconds East 956.61 feet to a 1/2-inch iron pin

South 59 degrees 19 minutes 54 seconds East 145.70 feet to a ½-inch iron pin on said westerly right-of-way line of Airport road; thence with the westerly right-of-way line with a a curve to the left, having a radius of 1,296.72 feet and a chord of South 14 degrees 58 minutes 00 seconds West 642.16 feet

Southwesterly 648.91 feet to a point; thence continuing with said westerly right-of-way line

South 00 degrees 37 minutes 50 seconds West 50.36 feet to the Point of Beginning, containing 5.40 acres, more or less.

28 June 2016, SLG





ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

BRUCE RAUNER, GOVERNOR

ALEC MESSINA, DIRECTOR

June 28, 2017

ILLLINOIS DEPARTMENT OF MILITARY AFFAIRS Owner Representative 1301 N. MACARTHUR BOULEVARD SPRINGFIELD, IL 62702

RE: Facility: IDOMA-ARMY AV. SUP. FAC.-#3, PEORIA, IL

County: PEORIA, NPDES Permit No: ILR005059

Notice of Renewal General Storm Water Permit for Industrial Site Activities

Dear NPDES Permittee:

We have reviewed your renewal application and determined that storm water discharges associated with industrial activity (excluding construction sites) are appropriately covered by the General NPDES Permit Issued by the Agency.

The Permit issued covers application requirements, a Storm Water Pollution Prevention Plan, and reporting requirements. Failure to meet any portion of the Permit could result in civil and/or criminal penalties. The Agency is ready and willing to assist you in interpreting any of the conditions of the Permit as they relate specifically to your discharge. An electronic copy of your facility's SWPPP must be submitted to the Agency in accordance with Part E.1 of the ILR00 Permit.

The Permit and attachments are available through the following website address: http://www.epa.illinois.gov/topics/forms/water-permits/storm-water/industrial/index

Your discharge is covered by this permit effective as of the date of this letter. You have the right to appeal the Agency's decision to cover the discharge by the General Permit to the Illinois Pollution Control Board within a 35-day period following the date of this letter.

Your original approval date is 1/16/1995. Annual reports for your facility are required to be submitted to the Agency pursuant to Part K.2 of this permit. This letter shows your facility permit number below your facility name. Please reference this number in all future correspondence. Should you have any questions concerning the Permit, please contact the Permit Section at 217/782-0610.

Very Truly Yours,

Alan Keller, P.E.

Manager, Permit Section

Division of Water Pollution Control

HIL 0 3 2017

CC: Records, Billing System, CAS, Region: Springfield

4302 N., Main St., Rodeford, IL 61103 (815)987-7760 595 S. State, Bgin, IL 60123 (847)608-3131 2125 S. First St., Champaign, IL 61820 (217)278-5800 2009 Mall St., Callinoville, IL 62234 (618)346-5120 9511 Harrison St., Des Plaines, IL 60016 (847)294-4000 412 SW Washington St., Suite D. Peoria, IL 61602 (309)671-3022 2309 W. Main St., Suite 116, Marion, IL 62959 (618)993-7200 100 W. Randolph, Suite 10-300, Chicago, IL 60601



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-2829

217/782-0610

11/9/2017 13 NOV '17 PM2: 25

ILLINOIS DEPARTMENT OF MILITARY AFFAIRS KIP TROEGER CAMP LINCOLN - 1301 N MACARTHUR BLVD SPRINGFIELD, IL 62702

RE: FACILITY: REPAIR CONCRETE PARKING APRON AND APPROACH APRON, PEORIA, IL

COUNTY: PEORIA, NPDES Permit No: ILR10Z366

Notice of Coverage Under Construction Site Activity Storm Water General Permit

Dear NPDES Permittee:

We have reviewed your application and determined that storm water discharges associated with industrial activity from construction sites are appropriately covered by the attached General NPDES Permit issued by the Agency. Your discharge is covered by this permit effective as of the date of this letter or as identified by the conditions of the permit. The Permit as issued covers application requirements, a storm water pollution prevention plan and reporting requirements.

As a Permit Holder, it is your responsibility to:

- 1. Submit a modified Notice of Intent of any ownership or address change to the Permit Section within 30 days;
- A Notice of Termination must be sent to the Agency, at the address indicated on the Notice of Termination, once
 your construction project has been completed and the site is properly stabilized. A Notice of Termination
 form has been enclosed for your convenience;

This letter shows your facility permit number below the construction site name. Please save this number and reference it in all future correspondence. Should you have any questions concerning the Permit, please contact Melissa Parrott at (217) 782-0610.

Very truly yours.

Alan Keller, P.E.

Manager, Permit Section

Division of Water Pollution Control

CC: Records Unit, Billing System, Region: Peoria

NPDES Permit No. ILR10

General NPDES Permit No. ILR10 Modification

13 NOV '17 PM2:25

Illinois Environmental Protection Agency
Division of Water Pollution Control
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
www.epa.state.il.us

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

General NPDES Permit For Storm Water Discharges From Construction Site Activities

Expiration Date:

July 31, 2018

Issue Date:

July 30, 2013

Effective Date:

August 1, 2013

Modification Date:

April 30, 2014

In compliance with the provisions of the Illinois Environmental Protection Act, the Illinois Pollution Control Board Rules and Regulations (35 III. Adm. Code, Subtitle C, Chapter I), and the Clean Water Act, and the regulations thereunder the following discharges are authorized by this permit in accordance with the conditions and attachments herein.

Alan Keller, P.E.

Manager, Permit Section

Division of Water Pollution Control

Part I. COVERAGE UNDER THIS PERMIT

- A. Permit Area. The permit covers all areas of the State of Illinois with discharges to any waters of the State.
- B Eligibility
 - 1. This permit shall authorize all discharges of storm water associated with industrial activity from a construction site that will result in the disturbance of one or more acres total land area or a construction site less than one acre of total land that is a part of a larger common plan of development or sale if the larger common plan will ultimately disturb one or more acres total land area. This permit may authorize discharges from other construction site activities that have been designated by the Agency as having the potential to adversely affect the water quality of waters of the state. This permit also authorizes discharges from construction sites previously approved by the Agency under the previous version of ILR10 that are still occurring after the effective date of this permit, except for discharges identified under Part I.B.3 (Limitations on Coverage). Where discharges from construction sites were initially covered under the previous version of the ILR10, the Storm Water Pollution Prevention Plan must be updated/revised as necessary to ensure compliance with the provision of this reissued ILR10 permit.
 - This permit may only authorize a storm water discharge associated with industrial activity from a construction site that is mixed with a storm water discharge from an industrial source other than construction, where:
 - a. the industrial source other than construction is located on the same site as the construction activity;
 - storm water discharges associated with industrial activity from the areas of the site where construction activities are occurring are in compliance with the terms of this permit; and
 - c. storm water discharges associated with industrial activity from the areas of the site where industrial activities other than construction are occurring (including storm water discharges from dedicated asphalt plants and dedicated concrete plants) are covered by a different NPDES general permit or an individual permit authorizing such discharges.

- 3. Limitations on Coverage. The following storm water discharges from construction sites are not authorized by this permit:
 - a. storm water discharges associated with industrial activities that originate from the site after construction activities have been completed and the site
 has undergone final stabilization;
 - discharges that are mixed with sources of non-storm water other than discharges identified in Part III.A (Prohibition on Non-Storm Water Discharges) of this permit and in compliance with paragraph IV.D.5 (Non-Storm Water Discharges) of this permit;
 - c. storm water discharges associated with industrial activity that are subject to an existing NPDES individual or general permit or which are issued a permit in accordance with Part VI.N (Requiring an Individual Permit or an Alternative General Permit) of this permit. Such discharges may be authorized under this permit after an existing permit expires provided the existing permit did not establish numeric limitations for such discharges;
 - storm water discharges from construction sites that the Agency has determined to be or may reasonably be expected to be contributing to a violation
 of a water quality standard; and
 - e. storm water discharges that the Agency, at its discretion, determines are not appropriately authorized or controlled by this general permit.
 - f. storm water discharges to any receiving water specified under 35 III. Adm. Code 302.105(d) (6).

C. Authorization.

- In order for storm water discharges from construction sites to be authorized to discharge under this general permit a discharger must submit a Notice of Intent (NOI) in accordance with the requirements of Part II below, using an NOI form provided by the Agency.
- Where a new contractor is selected after the submittal of an NOI under Part II below, or where site ownership is transferred, a new Notice of Intent (NOI)
 must be submitted by the owner in accordance with Part II.
- Unless notified by the Agency to the contrary, dischargers who submit an NOI in accordance with the requirements of this permit are authorized to discharge storm water from construction sites under the terms and conditions of this permit in 30 days after the date the NOI is received by the Agency.
- The Agency may deny coverage under this permit and require submittal of an application for an individual NPDES permit based on a review of the NOI or other information.

Part II. NOTICE OF INTENT REQUIREMENTS

A. Deadlines for Notification.

- To receive authorization under this general permit, a discharger must submit a completed Notice of Intent (NOI) in accordance with Part VI.G
 (Signatory Requirements) and the requirements of this Part in sufficient time to allow a 30 day review period after the receipt of the NOI by the
 Agency and prior to the start of construction. The completed NOI may be submitted electronically to the following email address:
 epa_constilr10swppp@illinois.gov
- 2. Discharges that were covered by the previous version of ILR10 are automatically covered by this permit. Where discharges associated with construction activities were initially covered under the previous version of ILR10 and are continuing, the Storm Water Pollution Prevention Plan must be updated/revised within 12 months of the effective date of this reissued permit, as necessary to ensure compliance with the provisions of the reissued ILR10. Updating of the SWPPP is not required if construction activities are completed and a Notice of Termination is submitted within 12 months of the effective date of this permit.
- A discharger may submit an NOI in accordance with the requirements of this Part after the start of construction. In such instances, the Agency may bring
 an enforcement action for any discharges of storm water associated with industrial activity from a construction site that have occurred on or after the start
 of construction.
- B. Failure to Notify. Dischargers who fail to notify the Agency of their intent to be covered, and discharge storm water associated with construction site activity to Waters of the State without an NPDES permit are in violation of the Environmental Protection Act and Clean Water Act.
- C. Contents of Notice of Intent. The Notice of Intent shall be signed in accordance with Part VI.G (Signatory Requirements) of this permit by all of the entities identified in paragraph 2 below and shall include the following information:
 - The mailing address, and location of the construction site for which the notification is submitted. Where a mailing address for the site is not available, the
 location can be described in terms of the latitude and longitude of the approximate center of the facility to the nearest 15 seconds, or the nearest quarter
 section (if the section, township and range is provided) that the construction site is located in;
 - 2. The owner's name, address, telephone number, and status as Federal, State, private, public or other entity;
 - The name, address and telephone number of the general contractor(s) that have been identified at the time of the NOI submittal;
 - The name of the receiving water(s), or if the discharge is through a municipal separate storm sewer, the name of the municipal operator of the storm sewer and the ultimate receiving water(s);
 - The number of any NPDES permits for any discharge (including non-storm water discharges) from the site that is currently authorized by an NPDES permit;

- A description of the project, detailing the complete scope of the project, estimated timetable for major activities and an estimate of the number of acres of the site on which soil will be disturbed;
- For projects that have complied with State law on historic preservation and endangered species prior to submittal of the NOI, through coordination with the
 Illinois Historic Preservation Agency and the Illinois Department of Natural Resources or through fulfillment of the terms of interagency agreements with
 those agencies, the NOI shall indicate that such compliance has occurred.
- An electronic copy of the storm water pollution prevention plan that has been prepared for the site in accordance with Part IV of this permit. The electronic copy shall be submitted to the Agency at the following email address: epa_constilr10swppp@illinois.gov
- Revised notice of intents shall be submitted for any substantial modifications to the project such as: address changes, new contractors, area coverage, additional discharges to waters of the state, or other substantial modifications.

D. Where to Submit.

Construction activities which discharge storm water that requires a NPDES permit must use an NOI form provided by the Agency. The applicable fee shall also be submitted. NOIs must be signed in accordance with Part VI.G (Signatory Requirements) of this permit. The NOI form may be submitted to the Agency in any of the following methods:

- File electronically with digital signature at the following website address: http://dataservices.epa.illinois.gov/SWConstructionPermit/bowl.ogin.aspx
 Registration specific to the permittee is required in order to file electronically.
- Submit complete NOI and SWPPP electronically to the following email address: epa_constilr10swppp@illinois.gov. Submit the NOI with original signature and fee by certified mail to the Agency at the following address:

Illinois Environmental Protection Agency Division of Water Pollution Control, Mail Code #15 Attention: Permit Section 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276

- E. Additional Notification. Construction activities that are operating under approved local sediment and erosion plans, land disturbance permits, grading plans, or storm water management plans, in addition to filing copies of the Notice of Intent in accordance with Part D above, shall also submit signed copies of the Notice of Intent to the local agency approving such plans in accordance with the deadlines in Part A above. See Part IV.D.2.d (Approved State or Local Plans). A copy of the NOI shall be sent to the entity holding an active General NPDES Permit No. ILR40 if the permittee is located in an area covered by an active ILR40 permit.
- F. Notice of Termination. Where a site has completed final stabilization and all storm water discharges from construction activities that are authorized by this permit are eliminated, the permittee must submit a completed Notice of Termination that is signed in accordance with Part VI.G (Signatory Requirements) of this permit.
 - 1. The Notice of Termination shall include the following information:
 - a. The mailing address, and location of the construction site for which the notification is submitted. Where a mailing address for the site is not available, the location can be described in terms of the latitude and longitude of the approximate center of the facility to the nearest 15 seconds, or the nearest quarter section (if the section, township and range is provided) that the construction site is located in;
 - The owner's name, address, telephone number, and status as Federal, State, private, public or other entity.
 - The name, address and telephone number of the general contractor(s);
 - d. The date when construction was completed and the site was stabilized; and
 - e. The following certification signed in accordance with Part VI.G (Signatory Requirements) of this permit:

"I certify under penalty of law that all storm water discharges associated with construction site activity from the identified facility that are authorized by NPDES general permit ILR10 have otherwise been eliminated. I understand that by submitting this notice of termination, that I am no longer authorized to discharge storm water associated with construction site activity by the general permit, and that discharging pollutants in storm water associated with construction site activity to Waters of the State is unlawful under the Environmental Protection Act and Clean Water Act where the discharge is not authorized by a NPDES permit. I also understand that the submittal of this notice of termination does not release an operator from liability for any violations of this permit or the Clean Water Act."

For the purposes of this certification, elimination of storm water discharges associated with industrial activity means that all disturbed soils at the identified facility have been finally stabilized and temporary erosion and sediment control measures have been removed or will be removed at an appropriate time, or that all storm water discharges associated with construction activities from the identified site that are authorized by a NPDES general permit have otherwise been eliminated.

All Notices of Termination are to be sent to the Agency to the mailing address in Part II.D.1, using the form provided by the Agency, or electronically if the
permittee submitted a Notice of Intent by electronic means.

Part III. SPECIAL CONDITIONS, MANAGEMENT PRACTICES, AND OTHER NON-NUMERIC LIMITATIONS

A. Prohibition on Non-Storm Water Discharges.

- Except as provided in Part I paragraph B.2 and paragraphs 2, 3 or 4 below, all discharges covered by this permit shall be comprised entirely of storm water.
- Except as provided in paragraph b below, discharges of materials other than storm water must be in compliance with a NPDES permit (other than this permit) issued for the discharge.
 - b. The following non-storm water discharges may be authorized by this permit provided the non-storm water component of the discharges is in compliance with Part IV.D.5 (Non-Storm Water Discharges): discharges from fire fighting activities; fire hydrant flushings; waters used to wash vehicles where detergents are not used; waters used to control dust; potable water sources including uncontaminated waterline flushings; landscape irrigation drainages; routine external building washdown which does not use detergents; pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used; uncontaminated air conditioning condensate; springs; uncontaminated ground water; and foundation or footing drains where flows are not contaminated with process materials such as solvents.
- 3. The following non-storm water discharges are prohibited by this permit: concrete and wastewater from washout of concrete (unless managed by an appropriate control), drywall compound, wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials, fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance, soaps, solvents, or detergents, toxic or hazardous substances from a spill or other release, or any other pollutant that could cause or tend to cause water pollution.
- Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, are allowable if managed by appropriate controls.

B. Discharges into Receiving Waters With an Approved Total Maximum Daily Load (TMDL):

Discharges to waters for which there is a TMDL allocation for sediment or a parameter that addresses sediment (such as total suspended solids, turbidity, or siltation) are not eligible for coverage under this permit unless the owner/operator develops and certifies a SWPPP that is consistent with wasteload allocations in the approved TMDL. To be eligible for coverage under this general permit, operators must incorporate into their SWPPP any conditions and/or Best Management Practices applicable to their discharges necessary for consistency with the TMDL within any timeframes established in the TMDL. If a specific numeric waste load allocation has been established that would apply to the project's discharges, the operator must incorporate that allocation into its SWPPP and implement necessary steps to meet that allocation.

Please refer to the Agency website at: http://www.epa.state.il.us/water/tmdl/report-status.html

C. Discharges covered by this permit, alone or in combination with other sources, shall not cause or contribute to a violation of any applicable water quality standard.

Part IV. STORM WATER POLLUTION PREVENTION PLANS

A storm water pollution prevention plan shall be developed for each construction site covered by this permit. Storm water pollution prevention plans shall be prepared in accordance with good engineering practices. The plan shall identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges associated with construction site activity from the facility. In addition, the plan shall describe and ensure the implementation of best management practices which will be used to reduce the pollutants in storm water discharges associated with construction site activity and to assure compliance with the terms and conditions of this permit. The permittee must implement the provisions of the storm water pollution prevention plan required under this part as a condition of this permit.

A. Deadlines for Plan Preparation and Compliance.

The plan shall:

- Be completed prior to the start of the construction activities to be covered under this permit and submitted electronically to the Agency at the time the Notice of Intent is submitted; and
- Provide for compliance with the terms and schedules of the plan beginning with the initiation of construction activities.

B. Signature, Plan Review and Notification.

- The plan shall be signed in accordance with Part VI.G (Signatory Requirements), and be retained at the construction site which generates the storm water discharge in accordance with Part VI.E (Duty to Provide Information) of this permit.
- Prior to commencement of construction, the permittee shall provide the plan to the Agency.
- 3. The permittee shall make plans available upon request from this Agency or a local agency approving sediment and erosion plans, grading plans, or storm water management plans; or in the case of a storm water discharge associated with industrial activity which discharges through a municipal separate storm sewer system. A list of permitted municipal separate storm sewer systems is available at: http://www.epa.state.il.us/water/permits/storm-water/ms4-status-report.pdf
- 4. The Agency may notify the permittee at any time that the plan does not meet one or more of the minimum requirements of this Part. Such notification shall identify those provisions of the permit which are not being met by the plan, and identify which provisions of the plan require modifications in order to meet the minimum requirements of this part. Within 7 days from receipt of notification from the Agency, the permittee shall make the required changes to the plan and shall submit to the Agency a written certification that the requested changes have been made. Failure to comply shall terminate authorization

under this permit.

- A copy of the letter of notification of coverage along with the General NPDES Permit for Storm Water Discharges from Construction Site Activities or other indication that storm water discharges from the site are covered under an NPDES permit shall be posted at the site in a prominent place for public viewing (such as alongside a building permit).
- All storm water pollution prevention plans and all completed inspection forms/reports required under this permit are considered reports that shall be
 available to the public at any reasonable time upon request. However, the permittee may claim any portion of a storm water pollution prevention plan as
 confidential in accordance with 40 CFR Part 2.
- C. Keeping Plans Current. The permittee shall amend the plan whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to Waters of the State and which has not otherwise been addressed in the plan or if the storm water pollution prevention plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified under paragraph D.2 below, or in otherwise achieving the general objectives of controlling pollutants in storm water discharges associated with construction site activity. In addition, the plan shall be amended to identify any new contractor and/or subcontractor that will implement a measure of the storm water pollution prevention plan. Amendments to the plan may be reviewed by the Agency in the same manner as Part IV.B above. Any revisions of the documents for the storm water pollution prevention plan shall be kept on site at all times.
- D. Contents of Plan. The storm water pollution prevention plan shall include the following items:
 - Site Description. Each plan shall provide a description of the following:
 - A description of the nature of the construction activity or demolition work;
 - A description of the intended sequence of major activities which disturb soils for major portions of the site (e.g. clearing, grubbing, excavation, grading, on-site or off-site stockpiling of soils, on-site or off-site storage of materials);
 - An estimate of the total area of the site and the total area of the site that is expected to be disturbed by clearing, grubbing, excavation, grading, onsite or off-site stockpiling of soils and storage of materials, or other activities;
 - An estimate of the runoff coefficient of the site after construction activities are completed and existing data describing the soil or the quality of any discharge from the site;
 - e. A site map indicating drainage patterns and approximate slopes anticipated before and after major grading activities, locations where vehicles enter or exit the site and controls to prevent offsite sediment tracking, areas of soil disturbance, the location of major structural and nonstructural controls identified in the plan, the location of areas where stabilization practices are expected to occur, locations of on-site or off-site soil stockpiling or material storage, surface waters (including wetlands), and locations where storm water is discharged to a surface water; and
 - f. The name of the receiving water(s) and the ultimate receiving water(s), and areal extent of wetland acreage at the site.
 - 2. Controls. Each plan shall include a description of appropriate controls that will be implemented at the construction site and any off-site stockpile or storage area, The Illinois Urban Manual www.aiswcd.org/IUM or other similar documents shall be used for developing the appropriate management practices, controls or revisions of the plan. The plan will clearly describe for each major activity identified in paragraph D.1 above, appropriate controls and the timing during the construction process that the controls will be implemented. For example, perimeter controls for one portion of the site will be installed after the clearing and grubbing necessary for installation of the measure, but before the clearing and grubbing for the remaining portions of the site. Perimeter controls will be actively maintained and/or repaired until final stabilization of those portions of the site upward of the perimeter control. Temporary perimeter controls will be removed after final stabilization. The description of controls shall address as appropriate the following minimum components:
 - a. Erosion and Sediment Controls. The permittee shall design, install and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants. At a minimum, such controls must be designed, installed and maintained to:
 - (i) Control storm water volume and velocity within the site to minimize soil erosion;
 - (ii) Control storm water discharges, including both peak flowrates and total storm water volume, to minimize erosion at outlets and to minimize downstream channel and streambank erosion;
 - (iii) Minimize the amount of soil exposed during construction activity;
 - (iv) Minimize the disturbance of steep slopes;
 - (v) Minimize sediment discharges from the site. The design, installation and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting storm water runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site;
 - (vi) Provide and maintain natural buffers around surface waters, direct storm water to vegetated areas to increase sediment removal and maximize storm water infiltration, unless infeasible; and
 - (vii) Minimize soil compaction and, unless infeasible, preserve topsoil.
 - b. Stabilization Practices. The storm water pollution prevention plan shall include a description of interim and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans should ensure that existing vegetation is preserved where practicable and that disturbed portions of the site are stabilized. Stabilization practices may include: temporarily seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, staged or staggered development, and other appropriate measures. A record of the dates when major grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated, shall be included in the plan. Stabilization of disturbed areas must, at a minimum, be initiated immediately whenever any clearing, grading, excavating or other earth disturbing activities have permanently ceased on any portion of the site, or temporarily ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days. Stabilization of disturbed areas must be initiated within 1 working day of permanent or temporary cessation of earth disturbing activities and shall be completed as soon as possible but not later than 14 days from the initiation of stabilization work in an area. Exceptions to these time frames are specified as provided in paragraphs (i) and (ii) below:

- (i) Where the initiation of stabilization measures is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.
- (ii) On areas where construction activity has temporarily ceased and will resume after 14 days, a temporary stabilization method can be used. Temporary stabilization techniques and materials shall be described in the SWPPP.
- c. Structural Practices. A description of structural practices utilized to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Such practices may include silt fences, earth dikes, drainage swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. Structural practices should be placed on upland soils to the degree practicable. The installation of these devices may be subject to Section 404 of the CWA.
 - (i) The following design requirements apply to sediment basins if such structural practices will be installed to reduce sediment concentrations in storm water discharges:
 - When discharging from the sediment basin, utilize outlet structures that withdraw water from the surface in order to minimize the discharge.
 - b. Prevent erosion of the sediment basin using stabilization controls (e.g., erosion control blankets), at the inlet and outlet using erosion controls and velocity dissipation devices:
 - Sediment basins shall be designed to facilitate maintenance, including sediment removal from the basins, as necessary.
- d. Use of Treatment Chemicals. Identify the use of all polymer flocculants or treatment chemicals at the site. Dosage of treatment chemicals shall be identified along with any information from any Material Safety Data Sheet. Describe the location of all storage area for chemicals. Include any information from the manufacturer's specifications. Treatment chemicals must be stored in areas where they will not be exposed to precipitation. The SWPPP must describe procedures for use of treatment chemicals and staff responsible for use/application of treatment chemicals must be trained on the established procedures.
- e. Best Management Practices for Impaired Waters. For any site which discharges directly to an impaired water identified on the Agency's website for 303(d) listing for suspended solids, turbidity, or siltation the storm water pollution prevention plan shall be designed for a storm event equal to or greater than a 25-year 24-hour rainfall event. If required by federal regulations or the Illinois Urban Manual, the storm water pollution prevention plan shall adhere to a more restrictive design criteria. Please refer to the Agency's website at: (http://www.epa.state.il.us/water/tmdl/303d-list.html)
- f. Pollution Prevention. The permittee shall design, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants. At a minimum, such measures must be designed, installed, implemented and maintained to:
 - Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;
 - (ii) Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to storm water; and
 - (iii) Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures.

Other Controls.

- (i) Waste Disposal. No solid materials, including building materials, shall be discharged to Waters of the State, except as authorized by a Section 404 permit.
- (ii) The plan shall ensure and demonstrate compliance with applicable State and/or local waste disposal, sanitary sewer or septic system regulations.
- (iii) For construction sites that receive concrete or asphalt from off-site locations, the plan must identify and include appropriate controls and measures to reduce or eliminate discharges from these activities.
- (iv) The plan shall include spill response procedures and provisions for reporting if there are releases in excess of reportable quantities.
- b. Best Management Practices for Post-Construction Storm Water Management. Describe the measures that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. Structural measures should be placed on upland soils to the degree attainable. The installation of these devices may be subject to Section 404 of the CWA. This permit only addresses the installation of storm water management measures, and not the ultimate operation and maintenance of such structures after the construction activities have been completed and the site has undergone final stabilization. Permittees are responsible for only the installation and maintenance of storm water management measures prior to final stabilization of the site, and are not responsible for maintenance after storm water discharges associated with industrial activity have been eliminated from the site.
 - (i) While not mandatory, it is advisable that the permittee consider including in its storm water pollution prevention plan and design and construction plans methods of post-construction storm water management to retain the greatest amount of post-development stormwater runoff practicable, given the site and project constraints. Such practices may include but are not limited to: storm water detention structures (including wet ponds); storm water retention structures; flow attenuation by use of open vegetated swales and natural depressions; infiltration of runoff onsite; and sequential systems (which combine several practices). Technical information on many post-construction storm water management practices is included in the Illinois Urban Manual (2012).
 - The storm water pollution prevention plan shall include an explanation of the technical basis used to select the practices to control pollution where post-construction flows will exceed predevelopment levels.
 - (ii) Velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g. maintenance of hydrologic conditions, such as the hydroperiod and hydrodynamics present prior to the initiation of construction activities).

(iii) Unless otherwise specified in the Illinois Urban Manual (2012), the storm water pollution prevention plan shall be designed for a storm event equal to or greater than a 25-year 24-hour rainfall event.

i. Approved State or Local Plans.

- (i) The management practices, controls and other provisions contained in the storm water pollution prevention plan must be at least as protective as the requirements contained in the Illinois Urban Manual, 2012. Construction activities which discharge storm water must include in their storm water pollution prevention plan procedures and requirements specified in applicable sediment and erosion control plans or storm water management plans approved by local officials. Requirements specified in sediment and erosion control plans or site permits or storm water management site plans or site permits approved by local officials that are applicable to protecting surface water resources are, upon submittal of an NOI to be authorized to discharge under this permit, incorporated by reference and are enforceable under this permit. The plans shall include all requirements of this permit and include more stringent standards required by any local approval. This provision does not apply to provisions of master plans, comprehensive plans, non-enforceable guidelines or technical guidance documents that are not identified in a specific plan or permit that is issued for the construction site.
- (ii) Dischargers seeking alternative permit requirements are not authorized by this permit and shall submit an individual permit application in accordance with 40 CFR 122.26 at the address indicated in Part II.D (Where to Submit) of this permit, along with a description of why requirements in approved local plans or permits should not be applicable as a condition of an NPDES permit.

Maintenance.

- The plan shall include a description of procedures to maintain in good and effective operating conditions, all erosion and sediment control measures and other Best Management Practices, including vegetation and other protective measures identified in the Storm Water Pollution Prevention Plan.
- Where a basin has been installed to control sediment during construction activities, the Permittees shall keep the basin(s) in effective operating condition and remove accumulated sediment as necessary.
- 4. Inspections. Qualified personnel (provided by the permittee) shall inspect disturbed areas of the construction site that have not been finally stabilized, structural control measures, and locations where vehicles enter or exit the site at least once every seven calendar days and within 24 hours of the end of a storm or by the end of the following business or work day that is 0.5 inches or greater. Qualified personnel means a person knowledgeable in the principles and practices of erosion and sediment controls measures, such as a licensed Professional Engineer (P.E.), a Certified Professional in Erosion and Sediment Control (CPESC), a Certified Erosion Sediment and Storm Water Inspector (CESSWI) or other knowledgeable person who possesses the skills to assess conditions at the construction site that could impact storm water quality and to assess the effectiveness of any sediment and erosion control measures selected to control the quality of storm water discharges from the construction activities.
 - a. Inspections may be reduced to once per month when construction activities have ceased due to frozen conditions. Weekly inspections will recommence when construction activities are conducted, or if there is 0.5" or greater rain event, or a discharge due to snowmelt occurs.
 - b. Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Locations where vehicles enter or exit the site shall be inspected for evidence of offsite sediment tracking.
 - Based on the results of the inspection, the description of potential pollutant sources identified in the storm water pollution prevention_plan in accordance with Part IV.D.1 (Site Description) of this permit and the pollution prevention control measures identified in the plan in accordance with Part IV.D.2 (Controls) of this permit shall be revised as appropriate as soon as practicable after such inspection to minimize the potential for such discharges. Such modifications shall provide for timely implementation of any changes to the plan and pollution prevention control measures within 7 calendar days following the inspection.
 - d. A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph b above shall be made and retained as part of the storm water pollution prevention plan for at least three years from the date that the permit coverage expires or is terminated. All inspection reports shall be retained at the construction site. The report shall be signed in accordance with Part VI.G (Signatory Requirements) of this permit.
 - e. The permittee shall notify the appropriate Agency Field Operations Section office by email at: epa.swnoncomp@illinois.gov, telephone or fax within 24 hours of any incidence of noncompliance for any violation of the storm water pollution prevention plan observed during any inspection conducted, or for violations of any condition of this permit. The permittee shall complete and submit within 5 days an "Incidence of Noncompliance" (ION) report for any violation of the storm water pollution prevention plan observed during any inspection conducted, or for violations of any condition of this permit. Submission shall be on forms provided by the Agency and include specific information on the cause of noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance. Corrective actions must be undertaken immediately to address the identified non-compliance issue(s).
 - f. All reports of noncompliance shall be signed by a responsible authority as defined in Part VI.G (Signatory Requirements).

g. After the initial contact has been made with the appropriate Agency Field Operations Section Office, all reports of noncompliance shall be mailed to the Agency at the following address:

Illinois Environmental Protection Agency Division of Water Pollution Control Compliance Assurance Section 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276

- Non-Storm Water Discharges. Except for flows from fire fighting activities, sources of non-storm water listed in Part III.A.2 of this permit that are
 combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and insure the
 implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.
- E. Additional requirements for storm water discharges from industrial activities other than construction, including dedicated asphalt plants, and dedicated concrete plants. This permit may only authorize any storm water discharge associated with industrial activity from a construction site that is mixed with a storm water discharge from an industrial source other than construction, where:
 - The industrial source other than construction is located on the same site as the construction activity;
 - Storm water discharges associated with industrial activity from the areas of the site where construction activities are occurring are in compliance with the terms of this permit; and
 - Storm water discharges associated with industrial activity from the areas of the site where industrial activity other than construction are occurring
 (including storm water discharges from dedicated asphalt plants [other than asphalt emulsion facilities] and dedicated concrete plants) are in compliance
 with the terms, including applicable NOI or application requirements, of a different NPDES general permit or individual permit authorizing such
 discharges.

F. Contractors.

- The storm water pollution prevention plan must clearly identify for each measure identified in the plan, the contractor(s) or subcontractor(s) that will implement the measure. All contractors and subcontractors identified in the plan must sign a copy of the certification statement in paragraph 2 below in accordance with Part VI.G (Signatory Requirements) of this permit. All certifications must be included in the storm water pollution prevention plan except for owners that are acting as contractors.
- Certification Statement. All contractors and subcontractors identified in a storm water pollution prevention plan in accordance with paragraph 1 above shall sign a copy of the following certification statement before conducting any professional service at the site identified in the storm water pollution prevention plan:

"I certify under penalty of law that I understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit (ILR10) that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification."

The certification must include the name and title of the person providing the signature in accordance with Part VI.G of this permit: the name, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification is made.

Part V. RETENTION OF RECORDS

- A. The permittee shall retain copies of storm water pollution prevention plans and all reports and notices required by this permit, records of all data used to complete the Notice of Intent to be covered by this permit and the Agency Notice of Permit Coverage letter for a period of at least three years from the date that the permit coverage expires or is terminated. This period may be extended by request of the Agency at any time.
- B. The permittee shall retain a copy of the storm water pollution prevention plan and any revisions to said plan required by this permit at the construction site from the date of project initiation to the date of final stabilization.

Part VI. STANDARD PERMIT CONDITIONS

- A. Duty to Comply. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Illinois Environmental Protection Act and the CWA and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. Failure to obtain coverage under this permit or an individual permit for storm water releases associated with construction activities is a violation of the Illinois Environmental Protection Act and the CWA.
- B. Continuation of the Expired General Permit. This permit expires five years from the date of issuance. An expired general permit continues in force and effect until a new general permit or an individual permit is issued. Only those construction activities authorized to discharge under the expiring general permit are covered by the continued permit.
- C. Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- D. Duty to Mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

- E. Duty to Provide Information. The permittee shall furnish within a reasonable time to the Agency or local agency approving sediment and erosion control plans, grading plans, or storm water management plans; or in the case of a storm water discharge associated with industrial activity which discharges through a municipal separate storm sewer system with an NPDES permit, to the municipal operator of the system, any information which is requested to determine compliance with this permit. Upon request, the permittee shall also furnish to the Agency or local agency approving sediment and erosion control plans, grading plans, or storm water management plans; or in the case of a storm water discharge associated with industrial activity which discharges through a municipal separate storm sewer system with an NPDES permit, to the municipal operator of the system, copies of all records required to be kept by this permit.
- F. Other Information. When the permittee becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in the Notice of Intent or in any other report to the Agency, he or she shall promptly submit such facts or information.
- G. Signatory Requirements. All Notices of Intent, storm water pollution prevention plans, reports, certifications or information either submitted to the Agency or the operator of a large or medium municipal separate storm sewer system, or that this permit requires be maintained by the permittee, shall be signed.
 - All Notices of Intent shall be signed as follows:
 - a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (1) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or (2) any person authorized to sign documents that has been assigned or delegated said authority in accordance with corporate procedures;
 - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
 - c. For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes (1) the chief executive officer of the agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
 - All reports required by the permit and other information requested by the Agency shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - The authorization is made in writing by a person described above and submitted to the Agency.
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of manager, operator, superintendent, or position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position).
 - c. Changes to Authorization. If an authorization under Part I.C (Authorization) is no longer accurate because a different individual or position has responsibility for the overall operation of the construction site, a new authorization satisfying the requirements of Part I.C must be submitted to the Agency prior to or together with any reports, information, or applications to be signed by an authorized representative.
 - d. Certification. Any person signing documents under this Part shall make the following certification:
 - "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated 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 submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."
- H. Penalties for Falsification of Reports. Section 309(c)(4) of the Clean Water Act provides that any person who knowingly makes any false material statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or by both. Section 44(j)(4) and (5) of the Environmental Protection Act provides that any person who knowingly makes any false statement, representation, or certification in an application form, or form pertaining to a NPDES permit commits a Class A misdemeanor, and in addition to any other penalties provided by law is subject to a fine not to exceed \$10,000 for each day of violation.
- Penalties for Falsification of Monitoring Systems. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by fines and imprisonment described in Section 309 of the CWA. The Environmental Protection Act provides that any person who knowingly renders inaccurate any monitoring device or record required in connection with any NPDES permit or with any discharge which is subject to the provisions of subsection (f) of Section 12 of the Act commits a Class A misdemeanor, and in addition to any other penalties provided by law is subject to a fine not to exceed \$10,000 for each day of violation.
- J. Oil and Hazardous Substance Liability. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under section 311 of the CWA.
- K. Property Rights. The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.
- L. Severability. The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.
- M. Transfers. This permit is not transferable to any person except after notice to the Agency. The Agency may require the discharger to apply for and obtain an individual NPDES permit as stated in Part I.C (Authorization).
- N. Requiring an Individual Permit or an Alternative General Permit.

- The Agency may require any person authorized by this permit to apply for and/or obtain either an individual NPDES permit or an alternative NPDES general permit. Any interested person may petition the Agency to take action under this paragraph. Where the Agency requires a discharger authorized to discharge under this permit to apply for an individual NPDES permit, the Agency shall notify the discharger in writing that a permit application is required. This notification shall include a brief statement of the reasons for this decision, an application form, a statement setting a deadline for the discharger to file the application, and a statement that on the effective date of the individual NPDES permit or the alternative general permit as it applies to the individual permittee, coverage under this general permit shall automatically terminate. Applications shall be submitted to the Agency indicated in Part II.D (Where to Submit) of this permit. The Agency may grant additional time to submit the application upon request of the applicant. If a discharger fails to submit in a timely manner an individual NPDES permit application as required by the Agency under this paragraph, then the applicability of this permit to the individual NPDES permit based on:
 - a. information received which indicates the receiving water may be of particular biological significance pursuant to 35 III. Adm. Code 302.105(d)(6);
 - b. whether the receiving waters are impaired waters for suspended solids, turbidity or siltation as identified by the Agency's 303(d) listing;
 - c. size of construction site, proximity of site to the receiving stream, etc.

The Agency may also require monitoring of any storm water discharge from any site to determine whether an individual permit is required.

- Any discharger authorized by this permit may request to be excluded from the coverage of this permit by applying for an individual permit. In such cases, the permittee shall submit an individual application in accordance with the requirements of 40 CFR 122.26(c)(1)(ii), with reasons supporting the request, to the Agency at the address indicated in Part II.D (Where to Submit) of this permit. The request may be granted by issuance of any individual permit or an alternative general permit if the reasons cited by the permittee are adequate to support the request.
- 3. When an individual NPDES permit is issued to a discharger otherwise subject to this permit, or the discharger is authorized to discharge under an alternative NPDES general permit, the applicability of this permit to the individual NPDES permittee is automatically terminated on the effective date of the individual permit or the date of authorization of coverage under the alternative general permit, whichever the case may be. When an individual NPDES permit is denied to a discharger otherwise subject to this permit or the discharger is denied for coverage under an alternative NPDES general permit, the applicability of this permit to the individual NPDES permittee remains in effect, unless otherwise specified by the Agency.
- State/Environmental Laws. No condition of this permit shall release the permittee from any responsibility or requirements under other environmental statutes
 or regulations.
- Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all construction activities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit and with the requirements of storm water pollution prevention plans. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by a permittee only when necessary to achieve compliance with the conditions of the permit.
- Q. Inspection and Entry. The permittee shall allow the IEPA, or an authorized representative upon presentation of credentials and other documents as may be required by law, to:
 - Enter upon the permittee's premises where a regulated construction activity is located or conducted, or where records must be kept under the conditions
 of this permit;
 - Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit;
 - Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
 - Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.
- R. Permit Actions. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- S. Bypasses and Upsets. The provisions of 40 CFR Section 122.41(m) & (n) are applicable and are hereby incorporated by reference.

Part VII. REOPENER CLAUSE

- A. If there is evidence indicating potential or realized impacts on water quality due to any storm water discharge associated with industrial activity covered by this permit, the discharger may be required to obtain an individual permit or an alternative general permit in accordance with Part I.C (Authorization) of this permit or the permit may be modified to include different limitations and/or requirements.
- B. Permit modification or revocation will be conducted according to provisions of 35 III. Adm. Code, Subtitle C, Chapter I and the provisions of 40 CFR 122.62, 122.63, 122.64 and 124.5 and any other applicable public participation procedures.
- C. The Agency will reopen and modify this permit under the following circumstances:
 - the U.S. EPA amends its regulations concerning public participation;
 - a court of competent jurisdiction binding in the State of Illinois or the 7th Circuit Court of Appeals issues an order necessitating a modification of public participation for general permits; or
 - 3. to incorporate federally required modifications to the substantive requirements of this permit.

Part VIII. DEFINITIONS

"Agency" means the Illinois Environmental Protection Agency.

"Best Management Practices" ("BMPs") means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control construction site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

"Commencement of Construction or Demolition Activities" The initial disturbance of soils associated with clearing, grading, or excavating activities or other construction or demolition activities.

"Construction Activities" Earth disturbing activities, such as clearing, grading and excavation of land. For purposes of this permit, construction activities also means construction site, construction site activities, or site. Construction activities also include any demolition activities at a site.

"CWA" means Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972)
Pub. L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. (96-483 and Pub. L. 97-117, 33 U.S.C. 1251 et seq.).

"Dedicated portable asphalt plant" A portable asphalt plant that is located on or contiguous to a construction site and that provides asphalt only to the construction site that the plant is located on or adjacent to. The term dedicated portable asphalt plant does not include facilities that are subject to the asphalt emulsion effluent limitation guideline at 40 CFR 443.

"Dedicated portable concrete plant" A portable concrete plant that is located on or contiguous to a construction site and that provides concrete only to the construction site that the plant is located on or adjacent to.

"Dedicated sand or gravel operation" An operation that produces sand and/or gravel for a single construction project.

"Director" means the Director of the Illinois Environmental Protection Agency or an authorized representative.

"Final Stabilization" means that all soil disturbing activities at the site have been completed, and either of the two following conditions are met:

- (i) A uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 70 percent of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or
- (ii) Equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.

For individual lots in residential construction, final stabilization means that either:

- (i) The homebuilder has completed final stabilization as specified above, or
- (ii) The homebuilder has established temporary stabilization including perimeter controls for an individual lot prior to occupation of the home by the homeowner and informing the homeowner of the need for, and benefits of, final stabilization.

"Large and Medium municipal separate storm sewer system" means all municipal separate storm sewers that are either:

- Located in an incorporated place (city) with a population of 100,000 or more as determined by the latest Decennial Census by the Bureau of Census (these cities are listed in Appendices F and G of 40 CFR Part 122); or
- (ii) Located in the counties with unincorporated urbanized populations of 100,000 or more, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties (these counties are listed in Appendices H and I of 40 CFR Part 122); or
- (iii) Owned or operated by a municipality other than those described in paragraph (i) or (ii) and that are designated by the Director as part of the large or medium municipal separate storm sewer system.

"NOI" means notice of intent to be covered by this permit (see Part II of this 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 discharges. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

"Runoff coefficient" means the fraction of total rainfall that will appear at the conveyance as runoff.

"Storm Water" means storm water runoff, snow melt runoff, and surface runoff and drainage.

"Storm Water Associated with Industrial Activity" means the discharge from any conveyance which is used for collecting and conveying storm water and which is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the NPDES program. For the categories of industries identified in subparagraphs (i) through (x) of this subsection, the term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, 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 significant materials remain and are exposed to storm water. For the categories of industries identified in subparagraph (xi), the term includes only storm water discharges from all areas listed in the previous

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sentence (except access roads) where material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water. For the purposes of this paragraph, material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, finished product, by-product or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas. Industrial facilities (including industrial facilities that are Federally or municipally owned or operated that meet the description of the facilities listed in this paragraph (i)- (xi)) include those facilities designated under 40 CFR 122.26(a)(1)(v). The following categories of facilities are considered to be engaging in "industrial activity" for purposes of this subsection:

- Facilities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards under 40 CFR Subchapter N (except facilities with toxic pollutant effluent standards which are exempted under category (xi) of this paragraph);
- (ii) Facilities classified as Standard Industrial Classifications 24 (except 2434), 26 (except 265 and 267), 28, 29, 311, 32, 33, 3441, 373;
- (iii) Facilities 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 CFR 434.11(I)) and oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge storm water contaminated by contact with or that has come into contact with, any overburden, raw material, intermediate products, finished products, byproducts or waste products located on the site of such operations; inactive mining operations are mining sites that are not being actively mined, but which have an identifiable owner/operator;
- (iv) Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under Subtitle C of RCRA;
- (v) 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 those that are subject to regulation under Subtitle D of RCRA;
- Facilities involved in the recycling of materials, including metal scrapyards, battery reclaimers, salvage yards, and automobile junkyards, including but limited to those classified as Standard Industrial Classification 5015 and 5093;
- (vii) Steam electric power generating facilities, including coal handling sites;
- (viii) Transportation facilities classified as Standard Industrial Classifications 40, 41, 42, 44, and 45 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 subparagraphs (i)-(vii) or (ix)-(xi) of this subsection are associated with industrial activity;
- (ix) 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, with a design flow of 1.0 mgd or more, or required to have an approved pretreatment program under 40 CFR 403. Not included are 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;
- (x) Construction activity including clearing, grading and excavation activities except: operations that result in the disturbance of less than one acre of total land area which are not part of a larger common plan of development or sale unless otherwise designated by the Agency pursuant to Part I.B.1.
- (xi) Facilities under Standard Industrial Classifications 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 31 (except 311), 34 (except 3441), 35, 36, 37 (except 373), 38, 39, 4221-25, (and which are not otherwise included within categories (i)-(x)).

"Waters" mean all accumulations of water, surface and underground, natural, and artificial, public and private, or parts thereof, which are wholly or partially within, flow through, or border upon the State of Illinois, except that sewers and treatment works are not included except as specially mentioned; provided, that nothing herein contained shall authorize the use of natural or otherwise protected waters as sewers or treatment works except that in-stream aeration under Agency permit is allowable.

"Work day" for the purpose of this permit, a work day is any calendar day on which construction activities will take place.

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Attachment H

Standard Conditions

Definitions

Act means the Illinois Environmental Protection Act, 415 ILCS 5 as Amended.

Agency means the Illinois Environmental Protection Agency.

Board means the Illinois Pollution Control Board.

Clean Water Act (formerly referred to as the Federal Water Pollution Control Act) means Pub. L 92-500, as amended. 33 U.S.C. 1251 et seq.

NPDES (National Pollutant Discharge Elimination System) means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 402, 318 and 405 of the Clean Water Act.

USEPA means the United States Environmental Protection Agency.

Daily Discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurements, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

Maximum Daily Discharge Limitation (daily maximum) means the highest allowable daily discharge.

Average Monthly Discharge Limitation (30 day average) means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Discharge Limitation (7 day average) means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Aliquot means a sample of specified volume used to make up a total composite sample.

Grab Sample means an individual sample of at least 100 milliliters collected at a randomly-selected time over a period not exceeding 15 minutes.

24-Hour Composite Sample means a combination of at least 8 sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24-hour period.

8-Hour Composite Sample means a combination of at least 3 sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over an 8-hour period.

Flow Proportional Composite Sample means a combination of sample aliquots of at least 100 milliliters collected at periodic intervals such that either the time interval between each aliquot or the volume of each aliquot is proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot.

- (1) Duty to comply. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or for denial of a permit renewal application. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirements.
- (2) Duty to reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. If the permittee submits a proper application as required by the Agency no later than 180 days prior to the expiration date, this permit shall continue in full force and effect until the final Agency decision on the application has been made.
- (3) Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (4) Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
- (5) Proper operation and maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up, or auxiliary facilities, or similar systems only when necessary to achieve compliance with the conditions of the permit.
- (6) Permit actions. This permit may be modified, revoked and reissued, or terminated for cause by the Agency pursuant to 40 CFR 122.62 and 40 CFR 122.63. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- (7) Property rights. This permit does not convey any property rights of any sort, or any exclusive privilege.
- (8) Duty to provide information. The permittee shall furnish to the Agency within a reasonable time, any information which the Agency may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. The permittee shall also furnish to the Agency upon request, copies of records required to be kept by this permit.

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- (9) Inspection and entry. The permittee shall allow an authorized representative of the Agency or USEPA (including an authorized contractor acting as a representative of the Agency or USEPA), upon the presentation of credentials and other documents as may be required by law, to:
 - (a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
 - (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
 - (d) Sample or monitor at reasonable times, for the purpose of assuring permit compliance, or as otherwise authorized by the Act, any substances or parameters at any location.

(10) Monitoring and records.

- (a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- (b) The permittee shall retain records of all monitoring information, including all calibration and maintenance records, and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of this permit, measurement, report or application. Records related to the permittee's sewage sludge use and disposal activities shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503). This period may be extended by request of the Agency or USEPA at any time.
- (c) Records of monitoring information shall include:
 - The date, exact place, and time of sampling or measurements;
 - The individual(s) who performed the sampling or measurements;
 - (3) The date(s) analyses were performed;
 - (4) The individual(s) who performed the analyses;
 - (5) The analytical techniques or methods used; and
 - (6) The results of such analyses.
- (d) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit. Where no test procedure under 40 CFR Part 136 has been approved, the permittee must submit to the Agency a test method for approval. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals to ensure accuracy of measurements.
- (11) Signatory requirement. All applications, reports or information submitted to the Agency shall be signed and certified.
 - (a) Application. All permit applications shall be signed as follows:
 - (1) For a corporation: by a principal executive officer of at least the level of vice president or a person or position having overall responsibility for environmental matters for the corporation:
 - For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
 - (3) For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official.
 - (b) Reports. All reports required by permits, or other information requested by the Agency shall be signed by a person described in paragraph (a) or by a duly authorized representative of that person. A person is a duly authorized representative only if:

 The authorization is made in writing by a person described in paragraph (a); and

(2) The authorization specifies either an individual or a position responsible for the overall operation of the facility, from which the discharge originates, such as a plant manager, superintendent or person of equivalent responsibility; and

(3) The written authorization is submitted to the Agency.

- (c) Changes of Authorization. If an authorization under (b) is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of (b) must be submitted to the Agency prior to or together with any reports, information, or applications to be signed by an authorized representative.
- (d) Certification. Any person signing a document under paragraph (a) or (b) of this section shall make the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure 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 submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

(12) Reporting requirements.

- (a) Planned changes. The permittee shall give notice to the Agency as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required when:
 - (1) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source pursuant to 40 CFR 122.29 (b): or
 - (2) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements pursuant to 40 CFR 122.42 (a)(1).
 - (3) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
- (b) Anticipated noncompliance. The permittee shall give advance notice to the Agency of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- (c) Transfers. This permit is not transferable to any person except after notice to the Agency.
- (d) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.
- (e) Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.
 - Monitoring results must be reported on a Discharge Monitoring Report (DMR).

- (2) If the permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 CFR 136 or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.
- (3) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Agency in the permit.
- Twenty-four hour reporting. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24-hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and time; and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The following shall be included as information which must be reported within 24-hours:
 - Any unanticipated bypass which exceeds any effluent limitation in the permit.
 - (2) Any upset which exceeds any effluent limitation in the permit.
 - (3) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Agency in the permit or any pollutant which may endanger health or the environment.
 - The Agency may waive the written report on a caseby-case basis if the oral report has been received within 24-hours.
- (g) Other noncompliance. The permittee shall report all instances of noncompliance not reported under paragraphs (12) (d), (e), or (f), at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (12) (f).
- (h) Other information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, or in any report to the Agency, it shall promptly submit such facts or information.

(13) Bypass.

- (a) Definitions.
 - Bypass means the intentional diversion of waste streams from any portion of a treatment facility.
 - (2) Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- (b) Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs (13)(c) and (13)(d).
- (c) Notice
 - Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.
 - (2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph (12)(f) (24-hour notice).

- (d) Prohibition of bypass.
 - (1) Bypass is prohibited, and the Agency may take enforcement action against a permittee for bypass, unless:
 - Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (ii) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (iii) The permittee submitted notices as required under paragraph (13)(c).
 - (2) The Agency may approve an anticipated bypass, after considering its adverse effects, if the Agency determines that it will meet the three conditions listed above in paragraph (13)(d)(1).

(14) Upset.

- (a) Definition. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- (b) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (14)(c) are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- (c) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - An upset occurred and that the permittee can identify the cause(s) of the upset;
 - (2) The permitted facility was at the time being properly operated; and
 - (3) The permittee submitted notice of the upset as required in paragraph (12)(f)(2) (24-hour notice).
 - (4) The permittee complied with any remedial measures required under paragraph (4).
- (d) Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.
- (15) Transfer of permits. Permits may be transferred by modification or automatic transfer as described below:
 - (a) Transfers by modification. Except as provided in paragraph (b), a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued pursuant to 40 CFR 122.62 (b) (2), or a minor modification made pursuant to 40 CFR 122.63 (d), to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act.
 - (b) Automatic transfers. As an alternative to transfers under paragraph (a), any NPDES permit may be automatically transferred to a new permittee if:

- The current permittee notifies the Agency at least 30 days in advance of the proposed transfer date;
- (2) The notice includes a written agreement between the existing and new permittees containing a specified date for transfer of permit responsibility, coverage and liability between the existing and new permittees; and
- (3) The Agency does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement.
- (16) All manufacturing, commercial, mining, and silvicultural dischargers must notify the Agency as soon as they know or have reason to believe:
 - (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant identified under Section 307 of the Clean Water Act which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:
 - One hundred micrograms per liter (100 ug/l);
 - (2) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2methyl-4,6 dinitrophenol; and one milligram per liter (1 mg/l) for antimony.
 - (3) Five (5) times the maximum concentration value reported for that pollutant in the NPDES permit application; or
 - (4) The level established by the Agency in this permit.
 - (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the NPDES permit application.
- (17) All Publicly Owned Treatment Works (POTWs) must provide adequate notice to the Agency of the following:
 - (a) Any new introduction of pollutants into that POTW from an indirect discharge which would be subject to Sections 301 or 306 of the Clean Water Act if it were directly discharging those pollutants; and
 - (b) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
 - (c) For purposes of this paragraph, adequate notice shall include information on (i) the quality and quantity of effluent introduced into the POTW, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.
- (18) If the permit is issued to a publicly owned or publicly regulated treatment works, the permittee shall require any industrial user of such treatment works to comply with federal requirements concerning:
 - (a) User charges pursuant to Section 204 (b) of the Clean Water Act, and applicable regulations appearing in 40 CFR 35;
 - (b) Toxic pollutant effluent standards and pretreatment standards pursuant to Section 307 of the Clean Water Act; and
 - (c) Inspection, monitoring and entry pursuant to Section 308 of the Clean Water Act.
- (19) If an applicable standard or limitation is promulgated under Section 301(b)(2)(C) and (D), 304(b)(2), or 307(a)(2) and that effluent standard or limitation is more stringent than any effluent limitation in the permit, or controls a pollutant not limited in the permit, the permit shall be promptly modified or revoked, and reissued to conform to that effluent standard or limitation.

- (20) Any authorization to construct issued to the permittee' pursuant to 35 III. Adm. Code 309.154 is hereby incorporated by reference as a condition of this permit.
- (21) The permittee shall not make any false statement, representation or certification in any application, record, report, plan or other document submitted to the Agency or the USEPA, or required to be maintained under this permit.
- (22) The Clean Water Act provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Clean Water Act is subject to a civil penalty not to exceed \$25,000 per day of such violation. Any person who willfully or negligently violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318 or 405 of the Clean Water Act is subject to a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than one year, or both. Additional penalties for violating these sections of the Clean Water Act are identified in 40 CFR 122.41 (a)(2) and (3).
- (23) The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both.
- (24) The Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.
- (25) Collected screening, slurries, sludges, and other solids shall be disposed of in such a manner as to prevent entry of those wastes (or runoff from the wastes) into waters of the State. The proper authorization for such disposal shall be obtained from the Agency and is incorporated as part hereof by reference.
- (26) In case of conflict between these standard conditions and any other condition(s) included in this permit, the other condition(s) shall govern.
- (27) The permittee shall comply with, in addition to the requirements of the permit, all applicable provisions of 35 III. Adm. Code, Subtitle C, Subtitle D, Subtitle E, and all applicable orders of the Board or any court with jurisdiction.
- (28) The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit is held invalid, the remaining provisions of this permit shall continue in full force and effect.

(Rev. 7-9-2010 bah)





ILLINOIS AIR NATIONAL GUARD PEORIA AIR NATIONAL GUARD BASE PEORIA, ILLINOIS

Contract #: W9133L-14-D-0002

Delivery Order 0006

Amec Foster Wheeler Project #: 2-9133-0006

October 2018



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FY16 Phase 1 Regional Site Inspections For Perfluorinated Compounds

Illinois Air National Guard Peoria Air National Guard Base Peoria, Illinois

Prepared for:
National Guard Bureau
Operations Division, Restoration Branch
Joint Base Andrews, MD 20762-5157

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ACRONYMS & ABBREVIATIONS

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

AST Aboveground Storage Tank

AW Air Wing

BB&E Inc.

bgs Below ground surface

BRAC Base Realignment and Closure

CE Civil Engineer

°F Degrees Fahrenheit
DO Dissolved Oxygen
DoD Department of Defense
DPT Direct-Push Technology
DQO Data Quality Objective

FAA Federal Aviation Administration

Ft. Feet/foot

FSP Field Sampling Plan FSS Fire Suppression System

FTA Fire Training Area

HA Health Advisory

IRP Installation Restoration Program
ILANG Illinois Air National Guard
ILARNG Illinois Army National Guard

in. Inch/Inches

JULIE Joint Utility Locating Information for Excavators

MS Matrix Spike

MSD Matrix Spike Duplicate µg/L Micrograms per Liter mL/min Milliliter per Minute

mV Millivolts

NFA No Further Action
NGB National Guard Bureau
NTU Nephelometric Turbidity Units

OWS Oil-Water Separator

ORP Oxidation Reduction Potential

PA Preliminary Assessment

PANGB Peoria Air National Guard Base
PFBS Perfluorobutanesulfonic Acid
PFC Perfluorinated Compound
PFOA Perfluorooctanoic Acid
PFOS Perfluorooctanesulfonic Acid
PIA Peoria International Airport
PRL Potential Release Location

PVC Polyvinyl Chloride

QAPP Quality Assurance Project Plan

QC Quality Control

RSL Regional Screening Level

SB Soil Boring (sample designation)
SD Sediment (sample designation)
SHSP Site Health and Safety Plan

SI Site Inspection

SW Surface Water (sample designation)

TOC Top of Casing

TW Temporary Well (sample designation)

UCMR 3 Third Unregulated Contaminant Monitoring Rule

USAF United States Air Force

USEPA United States Environmental Protection Agency

Vista Analytical Laboratories, Inc.

EXECUTIVE SUMMARY

Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler) was contracted by the National Guard Bureau Operations Restoration Branch (A4OR) 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 182nd Airlift Wing, Illinois Air National Guard, Peoria Air National Guard Base (the Base/PANGB), Greater Peoria Airport, in Peoria, Illinois. This Report presents the results and recommendations from the SI field activities conducted at PANGB in September 2017 and in May 2018. 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:

- Determine if PRL is eligible for a decision of No Further Action
- 2) Assess if PFCs are migrating off-Base
- Provide data for developing data quality objectives if further investigations are recommended.

To meet the objectives, Amec Foster Wheeler performed SIs at the ten PRLs and at the Base Boundary. SI locations were identified as:

- PRL 1: Current Fire Training Area (FTA)
- PRL 2: Former FTA (Installation Restoration Program Site 4)
- PRL 3: Main Hangar Building (Building 734)
- PRL 4: Fuel Cell Maintenance Hangar (Building 632)
- PRL 5: Recent Spill at East Civil Engineering (CE) Cold Storage
- PRL 6: Fire Station (Building 536)
- PRL 7: Aerial Port (Building 836)
- PRL 8: Nozzle Spray Testing Area
- PRL 9: Stormwater Drainage Ditch
- PRL 11: Stormwater Pond
- Base Boundary

Based on recommendations from the Preliminary Assessment (PA) conducted by BB&E, Inc. (BB&E) in February 2016, soil, groundwater, and sediment samples were collected and analyzed for the PFCs listed on the United States Environmental Protection Agency's (USEPA) Third

Unregulated Contaminant Monitoring Rule (UCMR 3) list (USEPA, 2012). The detected PFC 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, 2016a) and HA for PFOA (USEPA, 2016b); the USEPA Regional Screening Level (RSL) table for PFBS in residential soil (USEPA, 2017); the USEPA RSL for PFBS in tap water; and calculated screening levels using the USEPA screening level calculator for PFOA and PFBS in soil and sediment. These screening criteria are presented below in **Table ES-1**.

Table ES-1: USEPA and USAF SI Screening Criteria

Parameter	Chemical Abstract Number	USEPA Regional Screening Level Table (June 2017) ^a		Air Force Guidance for Soils and	USEPA Health Advisory Drinking Water	
		Residential Soil (µg/kg)	Tap Water (µg/L)	Sediments ^b (µg/kg)	(Surface Water or Groundwater) (μg/L) ^c	
Perfluorobutane sulfonate (PFBS)	375-73-5	1,300,000d	400 [†]	NL	NL	
Perfluorooctanoic acid (PFOA)	335-67-1	NL	NL	1,260	0.07 ^e	
Perfluorooctane sulfonate (PFOS)	1763-23- 1	NL	NL	1,260		

^a USEPA Regional Screening Levels (USEPA, 2017).

USEPA = United States Environmental Protection Agency

μg/kg = Micrograms per Kilogram

µg/L = Micrograms per Liter

NL = not listed

Based on comparison of analytical data to the screening criteria in **Table ES-1** above, Amec Foster Wheeler recommends further investigations of the ten PRLs as a combined result of

^b Screening levels calculated using the USEPA 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).

USEPA, 2016b. Drinking Water Health Advisory for Perfluorocctanoic Acid (PFOA) and USEPA, 2016a. Drinking Water Health Advisory for Perfluorocctane Sulfonate (PFOS).

^d PFBS RSL for Residential Soil concentration presented in SI 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.

Note: 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 for groundwater and surface water.

¹ PFBS RSL for Tap Water presented in the SI WP (Amec, 2017) was 380 µg/L based on the May 2016 RSL values. This table has been updated to include the more recent RSL values published in June 2017

groundwater, surface water, and soil exceedances. PFCs were found in exceedance of HA criteria in 15 of 15 groundwater samples collected at PRLs. PFCs were not detected exceeding HA criteria in the four groundwater samples from the Base Boundary wells. PFCs were detected at levels exceeding HA criteria in the six surface water samples collected at PRLs 9 and 11. The six sediment samples did not show exceedances for PFCs. Soil samples from each of the ten PRLs showed detections above laboratory reporting limits, but below HA criteria. An overview of conclusions from SI activities and recommendations for future investigations is shown on **Table ES-2**.

Table ES-2: Screening Criteria Exceedances and Recommendations

Screen PRL	ening Criteria Exceedance			Becommondation				
PKL	Soil		SD	sw	Recommendation			
1		x			GW investigation to determine the nature and extent of the confirmed PFC release.			
2		х			GW investigation to determine the nature and extent of the confirmed PFC release.			
3		х			GW investigation to determine the nature and extent of the confirmed PFC release.			
4		х			GW investigation to determine the nature and extent of the confirmed PFC release.			
5		х			GW investigation to determine the nature and extent of the confirmed PFC release.			
6		х			GW investigation to determine the nature and extent of the confirmed PFC release.			
7		х			GW investigation to determine the nature and extent of the confirmed PFC release.			
8	х	х			Soil investigation to determine extent of PFC contamination within the footprint of the PRL. GW investigation to determine the nature and extent of the confirmed PFC release.			
9				x	Surface and GW investigation to determine the nature and extent of the confirmed PFC release.			
11		х		x	Surface and GW investigation to determine the nature and extent of the confirmed PFC release.			
Base Boundary					PFCs were not detected at levels exceeding HA criteria in the Base Boundary wells.			

Notes:

GW = Groundwater SW = Surface Water X – Screening criteria exceedance PFC - Perfluorinated Compound PRL- Potential Release Location

SD = Sediment

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1.0 INTRODUCTION

Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler) was contracted by the National Guard Bureau (NGB) Operations Restoration Branch (A4OR) 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. The scope of the Contract includes performance of an SI at on-Base Potential Release Locations (PRLs) identified at the Peoria Air National Guard Base (the Base/PANGB), in Peoria, Illinois. This SI Report describes the objectives, procedures, and activities which were completed in September 2017 and May 2018, and presents Amec Foster Wheeler's findings and recommendations. It should be noted that due to a review of the September 2017 analytical data, and based on discussions with the ANG, a second mobilization occurred in May 2018 to collect additional data. 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 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).

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). The following information was obtained from the Final Preliminary Assessment (PA)/SI Report prepared by Leidos in May 2015 (Leidos, 2015). The Peoria International Airport (PIA) is a civil/military public airport that occupies approximately 3,800 acres of land and has two runways. Five commercial airlines, ANG, and Illinois Army National Guard (ILARNG) share use of the airport, which is classified by the Federal Aviation Administration (FAA) as a primary commercial service airport.

The Illinois Air National Guard (ILANG) began using the Greater Peoria Airport in June 1947 when the unit was originally organized as the 169th Fighter Squadron. Initially, ANG leased 17.1 acres from the airport on the eastern side of the airfield, but mission changes led to several additions to the lease, resulting in a total of 46.79 acres by 1980. In 1987, construction began for a new facility,

located on the west side of the airport. In 1994, ANG personnel moved to the new facility and ILARNG took occupancy of the vacated parcel.

The ANG mission has evolved considerably since the unit was originally recognized by the U.S. Air Force in 1947. Currently, the unit is designated the 182nd Air Wing (AW); it operates C-130 aircraft to support its mission to provide airdrop; command, control, and communications; logistics; and support services for the nation, state, and community.

BB&E Inc., (BB&E) conducted a PA site visit for ILANG at PANGB on 18 August 2015 to identify potential locations of historic environmental releases of Perfluorinated Compounds (i.e. PRLs), specifically from Aqueous Film Forming Foam (AFFF) usage and storage (BB&E, 2016). 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. The goal of the PA site visit was to determine if a site poses a potential threat to human health and the environment and requires additional inspection.

Based on past use and storage of AFFF at the Base, the PA identified 10 PRLs where releases of PFASs had or might have occurred, including FTAs, hangars, fire stations, storage areas, firefighting equipment testing areas, stormwater ponds, etc. The findings of AFFF use and storage at each of the PRLs are documented in BB&E's February 2016, PA Site Visit Report, and are summarized from the PA Report in **Table 1**.

Purpose and Scope

Twelve PRLs were identified based on locations where AFFF was potentially discharged or stored. Two PRLs warranted No Further Action (NFA) based on the findings of no known AFFF release and are not included in the scope of this SI. These PRLs (PRL 10, - Base Supply [Building 728] and PRL 12, - Fire Station [Building 536]), are located at the former PANGB on the eastern edge of the airport property, currently occupied by the ILARNG. The 10 PRLs that were sampled are illustrated on **Figure 3**, and the SI summary is presented as **Table 2**.

The purpose of the SI was to determine the presence/absence of constituents of concern (i.e. perfluorooctanoic acid [PFOA], perfluorooctanesulfonic acid [PFOS], and perfluorobutane sulfonate [PFBS]) at PRLs and along the Base Boundary. Soil and groundwater were collected at the 10 PRLs. Groundwater was collected at the Base Boundary wells while surface water and sediment were only collected at one Base Boundary location. Samples were analyzed for the

PFCs listed on the United States Environmental Protection Agencies (USEPA's) Third Unregulated Contaminant Monitoring Rule (UCMR3) list (USEPA, 2012); however, the SI focus was primarily on evaluation and discussion of PFOA, PFOS, and PFBS. This data has been used to develop recommendations for appropriate paths forward to either provide an NFA conclusion or recommendations for further investigations.SI investigative tasks included:

- 24 soil borings were advanced via direct-push technology (DPT) in September 2017.
- A total of 13 temporary monitoring wells were sampled for this investigation in September 2017 (6) and May 2018 (9).
- A total of 53 soil samples (including 5 duplicates) were collected from twenty-four borings from. Two soil samples were collected from the borings. Soil samples were collected from a shallow interval and from directly above the water table, or at the boring terminus if no groundwater was encountered. Per the WP Base Boundary wells were only sampled for groundwater, not for soil.
- Collection of six surface water samples (including one duplicate) from the stormwater drainage ditch, stormwater pond, and outfall at Lamarsh Creek.
- Collection of six sediment samples (including one duplicate) from the stormwater drainage ditch, stormwater pond, and outfall at Lamarsh Creek

Field activities were conducted in accordance with the Final SI WP, Quality Assurance Project Plan (QAPP), Field Sampling Plan (FSP), and Site Health and Safety Plan (SHSP) (Amec, 2017). The scope of the SI is outlined in the following sections. A list of the PRLs, their use, and PA recommendation are presented in **Table 1**.

Refer to Table 2 for distribution of borings and wells among the 10 PRLs and Base Boundary.

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2.0 INSTALLATION DESCRIPTION

Section 2.1 describes the location and environs of the Base. A brief history of the Base is provided

in Section 2.2.

Location

The Base is located at the General Wayne A. Downing PIA, formerly known as Greater Peoria

Airport, is located five miles west of Peoria, Illinois (Figures 1 and 2). The Base is the home of

the 182nd AW and leases approximately 91 acres in the southwest portion of the PIA. The PRLs

that were evaluated during this SI are located in the southeast portion of the Base (Figure 3). The

PIA, including the Base, is zoned for airport district usage. The airport is surrounded by properties

zoned for industrial, residential, and business use.

Organization and History

The following information was obtained from the Final PA/SI Report prepared by Leidos in May

2015 (Leidos, 2015). The PIA is a civil/military public airport that occupies approximately 3,800

acres of land and has two runways. Five commercial airlines, ANG, and ILARNG share use of the

airport, which is classified by the FAA as a primary commercial service airport.

The ILANG began using the Greater Peoria Airport in June 1947 when the unit was originally

organized as the 169th Fighter Squadron. Initially, ANG leased 17.1 acres from the airport on the

eastern side of the airfield, but mission changes led to several additions to the lease, resulting in

a total of 46.79 acres by 1980. In 1987, construction began for a new facility, located on the west

side of the airport. In 1994, ANG personnel moved to the new facility and ILARNG took occupancy

of the vacated parcel.

The ANG mission has evolved considerably since the unit was originally recognized by the U.S.

Air Force in 1947. Currently, the unit is designated the 182nd AW; it operates C-130 aircraft to

support its mission to provide airdrop; command, control, and communications; logistics; and

support services for the nation, state, and community.

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.

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3.0 ENVIRONMENTAL SETTING

The following sections provide information on the environmental setting at the Base. This

information is summarized from the Final PA/SI Report prepared by Leidos in May 2015 (Leidos,

2015).

Climate

The climate of the Peoria area is continental, which is characterized by significant variation in

temperature throughout the year due to the lack of significant bodies of water nearby. Other

characteristics of a continental climate are winter temperatures cold enough to support a fixed

period of snow each year and relatively moderate precipitation, mostly during the summer.

From 2000 through 2013, mean monthly temperatures in the Peoria area ranged from a low of

26.0 degrees Fahrenheit (°F) in January to 76.3°F in July. The annual average temperature was

52.4°F. The Peoria area received an average annual precipitation of 36.6 inches (in.).

Precipitation is heaviest from April through September and is lowest in mid-winter. Annual

snowfall ranged from 11.5 to 52.5 in. from 2000 through 2013 (Leidos, 2015).

Topography

The general land surface elevations at the Base vary between a low of 630 feet (ft.) above mean

sea level (AMSL) in the southern portion of the facility to a high of 653 ft. AMSL in the northern

half of the facility. The Base is located at an elevation approximately 200 ft. above the Illinois

River. The Installation is generally flat.

Geology

Central Illinois, inclusive of the Base, is underlain by Pleistocene (Cenozoic-era) glacial-fluvial

sediments. The sediment type and thickness are highly variable in this area. Thick sequences of

glacial and glacial- fluvial sediments are found in the valleys, and thinner sequences of mainly

glacial tills and loess are found on the plateaus in this part of Illinois (Engineering-Science, 1990).

Bedrock units in the Peoria area have a declining slope to the south-southwest. The uppermost

bedrock units in the area are Pennsylvanian-aged rocks of the McLeansboro Group, Carbondale

Formation, and Tradewater Formation, which typically consist of interbedded limestones, shales,

and sandstones. Coal seams are commonly found within these strata. Pennsylvanian-aged rocks

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are underlain by a regional unconformity, which overlies Mississippian- to Ordovician-aged shale, limestone, and dolostone throughout Central Illinois. No structural features, such as faults or small-scale folds, have been mapped in the bedrock for this area (EarthTech, 1996).

Soil

The soils underlying the Base are derived from Pleistocene-aged glacial deposits of Peoria Loess. Soil types include the Sylvan silty clay loam, the Rozetta silt loam, and the Orthents soils. Sylvan and Rozetta soils, containing up to 35% silt, are moderately permeable, susceptible to erosion, and well drained. Orthents soils, predominant in the Peoria area, are characterized as moderately fine to moderately coarse silt with highly variable properties. Depending on the extent of disturbance and alteration from cut and fill construction activities, Orthents soils vary from moderately to poorly drained with permeability that varies based on the original soil texture and the degree of compaction achieved during construction activities (EarthTech, 1996).

During prior activities at the Base, near-surface soils were determined to be organic-rich clays with variable amounts of silt and fine-grained sand underlain by a sand and clayey sand unit extending to a depth of approximately 25 ft. below ground surface (bgs). This sand and clay unit varied in thickness up to 15 ft., with observations of sporadic clay lenses. Clay and/or weathered shale layer extended to depths of approximately 28 to 30 ft. bgs on top of what was interpreted as the Pennsylvanian-age Carbondale Formation (EarthTech, 1996). During SI activities soil was largely classified as a variety of clay and sandy-silt units, which is generally consistent with the descriptions above.

Surface Water Hydrology

The Base is located on a plateau west of and approximately 200 ft. above the Illinois River. The land surface slopes gently to the south and east in the flight apron and to the north and east away from the apron in the northern portion of the property. Surface water runoff drains to concrete-lined ditches and the Stormwater Pond at the western corner of the current Base. This runoff drains through three outfalls located along the west side of the current Base. Outfall #3 drains into the detention pond located on the west side of the current Base. Runoff from Outfalls #1 and #2 drains directly into the East Branch of Lamarsh Creek through the Stormwater Drainage Ditch, which joins the Illinois River south of the current Base property line (URS, 2009).

Hydrogeology

Regional groundwater occurs in two primary aquifer systems, located within the Pleistocene- and Paleozoic-aged aquifers. The most important aquifer for municipal and industrial use in Peoria County is the Kansan Sankoty Sand, which is typically first encountered between 15 and 20 ft. bgs. This aquifer comes within approximately 1.5 miles of the site to the east of the airport. Groundwater in the area also can be obtained from wells as deep as 350 ft. bgs in Pennsylvanian-aged sandstone, coal, and fractured shale; however, wells are generally not drilled into these rocks due to the poor water quality and high mineral content. Groundwater near the Base occurs in a shallow aquifer at depths ranging from 3 to 12 ft. bgs. Groundwater flow generally reflects surface topography with a flow to the south at an average hydraulic gradient of 0.013. However, it should be noted that groundwater flow direction at the Base has not been verified and groundwater is thought to flow west at PRLs 1 and 8.

During the 2017 and 2018 SI field activities, groundwater was encountered throughout the base between 1.28 and 17.55 ft. bgs, which is generally consistent with historical data.

Critical Habitat and Threatened/Endangered Species

According to the United States Fish and Wildlife Service, as of December 2013, the following mammals and plants are federally endangered, threatened, proposed, and/or listed as candidate species in Peoria County, Illinois (Leidos, 2015):

- Myotis sodalist (Indiana Bat) Endangered
- Myotis septentrionalis (Northern Long-Eared Bat) Proposed Endangered
- Boltonia decurrens (Decurrent False Aster) Threatened
- Platanthera leucophaea (Eastern Prairie Fringed Orchid) Threatened

None of these species are known to reside or to have been sighted at the Base.

City of Peoria Water Supply

Drinking water is supplied to the Base and surrounding residential population by the Illinois American Water Company. The Illinois American Water Company obtains drinking water from wells located approximately 3 miles east (downgradient) of the airport. These drinking water wells obtain water from the San Koty aquifer. This aquifer, approximately 50 to 150-ft. thick and semiconfined, is in the Illinois River and Kickapoo Creek Valleys (URS, 2009).

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4.0 PRELIMINARY ASSESSMENT

BB&E conducted a PA site visit for ILANG at PANGB on 18 August 2015 to identify potential locations of historic environmental releases of PFCs (i.e. PRLs), specifically from AFFF usage and storage (BB&E, 2016). 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. The goal of the PA site visit was to determine if a site poses a potential threat to human health and the environment and requires additional inspection.

Based on past use and storage of AFFF at the Base, the PA identified 12 PRLs where releases of AFFF had or might have occurred, including FTAs, hangars, fire stations, storage areas, firefighting equipment testing areas, stormwater ponds, etc. NFA was advised for two PRLs (10 and 12) based on the findings of AFFF use and storage at each of the PRLs which are documented in BB&E's February 2016, PA Site Visit Report.

The findings of AFFF use and storage at each of the 10 PRLs recommended for inclusion in the SI, as documented in the PA Site Visit Report, are summarized below. As the PA recommended NFA at PRLs 10 and 12 they are not included in the ensuing text. A summary of recommendations is presented in **Table 1**.

PRL 1: Current FTA

The Current FTA was constructed in approximately 1990 and consists of two concentric concrete curbed rings separating two areas filled with gravel; the inner ring is designed to fill with water. During fire training exercises, fuel is added to the water and ignited. According to facility personnel, AFFF was used approximately once per year for fire training exercises. The outer ring drains to the storm sewer via an oil water separator (OWS). The inner ring can be drained by a manual valve via an OWS to the sanitary sewer or the storm sewer. Except during the winter months (November-April), when FTA activities are not conducted and the system is set discharge to the storm sewer, the valve to the inner ring is typically left open to the sanitary system. Typically, the inner ring is only drained once per year to the sanitary system.

PRL 2: Former FTA (IRP Site 4)

The former FTA (IRP Site 4) was used from approximately 1953 until 1988. Use of the FTA was discontinued to allow for the construction of the Base. The exact area of the former

FTA is unknown, but is likely underneath the current ramp based upon a review of historical photos. FTA activities included filling the training pit with 1,000 to 1,500 gallons of water, adding various combinations of jet fuel, alcohol, aviation gasoline, and kerosene, and igniting and extinguishing the fire. Between 10,000 and 15,000 gallons of fuels were burned in this manner. In 1988 the area was investigated as IRP Site 4. Based upon this investigation, it was determined that remedial action was necessary. The remedial action consisted of excavation and off-site disposal of impacted soil (Engineering-Science, 1989). IRP Site 4 received a NFA for industrial land use by the Illinois Environmental Protection Agency in 1989.

PRL 3: Main Hangar (Building 734)

Building 734 is the Main Hangar and has an AFFF Fire Suppression System (FSS) in place and utilizes a 1,000-gallon aboveground storage tank (AST) of AFFF. The FSS is currently tested every three years. The hangar is equipped with internal trench drains that drain to the sanitary sewer via an OWS. When the FSS is triggered, an automatic valve switches the drainage to a smaller system of drain pipes that is intended to slow the foam's entrance into the sanitary system. In the past, the foam was manually pushed out of the building to the storm drains due to the slow building drainage. In addition, it was noted that one of the foam cannons was previously directed so it would spray foam out of the open hangar doors. This caused a reportable release of foam in November of 2011. Foam was observed in the Lamarsh Creek following this release. Currently the system is always tested with the doors closed and the foam can dissipate and drain into the internal building drains.

PRL 4: Fuel Cell Maintenance Hangar (Building 632)

The Fuel Cell Maintenance Hangar (Building 632) has an AFFF FSS in place and utilizes a 500-gallon AST of AFFF. The building was constructed in approximately 1998. The system is currently tested every three years. The hangar is equipped with internal trench drains that drain to the sanitary sewer via an OWS. When the suppression system is triggered, an automatic valve switches the drainage to a smaller system of drain pipes that is intended to slow the foam's entrance into the sanitary system. In the past, the foam was manually removed from the building to the storm drains north of the building due to the slow building drainage. Base personnel noted that AFFF had been washed into the stormwater catch basin located east of the mechanical room containing the AFFF foam tank. Currently the foam can dissipate and drain into the internal building drains. During the site visit, drums of AFFF were observed in the building next to the

AFFF storage tank.

PRL 5: Recent Spill at East CE Cold Storage

In August 2015, a 55-gallon drum of AFFF was tipped over while moving it to the area to await disposal. AFFF was released onto the pavement under the storage lean-to and the grassy area located north of the lean-to. Following the release, the foam was left in the area to dissipate. Staining on the pavement and dead grass was observed at the time of the site visit. A storm drain is located just north of the spill area; no AFFF was observed in the drain. At the time of the PA, no report regarding this spill was available.

PRL 6: Fire Station (Building 536)

Building 536 is the Base Fire Station. Vehicles containing AFFF are stored in the engine bay of this building. Vehicles include three crash trucks (p-34 with 56 gallons, p-23 with 500 gallons, and TI-1500 with 210 gallons), and one foam trailer (1,000 gallons). The foam trailer is stored full outside of the Fire Station to the northeast. According to facility personnel, vehicles are washed and refilled with AFFF in the engine bay. There are trench drains located inside the engine bay that drain to the sanitary sewer system via an OWS. According to Base personnel, no known releases have occurred at the Fire Station.

PRL 7: Aerial Port (Building 836)

Building 836 was formerly used as the fuel cell maintenance hangar and previously had an AFFF suppression system that was removed from service in approximately 1995. Prior to that time, the system was tested according to the AFFF suppression system maintenance procedure. Base personnel believe the suppression system was not tested more than twice. The building utilizes a trench drain which until approximately 2014 discharged to sanitary through an OWS. Currently the trench drains discharge directly to sanitary.

PRL 8: Nozzle Spray Testing Area

Nozzles are tested utilizing AFFF on an annual basis in the grassy area that is north-northwest of the active FTA. According to facility personnel, testing has occurred exclusively in this area for the last 15 years. Following testing, the foam is left in the area to dissipate. There are no stormwater catch basins in the immediate area. The grassy area slopes to the north/northwest towards a wooded area.

PRL 9: Stormwater Drainage Ditch

Stormwater from the north portion of the Base, including the Main Hangar (Building 734) and the Current FTA, drains to the Stormwater Drainage Ditch (Outfall #1), located just southwest of the Current FTA. The stormwater drains to the east branch of Lamarsh Creek via this open Stormwater Drainage Ditch. During the site visit, it was noted that portions of the drain had been lined with concrete pavers; however, significant soil in the bottom of the drain was exposed due to erosion. Following the 2011 release of AFFF at PRL 3 (described in **Section 4.3**), foam was observed in the Stormwater Drainage Ditch and Lamarsh Creek.

PRL 11: Stormwater Pond

Stormwater from the south portion of the Base, including the Fuel Cell Maintenance Hangar (Building 632) and the Fire Station (Building 536) drain to the Stormwater Pond located southwest of the Base. Base personnel noted that foam had been observed in the Stormwater Pond previously, but no dates were given.

Base Boundary

As groundwater flows predominantly to the south Base Boundary locations were selected to evaluate the potential of off-Base migration of PFCs. As such, locations were concentrated along the southern edge of the Base.

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, and sampling; and sediment sampling. SI activities were conducted in accordance with the WP and the ANG Investigation Guidance (ANG, 2009). The SI field activities were conducted in two phases, in September 2017 and May 2018.

In September 2017, 24 soil borings and 14 temporary monitoring wells (8 co-located with borings) were advanced in the PRLs and at the Base Bcundary. 53 soil samples (including 5 duplicates) were collected from the 24 borings. Upon completion, nine of the 14 temporary monitoring wells were found to be dry. Where groundwater yields were insufficient for low-flow sampling (TW02), a representative grab sample was collected. Due to the systemic issues with groundwater recharge, a decision was made to forgo well development. Additionally, six sediment and six surface water samples were collected (including one duplicate each) from PRLs 9 and 11. Based on a review of the data, and in discussions with the ANG, it was determined that data gaps existed from the 2017 field activities. As such, Amec Foster Wheeler remobilized to collect additional data in May 2018.

The May 2018 activities included the installation of 11 additional temporary monitoring wells. Nine groundwater samples were collected. Temporary monitoring wells TWBB03.A, TWBB03.B, and TWBB03.C did not contain sufficient groundwater quantities for sample collection. It should be noted that upon completion, three temporary monitoring wells were found to be dry and an additional well (TWBB06.A) had insufficient recharge resulting in a grab rather than low-flow sample being collected.

Utility Location and Clearance

Prior to commencement of SI activities, drilling locations were pre-marked, and the drilling contractor (Reynolds Drilling Corporation) provided details of the proposed borehole locations to the Illinois one call utility notification center, Joint Utility Locating Information for Excavators (JULIE). JULIE assigned ticket No. X2570380 on 14 September 2017 and ticket A001210566 on 05 May 2018. Prior to initiating subsurface activities (18 September 2017 and 08 May 2018), TSI Global (2017) and BloodHound Underground Utility Locators (2018) cleared the drilling locations using ground-penetrating radar.

Utility clearance activities were performed at the direction and oversight of Amec Foster Wheeler.

Drilling locations were approved by Base personnel.

Permits

As described in **Section 5.1**, Amec Foster Wheeler obtained utility clearance permits for the SI activities, including Dig Safe Clearance with JULIE, and USAF Form 103 with the Base Civil

Engineering Division. It was determined by the Base Civil Engineer that FAA permits were not

required for performance of SI activities. No other permits were required or obtained.

Soil Boring Installation

In September 2017, 24 soil borings were advanced at the PRLs to a depth of 10-15 ft. by Reynolds

Drilling Corporation using DPT drilling techniques. Soil boring locations were selected based on

PRL use and physical characteristics to target the most probable AFFF release areas. Soil cores

were collected continuously for field screening at 4 to 5-ft. intervals in new, dedicated acetate

liners to be logged, observe soil lithology, and to be field screened in accordance with the FSP.

Drilling rods/tools were decontaminated between borings in accordance with protocol described

in the WP. It should be noted that select borings were converted to temporary monitoring wells.

Refer to Section 5.6 for additional information pertaining to temporary monitoring wells.

Soil Sampling

Two soil samples were collected from each soil boring, including one shallow sample (0-2 ft bgs)

and one deep samples (directly above the water table or the boring terminus). Shallow soil

samples were collected directly from a decontaminated hand auger. Deep soil samples were via

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. Soil was visually inspected for potential impacts.

Soil Boring Abandonment

Following the completion of drilling activities, each boring was backfilled with hydrated granular

bentonite to seal the borehole. Surface completions were patched with like materials

(topsoil/seed, asphalt, or concrete) in accordance with PANGB specifications.

Temporary Monitoring Well Installation and Development

In September 2017 and May 2018, a total of 25 temporary monitoring wells were installed to

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investigate potential groundwater impacts at the PRLs and at the Base Boundary. The primary purpose of installing the temporary monitoring wells was to assess groundwater quality downgradient of the PRLs and at the Base Boundary. Temporary well locations were determined based on historical groundwater data and topographic contours, historical indications of possible impact, and Base features such as buildings and the Base Boundary. In general, temporary monitoring wells were installed at locations with the greatest potential to intercept PFCs dissolved in groundwater based on available data (downgradient of their respective PRLs and along the southern Base Boundary) and might not represent the highest concentrations at each PRL. The temporary monitoring wells borings were advanced using DPT technologies. Temporary monitoring wells were installed in accordance with Amec Foster Wheeler's PFC-specific Standard Operating Procedure for installation of monitoring wells. Temporary monitoring wells were constructed within borings using a one-inch diameter, schedule 40 polyvinyl chloride (PVC) riser with a 0.010-inch slot screened interval with the water table bisecting the well screen. Wells installed in 2017 were constructed with a 5-ft screen. However, due to low groundwater yields during the 2017 activities, it was decided to deviate from the Work Plan (WP) during the 2018 field activities 2018 and install the temporary monitoring wells using 15-ft screens to facilitate water production. Each temporary monitoring well was sampled using a peristaltic pump and new dedicated well materials. 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.

When low-flow sampling was conducted, 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) where feasible). Equipment inserted into the well were decontaminated following each use. The temporary monitoring well construction logs are presented in **Appendix A** and the well development logs for the wells completed in 2018 are provided in **Appendix B**.

Well development water was containerized, labeled, and secured in steel 55-gallon drums. Drums were temporarily staged on-site in an area designated by the Base Environmental Manager pending the results of laboratory testing and were subsequently disposed via Advanced Integrated Solutions. Investigation Derived Waste manifests are provided in **Appendix E**.

Water Level Measurements

Prior to well purging, static water levels measurements were collected with an electronic water level meter. Water levels were measured as a distance below the top of the PVC riser and

recorded on field data sheets.

Groundwater Sampling

15 groundwater samples (including two duplicates) were collected from 13 temporary monitoring wells via low-flow sampling techniques, where possible. Where groundwater yields were insufficient for low-flow sampling (TW02, TW06-A), a representative grab sample was collected. 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 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 Sonde Instrument to record water parameters. The pump rate during purging was between 100 and 300 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 (DO), turbidity, temperature, and specific conductivity on approximately five-minute intervals. During water monitoring it was noted that the pH probe was malfunctioning therefore reported pH levels may not be representative of groundwater characteristics. However, the other parameters were used for determining stabilization. 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% (mS/cm) for specific conductance (conductivity),
- +/-10 millivolts (mV) for ORP,
- +/-10% (mg/L) for DO, and
- +/-10% (NTU) for turbidity.

Groundwater sampling logs are included in Appendix C.

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 with subsequent infill using hydrated bentonite chips. Surface completions were patched with like materials (topsoil/seed, asphalt, or concrete)

in accordance with the Base specifications.

Sediment Sampling

Six surface sediment samples (including one duplicate) were collected, including four (including one duplicate) from the drainage ditch in PRL 9 and two from the edge of the stormwater pond in PRL 11. The samples were collected from the upper 0.5 ft. of sediment using a clean shovel and stainless-steel trowel. Samples were immediately cooled with ice to less than 4°C. Re-usable sampling equipment was decontaminated in accordance with the WP. Sediment sampling logs

are included in Appendix D.

Surface Water Sampling

Six surface water samples (including one duplicate) were collected. Three from the drainage ditch in PRL 9 and three (including one duplicate) from the edge of the stormwater pond in PRL 11. Samples were collected directly from the water source at the surface and were immediately cooled with ice to less than 4°C. Re-usable sampling equipment was decontaminated in

accordance with the WP. Surface water sampling logs are included in Appendix D.

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 highdensity polyethylene brush used to remove debris and particulates. PFC-free bottled water was used to rinse soapy water from the sampling equipment. 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 UCMR 3 list. Concentrations were reviewed to ensure Amec Foster Wheeler's internal PFC-

free criteria were met.

Investigation Derived Waste Management

Soil cuttings were containerized in 55-gallon drums. Purge water generated during monitoring well development, groundwater sampling activities, and rinse water were captured in 55-gallon drums. Drums were initially kept on-site in an area designated by the Base Environmental Manager pending the results of laboratory testing and were subsequently disposed of via Advanced Integrated Solutions. Investigation Derived Waste manifests are provided in Appendix

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E.

Laboratory

Soil, water, and sediment samples were submitted to Vista in El Dorado Hills, California. Vista is accredited under the DoD Environmental Laboratory Accreditation Program and maintains a National Environmental Laboratory Accreditation Program certification.

Field Quality Assurance/Quality Control Sample Results

Quality assurance and quality control samples, including field duplicates matrix spike/matrix spike duplicates (MS/MSD), equipment rinsate 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** through **Table 6**.

Data Validation and Usability

Amec Foster Wheeler performed a data quality review of samples collected during field activities and submitted to Vista for analysis of PFCs, consisting of: 53 sediment samples (including five field duplicates), fifteen groundwater samples (including two duplicates), six surface sediment samples (including one duplicate), six surface water samples (including one duplicate), two equipment blanks, one field blank, and one decontamination source water sample.

The laboratory analytical data generated during the SI were reviewed by a qualified analytical chemist for conformance with the project data quality objectives (DQOs) specified in the QAPP (Amec, 2017). Amec Foster Wheeler performed USEPA Stage 4 validation on 10 percent (%) 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); 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).

For the samples collected in September 2017 Amec Foster Wheeler evaluated 432 data records from field samples during the validation. Amec Foster Wheeler J or UJ qualified 94 records (22%) as estimated values because of low MS/MSD recoveries, imprecision between MS and MSD results, high internal standard recoveries, field duplicate imprecision, and/or analyte concentrations outside the instrument's calibration range.

For the samples collected in May 2018 Amec Foster Wheeler evaluated a total of 60 data records from field samples during the validation. Amec Foster Wheeler J or B qualified 9 records (15%) as estimated values because of equipment blank contamination, field duplicate imprecision, and/or analyte concentrations outside the instrument's calibration range.

The Data Validation Reports, including qualified data, is included as **Appendix F**. Laboratory analytical reports and chains of custody forms are provided in **Appendix G**.

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¹ The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

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6.0 SITE INVESTIGATIONS

This SI field program was designed to collect data needed to evaluate the presence/absence of PFC compounds at each of the ten PRLs. The scope of the SI was designed using recommendations presented in the PA prepared by BB&E. 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 WP.

Field Activities Summary

A summary of the completed SI field activities is provided in **Table 2**. Individual sampling locations are shown on **Figures 4 through 10**. Soil boring and monitoring well construction and groundwater sampling logs are included in **Appendices A and B**, respectively. Surface water and sediment sampling logs are included in **Appendix D**.

General Work Plan Deviations

Deviations from the general WP included one or more of the following conditions:

- The June 2017 USEPA residential soil Regional Screening Level (RSL) value for PFBS (1,300,000 μg/kg) was used as the screening value in place of the May 2016 USEPA residential soil RSL value for PFBS (1,600,000 μg/kg). The updated RSL value was not published at the time the WP was finalized. Table 7 Presents the USEPA and USAF SI Screening Criteria.
- During the September 2017 mobilization nine wells were found to have inadequate recharge for low-flow or grab sampling. Where groundwater yields were insufficient for low-flow sampling (TW02), a representative grab sample was collected.
- In 2017, low groundwater yields made well development untenable.
- TW06.A was grab sampled due to low recharge conditions in May 2018.
- Due to insufficient groundwater yields during the 2017 field activities a decision was made to use 15 ft. screens during the May 2018 mobilization in an attempt to increase groundwater recharge.
- In September 2017 the well TWBB03 was found to be dry and was abandoned without a sample collected. In May 2018 three new wells were installed in an unsuccessful attempt to collect a sample. Following the third dry well a decision was made to abandon additional attempts to collect groundwater from TWBB03.

PRL1: Current FTA

6.1.1 Soil Sampling

Three soil borings (01-SB01, 01-SB02, and 01-SB03) were advanced at PRL 1, with shallow (1.0-1.5 ft. bgs) and deep (14.5-15.0 ft. bgs) soil samples collected from the borings. A total of seven

soil samples (including one duplicate) were collected at this PRL.

Soil boring locations are illustrated on Figure 4.

6.1.2 Groundwater Sampling

Temporary well TW01.A (co-located with 01-SB04) was drilled to a depth of 29.2 ft. bgs on 05 May 2018, and a well screen was installed from 14.2-29.2 ft. bgs. Prior to purging and sampling groundwater was measured at 17.1 ft bgs. Two groundwater samples (including one duplicate)

were collected from TW01.A.

The soil boring and temporary well location is illustrated on Figure 4.

PRL 2: Former FTA (IRP Site 4)

6.1.3 Soil Sampling

Three borings (02-SB01, 02-SB02, and 02-SB03) were advanced at PRL 2 on 20 September 2017, with shallow (0.5-1.0 ft. bgs) and deep (5.0-5.5 ft. bgs) soil samples collected from each boring. A total of seven soil samples (including one duplicate) were collected at this PRL.

Soil boring locations are illustrated on Figure 5.

6.1.4 Groundwater Sampling

Temporary well TW02 (co-located with 02-SB01) was drilled to a depth of 15 ft. bgs on 20 September 2017, and a well screen was installed from 10-15 ft. bgs. One groundwater grab sample was collected on 20 September 2017 from TW02 (co-located with 02-SB01) after it was determined that there was not enough recharge to fill the flow cell. Groundwater was measured at a depth of 14.38 ft. below top of casing (TOC) prior to the purge attempt.

The soil boring and temporary well location is illustrated on Figure 5.

PRL 3: Main Hangar Building (Building 734)

6.1.5 Soil Sampling

Three soil borings (03-SB01, 03-SB02, and 03-SB03) were advanced at the PRL 3 with shallow

(0.5-1.0 ft. bgs) and deep (10.0-15.0 ft. bgs) soil samples collected from the borings. A total of six

sediment samples were collected at this PRL.

Soil boring locations are illustrated on Figure 6.

6.1.6 Groundwater Sampling

Temporary well TW03.A (co-located with 03-SB04) was drilled to a depth of 22.0 ft. bgs on 11

May 2018 and a well screen was installed from 7.0-22.0 ft. bgs. Prior to purging and sampling

groundwater was measured at a depth of 7.0 ft. bgs. One groundwater sample was collected from

TW03.

The soil boring and temporary well location is illustrated on Figure 6.

PRL 4: Fuel Cell Maintenance Hangar (Building 632)

6.1.7 Soil Sampling

Three soil borings (04-SB01, 04-SB02, and 04-SB03) were advanced between 19 and 20

September 2017, with shallow (0.5-1.0 ft. bgs) and deep (6.0-15.0 ft. bgs) soil samples collected

from each boring. A total of seven soil samples (including one duplicate) were collected from this

PRL.

Soil boring locations are illustrated on Figure 6.

6.1.8 Groundwater Sampling

Temporary well TW04 (co-located with 04-SB01) was drilled to a depth of 15 ft. bgs on 19

September 2017, and a well screen was installed from 8-13 ft. bgs due to a collapsed borehole.

Groundwater was measured at 7.0 ft. below TOC prior to purging and sampling. Two ground

water samples (including one duplicate) were collected.

The soil boring and temporary well location is illustrated on Figure 6.

PRL 5: Recent Spill at East CE Cold Storage

6.1.9 Soil Sampling

Three soil borings (05-SB01, 05-SB02, and 05-SB03) were advanced on 19 September 2017,

with shallow (0.5-1.0 ft. bgs) and deep (4.0-13.0 ft. bgs) soil samples collected from each boring.

A total of seven soil samples (including one duplicate) were collected from this PRL.

Soil boring locations are illustrated on Figure 7.

6.1.10 Groundwater Sampling

Temporary well TW05 (co-located with 05-SB01) was drilled to a depth of 15 ft. bgs on 19 September 2017, and a well screen was installed from 10-15 ft. bgs. Groundwater was measured

at 14.0 ft. below TOC prior to purging and sampling. One ground water sample was collected.

The soil boring and temporary well location is illustrated on Figure 7.

PRL 6: Fire Station (Building 536)

6.1.11 Soil Sampling

Three soil borings (06-SB01, 06-SB02, and 06-SB03) were advanced with shallow (0.5-1.0 ft. bgs) and deep (7.0-15.0 ft. bgs) soil samples collected from the borings. A total of seven soil

samples (including one duplicate) were collected from this PRL.

Soil boring locations are illustrated on Figure 8.

6.1.12 Groundwater Sampling

Temporary well TW06.A (co-located with 06-SB04) was drilled to a depth of 22.0 ft. bgs on 05

May 2018 and a well screen was installed from 7.0-22.0 ft. bgs. Prior to purging and sampling

groundwater was measured at 17.55 ft. bgs. One groundwater grab sample was collected at

TW06.

The soil boring and temporary well location is illustrated on Figure 8.

PRL 7: Aerial Port (Building 836)

6.1.13 Soil Sampling

Three soil borings (07-SB01, 07-SB02, and 07-SB03) were advanced on 21 September 2017,

with shallow (1.5-2.0 ft. bgs) and deep (12.0-15.0 ft. bgs) soil samples collected from each boring.

A total of six soil samples were collected from this PRL.

Soil boring locations are illustrated on Figure 6.

6.1.14 Groundwater Sampling

Temporary well TW07 (co-located with 07-SB01) was drilled to a depth of 15 ft. bgs on 19

September 2017, and a well screen was installed from 10-15 ft. bgs. Groundwater was measured

at 12.5 ft. below TOC prior to purging and sampling. One ground water sample was collected.

The soil boring and temporary well location is illustrated on Figure 6.

PRL 8: Nozzle Spray Testing Area

6.1.15 Soil Sampling

Three soil borings (08-SB01, 08-SB02, and 08-SB03) were advanced with shallow (1.5-2.0 ft. bgs) and deep (12.0-15.0 ft. bgs) soil samples collected from the borings. A total of six soil

samples were collected from this PRL.

Soil boring locations are illustrated on Figure 4.

6.1.16 Groundwater Sampling

Temporary well TW08.A (co-located with 08-SB04) was drilled to a depth of 25.0 ft. bgs on 05 May 2018 and a well screen was installed from 10.0-25.0 ft. bgs. Prior to purging and sampling,

groundwater was measured at 11.5 ft. bgs. One groundwater sample was collected at PRL 8.

The soil boring and temporary well location is illustrated on Figure 4.

PRL 9: Stormwater Drainage Ditch

6.1.17 Sediment Sampling

At this PRL it was determined that the site was inaccessible to the drill rig and therefore, as per the WP, surface sediment samples were collected in lieu of standard soil samples. As such, four surface sediment samples (including one duplicate) were collected on 20 September 20017 from

the stormwater drainage ditch in this PRL.

Sampling locations are illustrated on Figure 9.

6.1.18 Surface Water Sampling

At this PRL it was determined that the site was inaccessible to the drill rig and therefore, as per the WP, surface water samples were collected in lieu of groundwater samples. As such, three surface water samples were collected on 20 September 2017 from the stormwater drainage ditch

in this PRL.

Sampling locations are illustrated on Figure 9.

PRL 11: Stormwater Pond

6.1.19 Sediment Sampling

Two surface sediment samples were collected on 20 September 2017 from the edge of the

stormwater pond in this PRL.

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6.1.20 Groundwater Sampling

Temporary well TW11.A was drilled to a depth of 20 ft. bgs on 10 May 2018, and a well screen was installed from 5.0-20.0 ft. bgs. Prior to purging and sampling groundwater was measured at 6.0 ft. bgs. One groundwater sample was collected from PRL 11.

The temporary well location is illustrated on Figure 9.

6.1.21 Surface Water Sampling

Three surface water samples (including one duplicate) were collected on 20 September 2017.

Well locations are illustrated on Figure 9.

Base Boundary Wells: TWBB1-TWBB5

6.1.22 Groundwater Sampling

In 2017, upon completion Base Boundary wells TWBB01, TWBB03, TWBB04, and TWBB05 were found to be dry. As such, Base Boundary wells TWBB01.A, TWBB03.A, TWBB04.A, and TWBB05.A were set in May 2018 to replace the dry wells from 2017. The information for each of these Base Boundary wells, as well as TWBB02 (completed in 2017), is summarized in the table below.

Well	Date	Total Depth (ft.)	Screened Interval (ft.)	DTW (ft.)	Samples Collected
TWBB01.A	05/09/2018	25	10-25	9.0	2
TWBB02	09/20/2017	13	8-13	4.14	1
TWBB03.C	05/11/2018	25	10-25	Dry	0
TWBB04.A	05/10/2018	28	13-28	15.65	1
TWBB05.A	05/10/2018	24.2	9.2-24.2	11.8	1

Well locations are illustrated on Figure 10.

7.0 SOIL AND GROUNDWATER STANDARDS

A soil or groundwater standard is an environmental and/or public health statute or rule used in identifying Base 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 Base 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, 2012)] and USEPA lifetime drinking water Health Advisories (HAs) for PFOS (USEPA, 2016a) and PFOA (USEPA, 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 RSL values²).
- 1,260 µg/kg in sediment (calculated in the absence of RSL values).

PFOA:

- 0.07 μg/L in groundwater/surface water that is used as or contributes to a drinking water source (combined with PFOS value).
- 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 PFBS, for which there is a Tier 2 toxicity value (USEPA, 2017). The USAF will also consider a release to be confirmed if the following concentrations are

² Air Force Guidance screening levels calculated using the USEPA 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).

exceeded:

PFBS:

- 400 µg/L in groundwater/surface water.
- 1,300,000 µg/kg in soil/sediment.

The HA, RSLs and USAF Guidance values are collectively referred to as screening criteria in this Report. **Table 7** presents the screening criteria for comparing the analytical results for PFBS, PFOA, and PFOS.

Table 7: USEPA and USAF SI Screening Criteria

Parameter	Chemical Abstract Number	USEPA Regional Screening Level Table (June 2017) ^a		Air Force Guidance for Soils and	USEPA Health Advisory Drinking Water	
		Residenti al Soil (μg/kg)	Tap Water (μg/L)	Sediments ^b (µg/kg)	(Surface Water or Groundwater) (μg/L) ^c	
Perfluorobutane sulfonate (PFBS)	375-73-5	1,300,000 [±]	400 ^f	NL	NL	
Perfluorooctanoic acid (PFOA)	335-67-1	NL	NL	1,260	0.079	
Perfluorooctane sulfonate (PFOS)	1763-23-1	NL	NL	1,260	0.07 ^e	

USEPA Regional Screening Levels (USEPA, 2017).

USEPA = United State Environmental Protection Agency

μg/kg = Micrograms per Kilogram

µg/L = Micrograms per Liter

NL = not listed

b Screening levels calculated using the USEPA 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).

^e USEPA, 2016b. Drinking Water Health Advisory for Perfluorocctanoic Acid (PFOA) and USEPA, 2016a. Drinking Water Health Advisory for Perfluorocctane Sulfonate (PFOS).

PFBS RSL for Residential Soil concentration presented in the SI 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.

Note: 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. Only groundwater was sampled during the SI, but analytical results have been compared to the tap water screening levels.

¹ PFBS RSL for Tap Water presented in the SI WP (Amec, 2017) was 380 µg/L based on the May 2016 RSL values. This table has been updated to include the more recent RSL value published in June 2017.

8.0 SITE INVESTIGATION RESULTS

This section presents the soil, groundwater, surface water and sediment 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 WP and as presented in **Tables 3 through 6**. Locations of detected analytes are shown on **Figures 4 through 10**.

PRL 1: Current FTA

8.1.1 PRL 1 Soil Analytical Results

Seven soil samples (including one duplicate) were collected and analyzed from three borings as described in **Section 6.3.2**: 01-SB01 from 1.0-1.5 and 14.5-15.0 ft. bgs; 01-SB02 from 1.0-1.5 and 14.5-15.0 ft. bgs; 01-SB03 from 1.0-1.5 and 14.5-15.0 ft. bgs. Analytical results from soil samples indicate PFCs were detected above the laboratory reporting limit. There were no exceedances of the screening criteria in the seven soil samples (including one duplicate) 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

In May 2018, two groundwater samples (including one duplicate) were collected from TW01.A and analyzed as described in **Section 6.3.3**. Analytical results from the groundwater samples indicate that, for both samples, six PFCs were detected at concentrations above the laboratory detection limit, with two compounds exceeding USEPA Drinking Water HA. For the primary sample, PFOS was detected at a concentration of 41.0 μ g/L and PFOA was detected at a concentration of 2.87 μ g/L. The combined PFOS and PFOA in the primary sample is 43.87 μ g/L. In the duplicate, PFOS was detected at a concentration of 30.5 μ g/L and PFOA was detected at a concentration of 1.39 μ g/L. For the duplicate, the combined PFOS and PFOA is 31.89 μ g/L.

Comparisons of analytical results to applicable criteria are presented on **Table 4**. The temporary monitoring well location showing detected compounds is illustrated on **Figure 4**.

PRL 2: Former FTA (IRP Site 4)

8.1.3 PRL 2 Soil Analytical Results

Seven soil samples (including one duplicate) were collected and analyzed from three borings as

described in **Section 6.4.2**: 02-SB01 from 0.5-1.0 and 5.0-5.5 ft. bgs; 02-SB02 from 0.5-1.0 and 5.0-5.5 ft. bgs; 02-SB03 from 0.5-1.0 and 5.0-5.5 ft. bgs. Analytical results from soil samples indicate PFCs were detected above the laboratory reporting limit. There were no exceedances of the screening criteria in the seven samples (including one duplicate) collected from PRL 2.

Comparisons of analytical results to applicable screening criteria are presented on **Table 3**. The soil boring locations showing detected compounds are depicted on **Figure 5**.

8.1.4 PRL 2 Groundwater Analytical Results

One groundwater sample was collected from TW02 and analyzed as described in **Section 6.4.3**. Analytical results from the groundwater sample indicates that five PFCs were detected at concentrations above the laboratory detection limit, with two compounds exceeding USEPA Drinking Water HA. PFOS was detected at a concentration of 0.17 µg/L and PFOA was detected at a concentration of 0.366 µg/L. The combined PFOS and PFOA is 0.536 µg/L.

Comparisons of analytical results to applicable criteria are presented on **Table 4**. The temporary monitoring well location showing detected compounds is illustrated on **Figure 5**.

PRL 3: Main Hangar Building (Building 734)

8.1.5 PRL 3 Soil Analytical Results

Six soil samples were collected and analyzed from the three soil borings as described in **Section 6.5.2**: 03-SB01 from 0.5-1.0 and 10.0-10.5 ft. bgs; 03-SB02 from 0.5-1.0 and 11.5-12.0 ft. bgs; and 03-SB03 from 0.5-1.0 and 14.5-15.0 ft. bgs. Analytical results from soil samples indicate PFCs were detected above the laboratory reporting limit. There were no exceedances of the screening criteria in the six 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**.

8.1.6 PRL 3 Groundwater Analytical Results

In May 2018, one groundwater sample was collected from TW03.A and analyzed as described in **Section 6.4.3**. Analytical results from the groundwater sample indicates that six PFCs were detected at concentrations above the laboratory detection limit, with two compounds exceeding USEPA Drinking Water HA. PFOS was detected at a concentration of 52.1 µg/L and PFOA was detected at a concentration of 0.481 µg/L. The combined PFOS and PFOA was reported as

52.581 µg/L.

Comparisons of analytical results to applicable criteria are presented on **Table 4**. The temporary monitoring well location showing detected compounds is illustrated on **Figure 6**.

PRL 4: Fuel Cell Maintenance Hangar (Building 632)

8.1.7 PRL 4 Soil Analytical Results

Seven soil samples (including one duplicate) were collected and analyzed from three soil borings as described in **Section 6.6.2**: 04-SB01 from 0.5-1.0 and 6.0-7.0 ft. bgs; 04-SB02 from 0.5-1.0 and 14.5-15.0 ft. bgs; and 04-SB03 from 0.5-1.0 and 5.0-5.5 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 seven samples (including one duplicate) 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 6**.

8.1.8 PRL 4 Groundwater Analytical Results

Two groundwater samples (including one duplicate) were collected from TW04 and analyzed as described in **Section 6.6.3**. Analytical results from the groundwater samples indicates that, for both samples, six PFCs were detected at concentrations above the laboratory detection limit, with two compounds exceeding USEPA Drinking Water HA. For the primary sample, PFOS was detected at a concentration of 7.82 μ g/L and PFOA was detected at a concentration of 0.128 μ g/L. The combined PFOS and PFOA in the primary sample is 7.948 μ g/L. In the duplicate, PFOS was detected at a concentration of 7.32 μ g/L and PFOA was detected at a concentration of 0.13 μ g/L. For the duplicate, the combined PFOS and PFOA is 7.45 μ g/L.

Comparisons of analytical results to applicable criteria are presented on **Table 4**. The temporary monitoring well location showing detected compounds is illustrated on **Figure 6**.

PRL 5: Recent Spill at East CE Cold Storage

8.1.9 PRL 5 Soil Analytical Results

Seven soil samples (including one duplicate) were collected and analyzed from three soil borings as described in **Section 6.7.2**: 05-SB01 from 0.5-1.0 and 12.5-13.0 ft. bgs; 05-SB02 from 0.5-1.0 and 4.5-5.0 ft. bgs; and 05-SB03 from 0.5-1.0 and 3.5-4.0 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 seven samples (including one duplicate)

collected from PRL 5.

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.

8.1.10 PRL 5 Groundwater Analytical Results

One groundwater sample was collected from TW05 and analyzed as described in Section 6.7.3.

Analytical results from the groundwater sample indicates that six PFCs were detected at

concentrations above the laboratory detection limit, with two compounds exceeding USEPA

Drinking Water HA. PFOS was detected at a concentration of 5.78 µg/L and PFOA was detected

at a concentration of 0.319 µg/L. The combined PFOS and PFOA is 6.099 µg/L.

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.

PRL 6: Fire Station (Building 536)

8.1.11 PRL 6 Soil Analytical Results

Seven soil samples (including one duplicate) were collected and analyzed from the three soil

borings as described in Section 6.8.2: 06-SB01 from 0.5-1.0 and 14.5-15.0 ft. bgs; 06-SB02 from

0.5-1.0 and 9.5-10.0 ft. bgs; and 06-SB03 from 0.5-1.0 and 6.5-7.0 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 seven samples (including one duplicate)

collected from PRL 6.

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.

8.1.12 PRL 6 Groundwater Analytical Results

In May 2018, one groundwater sample was collected from TW06.A and analyzed as described in

Section 6.8.3. Analytical results from the groundwater sample indicates that five PFCs were

detected at concentrations above the laboratory detection limit, with two compounds exceeding

USEPA Drinking Water HA. PFOS was detected at a concentration of 0.367 μg/L and PFOA was

detected at a concentration of 0.0786 µg/L. The combined PFOS and PFOA was reported as

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0.4456 µg/L.

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**.

PRL 7: Fire Department Equipment Test Area

8.1.13 PRL 7 Soil Analytical Results

Six soil samples were collected and analyzed from three soil borings as described in **Section 6.9.2**: 07-SB01 from 0.5-1.0 and 11.5-12.0 ft. bgs; 07-SB02 from 1.5-2.0 and 14.5-15.0 ft. bgs; and 07-SB03 from 1.0-1.5 and 14.5-15.0 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 six samples collected from PRL 7.

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**.

8.1.14 PRL 7 Groundwater Analytical Results

One groundwater sample was collected from TW07 and analyzed as described in **Section 6.9.3**. Analytical results from the groundwater sample indicate that five PFCs were detected at concentrations above the laboratory detection limit, with one compound exceeding USEPA Drinking Water HA. PFOS was detected at a concentration of 0.186 μ g/L and the combined PFOS and PFOA is 0.206 μ g/L.

Comparisons of analytical results to applicable criteria are presented on **Table 4**. The temporary monitoring well location showing detected compounds is illustrated on **Figure 6**.

PRL 8: Fire Station (Building 536)

8.1.15 PRL 8 Soil Analytical Results

Six soil samples were collected and analyzed from the three soil borings as described in **Section 6.10.2**: 08-SB01 from 0.5-1.0 and 14.5-15.0 ft. bgs; 08-SB02 from 0.5-1.0 and 14.5-15.0 ft. bgs; and 08-SB03 from 0.5-1.0 and 14.5-15.0 ft. bgs. Analytical results from soil samples indicate PFCs were detected above the laboratory reporting limit. Additionally, the shallow sample from 08-SB03 showed an exceedance of the screening criteria at a value of 2.41 mg/kg for PFOS.

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.

8.1.16 PRL 8 Groundwater Analytical Results

In May 2018, one groundwater sample was collected from TW08.A and analyzed as described in **Section 6.10.3**. Analytical results from the groundwater sample indicates that six PFCs were detected at concentrations above the laboratory detection limit, with two compounds exceeding USEPA Drinking Water HA. PFOS was detected at a concentration of 152 μ g/L and PFOA was detected at a concentration of 4.48 μ g/L. The combined PFOS and PFOA was reported as 156.48 μ g/L.

Comparisons of analytical results to applicable criteria are presented on **Table 4**. The temporary monitoring well location showing detected compounds is illustrated on **Figure 4**.

PRL 9: Stormwater Drainage Ditch

8.1.17 PRL 9 Surface Sediment Analytical Results

Four surface sediment samples (including one duplicate) were collected from the stormwater drainage ditch in PRL 9. Analytical results from these samples indicate PFCs were detected above the laboratory reporting level; however, no compounds exceeded the screening criteria in the four samples (including one duplicate) collected from PRL 9.

Comparisons of analytical results to applicable screening criteria are presented on **Table 5**. The soil boring locations showing detected compounds are depicted on **Figure 9**.

8.1.18 PRL 9 Surface Water Analytical Results

Three surface water samples were collected from the stormwater drainage ditch in PRL 9. Analytical results from these samples indicate that six PFCs were detected in 09-SW01 and 09-SW02 at concentrations above the laboratory limit with two compounds found at concentrations exceeding USEPA Drinking Water HA. PFOS was detected at a concentration of 3.97 and 3.76 μ g/L for 09-SW01 and 09-SW02 respectively. PFOA was detected at a concentration of 0.127 and 0.149 μ g/L for 09-SW01 and 09-SW02 respectively. Combined PFOS and PFOA were found to be at concentrations of 4.097 and 3.909 μ g/L for 09SW01 and 09SW02 respectively. Five PFCs were detected in 09SW03 at concentrations above the laboratory limit with one compound found at concentrations exceeding USEPA Drinking Water HA. PFOS was detected at a concentration of 0.628 μ g/L. Combined PFOS and PFOA were found to be at concentrations of 0.682 μ g/L.

Comparisons of analytical results to applicable criteria are presented on Table 6. The temporary

monitoring well location showing detected compounds is illustrated on Figure 9.

PRL 11: Stormwater Pond

8.1.19 PRL 11 Surface Sediment Analytical Results

Two surface sediment samples were collected from the edge of the stormwater pond in PRL 11. Analytical results from these samples indicate PFCs were detected above the laboratory reporting level; however, no compounds exceeded the screening criteria in the two samples collected from PRL 11.

Comparisons of analytical results to applicable screening criteria are presented on **Table 5**. The soil boring locations showing detected compounds are depicted on **Figure 9**.

8.1.20 PRL 11 Surface Water Analytical Results

Three surface water samples (including one duplicate) were collected from the stormwater pond in PRL 11. Analytical results from these samples indicate that five PFCs were detected in sample 11SW01 and six were detected in its duplicate SW-DUP0001 at concentrations above the laboratory limit with two compounds found at concentrations exceeding USEPA Drinking Water HA. PFOS was detected at a concentration of 0.368 and 0.385 μ g/L for 11-SW01 and SW-DUP001 respectively. PFOA was detected at a concentration of 0.0807 and 0.0872 μ g/L for 11-SW01 and SW-DUP001 respectively. Combined PFOS and PFOA were found to be at concentrations of 0.4487 and 0.4722 μ g/L for 11SW01 and SW-DUP001 respectively. Five PFCs were detected in 11-SW02 at concentrations above the laboratory limit with one compound found at concentrations exceeding USEPA Drinking Water HA. PFOS was detected at a concentration of 0.345 μ g/L. Combined PFOS and PFOA were found to be at concentrations of 0.3705 μ g/L.

Comparisons of analytical results to applicable criteria are presented on **Table 6**. The sampling locations showing detected compounds is illustrated on **Figure 9**.

8.1.21 PRL 11 Groundwater Analytical Results

In May 2018, one groundwater sample was collected from TW011.A and analyzed as described in **Section 6.12.3**. Analytical results from the groundwater sample indicates that six PFCs were detected at concentrations above the laboratory detection limit, with two compounds exceeding USEPA Drinking Water HA. PFOS was detected at a concentration of 0.461 μ g/L and PFOA was detected at a concentration of 0.0845 μ g/L. The combined PFOS and PFOA was reported as 0.5455 μ g/L.

Comparisons of analytical results to applicable criteria are presented on Table 4. The temporary

monitoring well location showing detected compounds is illustrated on Figure 9.

Base Boundary Wells: TWBB01-TWBB05

8.1.22 Groundwater Analytical Results

One Base Boundary well (TWBB02) was sampled in September 2017 and three Base Boundary

wells (TWBB01.A, TWBB04.A, and TWBB05.A) were sampled in May 2018. Base Boundary well

TWBB03, which was found to be dry in 2017, was not able to be replaced as three attempts to

find groundwater were unsuccessful in 2018. Analytical results from the Base Boundary wells

indicate that between two and five PFCs were detected at concentrations above the laboratory

detection limit. However, no concentrations were found to exceed USEPA Drinking Water HA

standards in the Base Boundary wells.

Comparisons of analytical results to applicable criteria are presented on Table 4. The temporary

monitoring well location showing detected compounds is illustrated on Figure 10.

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9.0 CONCLUSIONS/RECOMMENDATIONS

This section presents the SI conclusions and recommendations at each PRL. The

recommendations are based upon data collected by Amec Foster Wheeler during this SI, and an

evaluation of results compared to applicable screening criteria.

PRL 1: Current FTA

A 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 PRL 1. However, PFCs were detected at concentrations above

laboratory reporting limits.

A review of groundwater data compared to screening criteria indicates exceedances of the

USEPA Drinking Water HA for PFOS and PFOA exists downgradient of PRL 1. This determination

was made based on concentrations detected in TW01.A, which was installed in May 2018 to

assess groundwater conditions downgradient from PRL 1.

Based on the SI results, the following is recommended for PRL 1:

Additional investigations to further evaluate concentrations of PFCs in groundwater. This

should include a source evaluation and delineation to determine the nature and extent of

the release.

PRL 2: Former FTA (IRP Site 4)

A review of soil analytical data compared to screening criteria indicates there are no USEPA RSL

exceedances for PFBS, and no USAF Guidance screening level exceedances for PFOS or PFOA

within the stormwater drainage basin. PFCs were detected at concentrations above laboratory

reporting limits, but below HA criteria.

A review of groundwater data compared to screening criteria indicates exceedances of the

USEPA Drinking Water HA for PFOS and PFOA exists downgradient of PRL 2. This determination

was made based on concentrations detected in TW02, which was installed to assess groundwater

conditions downgradient from PRL 2.

Based on the SI results, the following is recommended for PRL 2:

Additional investigations to further evaluate concentrations of PFCs in groundwater. This

should include a source evaluation and delineation to determine the nature and extent of

the release.

PRL 3: Main Hangar Building (Building 734)

A review of soil analytical data compared to screening criteria indicates there are no USEPA RSL

exceedances for PFBS, and no USAF Guidance screening level exceedances for PFOS or PFOA

at PRL 3. PFCs were detected at concentrations above laboratory reporting limits, but below HA

criteria.

A review of groundwater data compared to screening criteria indicates exceedances of the

USEPA Drinking Water HA for PFOS and PFOA exists downgradient of PRL 3. This determination

was made based on concentrations detected in TW03.A, which was installed in May 2018 to

assess groundwater conditions downgradient from PRL 3.

Based on the SI results, the following is recommended for PRL 3:

Additional investigations to further evaluate concentrations of PFCs in groundwater. This

should include a source evaluation and delineation to determine the nature and extent of

the release.

PRL 4: Fuel Cell Maintenance Hangar (Building 632)

A review of soil analytical data compared to screening criteria indicates there are no USEPA RSL

exceedances for PFBS, and no USAF Guidance screening level exceedances for PFOS or PFOA

at PRL 4. PFCs were detected at concentrations above laboratory reporting limits, but below HA

criteria.

A review of groundwater data compared to screening criteria indicates exceedances of the

USEPA Drinking Water HA for PFOS and PFOA exists downgradient of PRL 4. This determination

was made based on concentrations detected in TW04, which was installed to assess groundwater

conditions downgradient from PRL 4.

Based on the SI results, the following is recommended for PRL 4:

· Additional investigations to further evaluate concentrations of PFC in groundwater. This

should include a source evaluation and delineation to determine the nature and extent of

the release.

PRL 5: Recent Spill at East CE Cold Storage

A review of soil analytical data compared to screening criteria indicates there are no USEPA RSL exceedances for PFBS, and no USAF Guidance screening level exceedances for PFOS or PFOA at PRL 5. However, PFCs were detected at concentrations above laboratory reporting limits.

A review of groundwater data compared to screening criteria indicates exceedances of the USEPA Drinking Water HA for PFOS and PFOA exists downgradient of PRL 5. This determination was made based on concentrations observed in TW05, which was installed to assess groundwater conditions downgradient from PRL 5. Given that groundwater flows to the south, groundwater with PFC concentrations above applicable screening criteria is potentially present off-Base, to the south of PRL 5.

Based on the SI results, the following is recommended for PRL 5:

Additional investigations to further evaluate concentrations of PFCs in groundwater. This
should include a source evaluation and delineation to determine the nature and extent of
the release.

PRL 6: Fire Station (Building 536)

A review of soil analytical data compared to screening criteria indicates there are no USEPA RSL exceedances for PFBS, and no USAF Guidance screening level exceedances for PFOS or PFOA at PRL 6. However, PFCs were detected at concentrations above laboratory reporting limits.

A review of groundwater data compared to screening criteria indicates exceedances of the USEPA Drinking Water HA for PFOS and PFOA exists downgradient of PRL 6. This determination was made based on concentrations detected in TW06.A, which was installed in May 2018 to assess groundwater conditions downgradient from PRL 6.

Based on the SI results, the following is recommended for PRL 6:

Additional investigations to further evaluate concentrations of PFCs in groundwater. This
should include a source evaluation and delineation to determine the nature and extent of
the release.

PRL 7: Aerial Port (Building 836)

A review of soil analytical data compared to screening criteria indicates there are no USEPA RSL exceedances for PFBS, and no USAF Guidance screening level exceedances for PFOS or PFOA

at PRL 7. However, PFCs were detected at concentrations above laboratory reporting limits.

A review of groundwater data compared to screening criteria indicates exceedances of the USEPA Drinking Water HA for PFOS exists downgradient of PRL 7. This determination was made based on concentrations observed in TW07, which was installed to assess groundwater conditions downgradient from PRL 7

Based on the SI results, the following is recommended for PRL 7:

Additional investigations to further evaluate concentrations of PFCs in groundwater. This
should include a source evaluation and delineation to determine the nature and extent of
the release.

PRL 8: Nozzle Spray Testing Area

A review of soil analytical data compared to screening criteria indicates an exceedance of USEPA RSL for PFOS in the upper soil at PRL 8. This determination was made based on the concentrations observed in the shallow soil (08SB03-0.5-1.0) at this PRL. However, PFCs were detected at concentrations above laboratory reporting limits.

A review of groundwater data compared to screening criteria indicates exceedances of the USEPA Drinking Water HA for PFOS and PFOA exists downgradient of PRL 8. This determination was made based on concentrations detected in TW08.A, which was installed in May 2018 to assess groundwater conditions downgradient from PRL 8.

Based on the SI results, the following is recommended for PRL 8:

- Additional investigations to further evaluate concentrations of PFCs in groundwater. This
 should include a source evaluation and delineation to determine the nature and extent of
 the release.
- Soil investigation to determine extent of PFC contamination within the footprint of the PRL.

PRL 9: Stormwater Drainage Ditch

A review of sediment analytical data compared to screening criteria indicates there are no USEPA RSL exceedances for PFBS, and no USAF Guidance screening level exceedances for PFOS or PFOA at PRL 9.

A review of surface water data compared to screening criteria indicates exceedances of the USEPA Drinking Water HA for PFOS and PFOA exists downgradient of PRL 9. This determination

was made based on concentrations observed in surface water samples collected in the

stormwater drainage ditch at PRL 9.

Based on the SI results, the following is recommended for PRL 9:

· Additional investigations to further evaluate concentrations of PFCs in surface water and

groundwater. This should include a source evaluation and delineation to determine the

nature and extent of the release.

PRL 11: Stormwater Pond

A review of sediment analytical data compared to screening criteria indicates there are no USEPA

RSL exceedances for PFBS, and no USAF Guidance screening level exceedances for PFOS or

PFOA at PRL 11.

A review of surface water data compared to screening criteria indicates exceedances of the

USEPA Drinking Water HA for PFOS and PFOA exists downgradient of PRL 11. This

determination was made based on concentrations observed in surface water samples collected

in the stormwater pond of PRL 11.

A review of groundwater data compared to screening criteria indicates exceedances of the

USEPA Drinking Water HA for PFOS and PFOA exists downgradient of PRL 11. This

determination was made based on concentrations detected in TW011.A, which was installed in

May 2018 to assess groundwater conditions downgradient from PRL 11.

Based on the SI results, the following is recommended for PRL 11:

· Additional investigations to further evaluate concentrations of PFC in surface water and

groundwater. This should include a source evaluation and delineation to determine the

nature and extent of the release.

Base Boundary

A review of groundwater analytical data compared to screening criteria indicates there are no

USEPA RSL exceedances for PFBS, and no USAF Guidance screening level exceedances for

PFOS or PFOA at the Base Boundary. This determination was made based on the concentrations

detected in Base Boundary wells TWBB01.A, TWBB02, TWBB04.A, and TWBB05.A which were

installed in 2017 and 2018.

PRL Sites Summary

Additional investigations are recommended for each of the ten PRLs. PFCs were detected at all PRLs including a sample that exceeded screening criteria collected in PRL 8. Based on these findings, Amec Foster Wheeler recommends additional soil investigations in all PRLs to delineate the nature and extent of potential source areas. Likewise, SI activities determined that the 10 PRLs have USEPA Drinking Water HA exceedances. Based on these findings Amec Foster Wheeler recommends additional investigations at the 10 PRLs to further evaluate groundwater conditions. These recommendations are summarized in **Table 8**.

Table 8: Screening Criteria Exceedances and Recommendations

PRL	Screenir	ng Criteria	Exceeda	ance	200000000000000000000000000000000000000
PKL	Soil	GW	SD	sw	Recommendation
1		X			GW investigation to determine the nature and extent of the confirmed PFC release.
2		×			GW investigation to determine the nature and extent of the confirmed PFC release.
3		×			GW investigation to determine the nature and extent of the confirmed PFC release.
4		×			GW investigation to determine the nature and extent of the confirmed PFC release.
5		×			GW investigation to determine the nature and extent of the confirmed PFC release.
6		×			GW investigation to determine the nature and extent of the confirmed PFC release.
7		×			GW investigation to determine the nature and extent of the confirmed PFC release.
8	Х	х			Soil investigation to determine extent of PFC contamination within the footprint of the PRL. GW investigation to determine the nature and extent of the confirmed PFC release.
9				х	Surface and GW investigation to determine the nature and extent of the confirmed PFC release.
11		×		×	Surface and GW investigation to determine the nature and extent of the confirmed PFC release.
Base Boundary					PFCs were not detected at levels exceeding HA criteria in the Base Boundary wells.

Notes:

GW = Groundwater SW = Surface Water

SD = Sediment

X – Screening criteria exceedance PFC - Perfluorinated Compound PRL- Potential Release Location

10.0 REFERENCES

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- USEPA, 2016a. Drinking Water Health Advisory for Perfluorooctane Sulfonate (PFOS), EPA 822-R-16-004. United States Environmental Protection Agency, May 2016.

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TABLES

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Table 1 Preliminary Assessment Recommendations

FY16 Phase I Regional Site Inspections for Perflourinated Compounds 182nd Airlift Wing, Illinois Air National Guard Greater Peoria Airport, Peoria, Illinois

	List of PRLs	
PRL	Use	Recommendation
. Current FTA	Current fire training area	Soil and groundwater inspection
2. Former FTA (IRP Site 4)	Former fire training area	Soil and groundwater inspection
3. Main Hangar Bldg (Bldg. 734)	Hangar with AFFF FSS utilizing a 1,000 gallon AST	Soil and groundwater inspection
4. Fuel Cell Maintenance Hangar (Bldg. 632)	Maintenance hangar with AFFF FSS utilizing a 500 gallon AST	Soil and groundwater inspection
5. Recent Spill at East CE Cold Storage	Storage area where a 55-gallon drum of AFFF was spilled	Soil and groundwater inspection
6. Fire Station (Bldg. 536)	Fire station where vehicles with AFFF are stored	Soil and groundwater inspection
7. Aerial Port (Bldg. 836)	Previously used as maintenance hangar with AFFF FSS	Soil and groundwater inspection
8. Nozzle Spray Testing Area	Area where nozzles are tested using AFFFF	Soil and groundwater inspection
Stormwater Drainage Ditch	Drainage pathway for north portion of the base including suspect PRLs	Soil and groundwater inspection
11. Stormwater Pond	Collection area for stormwater draining off of the southern portion of the Base	Soil and groundwater inspection

Notes:

Recommendations provided by BB&E, Inc. in the Final Perfluorinated Compounds Preliminary Assessment Site Visit Report (BB&E, 2016).

Table 2 Summary of Site Inspection Activities

FY16 Phase I Regional Site Inspections for Perflourinated Compounds 182nd Airlift Wing, Illinois Air National Guard Greater Peoria Airport, Peoria, Illinois

PRL Name	Analyzed Parameters	Soil Borings	Soil Samples	Groundwater Samples Existing Wells	Groundwater Samples Temporary Wells	Surface Water Samples	Sediment Samples
Current FTA	PFCs	3	7	0	0	0	0
Former FTA (IRP Site 4)	PFCs	3	7	0	1	0	0
3. Main Hangar Bldg (Bldg. 734)	PFCs	3	6	0	0	0	0
Fuel Cell Maintenance Hangar (Bldg. 632)	PFCs	3	7	0	2	0	0
Recent Spill at East CE Cold Storage	PFCs	3	7	0	1	0	0
6. Fire Station (Bldg. 536)	PFCs	3	7	0	0	0	0
7. Aerial Port (Bldg. 836)	PFCs	3	6	0	1	0	0
Nozzle Spray Testing Area	PFCs	3	6	0	0	0	0
Stormwater Drainage Ditch	PFCs	0	0	0	0	3	4
11. Stormwater Pond	PFCs	1	0	0	0	3	2

Notes:

Soil, groundwater, and sediment samples were collected and analyzed for the PFCs listed on the USEPA's Third Unregulated Contaminant Monitoring Rule (UCMR3) list.

Perfluorononanoic acid (PFNA)	NA	mg/kg	0.000991 U	0.000000	0.00103 U	0.000981 U	U 36600000	0.000381 J	0.00102 U	0.000955 U	0.000972 U	0.00102 U	0.00101 U	0.000976 U	U.000996 U	0.000962 U
ecid (PFHxS)	NA	mg/kg	-		0.00103 U 0.		0.0035 0.0	0.012 0.0	Н	_	0.000277 J 0.0		Э	0.0149 0.0	n	. =70
Perfluorohexanesulfonic	z	mg	0.00999	0.00907		0.00493	0.0	0.	0.00207	0.000293		0.00933	0.00101	0.0	0.000996	0.00552
Perfluoroheptanoic acid (AqHTq)	NA	mg/kg	0.000991 U	0.000338 J	0.00103 U	0.000981 U	0.000995 U	0.00102 U	0.000377 J	0.000955 U	0.000972 U	0.00102 U	0.00101 U	0.000976 U	0.000996 U	0.000962 U
Perfluorobutanesulfonic acid	13002	mg/kg	0.000298 J	0.000391 J	0.00103 U	0.000356 J	U 56600000	0.000535 J	0.00102 U	0.000955 U	0.000972 U	0.00102 U	0.00101 U	0.000976 U	U 966000.0	0.000962 U
Perfluorooctanoic acid (AO49)	1.261	mg/kg	0.00044 J	0.000546 J	0.00103 U	0.000981 U	0,000095 U	0.00075 J	0.000518 J	0.000955 U	0.000972 U	0.016	0.00101 U	0.00732	U 966000'0	0.0292
Perfluorooctanesulfonic acid (2049)	1.261	mg/kg	0.0944 J	0.218	0.000312 J	0.124	0.00112 J	0.104	0.271	0.00492 J	0.00775 J	0.00124 J	0.00175 J	0.000976 U	0.00367	0.0056
Analyte:	Screening Level:	Sample Type	FD	z	z	z	z	z	z	z	FD	z	z	z	z	z
	Screen	Sample Depth (ft.)	0.5-1.0	1.0-1.5	14.5 15.0	1.0-1.5	14.5-15.0	1.0-1.5	14.5-15.0	0.5-1.0	0.5-1.0	5.0-5.5	0.5-1.0	5.0-5.5	0.5-1.0	5.0-5.5
	10	Sample Date	20-Sep-17	20-Sep-17	20 Sep 17	20-Sep-17	20-Sep-17	20-Sep-17	20-Sep-17	20-Sep-17	20-Sep-17	20-Sep-17	20-Sep-17	20-Sep-17	20-Sep-17	20-Sep-17
		Sample ID	GPEOR-SO-DUP005-092017	GPEOR-01-SB01-1-1,5	GPEOR 01 SB01 14.5 15	GPEOR-01-SB02-1-1.5	GPEOR-01-SB02-14.5-15	GPEOR-01-SB03-1-1.5	GPEOR-01-SB03-14.5-15	GPEOR-02-SB01-0.5-1	GPEOR-SO-DUP001-092017	GPEOR-02-SB01-5-5.5	GPEOR-02-SB02-0.5-1	GPEOR-02-SB02-5-5.5	GPEOR-02-SB03-0.5-1	GPEOR-02-SB03-5-5.5
	8	Location	GF	015801		015803		015803			025B01 GP			025B02	coasco	Occabus
		PRL L		_		01	- 2						05			100

					Analyte:	Perfluorooctanesulfonic acid (PFOS)	bise sionetsooroulh99 (AO79)	Perfluorobutanesulfonic acid (PFBS)	Perfluoroheptanoic acid (AqH49)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorononoic acid (ANA9)
				Screen	Screening Level:	1.261	1.261	1300²	NA	NA	NA
	035801	GPEOR-03-SB01-0.5-1	21-Sep-17	0.5-1.0	z	0.00599	0.000285 J	0.000963 U	0.000963 U	0.000807 J	0.000963 U
		GPEOR-03-SB01-10-10.5	21-Sep-17	10.0-10.5	z	0.000919 J	0.001 U	0.001 U	0.001 U	0.000335 J	0.001 U
03	035802	GPEOR-03-SB02-0.5-1	21-Sep-17	0.5-1.0	z	0.0406	0.000392 J	0.000523 J	0.000483 J	0.00614	U 766000.0
		GPEOR-03-SB02-11.5-12	21-Sep-17	11.5-12.0	z	0.000846 J	0.00103 U	0.00103 U	0.00103 U	0.00103 U	0.00103 U
	035803	GPEOR-03-SB03-0.5-1	21-Sep-17	0.5-1.0	z	0.00934	0.000971 U	0.000971 U	0.000971 U	0.00162 J	0.000971 U
		GPEOR-03-5803-14.5-15	21-Sep-17	14.5-15.0	z	0.00103 U	0.00103 U	0.00103 U	0.00103 U	0.00103 U	0.00103 U
	045801	GPEOR-04-SB01-0.5-1	19-Sep-17	0.5-1.0	z	0.00418	0.000952 U	0.000952 U	0.000952 U	0.00146 J	0.000952 U
	109540	GPEOR-04-SB01-6-7	19-Sep-17	6.0-7.0	z	0.00477	0.000996 U	0.000996 U	0.000996 U	0.000996 U	0.000996 U
	COASBO	GPEOR-04-SB02-0.5-1	19-Sep-17	0.5-1.0	z	0.00134 J	0.000992 U	0.000992 U	0.000992 U	0.000992 U	0.000992 U
8	700510	GPEOR-04-SB02-14.5-15	19-Sep-17	14.5-15.0	z	0.000289 J	0.000962 U	0.000962 U	0.000962 U	0.000962 U	0.000962 U
		GPEOR-04-SB03-0.5-1	20-Sep-17	0.5-1.0	z	0.00304	0.00105 U	0.00105 U	0.00105 U	0.000679 J	0.00105 U
	045803	GPEOR-04-SB03-5-5.5	20-Sep-17	5.0-5.5	z	0.000981 U	0.00058 J	0.000981 U	0.000981 U	0.00192 J	0.000981 U
		GPEOR-SO-DUP002-092017	20-Sep-17	5.0-5.5	FD	0.000356 J	0.000564 J	U 766000.0	0.000997 U	0.00206	U 766000.0

Screening Level:
19-Sep-17 0.5-1.0
19-Sep-17 12.5-13.0
19-Sep-17 0.5-1.0
19-Sep-17 4.5-5.0
19-Sep-17 0.5-1.0
19-Sep-17 0.5-1.0
19-Sep-17 3.5-4.0
21-Sep-17 0.5-1.0
21-Sep-17 0.5-1.0
21-Sep-17 14.5-15.0
21-Sep-17 0.5-1.0
21-Sep-17 9.5-10.0
21-Sep-17 0.5-1.0
21-Sep-17 6.5-7.0

		Analyte:	r. erfluorooctanesulfonic acio (PFOS)	Perfluorooctanoic acid (AO79)	erfluorobutanesulfonic acid	Perfluoroheptanoic acid (AqH٦٩)	Perfluorohexanesulfonic acid (PFHxS)	Perfluoronononic acid (AN49)
	Scre	Screening Level:		1.261	1300²	NA	NA	NA
	19-Sep-17 1.0-1.5	z	0.000371 J	U 656000.0	0.0000939 U	0.000939 U	U 686000.0	0.000939 U
1.7	19-Sep-17 11.5-12.0	N 0.	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
e e	19-Sep-17 1.5-2.0	Z	0.0000372 J	U 786000.0	U 786000.0	0.000987 U	0.000987 U	U 7860000
e d	19-Sep-17 14.5-15.0	N 0.	U 766000.0	U 766000.0	U 766000.0	U 766000.0	U 766000.0	U 766000.0
19-Sep-17	17 1.0-1.5	z	0.000933 U	U 886000.0	U.0000933 UJ	0.000933 U	0.000933 U	0.000933 U
19-Sep-17	17 14.5-15.0	N 0.	0.001 U	U 100.0	U 100.0	0.001 U	0.001 U	0.001 U
20-Sep-17	17 0.5-1.0	Z	0.463	0.0035	0.0011 J	0.000844 J	0.05	0.000927 J
20-Sep-17	17 14.5-15.0	N 0.	0.194	0.000613 J	0.00129 J	0.000346 J	0.0325	U 766000.0
20-Sep-17	17 0.5-1.0	Z	0.0981	0.000984 U	0.000984 U	0.000984 U	0.00466	0.000984 U
20-Sep-17	7 14.5-15.0	N 0.	0.03	0.000971 U	0.00122 J	0.00058 J	0.0188	0.000971 U
20-Sep-17	7 0.5-1.0	z	2.41 J	0.00887 J	0.00334 J	0.00147 J	0.175 J	0.0015 J
20-Sep-17	14.5-15.0	Z 0:	0.302	0.000733 J	0.000942 J	0.000994 U	0.0227	0.000994 U

Summary of Soil Analytical Testing Results

FY16 Phase I Regional Site Inspections for Perfluorinated Compounds 182nd Airlift Wing, Illinois Air National Guard

Greater Peoria Airport, Peoria, Illinois

Perfluorononanoic acid (AN79)	NA
Perfluorohexanesulfonic SzH79) bios	NA
Perfluoroheptanoic acid (AqH1q)	NA
Perfluorobutanesulfonic acid (2849)	1300²
Perfluorooctanoic acid (AO49)	1.261
Perfluorooctanesulfonic acid (PPOS)	1.261
Analyte	Screening Level:

Notes:

Light blue = Exceeds Screening Level

FD - Field Duplicate Sample

ID - Identification

J - The analyte was positively identified and the associated numerical value it the approximate concentration in the sample.

mg/kg - milligrams per kilogram

MECDC - Maine Center for Disease Control and Prevention

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.

PFAS analysis by Modified USEPA Method 537 using Liquid Chromatography and Tandem Mass Spectrometry

¹ Screening levels calculated using the USEPA Regional Screening Level calculator [https://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search]

² USEPA Residential Screening Levels (June 2017) [https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables-june-2017]

Summary of Surface Water Analytical Testing Results

FY16 Phase I Regional Site Inspections for Perfluorinated Compounds 182nd Airlift Wing, Illinois Air National Guard

Greater Peoria Airport, Peoria, Illinois

ample Date -Sep- -Sep- -Sep- -Sep- -Sep-		Perfluorooctanesulfonic acid (PFOS) Perfluorooctanoic acid (PFOA) Perfluorobutanesulfonic acid (PFHPA) Perfluorobutanesulfonic acid (PFHPA) Perfluoroheptanoic acid (PFHPA) Perfluoroheptanoic acid (PFHPA) Perfluoroheptanoic acid (PFHPA)	Health Advisory: 0.07 0.07 0.07 NA NA NA NA	NA NA	Sample Sample Sample Sample μg/L μg/L μg/L μg/L μg/L μg/L μg/L	-5ep-17 0.0-1.0 N 3.97 0.127 4.097 0.112 0.0603 0.916 0.0146	20-Sep-17 0.0-1.0 N 3.76 0.149 3.909 0.318 0.119 2.18 0.0131	-Sep-17 0.0-1.0 N 0.628 0.054 0.682 0.209 0.0523 1.1 0.0053 U	20-Sep-17 0.0-1.0 N 0.368 0.0807 0.4487 0.0467 0.0469 0.362 0.00543 U	-Sep-17 0.0-1.0 FD 0.385 0.0872 0.4722 0.0556 0.0462 0.351 0.0035 J	20-Sep-17 0.0-1.0 N 0.345 0.0255 0.3705 0.0552 0.0274 0.414 0.00539 U
		Analy	Health Adviso	EPA RSL Tapwate	Sample Depth (ft.)	0.0-1.0	0.0-1.0	0.0-1.0	0.0-1.0	0.0-1.0	0.0-1.0
Sample ID GPEOR-09-SW01-0-1 GPEOR-09-SW02-0-1 GPEOR-09-SW03-0-1 GPEOR-11-SW01-0-1 GPEOR-11-SW01-0-1					Location	095W01	09SW02	E0WS60		115W01	11SW02
	Location 095W01 095W02 095W03 115W01				PRL		60			11	1/2

Notes:

Light Shaded Blue - Exceeds Health Advisory

FD - Field Duplicate Sample

D - Identification

N - Normal Field Sample

NA - Not applicable

PRL - Potential Release Location

PFAS analysis by Modified USEPA Method 537 using Liquid Chromatography and Tandem Mass Spectrometry ug/L - micrograms per liter

Health Advisory from USEPA Office of Water, 2016a and 2016b, Health Advisories (Has) for drinking water.

¹ USEPA Residential Screening Levels (June 2017) [https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables-june-2017]

	_	_				_			
Perfluorononanoic acid (PFNA)	NA	NA	Hg/L	0.00568 U	0.00815 J	0.0108	0.00269 J	0.00563 U	0.00568 U
Perfluorohexanesulfonic acid (PFHxS)	NA	NA	7/8н	1.37	1.98	1.92	56'5	0.129	0.231
Perfluoroheptanoic acid (PFHpA)	NA	NA	µg/L	0.0405	0.161	0.155	0.152	0.0139	0.0268
Perfluorobutanesulfonic acid (PFBS)	NA	400	µg/L	0.0502	0.214	0.173 J	1.11	0.0104	0.0399
PFOS+PFOA	0.07	AN	µg/L	0.536	7.948	7.45	6:009	0.206	0.0655
(AO19) bios oionstoooroulf199	0.07	NA	µg/L	0.366	0.128	0.13	0.319	0.02	0.0117
Perfluorooctanesulfonic acid (PFOS)	0.07	NA	µg/L	0.17	7.82	7.32	5.78	0.186	0.0538
Analyte:	Health Advisory:	owater!:	Sample Type	z	z	FD	N	z	Z
	Health A	EPA RSL Tapwater1:	Sample Depth (ft.)	0.0-0.0	0.0-0.0	0.0-0.0	3.5-4.0	0.0-0.0	0.0-0.0
			Sample Date	21-Sep-17	21-Sep-17	21-Sep-17	21-Sep-17	21-Sep-17	21-Sep-17
			Sample ID	GPEOR-GW-TW02-092117	GPEOR-GW-TW04-092117	GPEOR-GW-DUP001-092117	GPEOR-GW-TW05-092117	GPEOR-GW-TW07-092117	GPEOR-GW-TWBB02-092117
			Location	TW-02	TW-04		TW-05	TW-07	TWBB04
			PRL	02	04	ii G	50	20	BBW

Table 5

Summary of Groundwater Analytical Testing Results

FY16 Phase I Regional Site Inspections for Perfluorinated Compounds 182nd Airlift Wing, Illinois Air National Guard Greater Peoria Airport, Peoria, Illinois

Votos:

Light Shaded Blue - Exceeds Health Advisory

FD - Field Duplicate Sample

ft - feet

ID - Identification

J - The analyte was positively identified and the associated numerical value it the approximate concentration 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.

ug/L - micrograms per liter

PFOS+PFOA - Co-occurance of PFOA and PFOS (PFOA + PFOS) in aqueous samples is reported using the following guidelines:

If both PFOA and PFOS are detected at of 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" respresent Not Applicable.

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.

USEPA Residential Screening Levels (June 2017) [https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables-june-2017]

Table 6
Summary of Sediment Analytical Testing Results
FY16 Phase I Regional Site Inspections for Perfluorinated Compounds

182nd Airlift Wing, Illinois Air National Guard Greater Peoria Airoort, Peoria, Illinois

	_	_		_		_		_
Perfluorononanoic acid (PFNA)	NA	mg/kg	0.000328 J	0.00103 U	0.00103 U	0.000964 U	0.00046 J	0.00102 U
Perfluorohexanesulfonic acid (PFHxS)	NA	mg/kg	0.00388	0.00036 J	0.001	0.0014 J	0.0182	0.0000501 J
Perfluoroheptanoic acid (AqH٦٩)	NA	mg/kg	0.000547 J	0.00103 U	0.00103 U	0.000964 U	0.000739 J	0.00102 U
Perfluorobutanesulfonic acid (PFBS)	NA	mg/kg	0.00104 U	0.00103 U	0.00103 U	0.000964 U	0.000418 J	0.00102 U
Perfluorooctanoic acid (AO79)	1.261	mg/kg	0.000549 J	0.00103 U	0.00103 U	0.000964 U	0.00348	0.00102 U
Perfluorooctanesulfonic acid (PFOS)	1.261	mg/kg	0.026	0.00168 J	0.00472	0.00546	0.0711	0.00273
Analyte:	g Level:	Sample Type	z	z	z	FD	_	
	nin	Sai				ш	Z	z
	Screening Level:		0.0-1.0	0.0-1.0	0.0-1.0	0.0-1.0	0.0-1.0	0.0-1.0
	Screenin	Septh	0.40			28.0		
	Screenin	Sample Depth (ft.)	0.0-1.0	0.0-1.0	0.0-1.0	0.0-1.0	0.0-1.0	0.0-1.0
	Screenin	Sample Sample Depth Date (ft.)	20-Sep-17 0.0-1.0	20-Sep-17 0.0-1.0	GPEOR-09-SD03-0-1 20-Sep-17 0.0-1.0	20-Sep-17 0.0-1.0	20-Sep-17 0.0-1.0	20-Sep-17 0.0-1.0

Notes:

FD - Field Duplicate Sample

ft - feet

ID - Identification

J - The analyte was positively identified and the associated numerical value it the approximate concentration in the sample.

mg/kg - milligrams per kilogram

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.

USEPA - U.S. Environmental Protection Agency

PFAS analysis by Modified USEPA Method 537 using Liquid Chromatography and Tandem Mass Spectrometry

¹ Screening levels calculated using the USEPA Regional Screening Level calculator [https://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search]

Table 7 Screening Criteria Exeedances and Recommendations

FY16 Phase I Regional Site Inspections for Perflourinated Compounds 182nd Airlift Wing, Illinois Air National Guard Greater Peoria Airport, Peoria, Illinois

Parameter	Chemical Abstract	EPA Reg Screening Le (June 2	evel Table	Air Force Guidance for Soils and	EPA Health Advisory Drinking Water
ratameter	Number	Residential Soil (µg/kg)	Tap Water (µg/L)	Sediments ^b (µg/kg)	(Surface Water or Groundwater) (μg/L) ^c
Perfluorobutane sulfonate (PFBS)	375-73-5	1,300,000 ^d	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	0.07*

^a EPA Regional Screening Levels (USEPA, 2017).

EPA = U.S. Environmental Protection Agency

NL = not listed

^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 Perfluorocctanoic Acid (PFOA) and USEPA, 2016a. Drinking Water Health Advisory for Perfluorocctane 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.

^{*} Note: 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. Only groundwater was sampled during the SI, but analytical results have been compared to the tap water screening levels.

Table 8 Recommendations from Site Inspection

FY16 Phase I Regional Site Inspections for Perflourinated Compounds 182nd Airlift Wing, Illinois Air National Guard Greater Peoria Airport, Peoria, Illinois

	Screening Criteria Exceedance		Recommendations
PRL	Soil	GW	
1		×	Installation of monitoring well to determine the presence of potential PFC contamination at or exceeding screening criteria levels.
2		х	GW investigation to determine the nature and extent of the confirmed PFC release.
3		х	Installation of monitoring well to determine the presence of potential PFC contamination at or exceeding screening criteria levels.
4		×	GW investigation to determine the nature and extent of the confirmed PFC release.
5		×	GW investigation to determine the nature and extent of the confirmed PFC release.
6		×	Installation of monitoring well to determine the presence of potential PFC contamination at or exceeding screening criteria levels.
7		×	GW investigation to determine the nature and extent of the confirmed PFC release.
8	х	х	Soil investigation to determine extent of PFC contamination within the footprint of the PRL. Installation of monitoring well to determine the presence of potential PFC contamination at or exceeding screening criteria levels.
9		×	Surface and GW investigation to determine the nature and extent of the confirmed PFC release.
11		×	Surface and GW investigation to determine the nature and extent of the confirmed PFC release.

Notes:

GW = Groundwater

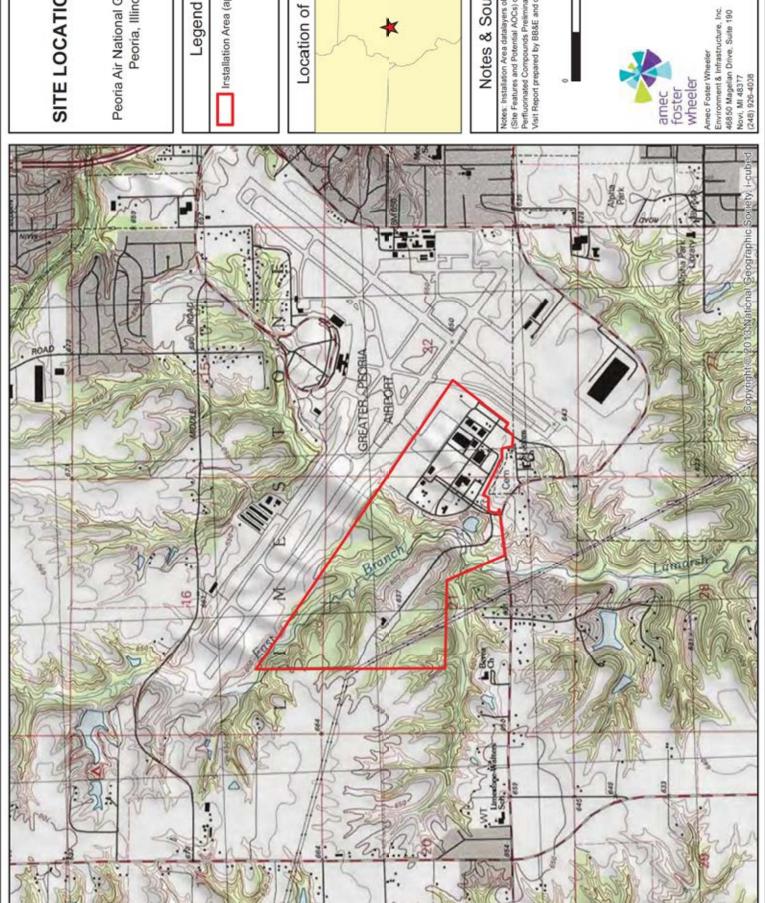
Inc. - Inconclusive based on results of SI

X – Screening criteria exceedance

PFC - Perfluorinated Compound

FIGURES

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SITE LOCATION MAP

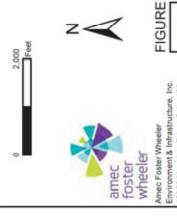
Peoria Air National Guard Base Peoria, Illinois

Installation Area (approximate)



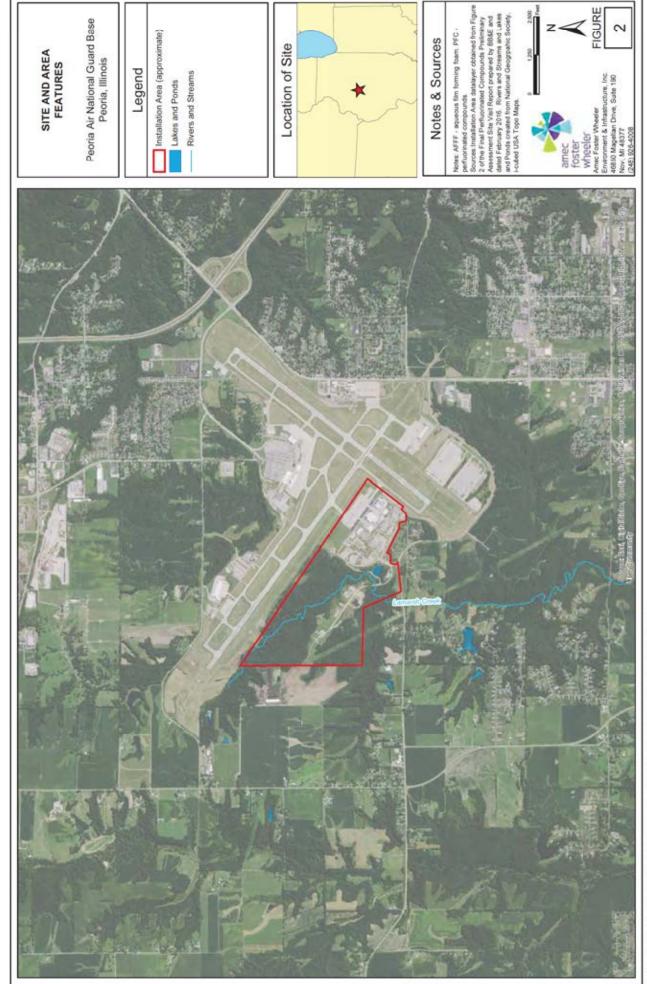
Notes & Sources

Notes: Installation Area datalayers obtained from Figure (Site Features and Potential AOCs) of the Final



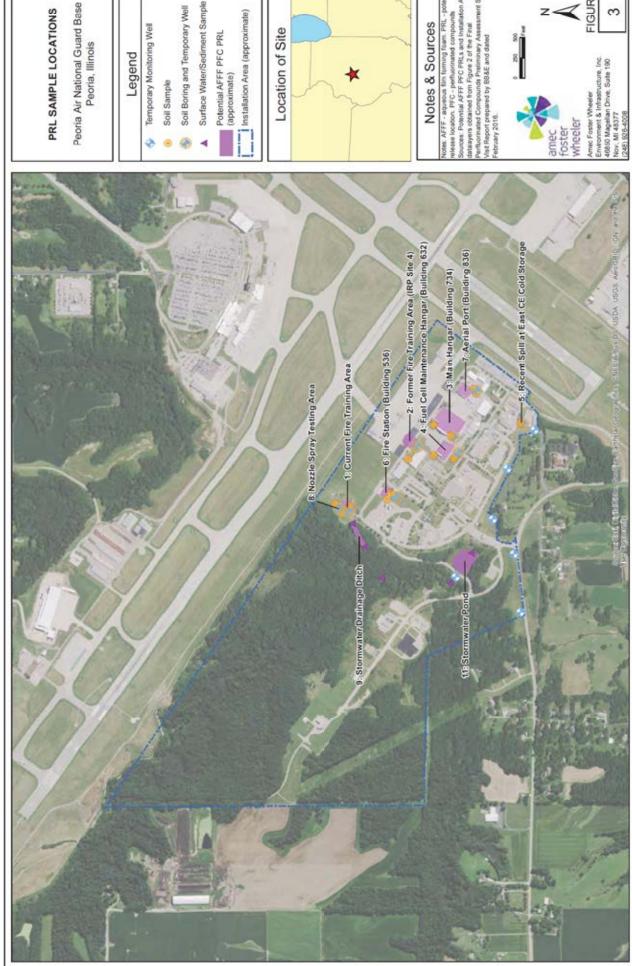
Environment & Infrastructure, Inc. 46850 Magellan Drive, Suite 190 Novi, MI 48377 (248) 926-4018

G:WANG\a_MXD\Peoria_291330006.016\Peoria_SiteLocus_170418.mxd April 18, 2017 DWN: amy stuyvesant CHKD: CJK



G:ANGIa_MXD/Peoria_291330006.016/Peoria_Stle_Features_170414.mxd April 18, 2017. DVNV. amy:stuyvesant.CHKD-CJK

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G:\AWG'su_MXD'Peoris_291330006.016/Draft_SL_ReportAliSampieLocations_171227 mxd_January_11,2018_DWr: amy stuyvesant CHKD: AKN

PRL SAMPLE LOCATIONS

Peoria Air National Guard Base Peoria, Illinois

Legend

Temporary Monitoring Well

Potential AFFF PFC PRL (approximate)

Installation Area (approximate)

Location of Site

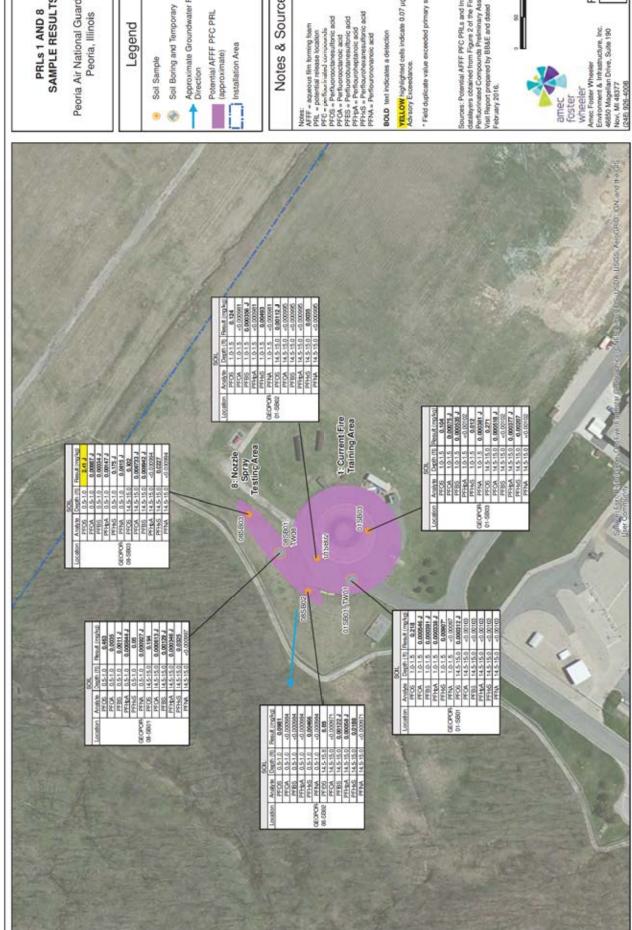
Notes & Sources

Notes: AFFF - aqueous film forming foam: PRU - potential neteste location: PFC - performinate compounds Sources: Potential AFF PFC PRUs and installation Area datasyers obtained from Figure 2 of the Final Performanced Compounds Preliminary Assessment Site Vist Report prepared by 88.6.E and dailed.



N≪ Negure

Amec Foster Wheeler Environment & Infrastructure, Inc. 4980 Magellan Drive, Suite 190 Novi, MI 48377 [248] 928-4008



G:ANGa_MXD/Peoria_291330006.0167braf_SI_Report/PRLs_1_8_AnalyticalResuls_171227_mid_December_27, 2017_DWN: amy.stuyvesant.CHKD: CJK

PRLs 1 AND 8 SAMPLE RESULTS

Peoria Air National Guard Base Peoria, Illinois

Legend

Soil Sample

Soil Boring and Temporary

Approximate Groundwater Flow Direction

Potential AFFF PFC PRIL (approximate)

Installation Area

Notes & Sources

BOLD text indicates a detection

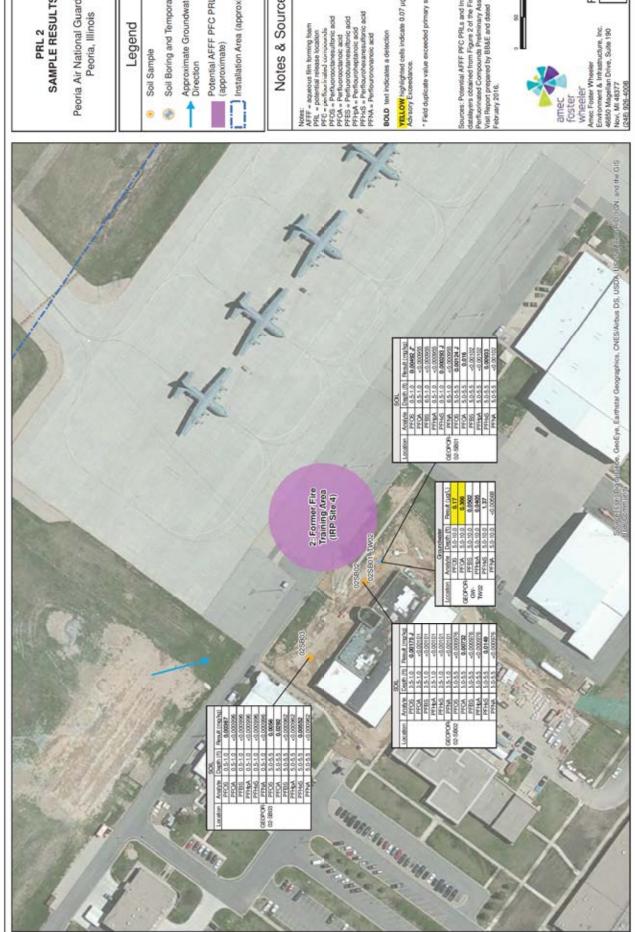
YELLOW highlighted cells indicate 0.07 µg/L Health Advisory Exceedance.

Field duplicate value exceeded primary sample

Sources: Potential AFFF PFC PRLs and Installation Area databases obtained from Figure 2 of the Final Perfluoring Perfluoring Perfluoring Perfluoring Perfluoring Perfluoring Visit Report proported by BBAE and dated February 2016.



Amec Foster Wheeler Environment & Intrastructure, Inc. 46850 Magellan Drive, Suite 190 Nov, MI 48377



G:ANGa_MXDPeoria_291330006.016/Draft_SI_Report/PRIs_2_AnalyticalResults_171227.mud December 28, 2017 DWN: amy stuyvesant CHKD: CJK

PRL 2 SAMPLE RESULTS

Peoria Air National Guard Base Peoria, Illinois

Legend

Soil Sample

Soil Boring and Temporary Well

Approximate Groundwater Flow Direction

Potential AFFF PFC PRL (approximate)

Installation Area (approximate)

Notes & Sources

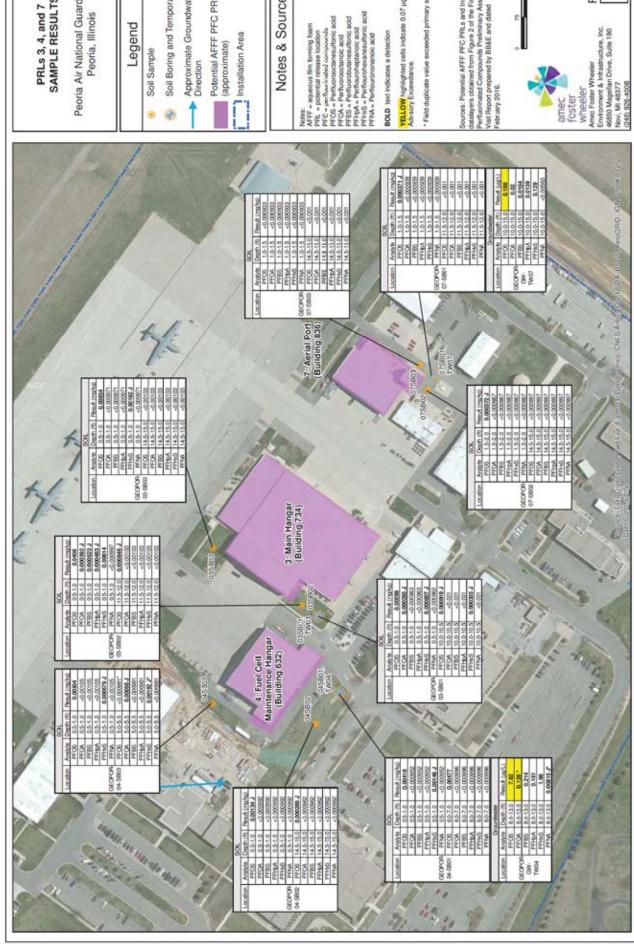
BOLD text indicates a detection

YELLOW highlighted cells indicate 0.07 µg/L Health Advisory Exceedance.

Sources: Potential APPF PFC PPLs and Installation Area detailayers obtained from Figure 2 of the Final Perflociment Compounds Preliminary Assessment Site Perflociment Prepared Compounds Preliminary Assessment Site February 2016.



Amec Foster Wheeler Environment & Intrastructure, Inc. 46850 Magellan Drive, Suite 190 Nov, MI 48377



G:ANGa_MXDiPeoria_291330006.016/Draft_SI_ReportPRLs_3, 4, 7_AnalyticalResults_171227.mvd December 28, 2017 DWN: amy stuyvesant CHKD: C.K.

PRLs 3, 4, and 7 SAMPLE RESULTS

Peoria Air National Guard Base Peoria, Illinois

Legend

Soil Sample

Soil Boring and Temporary Well

Approximate Groundwater Flow Direction

Potential AFFF PFC PRL

(approximate)

Installation Area

Notes & Sources

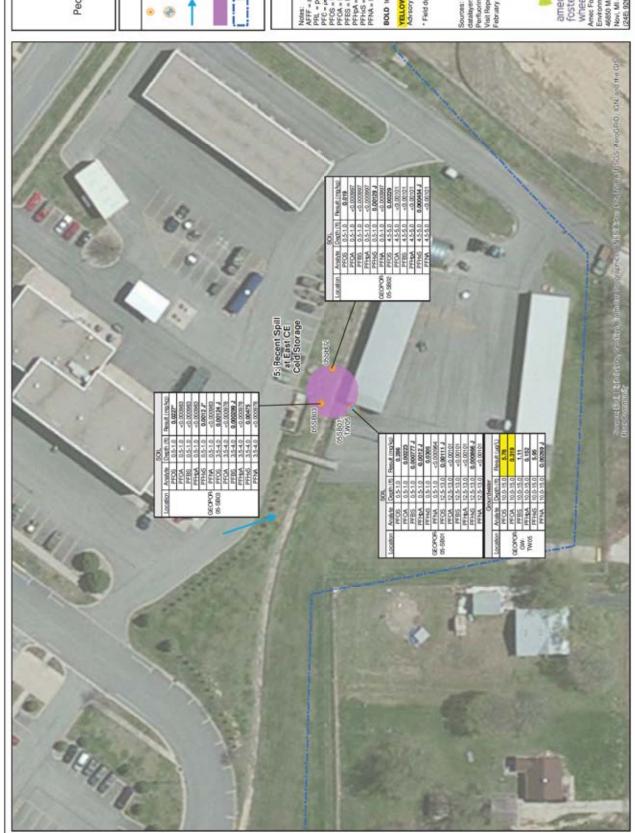
BOLD text indicates a detection

YELLOW highlighted cells indicate 0.07 µg/L Health Advisory Exceedance.

Field duplicate value exceeded primary sample

Sources: Potential APPF PFC PFLs and Installation Area datalayers obtained from Figure 2 of the Final Perflocing Perflocing Perflocing Perflocing Perflocing National Preferring National Prepared Compounds Preferring Assessment Site February 2016.

N FIGURE 9 amec foster
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Amec Foster Wheeler
Environment & Intrashucture, inc.
44550 Magettan Drive, Suite 190
Nov, Mil 48377.



G:ANGa, MXD:Peoria, 29133006.016/Draft, Si, ReportPRLa, S, AnalyticalResults, 171227.mvd December 28, 2017 DWN: any stuyvesant CHKD: CJK

PRL 5 SAMPLE RESULTS

Peoria Air National Guard Base Peoria, Illinois

Legend

Soil Sample

Soil Boring and Temporary Well

→ Approximate Groundwater Flow Direction

Potential AFFF PFC PRL (approximate)

Installation Area

Notes & Sources

AFF = aquabous film forming floam
AFF = aquabous film forming floam
PRC = perfluential evidence focation
PFCS = Perfluencedamesulfonic acid
PFCS = Perfluencedamesulfonic acid
PFCS = Perfluencedamesulfonic acid
PFCS = Perfluencebranesulfonic acid
PFCS = Perfluencebranesulfonic acid
PFNA = Perfluencebranesulfonic acid

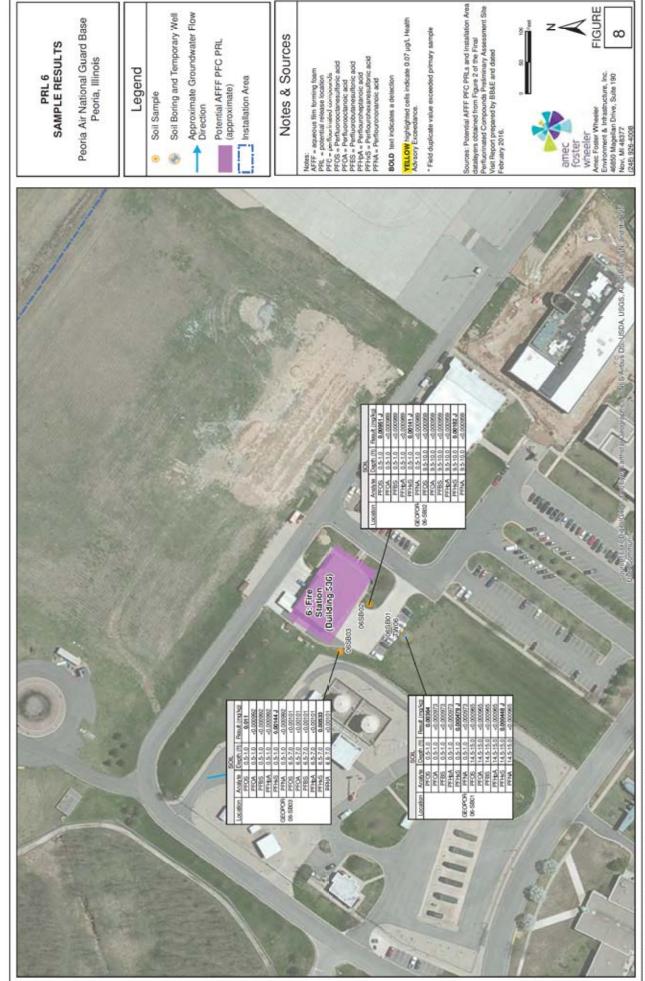
BOLD text indicates a detection

YELLOW highlighted cells indicate 0.07 µg/L Health Advisory Exceedance.

Sources: Potential AFFF PFC PRLs and Installation Area databases obtained from Figure 2 of the Final Perfluoring Perfluoring Perfluoring Perfluoring Perfluoring Perfluoring Visit Report proported by BBAE and dated February 2016.



fOSTET Wheeler Ante Coster Wheeler Environment & Intrastructure, Inc. 46850 Mapelan Drive, Suite 190 Nov, MI 48377

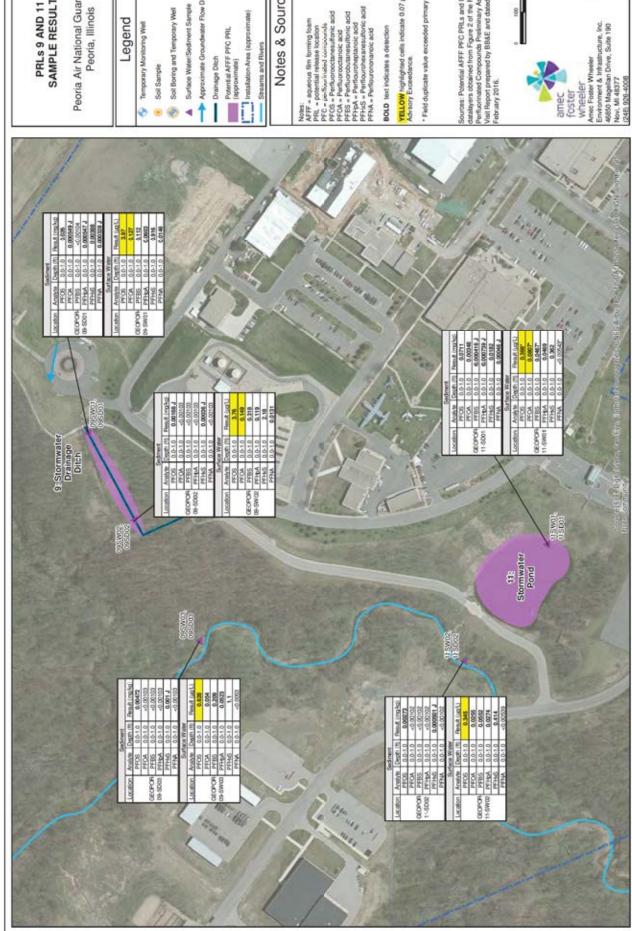


Legend

G:ANGa_MXDPeoria_291330006.016/Draft_SI_Report/PRIa_6_AnalyticalResults_171227.mxd December 28, 2017 DWN: amy_stuyvesant CHKD: CJK

N FIGURE

ω



G:ANGa_MXD/Peoria_291330006.016/braft_St_Report/PRLs_9_11_AnalyticalResuls_171227.mxd_January 11,2018_DWN: amy stuyvesant CHKD: CJR

PRLs 9 AND 11 SAMPLE RESULTS

Peoria Air National Guard Base Peoria, Illinois

Legend

Temporary Monitoring Well Soil Sample

Soil Boring and Temporary Well

Surface Water/Sediment Sample

Approximate Groundwater Flow Direction - Drainage Ditch

Potential AFFF PFC PRL (approximate)

Installation Area (approximate)

Streams and Rivers

Notes & Sources

BOLD text indicates a detector

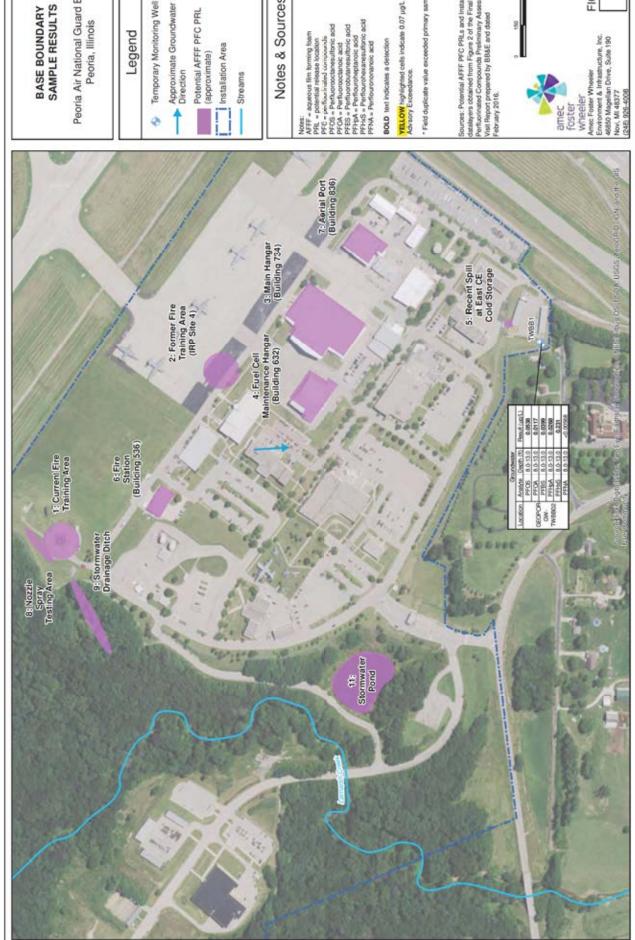
YELLOW highlighted cells indicate 0.07 µg/L Health Advisory Exceedance.

Field duplicate value exceeded primary sample

Sources: Potential AFFF PFC PRLs and Installation Area detablayers obtained from Figure 2 of the Final Perflucionated Compounds Preliminary Assessment Site Visit Report prepared by BB&E and dated February 2016.

N FIGURE amec foster
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4650 Mapeten Drive, Suite 190
Nov, Mil 4837.

6



Peoria Air National Guard Base Peoria, Illinois

Legend

Approximate Groundwater Flow Direction Temporary Monitoring Well

Potential AFFF PFC PRI. (approximate)

Installation Area

Streams

Notes & Sources

BOLD text indicates a detection

YELLOW highlighted cells indicate 0.07 µg/L Health Advisory Exceedance.

Field duplicate value exceeded primary sample

Sources: Potential APPF PFC PFLs and Installation Area datalayers obtained from Figure 2 of the Final by Perflociment Compounds Prefirminary Assessment Site Perflociment Compounds Prefirminary Assessment Site February 2016.



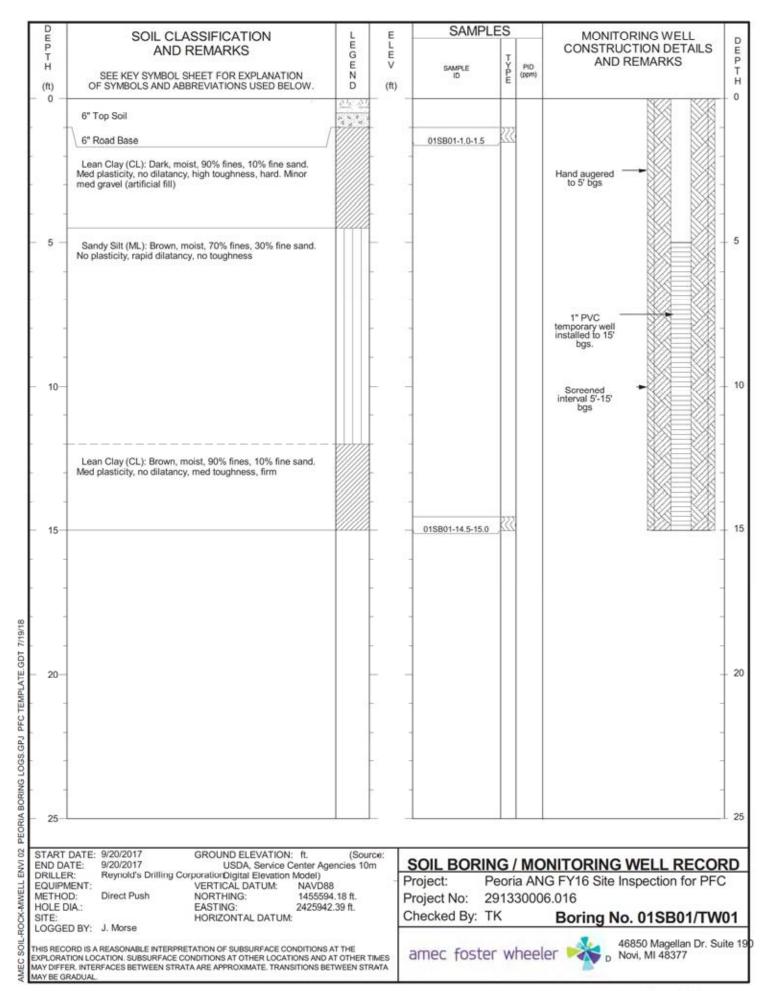
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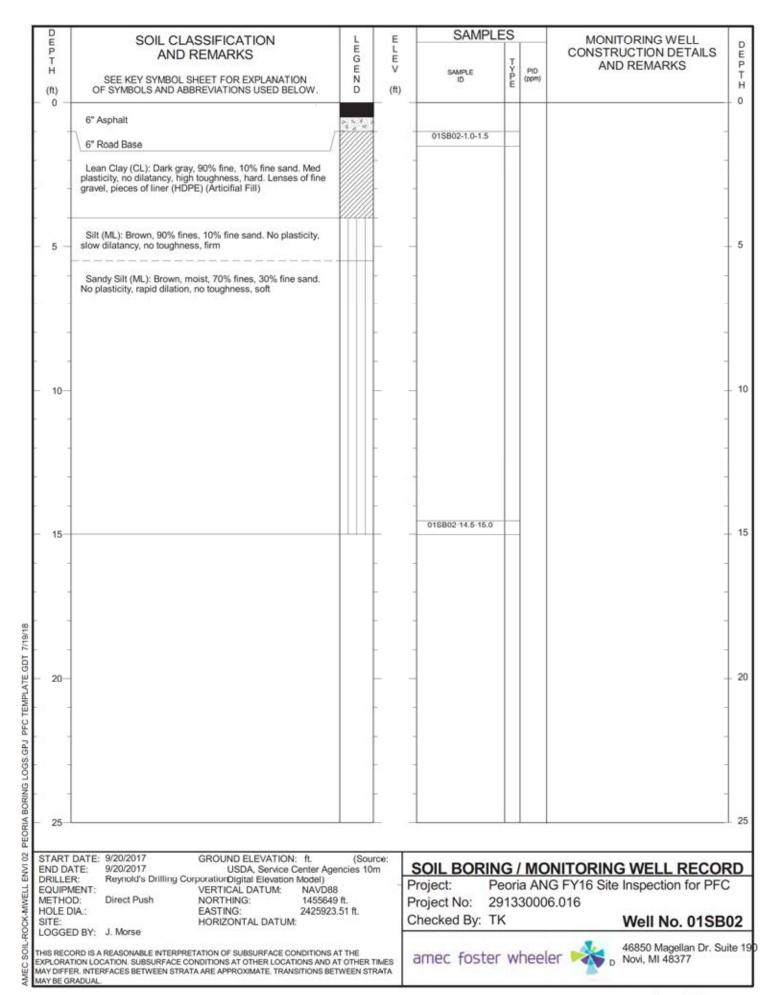
APPENDIX A

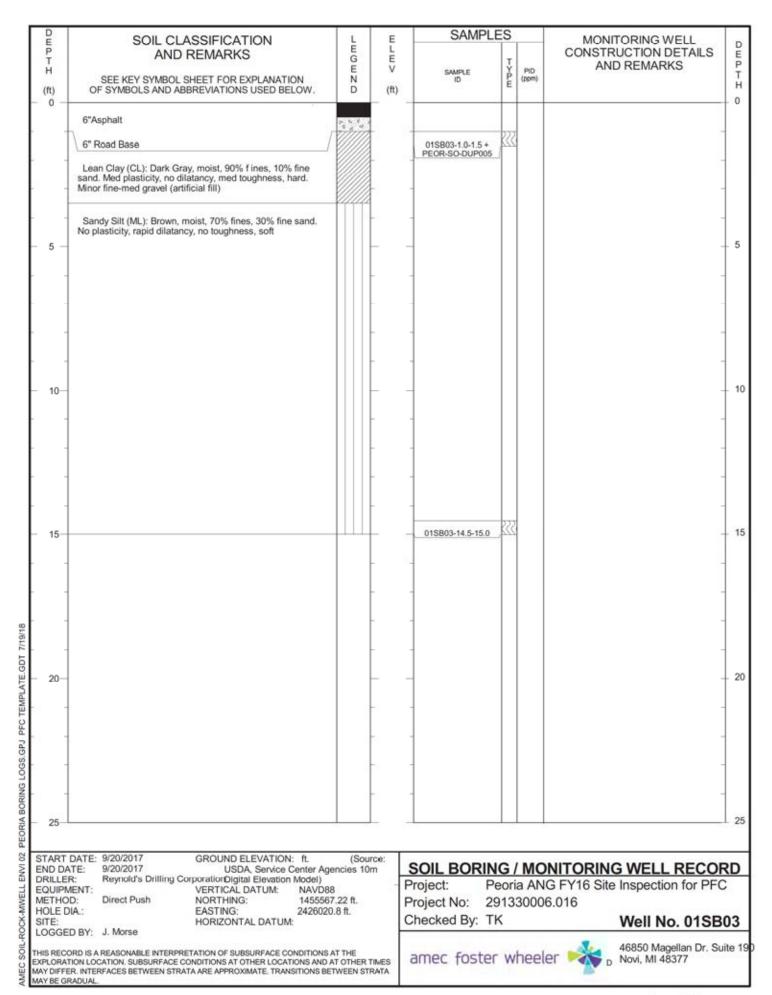
SOIL BORING AND MONITORING WELL CONSTRUCTION LOGS

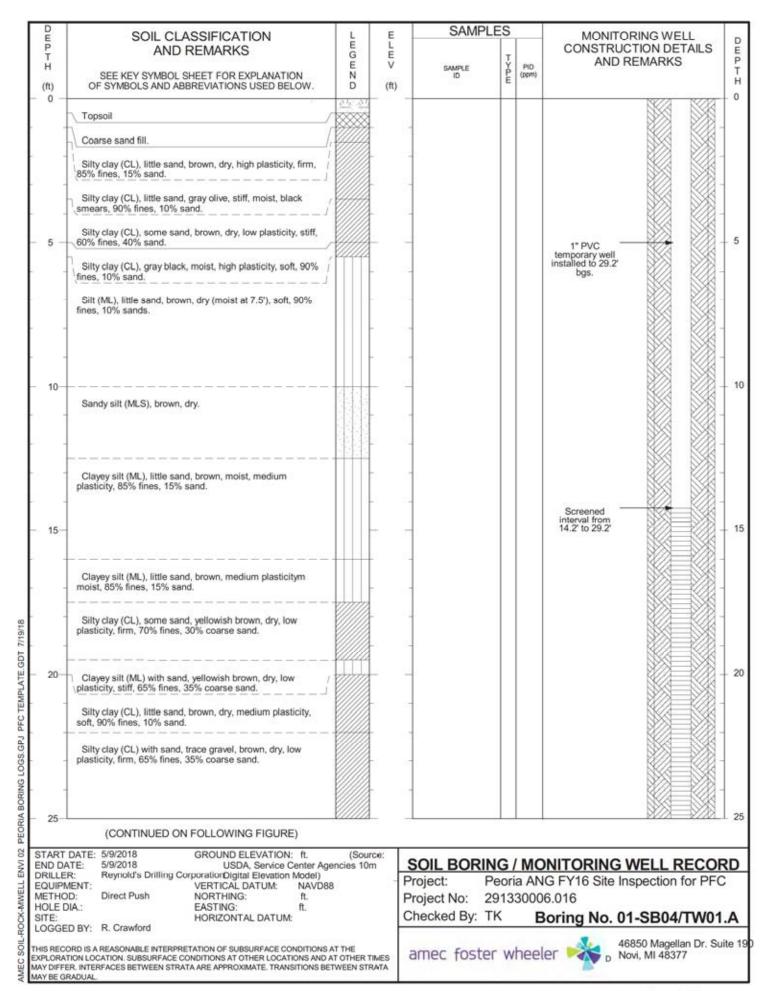
NGB/A4OR

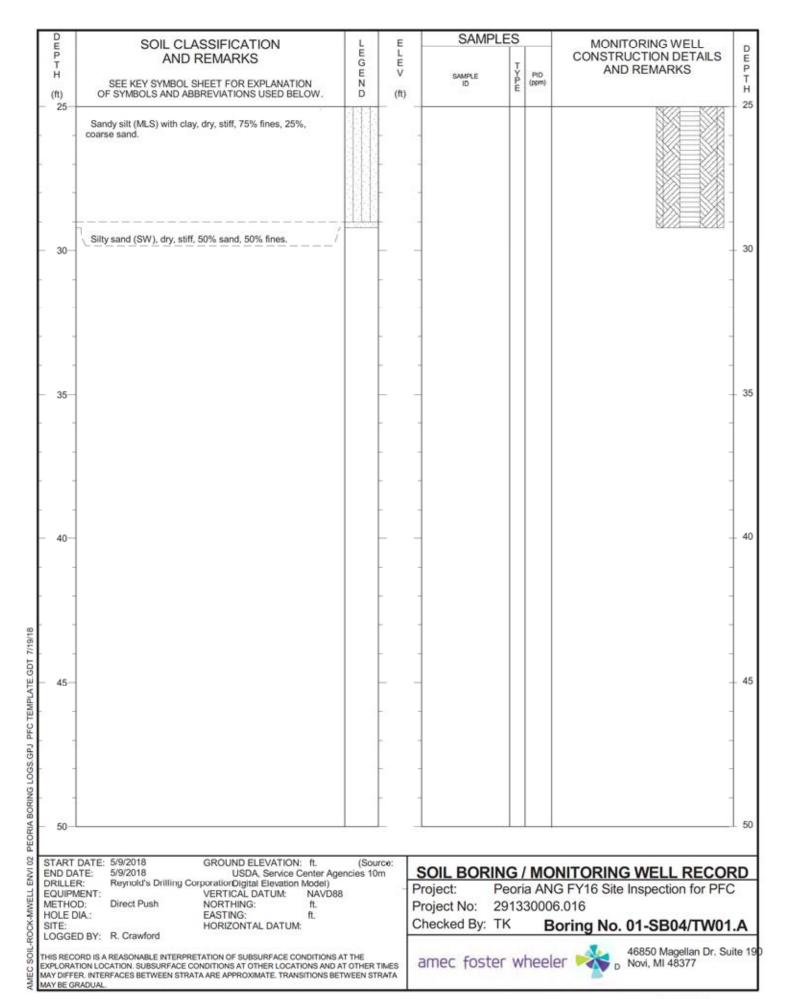
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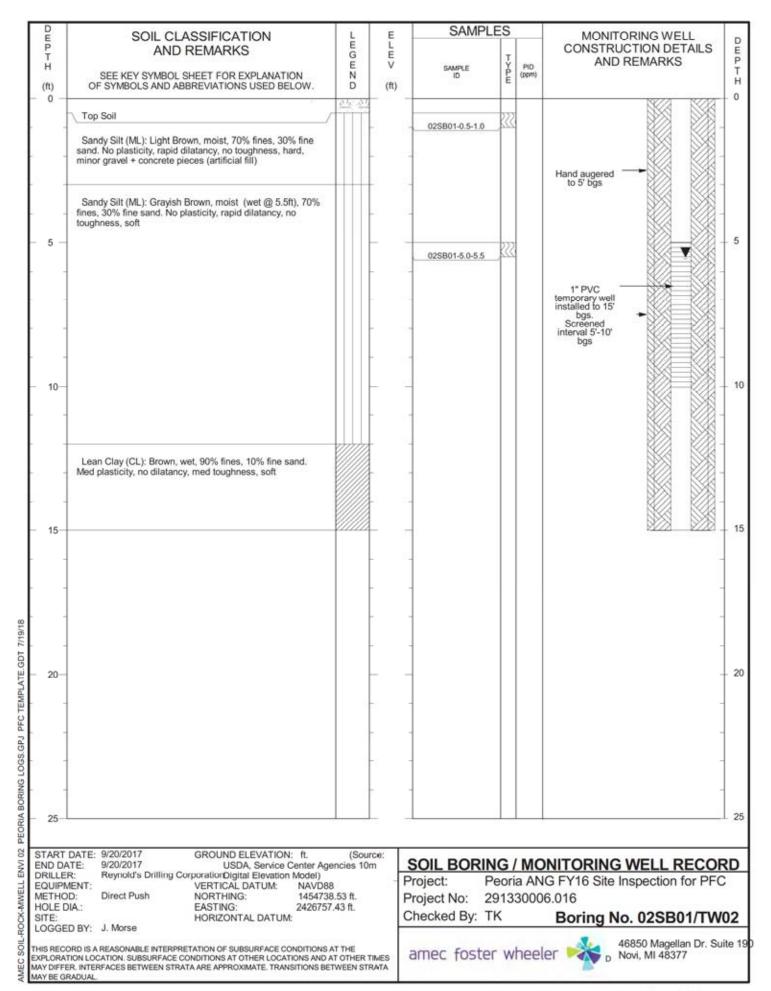


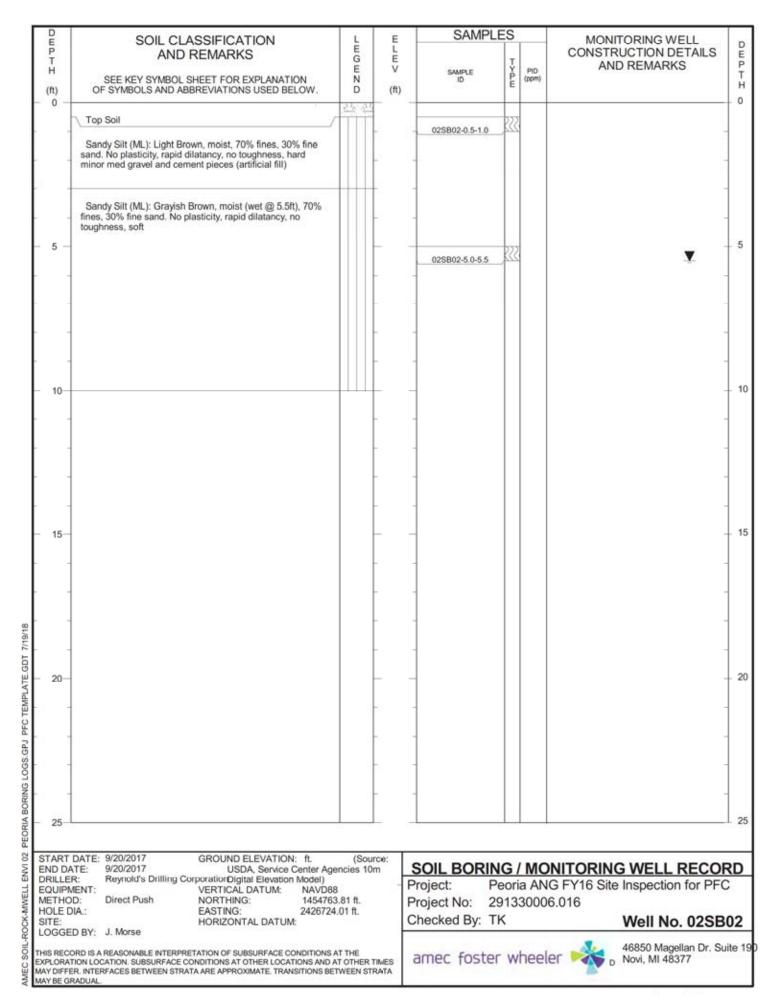


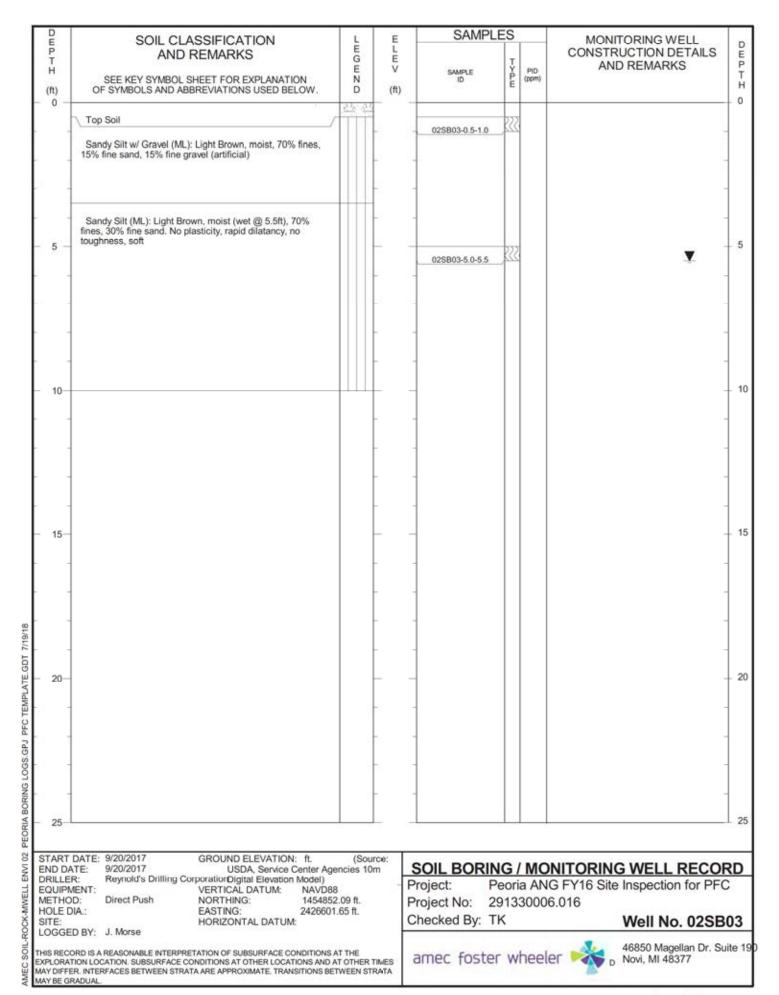


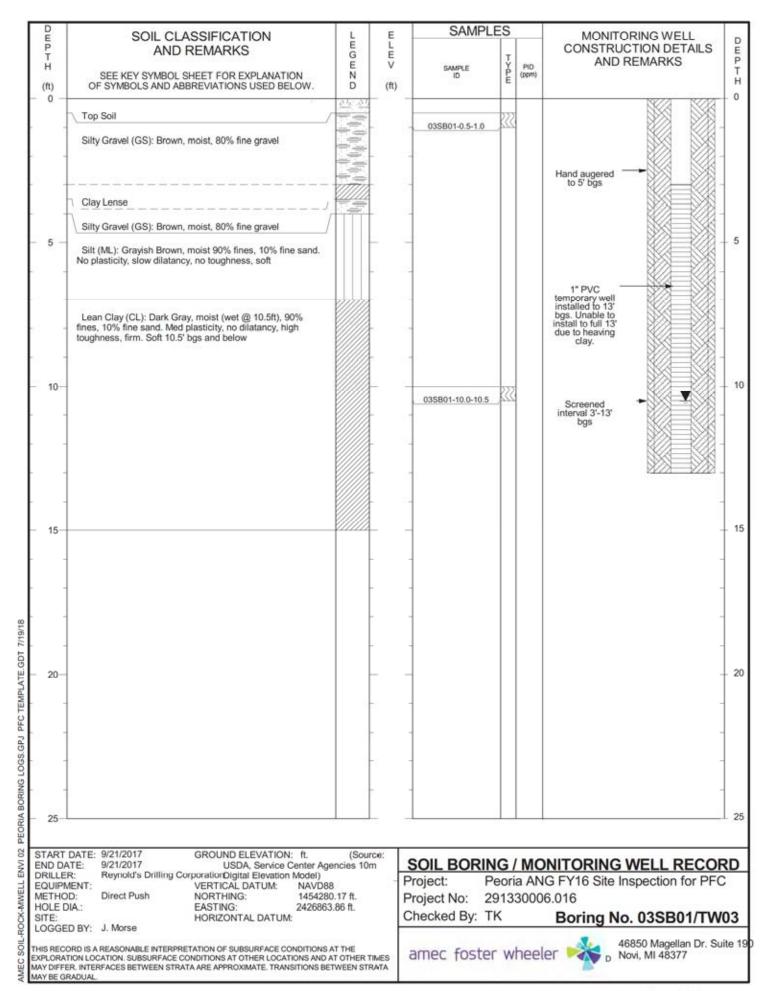


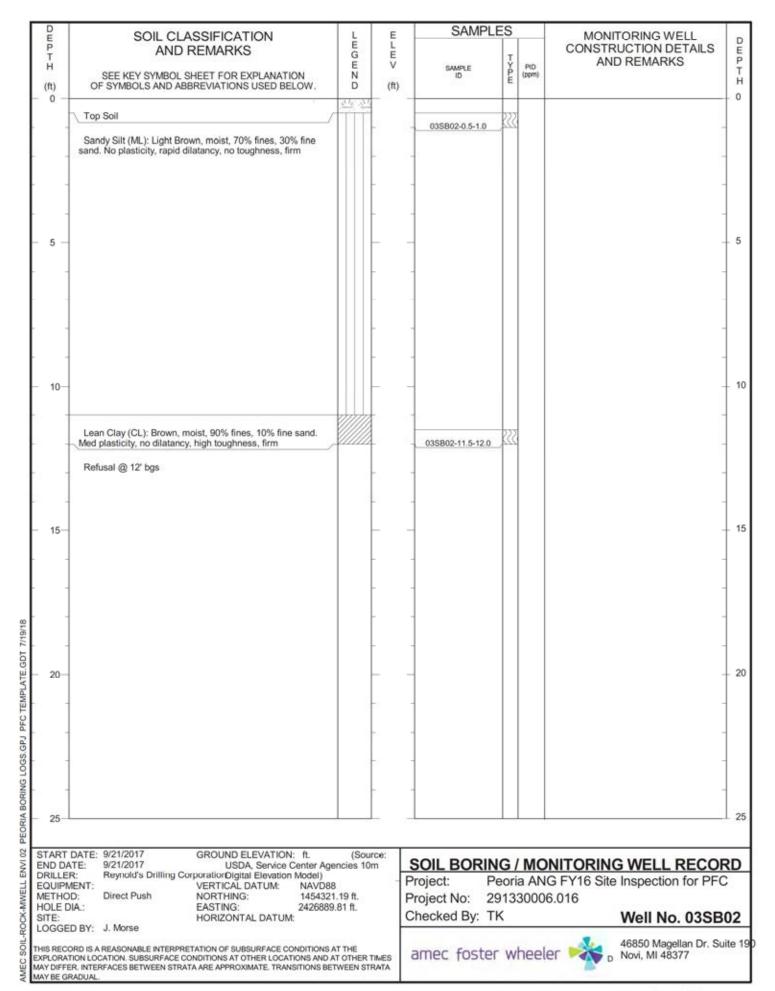


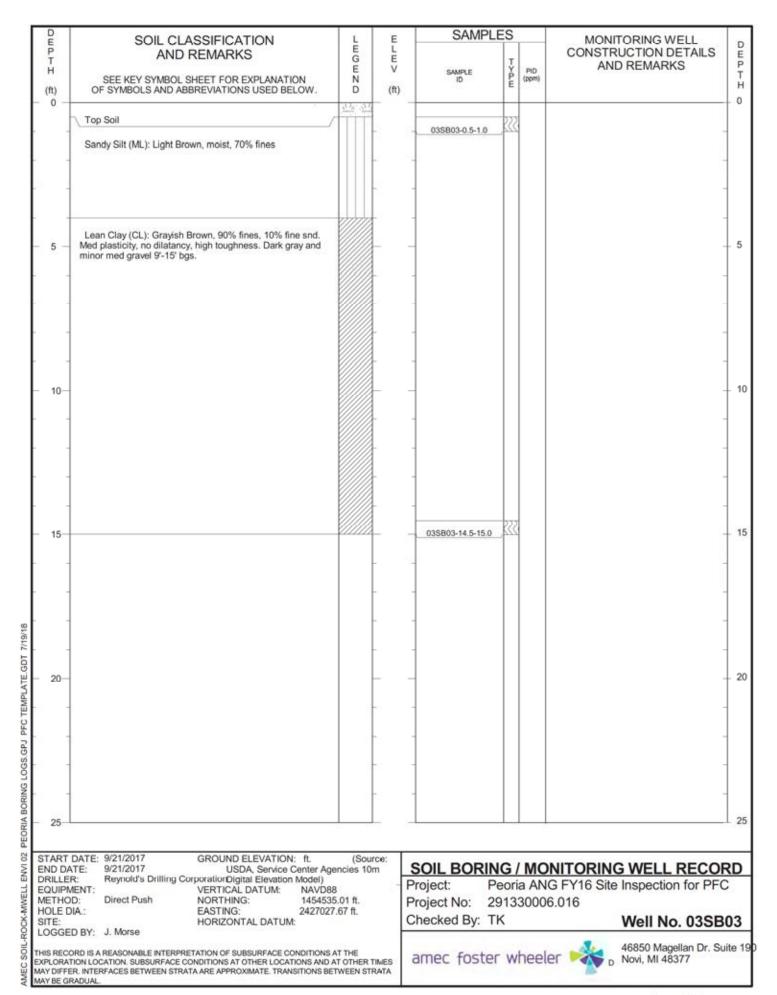


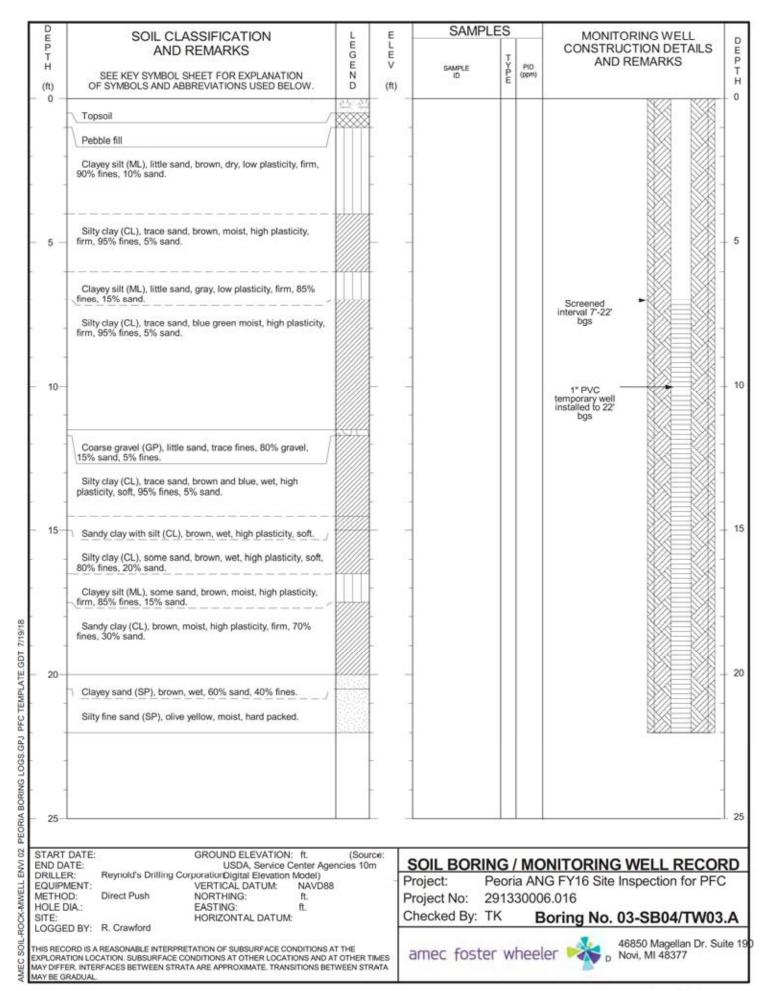


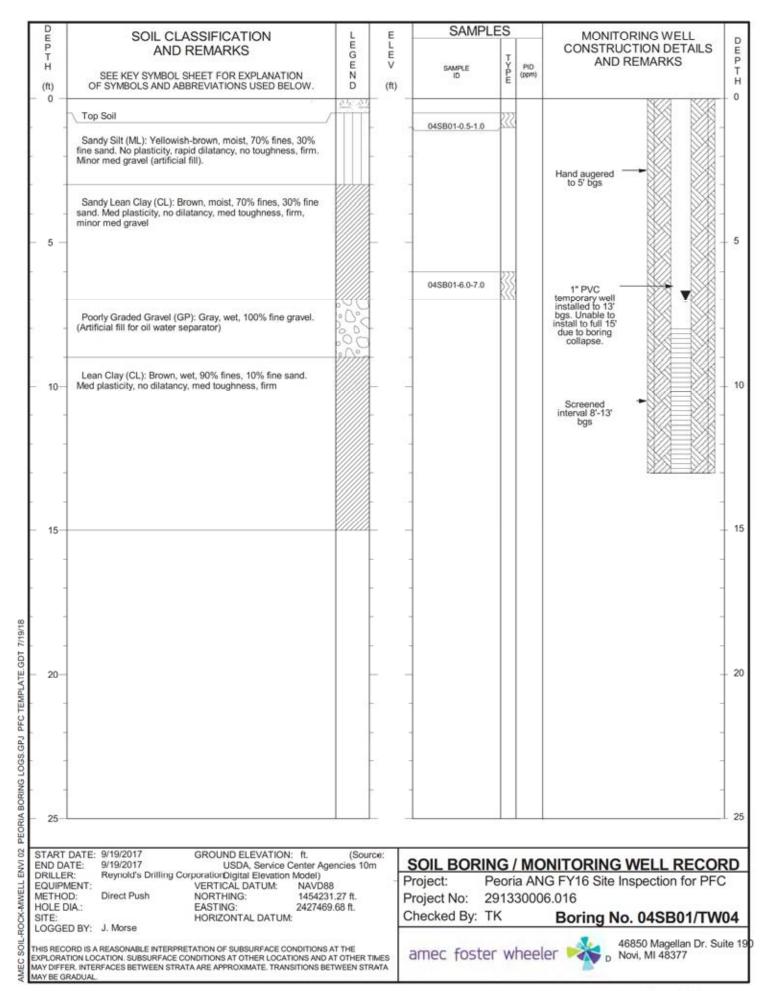


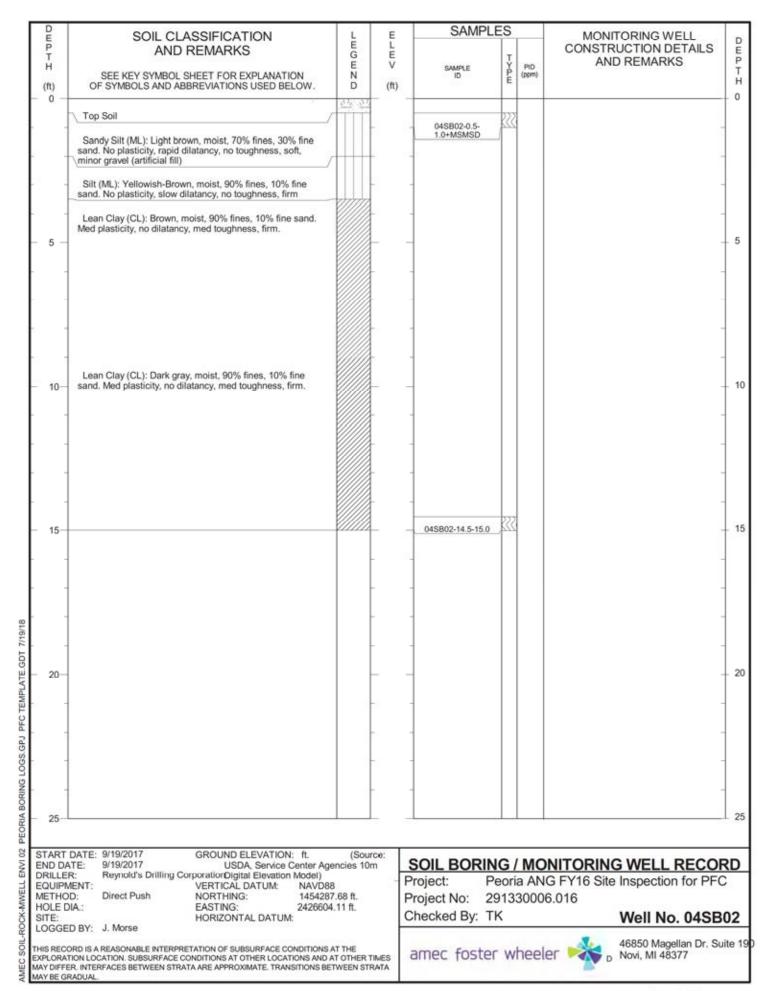


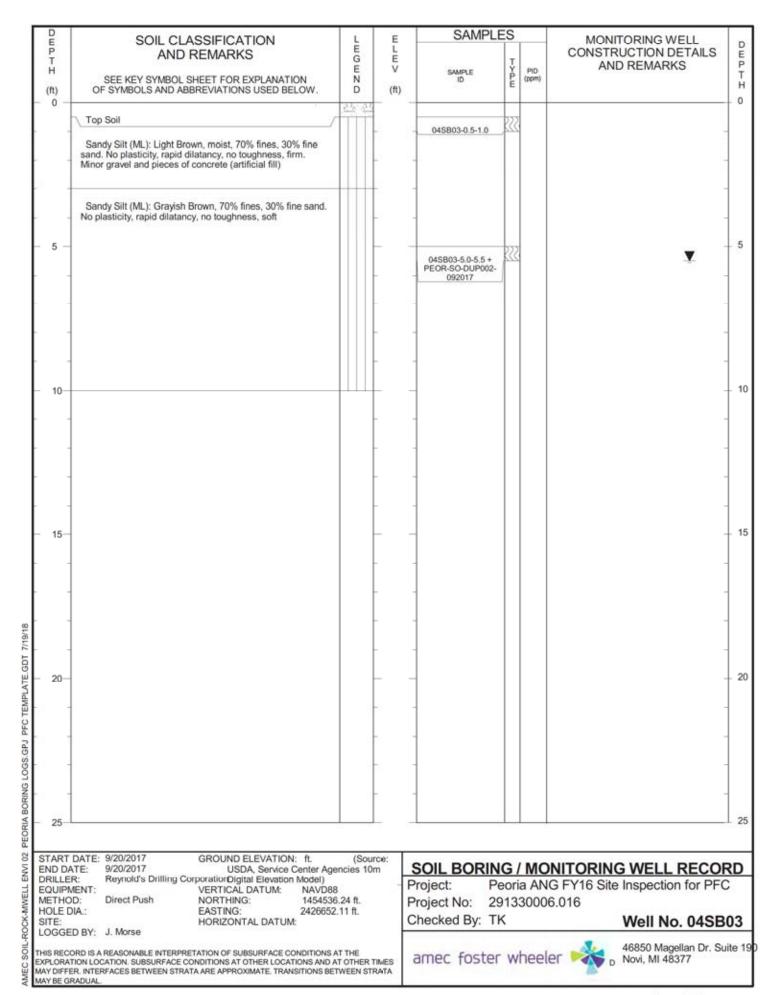


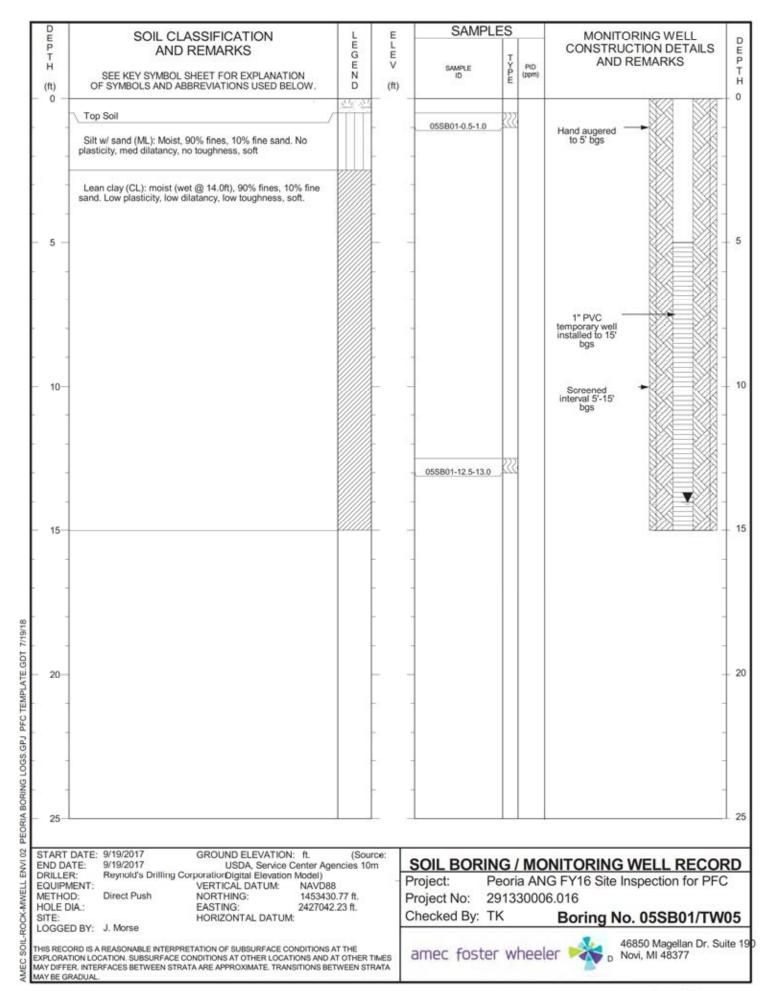


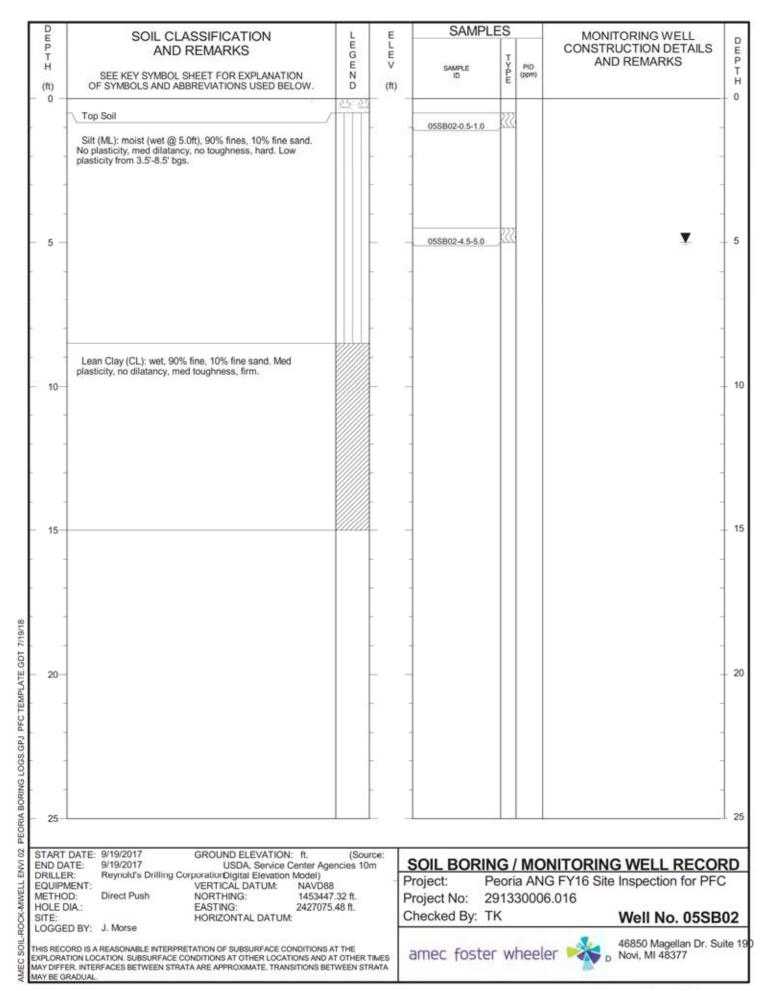


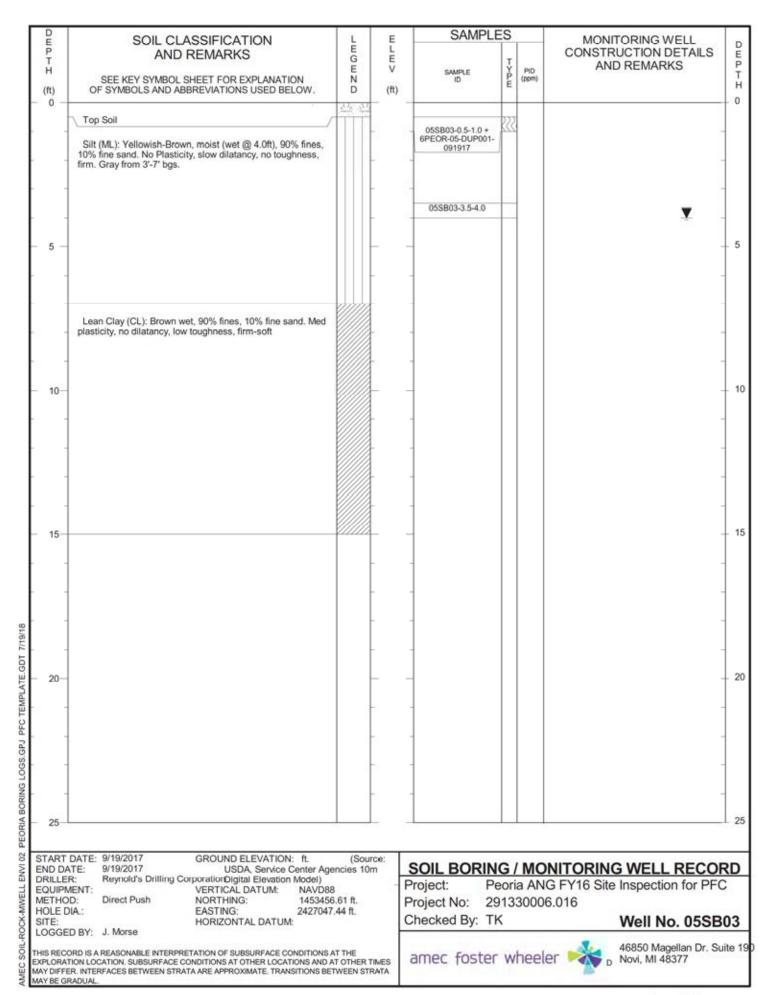


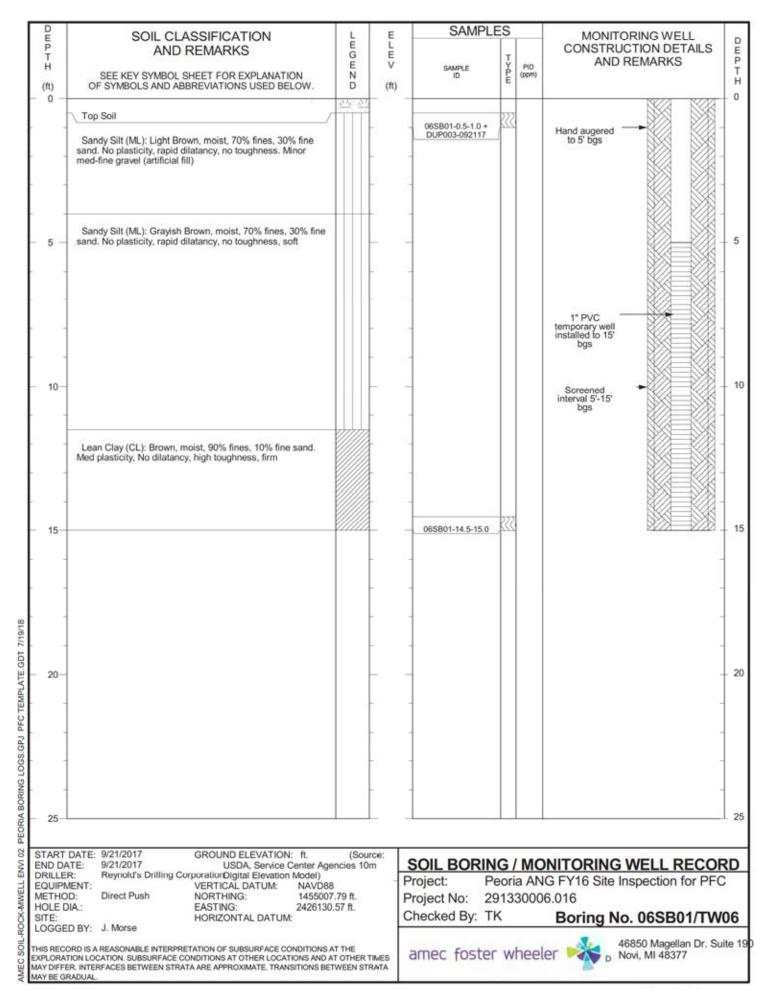


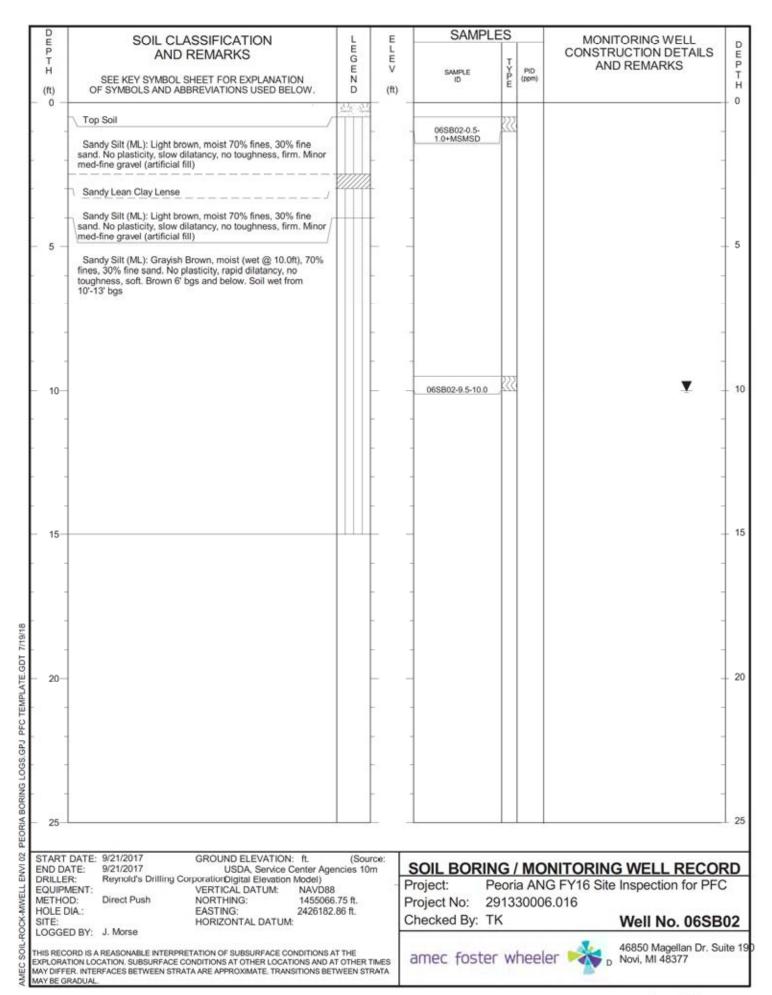


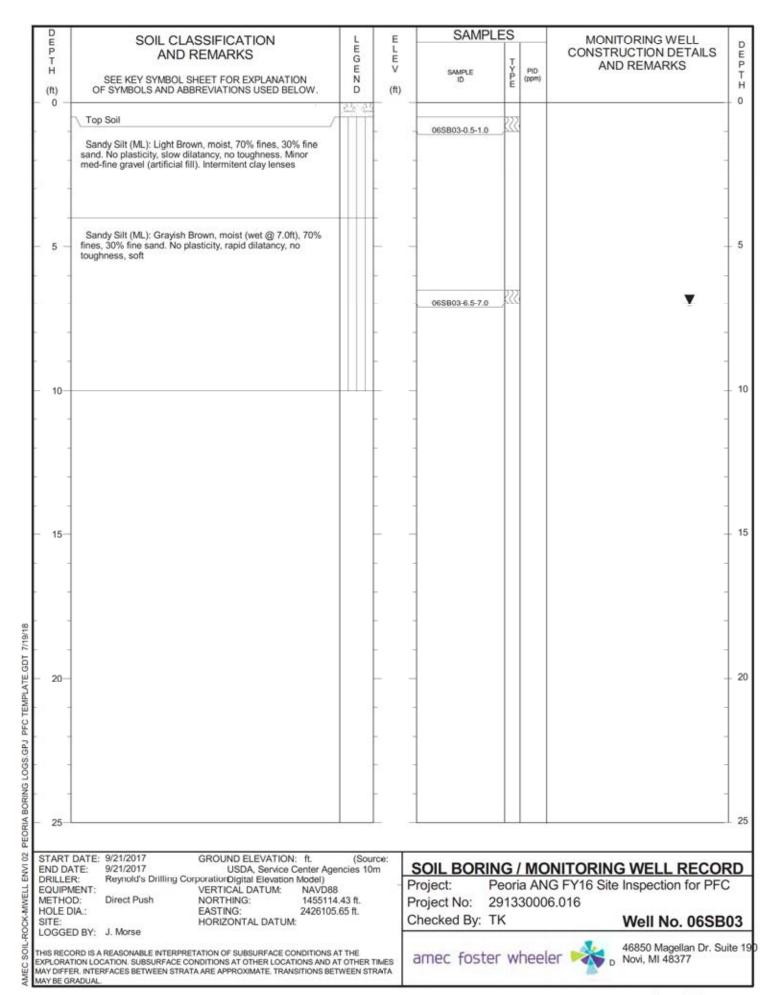


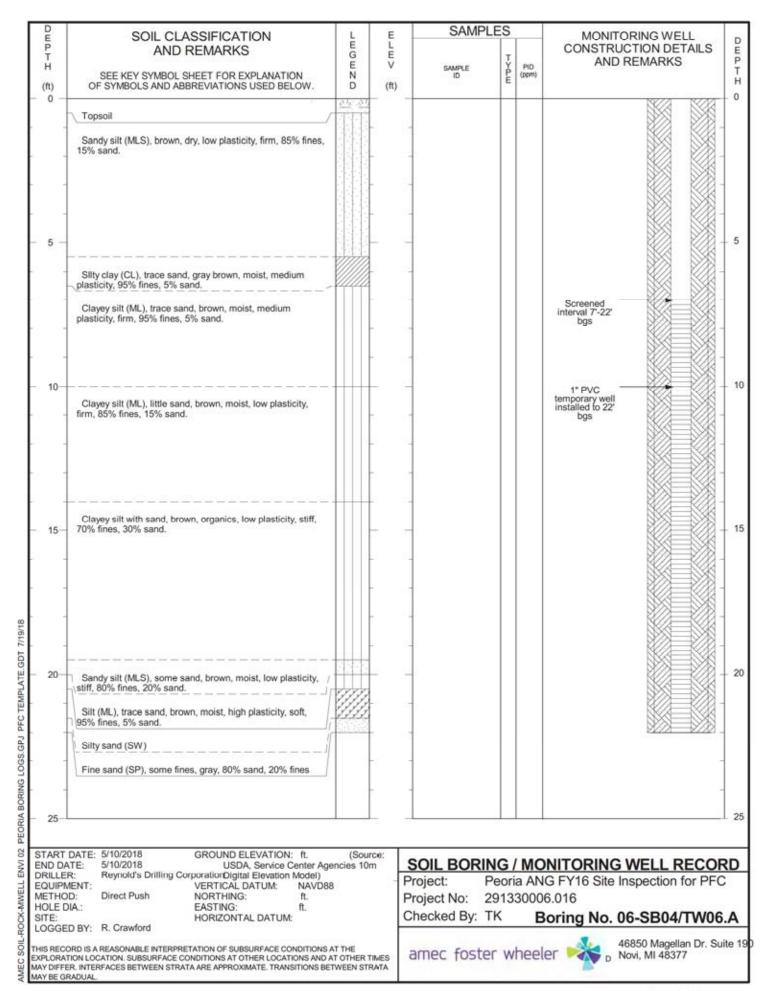


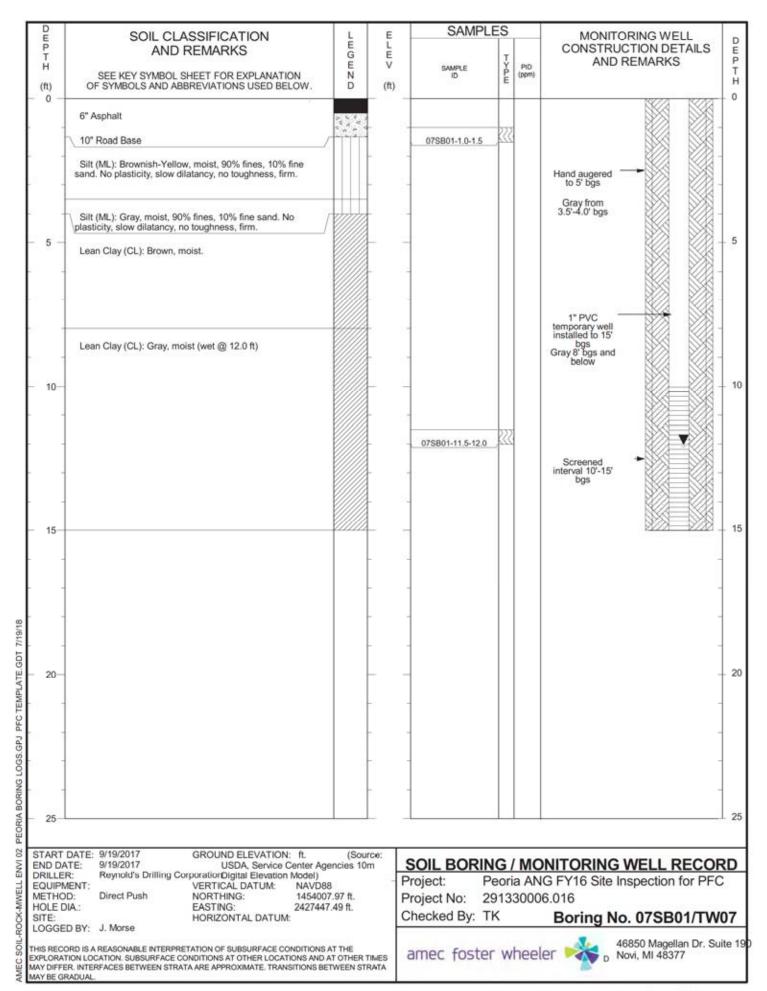


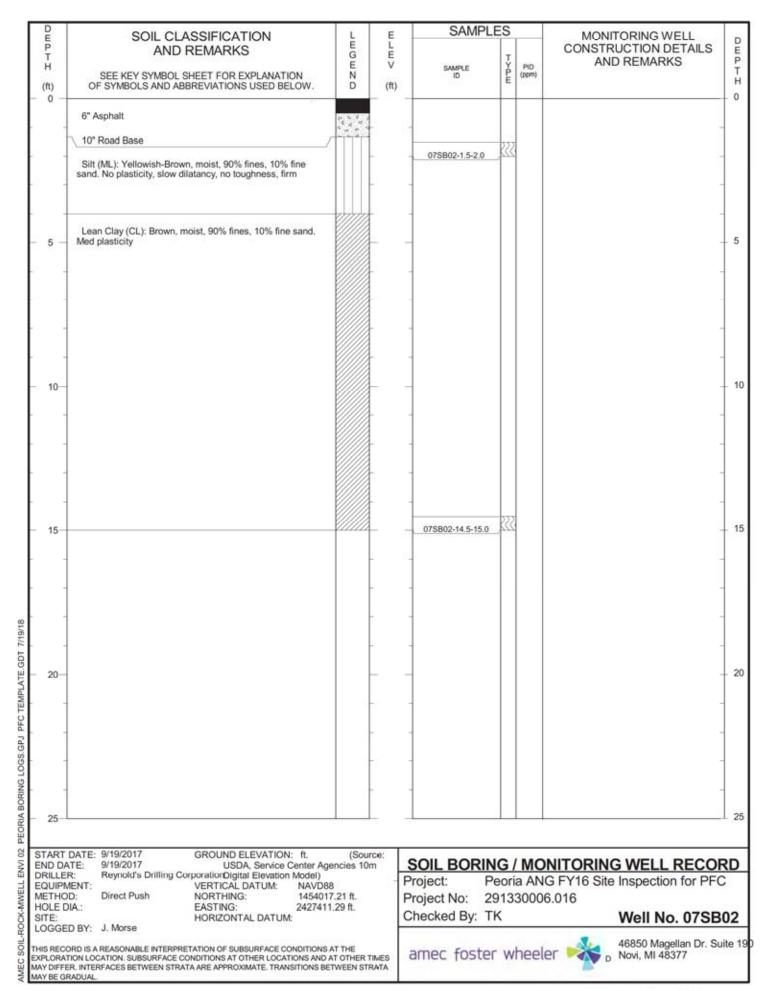


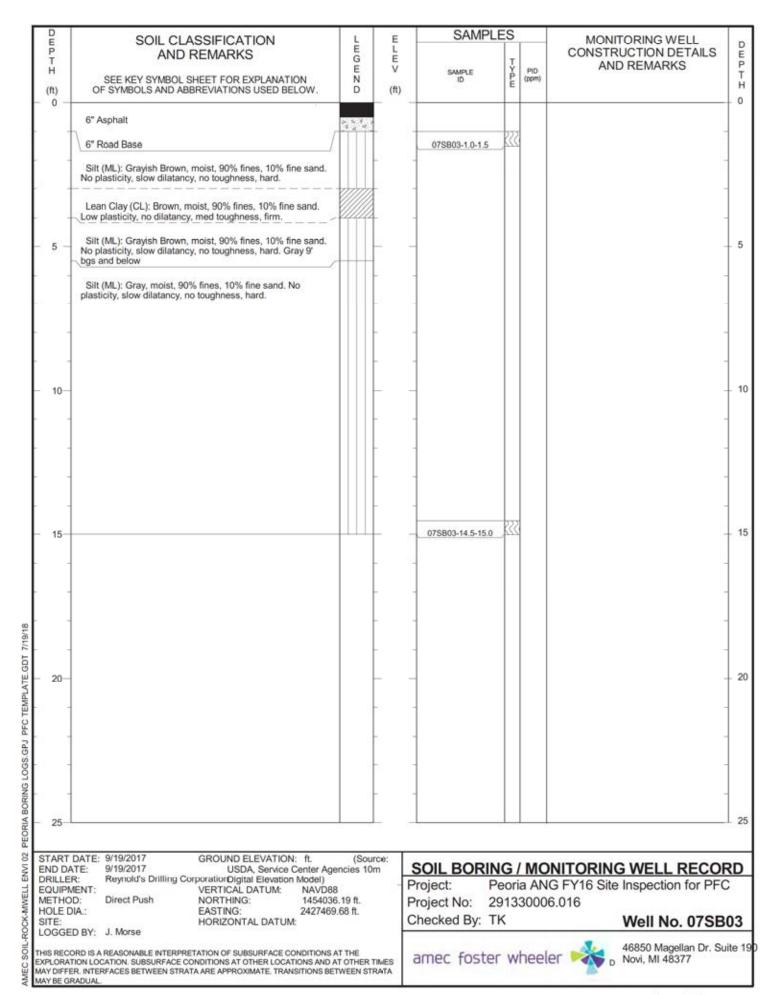


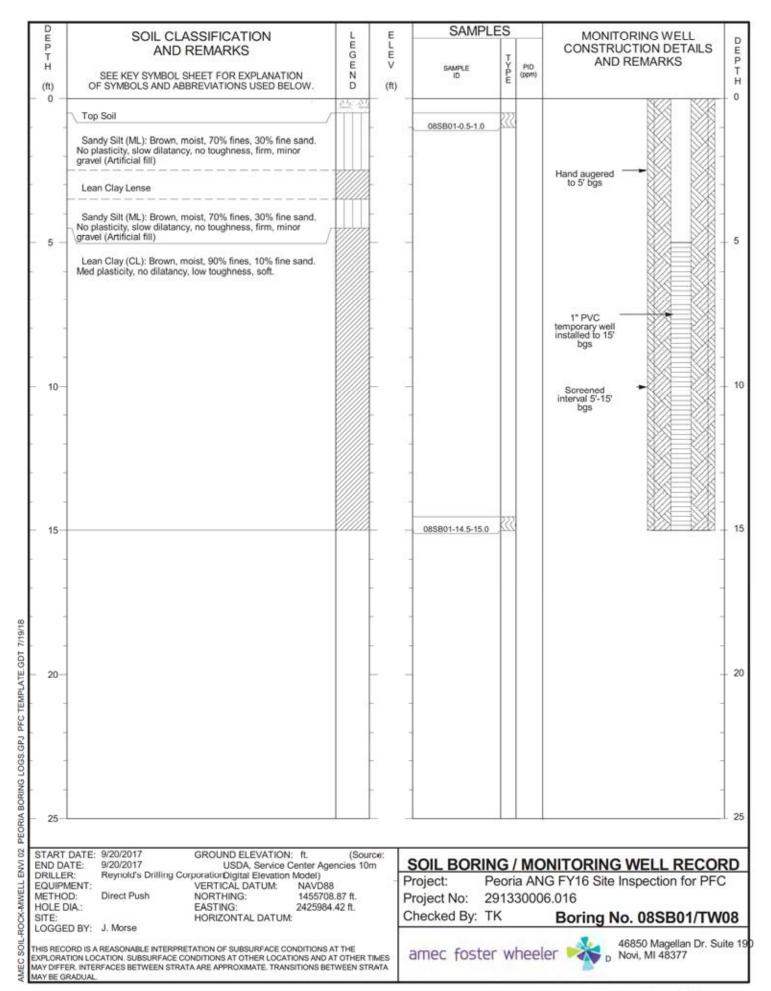


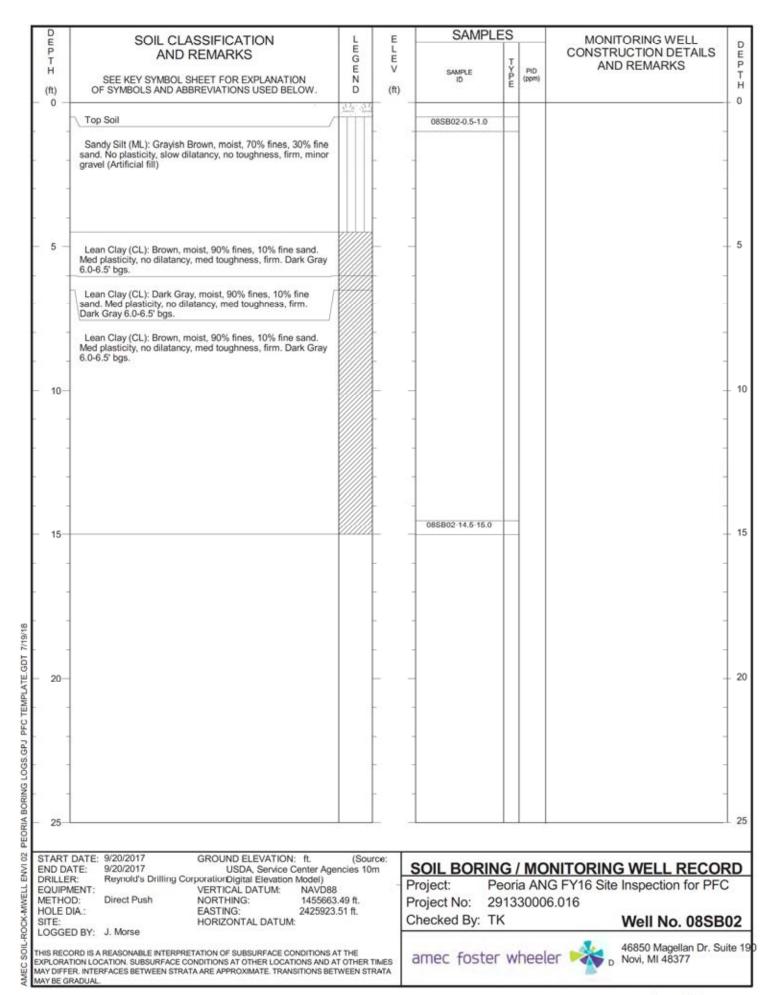


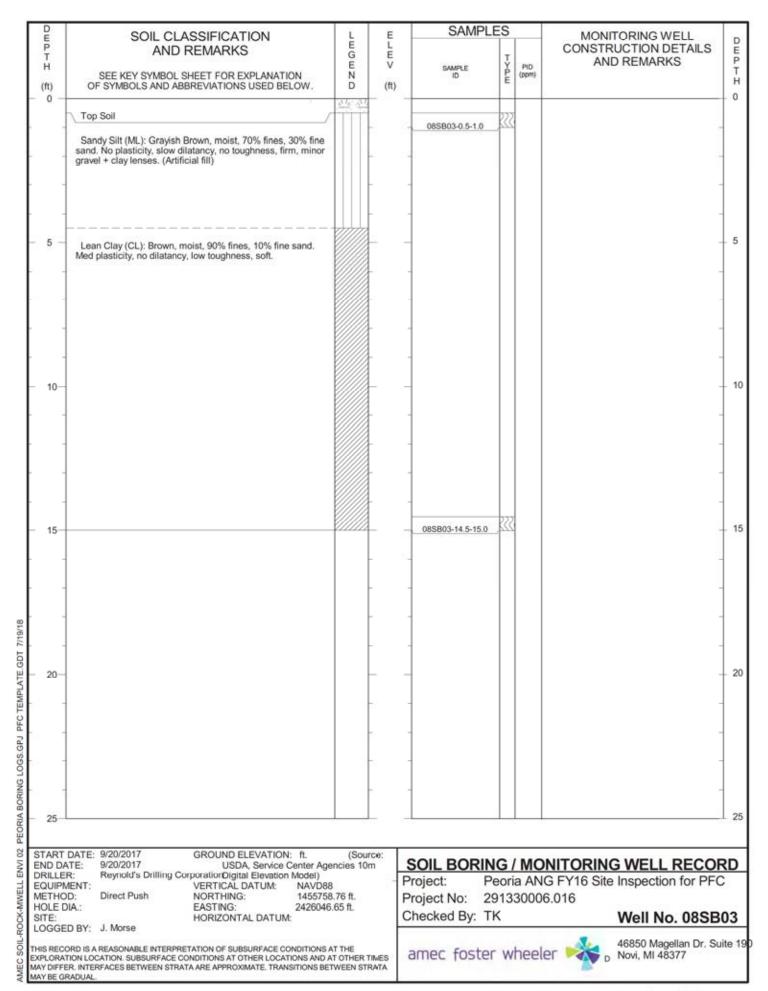


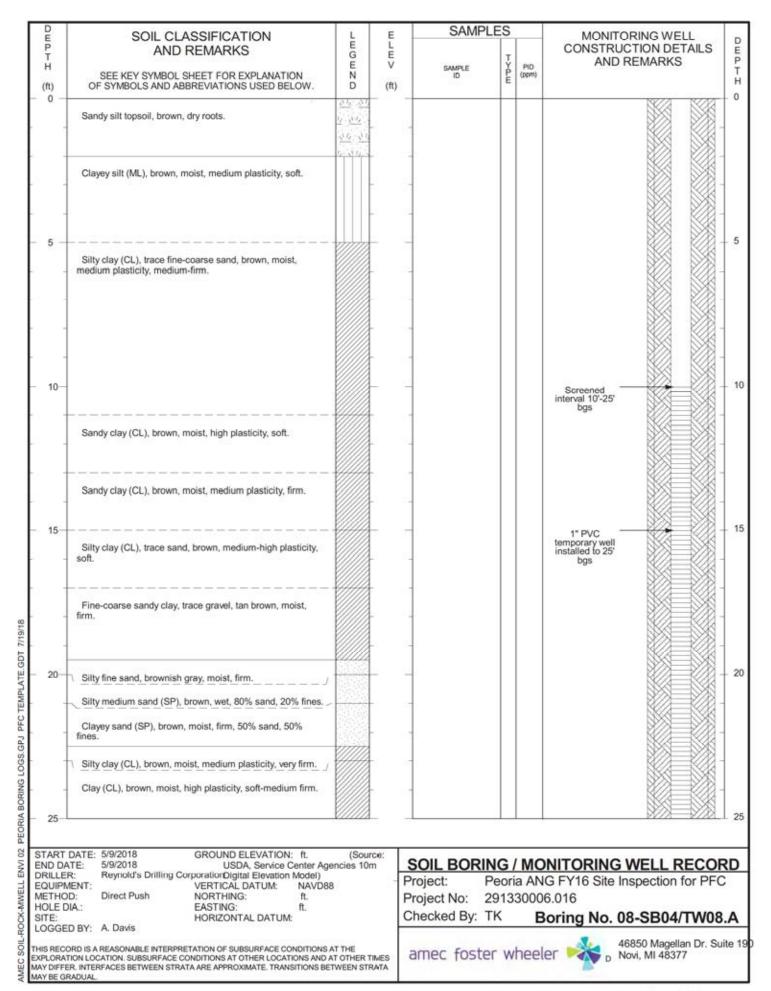


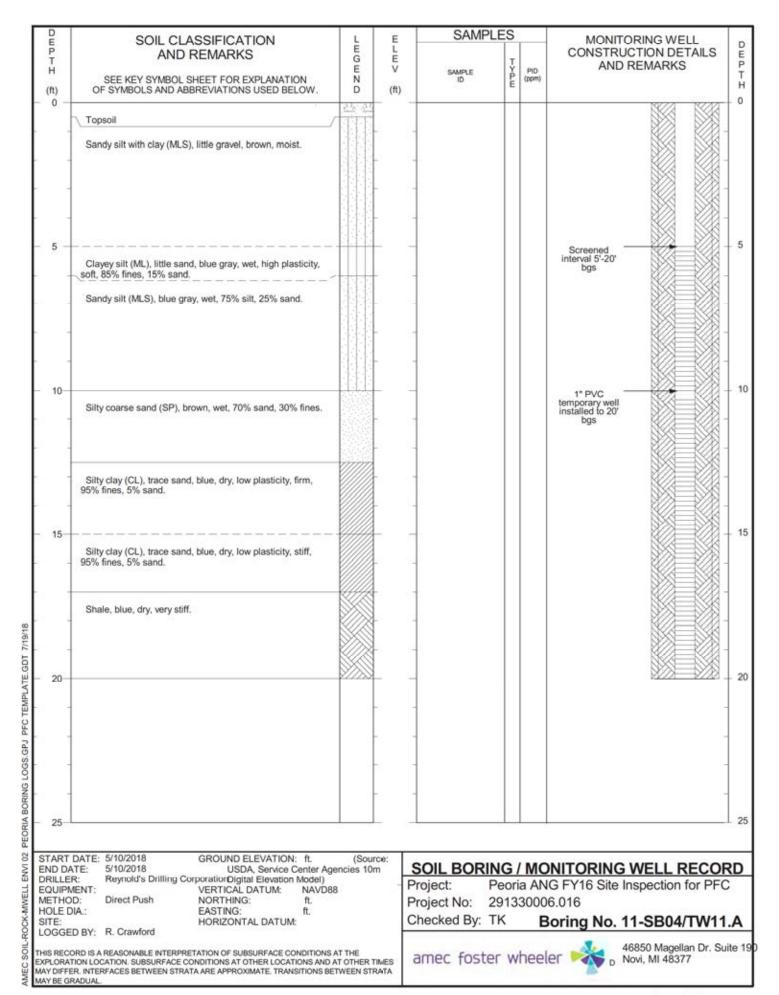


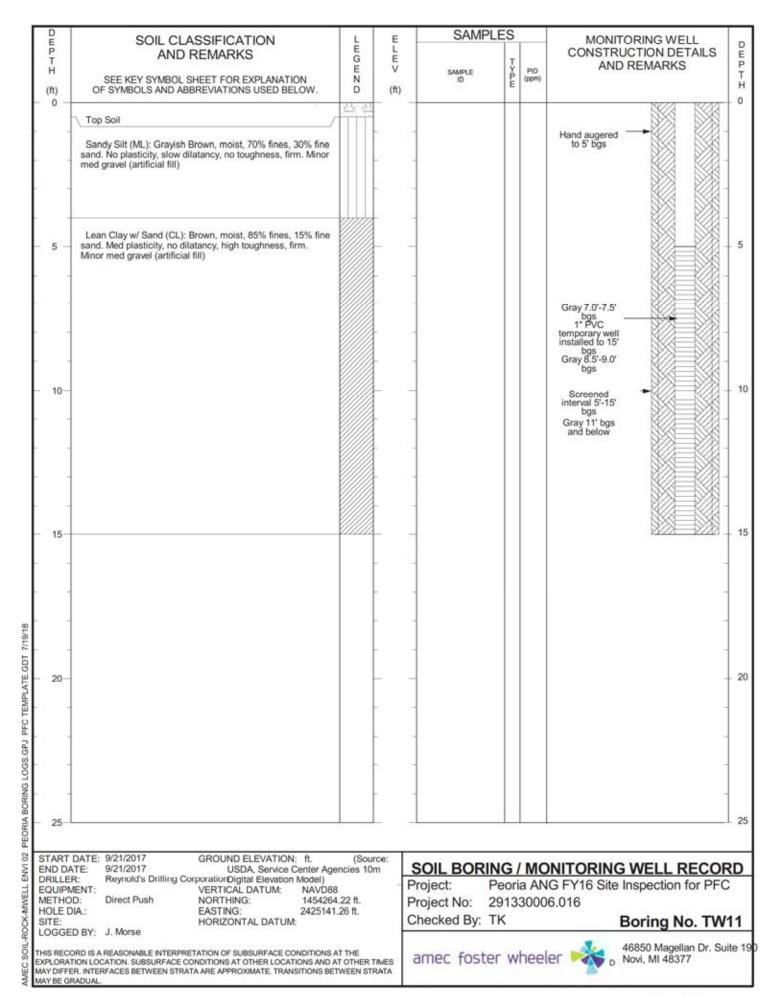


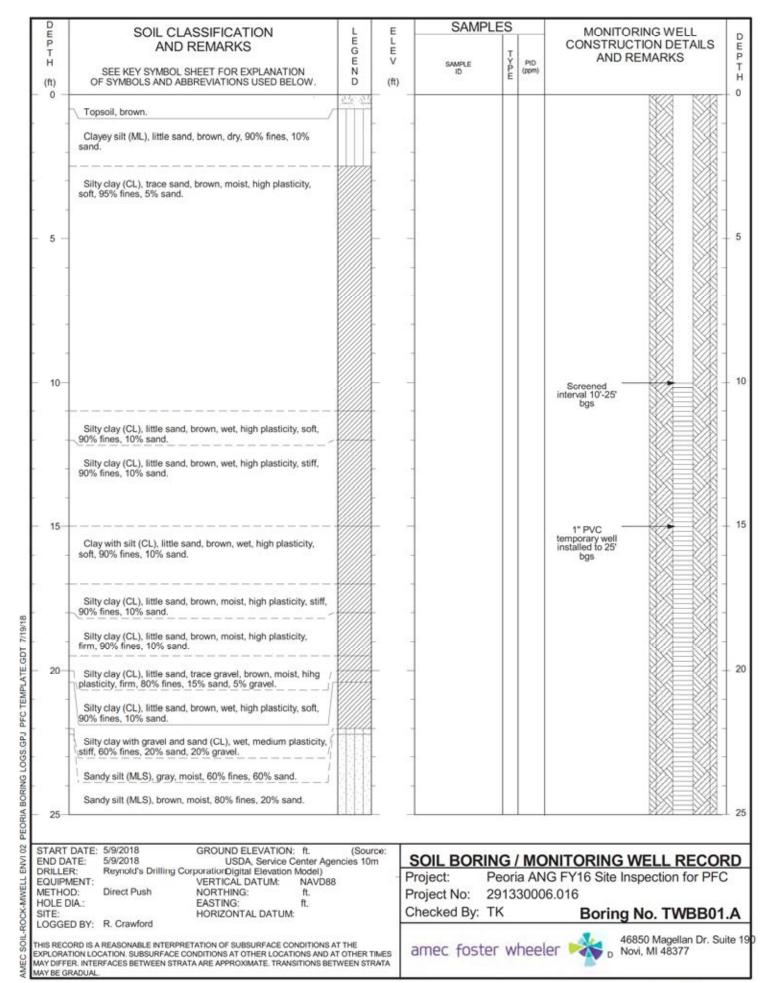


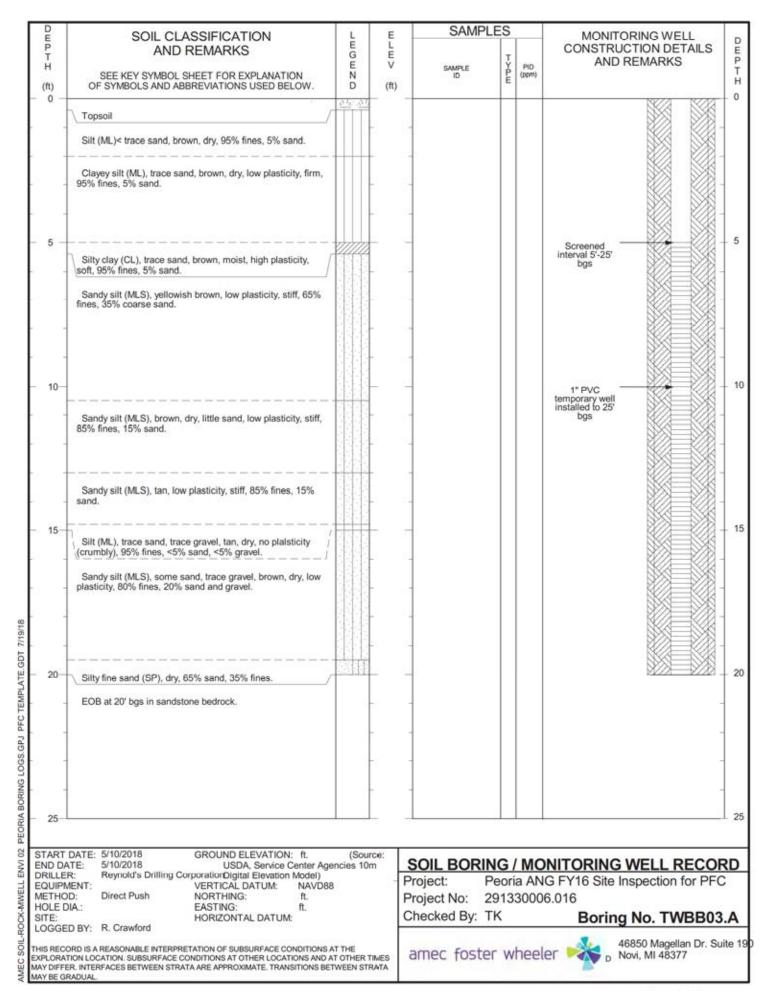


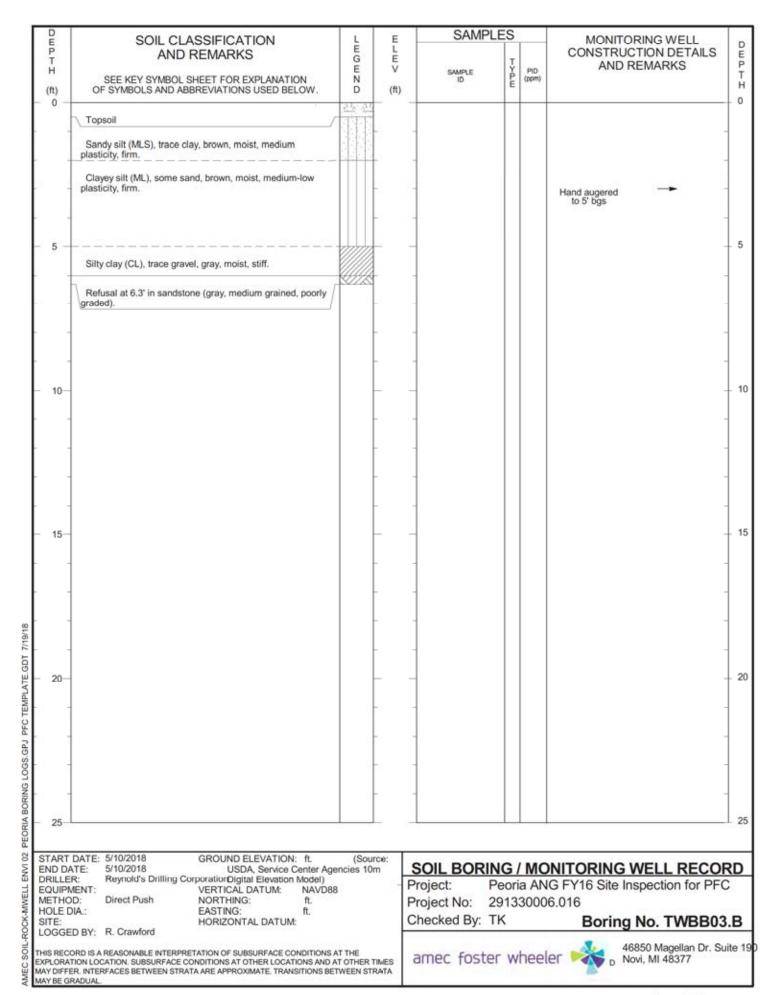


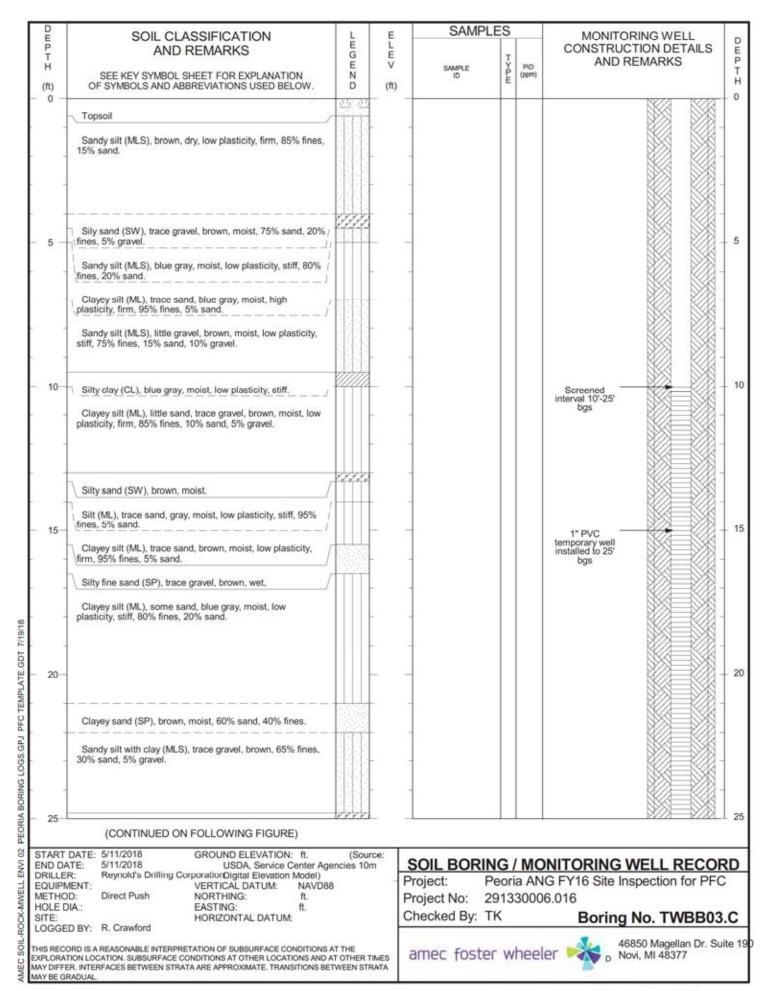


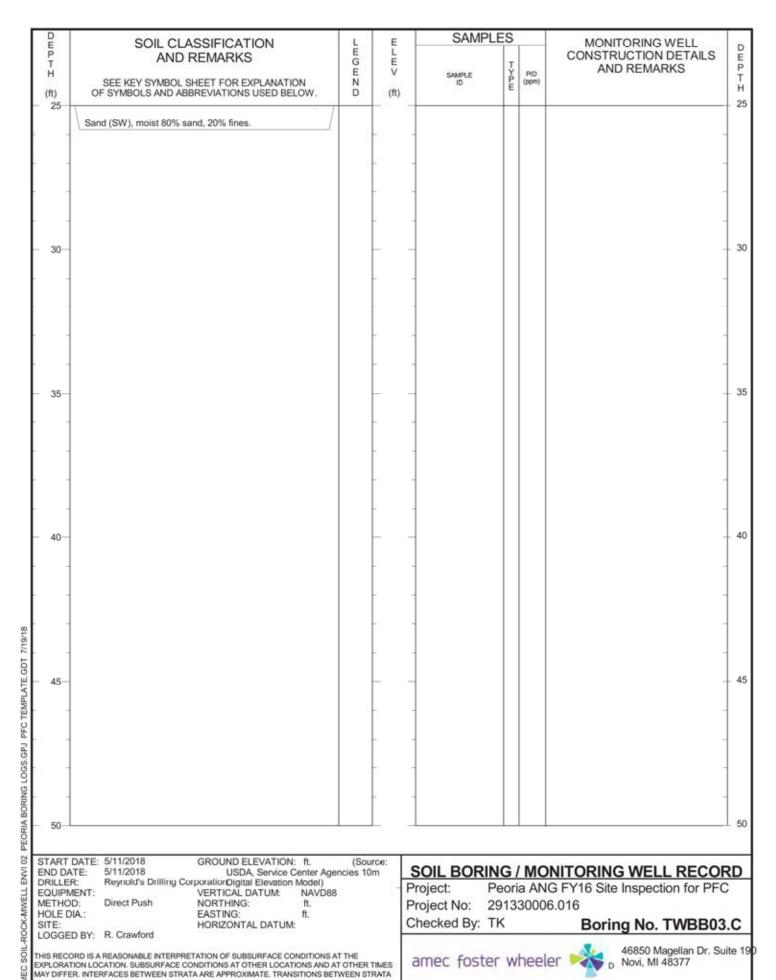






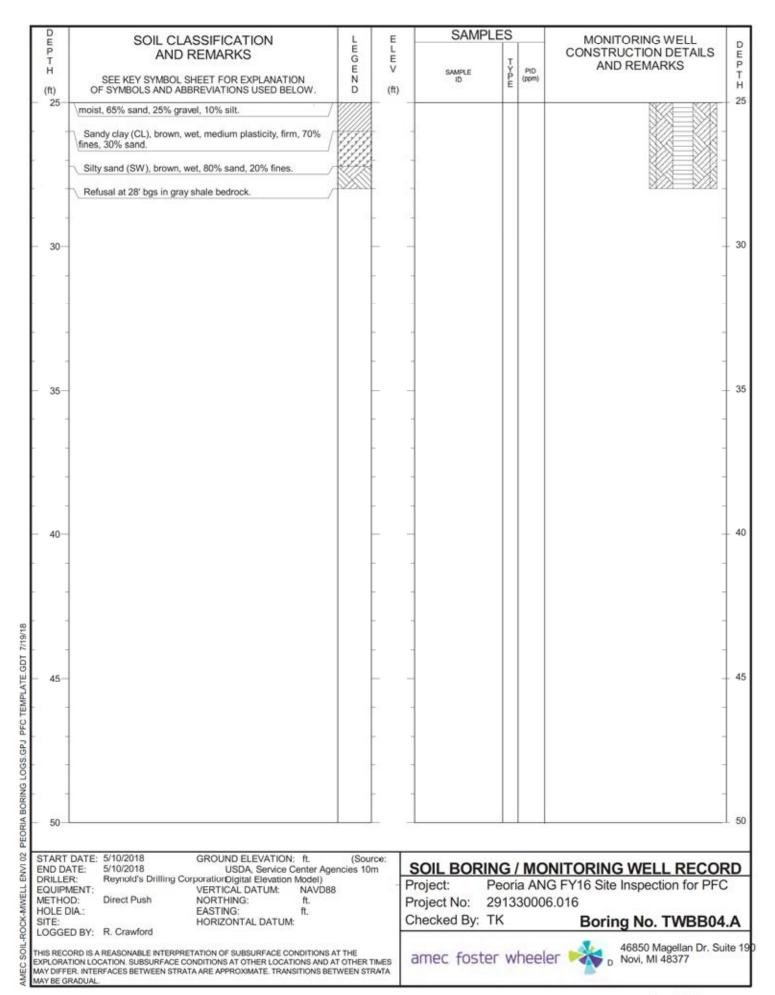


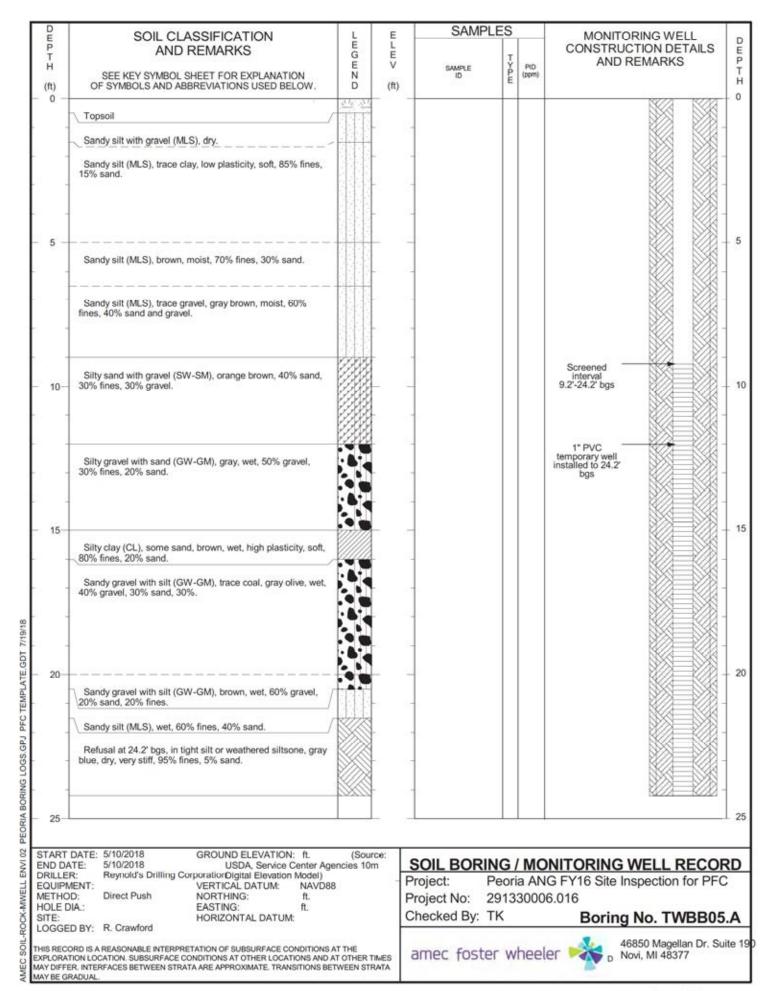


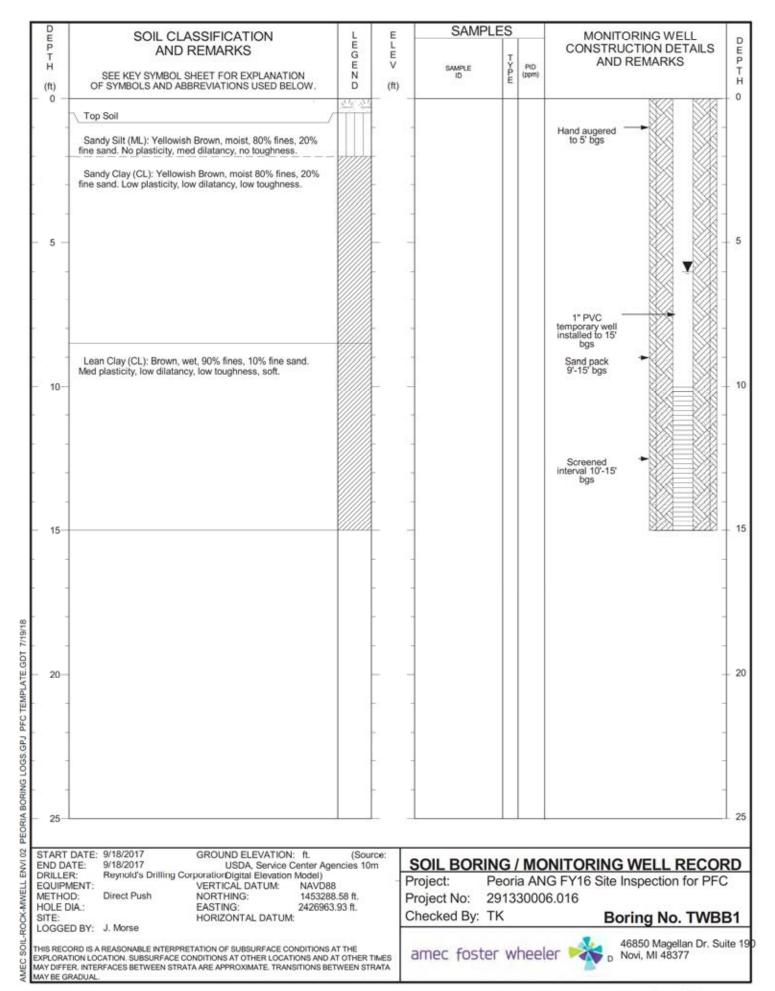


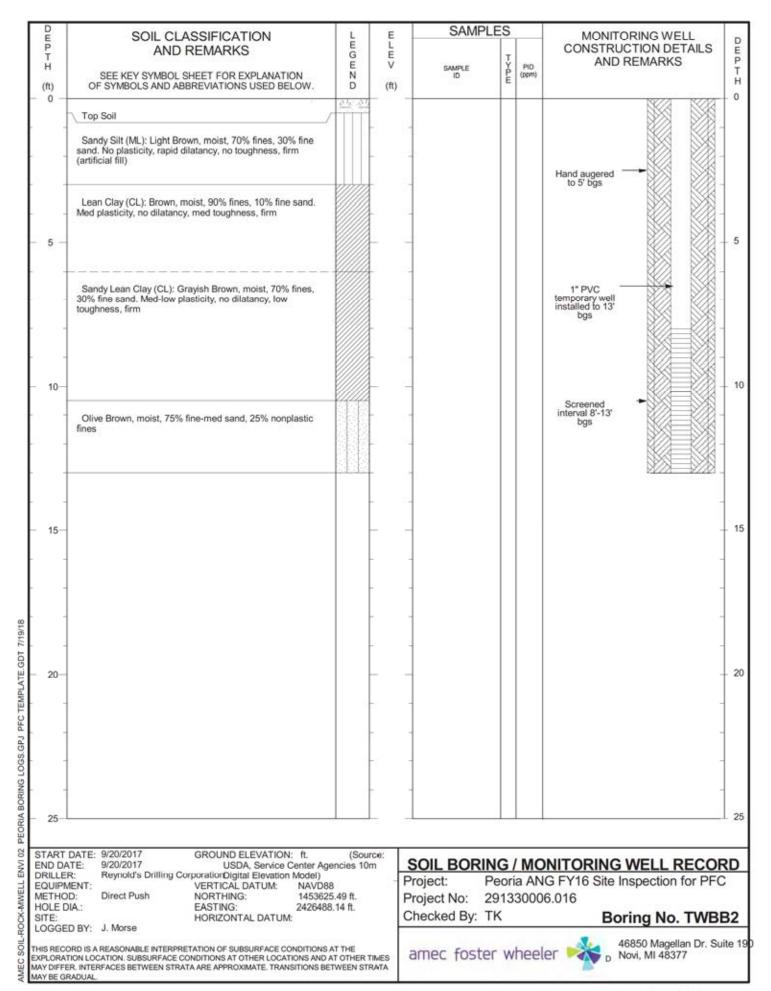
MAY BE GRADUAL

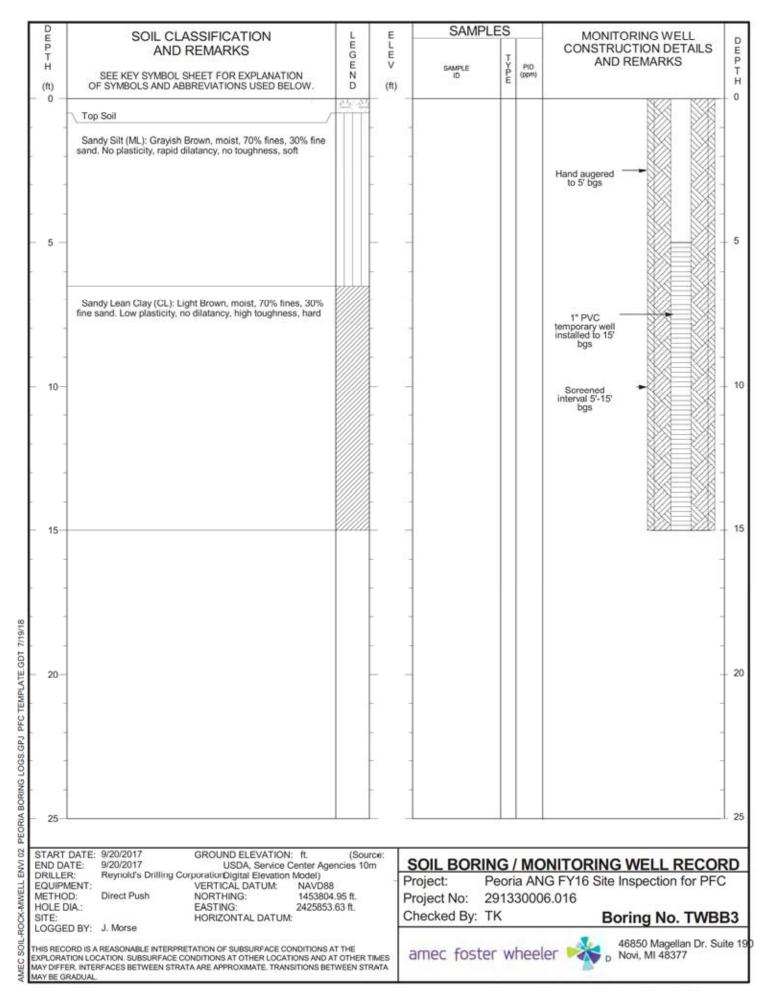
E	SOIL CLASSIFICATION	L E	E	SAMPL	ES			RING WELL	
P T H (ft)	AND REMARKS SEE KEY SYMBOL SHEET FOR EXPLANATION OF SYMBOLS AND ABBREVIATIONS USED BELOW.	GEND	E V (ft)	SAMPLE ID	TYPE	PID (ppm)		TION DETAILS EMARKS	
0 -	Topsoil	11.21			T				T
	Silty (ML), trace sand, brown, dry, low plasticity, soft, 95% fines, 5% sand.								
	Clayey silt (ML), some sand, brown, dry, low plasticity, firm, 85% fines, 15% sand.	7							
5 —	Clayey silt (ML), some sand, brown, moist, medium plasticity, firm, 85% fines, 15% sand.								1
-									-
	Sandy silt (MLS), brown, wet, low plasticity, soft.								
10-	Clayey silt (ML), some sand, brown, low plasticity, firm, 85% fines, 15% sand.		10 13						+
	Clayey silt (ML), some sand, brown, moist, high plasticity, / soft, 80% fines, 20% sand.								
	Sandy silt with clay (MLS), trace gravel, brown, moist, low plasticity, stiff, 60% fines, 40% sand and gravel.								
							Screened interval 13'-28' bgs		
15-									1
	Sandy silt with clay, little gravel, brown, moist, low plasticity, firm, 60% fines, 30% sand, 10% gravel.								
	Sandy silt (MLS), trace gravel, gray-brown, dry, 80% fines, 20% sand and gravel.						1" PVC temporary well installed to 28' bgs		
20-	Silt (ML), trace clay, tan, wet, medium plasticity, stiff, 100% / fines.								_
	Silty clay (CL), some sand, brown, moist, medium plasticity, firm, 80% fines, 20% sand.								
	Clayey silt (ML), little sand, brown, wet, medium plasticity, soft, 90% fines, 10% sand.								-
	Silt with clay, trace sand, gray, stiff, 95% fines, 5% sand.	Ш							-
25	Poorly graded gravelly sand, little silt, yellowish brown, (CONTINUED ON FOLLOWING FIGURE)	· ()	1 1					877 - 5778	1
	DATE: 5/10/2018 GROUND ELEVATION: ft.	(Sou	irce:	OII BODII			MITORING	VELL DEGG	D
ND DA	R: Reynold's Drilling CorporationDigital Elevation Model)	cies 10	Pro	ject: P			NITORING V IG FY16 Site Ins		
METHO HOLE D	DD: Direct Push NORTHING: ft. DIA.: EASTING: ft.			•		3000	6.016	N. TARRES	
SITE: .OGGE	ED BY: R. Crawford HORIZONTAL DATUM:		Ch	ecked By: T	N			No. TWBB04	
IS RECO	ORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT	THE	2	nec foste	- 141	haal	468	350 Magellan Dr. Su vi, MI 48377	uite

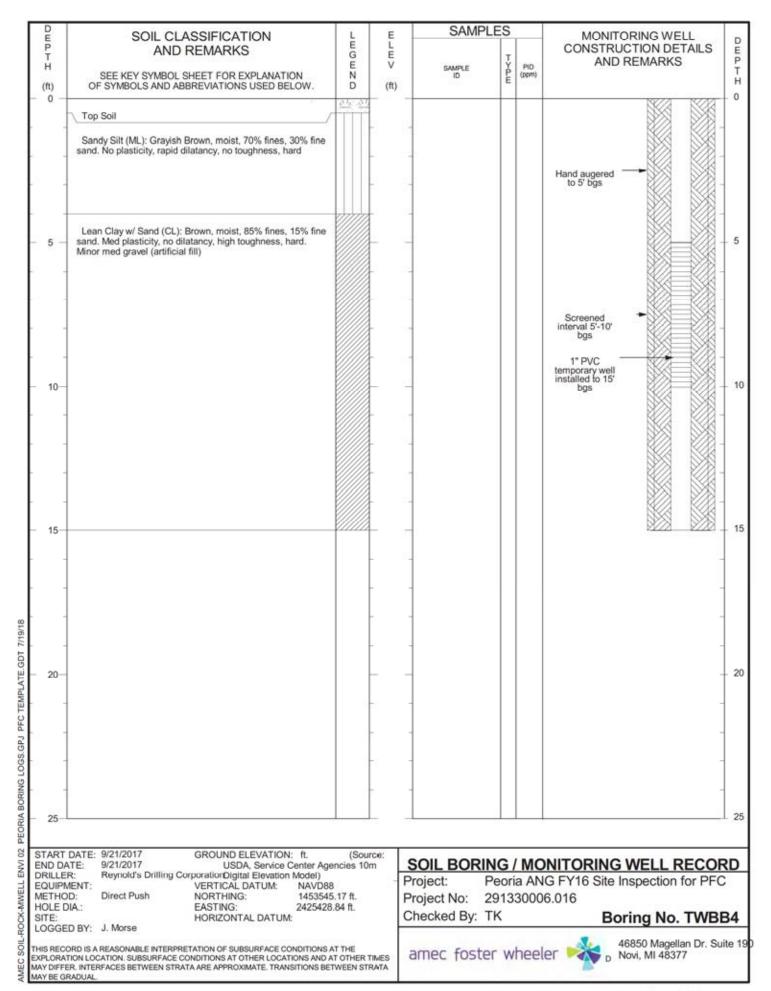


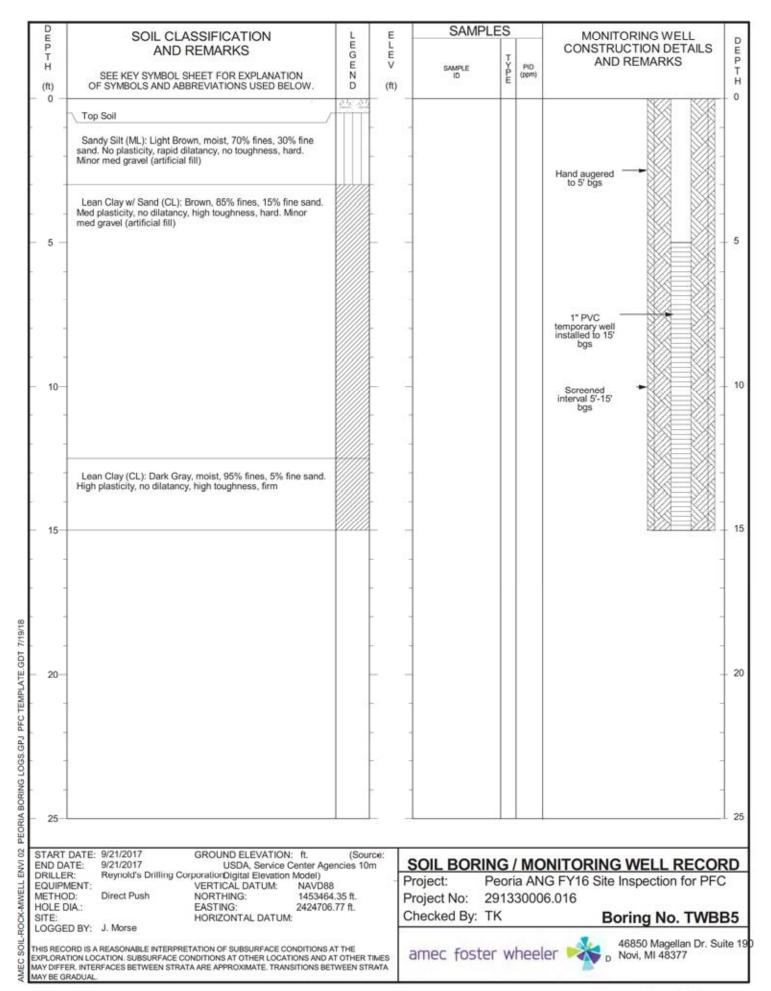












APPENDIX B

WELL DEVELOPMENT LOGS

NGB/A4OR

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wheeler											
Project Name:					ons for Per-F onal Guard Ir		Project No	umber:			291330006
Contract:	-		.V	/9133L-14-D	0-0002		Task Orde	er:	19		0006
Installation:	1.5			GPEOF	2		ted/Date Co	mpleted:		05/10/18/05/10/18	
Well ID:				TW01.A			Initial Dep	th to Water	(ft):		17.1
Measuring Point				Top of Ris				th of Well (f			28.9
Development Me	10 10 10 10 10 10 10 10 10 10 10 10 10 1			PUMPE	D				Purging (ft):		20.5
Total Volume Pu	rged (gal):			3			All 2 to 2 to 3 to 3 to 3 to 3 to 3 to 3 to	Volume (gal			0.5
Technician(s):			Ad	am			3 Casing \	Volumes (ga	al);		1.5
Date/Time	Intake Depth (feet)	Water Level (feet)	Rate (ml/m)	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.)
05/10/18 08:05	9		300	3 3							Pumping Started
05/10/18 08:20	25	22.6	200	15.2	6.57	1.31	0.67	-215.6	2582	100,000	
05/10/18 08:05	25	22.4	200	15.2	7,79	1.31	0.50	-311.8	3713	1,5	1
05/10/18 08:30	25	21.3	200	15.1	9.03	1.30	0.42	-355.6	1359		2
05/10/18 08:35	25	21.2	200	15.2	9.17	1.30	0.34	-356.7	1130	1.7	
05/10/18 08:40 05/10/18 08:45	25 25	21.1	200	15.2 15.1	9.66 9.84	1.30	0.34	-352.9	1670 727	1.9	
05/10/18 08:50	25	21.0	200	15.1	9.88	1.29	0.31	-360.0 -367.1	191	1,9	
05/10/18 08:55	25	21.0	200	15.6	9.98	1.29	0.23	-366.2	286	2.0	
05/10/18 09:00	25	21.0	200	15.8	10.07	1.30	0.24	-367.9	108		
05/10/18 09:05	25	20.9	200	15.7	10.23	1.29	0.23	-367	121	2.2	
05/10/18 09.10	25	20.7	200	15.7	10.56	1.29	0.19	-371.1	116		
05/10/18 09:15	25	20.7	200	15.7	10.77	1.29	0.19	-368.7	119	2.5	
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							+				
	 										
	 										
Instruments (M		Model, a									
Equipment Calibrate	d (Y/N):		· Y	es		Calibrated Within	Criteria (Y/N)			N.	No - pH is off
				Turbidity N	Aeter, Water	Quality Meter, Wa lamotte 2020we F YSI pro FA00	A00493,	or, Peristaltic P	'ump		
Calculations:						1.00	300				Clamatura
Saturated well control of the second of the	(well diameter (in			I/ft^3		-n · (1.)	0 (in)/12 (in/ft))H*7.48 gal/ft^)/2)*2 * 11.80 * 0.5 gal.			Signature:
Notes:											Name (print):
					-						Adam
QA/QC'd by:								C	A/QC Date:	i	4



wheeler											
Project Name:			1 Regional a ounds at Mult				Project N	umber:			291330006
Contract:			W	/9133L-14-D	0-0002		Task Orde	er:	19		0006
Installation:				GPEOF	1			ted/Date Co			05/11/18/05/11/18
Well ID:				TW03.4				oth to Water			7.0
Measuring Point				Top of Ris				th of Well (f			22.0
Development Me	0.1 (CONT.) (CONT.) (CONT.)			PUMPE	D				Purging (ft):		7.2
Total Volume Pu	rged (gal):			3			All Prince and Control of the Control	Volume (gal			0.6
Technician(s):			Ad	am	_		3 Casing	Volumes (ga	al);		1.8
Date/Time	Intake Depth (feet)	Water Level (feet)	Rate (ml/min)	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.)
05/11/18 11:30			300	3 3							Pumping Started
05/11/18 11:25	20	7.2	200	15.2	9.81	0.563	0.59	-64.4	2953	2.1	
05/11/18 11:30	20	7.2	200	15.1	9.00	0.562	0.43	-78.1	2398		2
05/11/18 11:35	20	7.2	200	15.1	9.7	0.558	0.35	-91.2	1948	2.2	
05/11/18 11:40	20	7.2	200	15.2	9.94	0.560	0.30	-115.4	1554	2.2	
05/11/18 11:45 05/11/18 11:50	20 20	7.2	200	15.3 15.4	10.13	0.557 0.557	0.29	-140.2 -150.3	1186 979	2.3	
05/11/18 11:55	20	7.2	200	15.5	10.28	0.555	0.25	-150.5	702	2.4	_
05/11/18 12:00	20	7.2	200	15.6	9.87	0.554	0.23	-149.9	119		
05/11/18 12:05	20	7.2	200	15.9	9.97	0.550	0.25	-137.2	57	2.5	
05/11/18 12:10	20	7.2	200	16.0	10.06	0.553	0.23	-141.0	93.8		
05/11/18 12:15	20	7.2	200	16.3	10.07	0.543	0.22	-144.7	78	2.7	
05/11/18 12:20	20	7.2	200	16.2	10.09	0.536	0.21	-137.4	67.6		
05/11/18 12:25	20	7.2	200	16.2	10.10	0.539	0.20	-131.7	46.6	2.8	
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3 11 3									7		
Instruments (M	lanufacturer,	Model, a	nd Serial	No.):							
Equipment Calibrate	d (Y/N):		Y.	es		Calibrated Within	Criteria (Y/N)	ľ.			No - pH off
				Turbidity N		Quality Meter, Wa Lamotte 2020we F YSI 556 MPS F/	FA00439,	er, Peristaltic P	ump		
0.1.1						O SOV MEST	100111				lo: ·
Calculations:											Signature:
Saturated well co V = Volume (gal/ft) П = 3.14 R = well radius (ft) = H = height of water	(well diameter (ir			I/ft^3		-D • (1.)	0 (in)/12 (in/ft)	2)H*7,48 gal/ħ*)/2)*2 * 15.00 0.6 gal.			about
Notes:											Name (print):
					100						Adam
OA/OC'd by:									A/OC Date:		



wheeler											
Project Name:			1 Regional Sounds at Mult				Project No	umber:			291330006
Contract:	92		W	9133L-14-E	-0002		Task Orde	er:			0006
Installation:	-			GPEOF			Date Start	ed/Date Co	mpleted:		05/09/18/05/09/18
Well ID:				TWBB01	A		Initial Dep	th to Water	(ft):		9.0
Measuring Point				Top of Ris	ier		Total Dept	th of Well (f	t):		25.0
Development Me				PUMPE	0		Depth to V	Water After	Purging (ft):		9.2
Total Volume Pu	rged (gal):			4.7			AT 2 THE WORLD BE SEEN	Volume (gal			0.7
Technician(s):	24 0000 0	R	eid Crawford	Adam Davis	5	(67)	3 Casing \	Volumes (ga	al):		2.0
Date/Time	Intake Depth (feet)	Water Level (feet)	Rate (ml/min)	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.)
05/09/18 10:32	3		300	3 3							Pumping Started
05/09/18 10:33	22.5	9.00									start purge
05/09/18 10:40	22.5	9.3							9		100 200
05/09/18 10:47	22.5	9.35			1				0	2	2
05/09/18 10:55	22.5	9.38	200			0.00				2.5	end purge
05/09/18 11:33	22.5	9.2	200	15.8	3.36	0.80	4.69	245.8	97.1	4	
05/09/18 11:42	22.5	9.2	200	16.1	3.60 4.41	0.78	3.87	182.5	54.6	4.2	
05/09/18 11:46 05/09/18 11:49	22.5 22.5	9.2	200	16.1	4.26	0.78	3.95 4.01	165.6 177.7	48.9 45.7	4.7	+
UD/U9/10 11:49	22.5	9.2	200	10.2	4,20	0.70	4.01	177.7	45.7	4.1	+
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Instruments (M	anufacturar	Model a	nd Sorial	No. V							
Equipment Calibrate		model, a		es		Calibrated Within	Critorio (V/NI)				Yes
Equipment Canbrate	d (maj.				total Mileton	•					100
				Turbidity is	neter, vvater	Quality Meter, Wa Lamotte 2020we YSI 556 MPS F/	FA0439,	or, Pensianic P	ump		
Calculations:											Signature:
Saturated well co V = Volume (gal/ft) n = 3.14 R = well radius (ft) = H = height of water	(well diameter (in			I/ft^3		-0.00	0 (in)/12 (in/ft))H*7.48 gal/ft* y2)*2 * 16.00 * 0,7 gal.			As land
Notes:											Name (print):
			PH pro	be acting up	o. unable to g	et proper calibration	on				Reid Crawford
QA/QC'd by:								-	A/QC Date:		



wheeler												
Project Name:			1 Regional : ounds at Mult				Project N	umber:			291330006	
Contract:	2.		W	/9133L-14-E	0-0002		Task Orde	er:	5		0006	
Installation:				GPEOF				ted/Date Co	mpleted:		05/11/18/05/11/18	
Well ID:	7			TW06.A	(oth to Water			17.55	
Measuring Point				Top of Ris	ser		Total Dep	th of Well (f	t):		22.0	
Development Me				PUMPE	D				Purging (ft):		19.0	
Total Volume Pu	rged (gal):			2			1 Casing	Volume (gal	I):		0.2	
Technician(s):	22 37 63 57		Ad	am		8	3 Casing	Volumes (g	al):		0.5	
Date/Time	Intake Depth (feet)	Water Level (feet)	Rate (ml/min)	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.)	
05/11/18 07:49			300	9 9							Pumping Started	
05/11/18 11:13	21	19.0	200	17.1	9.36	0.76	4.09	46.2	184	2		
	21		200									
	21		200								2	
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Instruments (N		Model, a									400 0 400 400	
Equipment Calibrate	id (Y/N):		: Y	es		Calibrated Within			-		No - pH off	
				Turbidity N		Quality Meter, Wa Lamotte 2020we F YSI 556 MPS F/	FA00439,	er, Peristaltic F	ump			
Calculations:											Signature:	
Saturated well co V = Volume (gal/ft) П = 3.14 R = well radius (ft) = H = height of water	(well diameter (in			I/ft^3		-H*(1.	.0 (in)/12 (in/ft	()H*7.48 gal/h/ ())/2)^2 * 4.45 * 0.2 gal.			9000	
Notes:											Name (print):	
		- 1	Well ran dry 3	times then	we took a gr	ab sample and YS	l reading				Adam	
QA/QC'd by:								-	A/QC Date:			
MENTAL HIDE									CONTRACTOR DOLD.			



wheeler											
Project Name:			1 Regional : ounds at Mult				Project N	umber:			291330006
Contract:			.W	/9133L-14-E	0-0002		Task Orde	er:			0006
Installation:				GPEOF	1		Date Start	ted/Date Co	mpleted:		05/10/18/05/10/18
Well ID:				TW08.4			Initial Dep	oth to Water	(ft):		11.5
Measuring Point				Top of Ris				th of Well (f			21.7
Development Me	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1			PUMPE	D		10 miles		Purging (ft):		12.4
Total Volume Pu	rged (gal):			2.1			All Prince and Control of the Control	Volume (gal			0.4
Technician(s):			Ad	am			3 Casing	Volumes (ga	al):		1.3
Date/Time	Intake Depth (feet)	Water Level (feet)	Rate (ml/min)	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.)
05/10/18 10:03	3		300	9 9							Pumping Started
05/10/18 10:40	20	12.45	200	16.6	7.0	1.04	1.87	-205.0	99999	1.0	pump kept stopping
05/10/18 10:45	20	12.4	200	16.6	7.3	1.04	1.69	-192.7	99999		after 11:10, so, changes
05/10/18 10:50	20	12.35	200	16.6	8.4	1.04	1.60	-179.1	99999	1.1	in parameters after that time
05/10/18 10:55	20	12.4	200	16.6	8.66	1.02	1.66	-169.9	99999		are likely the result of the stops
05/10/18 11:00	20	12.35	200	17.1 16.9	8.98 9.18	1.03	1.70	-166.3 -157	99999	1.2	not changing conditions.
05/10/18 11:05	20	12.35	200	17.2	9.16	1.02	1.65	-154.3	99999 3342	_	
05/10/18 11:15	20	12.35	200	17.2	9.28	1.02	1.66	-155.7	2740		
05/10/18 11:20	20	12:35	200	16.9	9.47	1.02	1.69	-150.1	2310	1.5	
05/10/18 11:25	20	12.35	200	17.7	9.57	1.02	1.69	-150.8	1836		
05/10/18 11:30	20	12.35	200	17.6	9.77	1.02	1.68	-153.5	1704	1.7	
05/10/18 11:35	20	12.4	200	17.5	10.10	1.03	1.67	-158.1	2281		
05/10/18 11:40	20	12.4	200	17.5	10.17	1.00	1.72	-147.4	2447	2	
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Instruments (M	anufacturer,	Model, a	nd Serial	No.):							
Equipment Calibrate				es		Calibrated Within	Criteria (Y/N)	Y.		7	No - pH off
				Turbidity N		Quality Meter, Wa Lamotte 2020we F YSI 556 MPS F/	FA00439,	er, Peristaltic F	ump		
0.1.1.1						33,333,1111,333					la:
Calculations: Saturated well co V = Volume (galift) П = 3.14 R = well radius (ft) = H = height of water of	(well diameter (in			I/ft^3		-0.4	0 (in)/12 (in/ft)	()H*7.48 gal/ft* ()/2)*2 * 10.20 0.4 gal.			Signature:
Notes:											Name (print):
					8.20						Adam Davis
QA/QC'd by:								C	A/QC Date:		



wheeler											
Project Name:			1 Regional : ounds at Mult				Project N	umber:			291330006
Contract:			W	/9133L-14-D	0-0002		Task Orde	er:	1.9		0006
Installation:				GPEOF	1		Date Start	ted/Date Co	mpleted:		05/10/18/05/10/18
Well ID:				TW11.4				oth to Water			6.0
Measuring Point				Top of Ris			Total Dep	th of Well (f	t):		19.0
Development Me	5. 1 Control of the C			PUMPE	D				Purging (ft):		6.5
Total Volume Pu	rged (gal):			4			All Prince and Control of the Control	Volume (ga			0.5
Technician(s):			Ad	am	_		3 Casing	Volumes (g	al);		1.6
Date/Time	Intake Depth (feet)	Water Level (feet)	Rate (ml/min)	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.)
05/10/18 16:23			300	9 9							Pumping Started
05/10/18 16:55	15	6.5	200	13.4	11.44	1.38	0.11	-263.3	1082		
05/10/18 17:00	15	6.5	200	13.5	11.67	1.36	0.08	-275.1	893		
05/10/18 17:05	15	6.5	200	13.7	12.22	1.34	0.09	-289.9	1213		
05/10/18 17:10	15	6.5	200	13.4	12.26	1.35	0.09	-287.7	825		
05/10/18 17:15 05/10/18 17:20	15 15	6.5	200	13.8	12.17	1.35	0.08	-291.8 -285.2	671 98		
05/10/18 17:25	15	6.5	200	13.3	12.35	1.36	0.07	-271.9	96		
05/10/18 17:30	15	6.5	200	13.3	12.56	1.36	0.07	-254.1	63		
05/10/18 17:35	15	6.5	200	13.2	12.62	1.36	0.06	-253.3	59		
05/10/18 17:40	15	6.5	200	13.4	12.52	1,38	0.07	-237.7	56		
05/10/18 17.45	15	6.5	200	13.0	12.49	1.38	0.06	-236.8	689	(6)	we took sample to avoid turbidity
											rising more. It was -150
									-		when we sampled
											9
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									7		
Instruments (M		Model, a		1							
Equipment Calibrate	d (Y/N):		: Yı	és		Calibrated Within	Criteria (Y/N)	r.	-		No - pH off
				Turbidity N		Quality Meter, Wa Lamotte 2020we F YSI 556 MPS F/	FA00439,	er, Peristaltic F	ump		
Calculations:											Signature:
	21 19			1000						la la	orginature.
Saturated well ca V = Volume (gal/ft) n = 3.14	asing volume:	V= Π(R^2	?)H*7.48 ga	I/ft^3		-0 - (1.0	0 (in)/12 (in/ft)		* 7,48 gal/ħ^3		Odan 3
R = well radius (ft) = H = height of water (n)/12 (in/ft))	(2)				=	0.5 gal.			
Notes:											Name (print):
					190						Adam Davis
OA/OC'd by:								-	A/OC Date:		



wheeler											
Project Name:			e 1 Regional ounds at Mul				Project N	umber:			291330006
Contract:	24		.V	/9133L-14-D	-0002		Task Orde	er:			0006
Installation:				GPEOR	2		Date Start	ted/Date Co	mpleted:		05/10/18/05/10/18
Well ID:				TWBB04	A		Initial Dep	th to Water	(ft):		15.65
Measuring Point	:			Top of Ris			Total Dep	th of Well (f	t):		29.5
Development Me	The state of the s			PUMPE	D				Purging (ft):		17.00
Total Volume Pu	irged (gal):			1.7			All All and the second second	Volume (ga			0.6
Technician(s):			Ad	am			3 Casing \	Volumes (g	al);		1.7
Date/Time	Intake Depth (feet)	Water Level (feet)	Rate (ml/min)	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.)
05/10/18 12:31			300	9				Š			Pumping Started
05/10/18 12:50	22	17.2	200	16.7	9.25	5.59	8.7	-346.2	9999		
05/10/18 12:55	22	17.1	200	16.5	8.46	5.56	0.99	-306.8	9999		
05/10/18 13:00	22	17.1	200	16.4	8.18	5.54	1.14	-280.4	2447	1.1	
05/10/18 13:05	22	17.1	200	16.3	8.08	5.49	1.23	-261.7	1516		
05/10/18 13:10	22	17.05	200	16.6 16.3	8.09 8.13	5.52 5.49	1.34	-246.1 -238.8	966 902	1.3	
05/10/18 13:19	22	17.1	200	16.4	8.46	5.50	1.42	-238.8	709	1,3	
05/10/18 13:25	22	17.00	200	16.7	9.68	5.44	1.44	-221.3	168	1.4	
05/10/18 13:30	22	17.00	200	16.7	9.90	5.45	1.48	-215.6	54	1,54	
05/10/18 14:33	22	17.00	200	16.7	8.99	5.49	1.58	-212.6	45	1.6	
		15.05									
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Instruments (M		Model, a		No.):		0.00.1.10.00.					lo all all
Equipment Calibrate	ed (1/N):		- 1			Calibrated Within	7 7			- 1	lo - pH off
				Turbidity N		Quality Meter, Wa Lamotte 2020we I YSI 556 MPS F.	FA00439,	er, Penstaltic F	ump		
Coloulations											Clanatura
Calculations:										. !	Signature:
Saturated well c V = Volume (gal/ft) Π = 3.14	asing volume:	V= Π(R^2	2)H*7.48 ga	l/ft^3		-D • (1)	V= Π(R^2 0 (in)/12 (in/ft)	()H*7.48 gal/ft/)/2)*2 * 13.85			Mart 10
R = well radius (ft) = H = height of water		n)/12 (in/ft))	(2)					0.6 gal.	10 10 10 10 10 10 10 10 10 10 10 10 10 1		V
Notes:											Name (print): Adam Davis
QA/QC'd by:								-	QA/QC Date:		

Rev. 1, Date: 12/29/2016



wheeler											
Project Name:			1 Regional : ounds at Mult				Project N	umber:			291330006
Contract:	9.		.W	/9133L-14-E	0-0002		Task Orde	er:			0006
Installation:				GPEOF	2		Date Start	ted/Date Cor	mpleted:		05/10/18/05/10/18
Well ID:				TWBB05	.A		Initial Dep	th to Water	(ft):		11.8
Measuring Point				Top of Ris				th of Well (f			20.1
Development Me				PUMPE	D				Purging (ft):		11.8
Total Volume Pu	rged (gal):			1.3			All 2 to 2 to 3 to 3 to 3 to 3 to 3 to 3 to	Volume (gal			0.3
Technician(s):			Ad	am			3 Casing \	Volumes (ga	al);		1.0
Date/Time	Intake Depth (feet)	Water Level (feet)	Rate (ml/min)	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.)
05/10/18 13:56			300	3 3							Pumping Started
05/10/18 14:10	16	11.8	200	15.4	10.52	1.37	0.34	-395.5	99999		
05/10/18 14:15	16	11.8	200	15.1	10.60	1.36	0.19	-397.1	2942		2
05/10/18 14:20	16	11.8	200	15.0	10.68	1.36	0.15	-395.9	3986	0.0	
05/10/18 14:25	16	11.8	200	14.5	10.64	1.36	0.15 0.15	-370.2	1243	0.8	
05/10/18 14:30 05/10/18 14:35	16 16	11.8	200	14.1	10.64	1.36	0.15	-360.7 -360.4	639 734	_	
05/10/18 14:40	16	11.8	200	14.0	10.48	1.34	0.12	-359.5	75	1	_
05/10/18 14:45	16	11.8	200	14.5	10.61	1.35	0.14	-350.9	64.9		
05/10/18 14:50	16	11.8	200	14.4	10.73	1.36	0.13	-358.8	56.7		
05/10/18 14:55	16	11.8	200	14.1	10.75	1.35	0.13	-346.6	45.8	1.2	
	 		 				+				
	$\overline{}$										
			-								
	 		 								
Instruments (M		Model, a									
Equipment Calibrate	d (Y/N):		:Yi	es		Calibrated Within	700				No - pH off
				Turbidity N		Quality Meter, Wa Lamotte 2020we F YSI 556 MPS F/	FA00439,	or, Peristaltic P	'ump		
Calculations:											Signature:
Saturated well co V = Volume (gal/ft) n = 3.14 R = well radius (ft) = H = height of water of	(well diameter (in			I/ft^3		-II - (1	.0 (in)/12 (in/ft))H*7.48 gal/ft^))/2)^2 * 8.30 * 0.3 gal.			ONE
Notes:											Name (print):
					-						Adam Davis
QA/QC'd by:								0	A/QC Date:		

APPENDIX C

GROUNDWATER SAMPLING LOGS

NGB/A4OR

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wneeler									
Project Name:			spections for I		ted Compounds	Project Nu	ımber:		291330006
Contract:		1/	/9133L-14-D-	0002		Task Orde	· ·	e -	0006
Installation:	7		GPEOR	0004		Technicia		10.00	devin peterson
Well ID:			TW08			Date:	1401.	12 <u>-</u>	09/21/17
Initial Depth to Water (ft):	-		999.0			Well Diam	eter (in):	·	1.0
Total Depth of Well (ft):			15.0			1 Casing \		an:	1.0.
Method of Purging:	7		dry		 -	3 Casing \			
Measuring Point (toc, tor, e	tc 1:			of Casing		Pump Inta			dry
measuring Fornt (toc, tor, e	10.7.		100	or Granning	Specific	Tump ma	Ke Depui	icetj.	uiy
Time Water Level (feet)	Flow Rate (mL/min)	Cum. Volume (gal.)	Temp. (°C)	pH (SU)	Electrical Conductance (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Comments/Observations During Purging
	Stabilization	n Criteria	±0.5°C	±0.1	±3%	±10%	±10%	±10% and <10 NTU	(color, sediment, odor, etc.)
13:58	dry								Pumping/Purging Started
							0 0		702-01 ft
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	_					+			
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					_	+			
						+			
	_				_	+			
	_				_	+			
Stability Reached (Y/N):			Yes		If No, Provide E	xplanation			NA
	Final	Values:	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	
Sample ID:	141		-			Method of			
QA/QC Samples (Yes/No):						Sample Da			
Duplicate ID:			NA			Sample Co		ime:	
Sample Container Type(s):			, INC.			Total Volu			
Preservative(s):							- / / / / / / / / / / / / / / / / / / /	u (gai).	dny
Analysis/Method(s):	-					Sample De		Compling (ft):	dry
Instruments (Manufactur	or Model	and Caria	I No V			Deptil to v	vater Arter	Sampling (ft):	
Equipment Calibrated (Y/N):	er, moder, a		es		Calibrated Within	Criteria (Y/N):			Yes
			Turbidity		r Quality Meter, W			Pump	
				Hach 210	0Q 3241-2013, YS	1556 MPS 14T	100349		
Calculations:									Signature:
Saturated well casing volui	me: V= Π(R^	2)H*7.48 g	al/ft^3						In Oth
V=Volume (gal/ft)						V= Π/R^2	2)H*7,48 gal	tt^3	7 (7/1)
П = 3.14					= FI 1 (1.)			00 * 7,48 gal/ft*3	Am will
R = well radius (ft) = (well diamet	ter (in)/12 (in/ft))/2)					= gal.		13
H = height of water column (ft)		1000000							
Notes:									Name (print):
				none					devin peterson
QA/QC'd by:								QA/QC Date:	



wheeler	171-		A11						
Project Name:				Per-Fluorinat and Installation	ed Compounds ons	Project Nu	ımber:		291330006
Contract:	_	W	9133L-14-D-	-0002		Task Orde	er:		0006
Installation:	ģ.		GPEOR			Technicia	n(s):		devin peterson
Well ID:			TWB83			Date:			09/21/17
Initial Depth to Water (ft):			999.0			Well Diam			1.0
Total Depth of Well (ft):			15.0			1 Casing \			
Method of Purging:	-4-1-		dry	el Cosino		3 Casing \			- de
Measuring Point (toc, tor	, etc.):		тор	of Casing	Specific	Pump Inta	ke Depth (reet):	dry
Time Water Lev (feet)	rel Flow Rate (mL/min)	Cum. Volume (gal.)	Temp. (°C)	pH (SU)	Electrical Conductance (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Comments/Observations During Purging (color, sediment, odor, etc.)
	Stabilization	n Criteria	±0.5°C	±0.1	±3%	±10%	±10%	±10% and <10 NTU	
14:01	dry								Pumping/Purging Started
									100 to 10
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	+	$\overline{}$							<u> </u>
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	+	\vdash							
	+	 				+			
	_								
		\vdash							
	+				_	+			
	_								
Stability Reached (Y/N):			Yes		If No, Provide b	volanation			NA
otability redefied (1714).					1110,110100	.npidi)diddii			101
	Final	Values:	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	
Sample ID:	-					Method of		r.	
QA/QC Samples (Yes/No)	: <u> </u>		818			Sample Da			
Duplicate ID:			NA			Sample Co			9,
Sample Container Type(s Preservative(s):)					Total Volu Sample De		a (gai):	dry
Analysis/Method(s):	-							Sampling (ft):	
Instruments (Manufact	urer, Model,	and Serial	No.):			Departo 1	ruter Atter	Cumping (ic).	
Equipment Calibrated (Y/N):			05		Calibrated Within	Criteria (Y/N):			Yes
	5.1		Care Chicago					San Constitution of the Co	
			urbidity	Hach 210	r Quality Meter, Wa OQ 3241-2013, YSI	ster Level Met 556 MPS 14f	er, Penstano 100349	c Pump	
Calculations:									Signature:
Saturated well casing vol	ume: V= Π(R'	2)H*7.48 g	al/ft^3						1
						W- EVEN	W.1+7 40 cold	nan o	11.
V=Volume (gal/ft) П = 3.14					= 011(1.0		()H*7.48 gal/ (/2)^2 * -984.	m^3 .00 * 7.48 gal/ft^3	MM
R = well radius (ft) = (well dian)/2)			2000		= gal.	and the same of th	1 -/ / /
H = height of water column (ft)									5: 87
Notes:									Name (print):
				0-200					910.000.00000000
				dry					jeremiah morse
OA/OC'd by:								QA/QC Date:	
The state of the s								PROBLEMS - I TOURS	



wneeler									
Project Name:			spections for I		ted Compounds	Project Nu	ımber:		291330006
Contract:		1/	/9133L-14-D-	1002		Task Orde	er:	0-	0006
Installation:			GPEOR	0002		Technicia			devin peterson
Well ID:			TW01			Date:	1/0/	10 <u>-</u>	09/21/17
Initial Depth to Water (ft):			999.0			Well Diam	eter (in):	0	1.0
Total Depth of Well (ft):			15.0			1 Casing \	The second second	an:	1.0
Method of Purging:			dry		 -	3 Casing \			
Measuring Point (toc, tor, e	te 1:			of Casing		Pump Inta			dry
measuring Forit (toc, tor, e	10.7.		100	/ Goorig	Specific	Tump ma	ke Depui	icetj.	u.y
Time Water Level (feet)	Flow Rate (mL/min)	Cum. Volume (gal.)	Temp. (°C)	pH (SU)	Electrical Conductance (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Comments/Observations During Purging
70	Stabilization	n Criteria	±0.5°C	±0.1	±3%	±10%	±10%	±10% and <10 NTU	(color, sediment, odor, etc.)
14:02	dry		· ·						Pumping/Purging Started
							0 0		202-010
						1			
						<u> </u>			
						+			
					_	+			
						+		-	
						+			
						+	_		
						+			
					_	+			
						+			
					_	+			
						+			
						+			
						+			
Stability Reached (Y/N):		2.0	Yes		If No, Provide E	explanation			NA
	Final	Values:	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	
Sample ID:	101				-	Method of			
QA/QC Samples (Yes/No):						Sample Da		·	
Duplicate ID:			NA.			Sample Co		ime:	
Sample Container Type(s):						Total Volu			
Preservative(s):						Sample De		- (gai)	dry
Analysis/Method(s):								Sampling (ft):	
Instruments (Manufactur	er Model :	and Seria	I No Y			Depui to 1	rater Arter	Sampling (it).	
Equipment Calibrated (Y/N):			es		Calibrated Within	Criteria (Y/N):			Yes
				Turbidity M	leter, Water Level I Hach 2100Q 32		tic Pump		
					1 mail & 10042 32	- 1-E010)			
Calculations:									Signature:
Caturated wall assing value	V- E/D	DILL#7 40 a	~UBAO						i
Saturated well casing volur	ne: v= n(R	2)H 7,46 g	aut.2						No.
V=Volume (gal/ft))H*7.48 gal/		1 1 1 -
Π = 3.14					= П (1.			00 * 7.48 gal/ft^3	4
R = well radius (ft) = (well diamet	er (in)/12 (in/ft))/2)					= gal.		7 '
H = height of water column (ft)									7
Notes									Mama farinth
Notes:									Name (print):
				oles i					incominh manna
				dry					jeremiah morse
OVIOCIA hiii								QA/QC Date:	
QA/QC'd by:								WATER Date.	



wheeler										
Project Name:					Per-Fluorinat uard Installatio	ed Compounds ons	Project Nu	ımber:		291330006
Contract:	9		W	9133L-14-D	-0002		Task Orde	r:		0006
Installation:				GPEOR			Technicia	n(s):		devin peterson
Well ID:				TW02			Date:			09/21/17
Initial Depth to V				14.38			Well Diam	The second second		1.0
Total Depth of V				15.0				/olume (ga		0.0
Method of Purgi				pumping				/olumes (g		0.1
Measuring Point	t (toc, tor, et	c.):		Тор	of Casing		Pump Inta	ke Depth (feet):	14.8
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
		Stabilization	n Criteria	±0.5°C	±0.1	±3%	±10%	±10%	±10% and <10 NTU	(color, sediment, odor, etc.)
09:10		100								Pumping/Purging Started
					_		_			
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Stability Reache	of OVAN			No		M. Mar. Osmirada I.	and another a		No Char	enchance combined will blow and
Stability Reache	eu (T/N).			140	-	If No, Provide E	хріапавоп		INO - IOW	recharge unable to till flow cell
		Final	Values:	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	
Sample ID:								Sampling:		
QA/QC Samples	(Yes/No):	li-		878			Sample Da			
Duplicate ID:	or Timo(a).			NA.				ollection Ti me Purged		.05
Sample Contain Preservative(s):							Sample De	-	(gar):	14.8
Analysis/Method									Sampling (ft):	14.0
Instruments (N		r. Model. a	and Serial	No.):			Departo 1	rater rater	Camping (14):	
Equipment Calibrat			Ye	- C.		Calibrated Within	Criteria (Y/N):			Yes
		ai		Turbidity	Meter, Water	r Quality Meter, Wa	ater Level Met	er, Peristaltic	Pump	
Calculations:					Hach 2100	0Q 3241-2013, YS	1000 MPS 141	100349		Signature:
			D11 14-7 7-	110.4						i signature.
Saturated well of V=Volume (gal/ft) Π = 3.14 R = well radius (ft) : H = height of water	= (well diamete			ai/tt^3		= n · (·	1.0 (in)/12 (in/f	2)H*7,48 gal/f t))/2)*2 * 0.62 0.0 gal	1^3 * 7.48 gal/ft^3	911
Notes:										Name (print):
					none					jeremiah morse
OA/OC'd by:									QA/QC Date:	



wneeler												
Project Name:			spections for I		ted Compounds	Project Nu	ımber:		291330006			
Contract:		1/	/9133L-14-D-	1002		Task Orde	er:	e -	0006			
Installation:			GPEOR	0002		Technicia		10.00	devin peterson			
Well ID:			TWBB1			Date:	101.	12 <u>-</u>	09/21/17			
Initial Depth to Water (ft):			999.0			Well Diam	eter (in)	-	1.0			
Total Depth of Well (ft):			15.0			1 Casing \		an:	1.00			
Method of Purging:	7		dry		 -	3 Casing \						
Measuring Point (toc, tor, e	to 1:			of Casing		Pump Inta			dry			
measuring Folit (toc, tor, e	10.7.		100	/ Goorig	Specific	Tump ma	ke Depui	icetj.	uy			
Time Water Level (feet)	Flow Rate (mL/min)	Cum. Volume (gal.)	Temp. (°C)	pH (SU)	Electrical Conductance (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Comments/Observations During Purging			
	Stabilization Criteria		±0.5°C	±0.1	±3%	±10%	±10%	±10% and <10 NTU	(color, sediment, odor, etc.)			
14:08	dry								Pumping/Purging Started			
							0 0		20200 2000			
	0.0											
						1						
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						+						
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Stability Reached (Y/N):			Yes		If No, Provide E	xplanation			NA			
	Final	Values:	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A				
Sample ID:					-	Method of						
QA/QC Samples (Yes/No):						Sample Da						
Duplicate ID:	-		NA.			Sample Co		ima:				
Sample Container Type(s):			140			Total Volu						
Part of the part o						Sample De	-	u (gai).	dou			
Preservative(s): Analysis/Method(s):	_					Control of the Contro		Sampling (ft):	dry			
Instruments (Manufactur	or Model	and Soria	I No Y			Deptil to v	vater Arter	Sampling (it).				
Equipment Calibrated (Y/N):	er, moder, a		es es		Calibrated Within	Criteria (Y/N):			Yes			
			Turbidity		r Quality Meter, W 0Q 3241-2013, YS			Pump				
				HBUI Z IU	00 3241-2013, 10	1330 MF3 141	100349					
Calculations:									Signature:			
Caturated wall assing value	was V- 0/04	D)U#7 40 a	a LIBAO						i			
Saturated well casing volun	ne: v=11(R"	zjn 7,48 g	ai/It-3									
V=Volume (gal/ft)						V= Π(R^2)H*7.48 gal/	ft^3	20			
Π = 3.14 = Π * (1.0 (in))12 (in/fi								(in)/12 (in/ft))/2)^2 * -984.00 * 7.48 gal/ft^3				
R = well radius (ft) = (well diamet	er (in)/12 (in/ft))/2)					= gal.		/ / /			
H = height of water column (ft)									100			
Notes									Nama fariatte			
Notes:									Name (print):			
				oles i					in-remish mana			
				dry					jeremiah morse			
OVIOCIA Pro-								QA/QC Date:				
QA/QC'd by:								WATER Date:				



wheeler										
Project Name:				spections for ir National Gu		ed Compounds ons	Project Nu	ımber:		291330006
Contract:	9		V	/9133L-14-D-	0002		Task Orde	r:		0006
Installation:		Š.		GPEOR			Technician	n(s):		devin peterson
Well ID:				TWB82			Date:			09/21/17
Initial Depth to	Water (ft):			4.14			Well Diam	eter (in):		1.0
Total Depth of				15.0			1 Casing V			0.4
Method of Purg	jing:	<u> </u>		pumping			3 Casing V	/olumes (g	jal):	1.3
Measuring Poir	nt (toc, tor, et	c.):		Тор	of Casing		Pump Inta	ke Depth (feet):	13
Time	Water Level (feet)	Flow Rate (mL/min)	Cum. Volume	Temp.	pH (SU)	Specific Electrical Conductance	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Comments/Observations
		Stabilization	(gal.)	±0.5°C	±0.1	(mS/cm) ±3%	±10%	±10%	±10% and <10	During Purging (color, sediment, odor, etc.)
		0.0500000000	- Grineria	20.0 0	20.1	4000	11070	21076	NTU	
12:07		100								Pumping/Purging Started
12:10	6.07	100		20.8	8.87	1.21	0.50	-559	796au	
12:13	7.75	100		22.4	8.54	1.19	0.54	-540	1302au	
12:16	8.05	100		22.6	8.24	1.23	0.51	-532.7	1805	
12.19	8.45	100		22.4	8.28	1.25	0.47	-538.6	1250	
12:22	9.15	100	. dans	22.5	8.26	1.27	0.48	-541.7	1175	
			u'gg							
	\vdash					-				
							+	\vdash		
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							1			
Stability Reach	ed (V/M):		E / Mhor	(some do not	Combileto	If No, Provide b	volanation		(Whos Jenny	e do not stabilize) - high turbidity
Stability Reach	eu (1/N).		Outer	(Sollie do Hot	Didulize	II NO, FTOWIGE D	хріапавоп		Other (son	e do not stabilize y - risgit turbulty
		Final '	Values:	22.5	8.26	1.27	0.48	-541.7	1175	
Sample ID:		S.		GPEOR-TB	B2	77	Method of	Sampling	:	peristaltic
QA/QC Sample:	s (Yes/No):			Yes MS/MS	SD.		Sample Da	ate:		09/21/17
Duplicate ID:				NA	***		Sample Co	ollection Ti	ime:	12:30
Sample Contain	ner Type(s):			6 oz HDPE			Total Volu			.5
Preservative(s)				lce (4 °C)			Sample De		- (guy)	13
Analysis/Metho	The state of the s	31	PFA	S (EPA 537-r			The second secon		Sampling (ft):	10.23
Instruments (I		er. Model. a								
Equipment Calibra				es		Calibrated Within	Criteria (Y/N):			Yes
Equipment Guinero	and the transfer			*8:		-	Comment (1114).			
				Turbidity		r Quality Meter, Wa OQ 3241-2013, YSI			Pump	
Calculations:										Signature:
										!
Saturated well	casing volum	ne: V= Π(R^	2)H*7.48 g	al/ft^3						h
							V= EVEAS)H*7.48 gal/	862	In Paton
V=Volume (gal/ft) П = 3.14						= H * (1			6 * 7.48 gal/ft*3	V~
R = well radius (ft)	= (well diamete	er (in)/12 (in/ft)	V2)			1000000		0.4 gal.	week of the state	V
H = height of wate		Carlo ver family								
Notes:										Name (print):
183										
					none					devin peterson

OA/OC'd by:									QA/QC Date:	



wheeler										
Project Name:				spections for ir National Gu		ted Compounds ons	Project Nu	ımber:		291330006
Contract:			٧	/9133L-14-D-	0002		Task Orde	r:		0006
Installation:		ğ		GPEOR			Technician	n(s):		devin peterson
Well ID:				TW04			Date:			09/21/17
Initial Depth to	Water (ft):			6.0			Well Diam	eter (in):		1.0
Total Depth of				15.0			1 Casing V			0.4
Method of Purg		8		pumping			3 Casing V	7		1.1
Measuring Poir	nt (toc, tor, et	c.):		Top	of Casing		Pump Inta	ke Depth	(feet):	13
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
		Stabilization	n Criteria	±0.5°C	±0.1	±3%	±10%	±10%	±10% and <10 NTU	(color, sediment, odor, etc.)
11:20		100		v						Pumping/Purging Started
11:23	6.01	100	.1	21.0	7.79	0.78	0.92	-21.5	70.2	
11:26	6.02	100	.2	20.8	7.84	0.78	0.56	-32.6	34.1	
11:29	6.02	100	,3	20.5	7.65	0.77	0.33	-105.2	16.9	
11.32	6.02	100	.4	20.4	7.67	0.77	0.32	-99.9	12.5	
11:35	6.02	100		20.4	7.65	0.77	0.27	-95.5	10.7	
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Stability Reach	ed (Y/N):			Yes		If No, Provide E	xplanation		3	NA
		Final	Values:	20.4	7.65	0.77	0.27	-95.5	10.7	
Sample ID:				GPEOR-TW-	-04	· .	Method of	Sampling	:	peristaltic
QA/QC Sample:	s (Yes/No):	1	1272-1	Yes DUP			Sample Da	ate:		09/21/17
Duplicate ID:			GPEO	R-GW-DUPO	01-092117		Sample Co	ollection T	ime:	11:40
Sample Contain	ner Type(s):	5	2	unpreserved p	olastic		Total Volu	me Purge	d (gal):	.6
Preservative(s)				Ice (4 °C)			Sample De	- A 10 10 10 10 10 10 10 10 10 10 10 10 10		13
Analysis/Metho	d(s):	at you might	PFA	S (EPA 537-r	nodified)	16	Depth to V	Vater After	Sampling (ft):	6.02
Instruments (I Equipment Calibra		er, Model, a		l No.):		Calibrated V/ithin	Criteria (Y/N):			Yes
		al .			CONTRACTOR AND ADDRESS	-			Same of the same o	
				Turbidity		r Quality Meter, Wa 0Q 3241-2013, YSI			c Pump	
Calculations:										Signature:
				100.00						
Saturated well of V=Volume (gal/ft) Π = 3.14 R = well radius (ft)	= (well diamete			aur 3		= n • (1.0 (in)/12 (in/fi	2)H*7,48 gal/ 1)y2y*2 * 9.0 0.4 gal.	ff^3 0 * 7.48 gal/ff^3	Im lun
H = height of wate	r column (ft)									
Notes:										Name (print):
l					none					devin peterson
										486-80 C60090 6-93 NE
OA/OC'd by:									QA/QC Date	. 7-2



111166161												
Project Name:				spections for l ir National Gu		ted Compounds ons	Project Nu	ımber:		291330006		
Contract:	9		1/	/9133L-14-D-	0002		Task Orde	r.		0006		
Installation:				GPEOR	0002		Technicia		- 10 m	devin peterson		
Well ID:				TW07			Date:		-	09/21/17		
Initial Depth to	Water (ft):			1,28			Well Diam	eter (in):	-	1.0		
Total Depth of				15.0			1 Casing \		al):	0.6		
Method of Purg	ging:			pumping			3 Casing \	Volumes (gal):	1.7		
Measuring Poir	nt (toc, tor, et	c.):		Тор	of Casing		Pump Inta	ke Depth	(feet):	13		
			Cum.			Specific						
Time	Water Level (feet)	Flow Rate (mL/min)	Volume (gal.)	Temp. (°C)	pH (SU)	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			
10:35		100						on the same		Pumping/Purging Started		
10:38	3.78	100	.05	23.3	6.71	1.85	0.71	17.2	17.4	1		
10:41	5.76	100	.1	24.1	6.80	1.83	0.82	-30.7	12.09			
10:44 10:47	7.81 9.53	100	.15	24.0	6.81	1.77	0.83	-33.3 -29.6	11.23			
10.47	9.55	100	.2	24.0	0.01	1.75	0.90	-23.0	10.04			
							1					
							1					
	$\overline{}$											
	-							-				
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							1					
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						_						
Stability Reach	ed (Y/N):			Yes		If No, Provide b	xplanation			NA		
on and the second		Einel I	(felicens									
		Final	Values:	24.0	6.81	1.75	0.90	-29.6	10.64			
Sample ID:				GPEOR-TW-	-07		Method of		-	peristaltic		
QA/QC Sample	s (Yes/No):			No NA			Sample Da		-	09/21/17 10:50		
Duplicate ID: Sample Contain	nor Time/el:		21	unpreserved p	daetio		Sample Co Total Volu		- 5 CA	3		
Preservative(s)			21	lce (4 °C)			Sample De	- X X X X X X X X X X X X X X X X X X X	u (gai):	13		
Analysis/Metho	TO STATE OF THE PARTY OF THE PA		PFA	S (EPA 537-n					Sampling (ft):	10.72		
Instruments (er. Model. a					Depuito i	ruter Aite	oumpaning (14).			
Equipment Calibra				05		Calibrated Within	Criteria (Y/N)			Yes		
				1 - 200 0.00	A STATE OF THE PARTY.				Section .			
				Turbidity		r Quality Meter, Wi 0Q 3241-2013, YS			c Pump			
Calaulatian									Cianatura:			
Calculations:										Signature:		
Saturated well	casing volum	ne: V= Π(R^	2)H*7.48 g	al/ft^3						Den M		
MeMelimes (and 0)							V= D/RAS	2)H*7,48 gal	PAG	18, 1		
V=Volume (gal/ft) Π = 3.14						= FT * (1			72 * 7.48 gal/ft*3	Thu,		
R = well radius (ft) = (well diameter (in)/12 (in/ft))/2)								0.6 gal.				
H = height of water column (ft)												
Notes						Name (exist)						
Notes:				Name (print):								
					none					Devin Peterson		
QA/QC'd by:									QA/QC Date:	*-		



wheeler														
Project Name:				spections for l ir National Gu		ted Compounds ons	Project Nu	ımber:		291330006				
Contract:			V	/9133L-14-D-	0002		Task Orde	er:		0006				
Installation:		ğ		GPEOR			Technicia			devin peterson				
Well ID:				TW05			Date:	New York		09/21/17				
Initial Depth to				8.62			Well Diam			1.0				
Total Depth of				15.0			1 Casing \			0.3				
Method of Pur	T			pumping			3 Casing \			0.8				
Measuring Po	int (toc, tor, et	tc.):		Top	of Casing		Pump Inta	ke Depth	(feet):	.14				
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				
	1	Stabilization	n Criteria	±0.5°C	±0.1	±3%	±10%	±10%	±10% and <10 NTU	(color, sediment, odor, etc.)				
09:47	т —	100								Pumping/Purging Started				
09:51	8.24	100	.2	19.3	6.74	2.12	3.21	371.5	high	very turbid, slowly clearing				
09:54	9.15	100	.3	18.7	6.73	2.48	2.48	365.7	high					
09:59	9.90	100	.4	19.8	6.81	2.45	1.27	351.5	1023au					
10.02	10.35	100	.45	19.7	6.83	2.43	0.95	339.5	192					
10:05	10.85	100	.5	19.6	6.86	2.43	0.90	315.7	99					
										<u> </u>				
										<u> </u>				
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							†							
							1							
Stability Reac	had (V/N):			No		If No. Provide b	volanation		No - combe	ant drawdown, collecting sample				
Otubinty recue	nea (maj.			140		ii (to, r ronde c	принини		140 Signino	an drawown, concerns surrow				
		Final	Values:	19.6	6.86	2,43	0.90	315.7	99					
Sample ID:				TW05		- 2	Method of	Sampling	:	peristaltic				
QA/QC Sample	es (Yes/No):	8		No			Sample Da	ate:		09/21/17				
Duplicate ID:				NA			Sample Co	ollection T	ime:	10:10				
Sample Conta	iner Type(s):	St.	2	unpreserved p	olastic		Total Volu	me Purge	d (gal):	.6				
Preservative(s	s):			lce (4 °C)			Sample De	epth (ft):		14				
Analysis/Meth		Si co		S (EPA 537-n	nodified)	76	Depth to V	Vater After	Sampling (ft):	12.5				
Instruments Equipment Calibr		er, Model, a		No.):		Calibrated V/ithin	Criteria (Y/N):			Yes				
		sit		Turbidity		r Quality Meter, W	ater Level Met	er, Peristalti	c Pump					
					Hach 210	0Q 3241-2013, YS	1 556 MPS 141	100349		1				
Calculations	2									Signature:				
Saturated well	I casing volun	ne: V= Π(R^	2)H*7.48 g	al/ft^3						1				
V=Volume (gal/ft П = 3.14 R = well radius (f H = height of wat	t) = (well diamete	er (in)/12 (in/ft))/2)			= n • (1.0 (in)/12 (in/fl	2)H*7.48 gal/ 1)y2y*2 * 6.3 0.3 gal.	ff^3 8 * 7.48 gal/ff^3	Ten Peth				
Notes:										Name (print):				
					none					devin peterson				
QA/QC'd by:									QA/QC Date:					



wneeler												
Project Name:			spections for I		ted Compounds	Project Nu	ımber:		291330006			
Contract:		1/	/9133L-14-D-	1002		Task Orde	er:	e -	0006			
Installation:			GPEOR	0002		Technicia		10.00	Jeremiah Morse			
Well ID:			TW03			Date:	1401.	12 <u>-</u>	09/22/17			
Initial Depth to Water (ft):	-		999.0			Well Diam	eter (in):	-	1.0			
Total Depth of Well (ft):			15.0			1 Casing \		an:	1.0			
Method of Purging:	7		NA		 -	3 Casing \						
Measuring Point (toc, tor, e	tc 1:			of Casing		Pump Inta			NA			
measuring Fornt (toc, tor, e	10.7.		100	r dasing	Specific	Tump ma	ke Depui	icetj.	110			
Time Water Level (feet)	Flow Rate (mL/min)	Cum. Volume (gal.)	Temp. (°C)	pH (SU)	Electrical Conductance (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Comments/Observations During Purging			
1	Stabilization	n Criteria	±0.5°C	±0.1	±3%	±10%	±10%	±10% and <10 NTU	(color, sediment, odor, etc.)			
22:24	NA.								Pumping/Purging Started			
							0 0		20200 2000			
	100											
						1						
						<u> </u>						
									+			
									+			
											+	
	-				_	+	_					
	_					+						
		 	1				_	+				
					_	+						
						+						
	_				_	+						
	_				_	+						
Stability Reached (Y/N):			Yes		If No, Provide E	explanation			NA			
	Final	Values:	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A				
Sample ID:	7 11101	ranacst				Method of						
QA/QC Samples (Yes/No):						Sample Da		. –				
Duplicate ID:			NA			Sample Co		ime:				
			, INC.			Total Volu						
Sample Container Type(s):								u (gai):	NA NA			
Preservative(s):	-					Sample De	The state of the s	Complian (6)	NA			
Analysis/Method(s): Instruments (Manufactur	or Madel	and Caria	I No V			Depth to v	vater Arter	Sampling (ft):				
Equipment Calibrated (Y/N):		es		Calibrated Within	Criteria (Y/N):			Yes				
				r Quality Meter, W			Pump					
			н	ach 2100Q 8	See calibration, YS	1556 MPS See	e calibration					
Calculations:									Signature:			
									- granara			
Saturated well casing volur	me: V= Π(R^	2)H*7.48 g	al/ft^3									
V=Volume (gal/ft)						V= F/R^2	2)H*7,48 gal/	843				
Π = 3.14					= FIT (1.			00 * 7.48 gal/ft^3	(m) m			
R = well radius (ft) = (well diamet	ter (in)/12 (in/ft))/2)					= gal.	The state of the s	,			
H = height of water column (ft)		600000										
Notes:									Name (print):			
									1970 M. 1980 M			
				Dry					Jeremiah Morse			
QA/QC'd by:								QA/QC Date:				



wneeler													
Project Name:			spections for I		ted Compounds	Project Nu	ımber:		291330006				
Contract:		1/	/9133L-14-D-	0002		Task Orde	er:	0	0006				
Installation:			GPEOR	0004		Technicia			Jeremiah Morse				
Well ID:			TW06			Date:	101.	2 <u>-</u>	09/22/17				
Initial Depth to Water (ft):	-		999.0			Well Diam	eter (in):	0-	1.0				
Total Depth of Well (ft):	_		15.0			1 Casing \		an-	1.0				
Method of Purging:	2. The same of the		NA			3 Casing \							
Measuring Point (toc, tor, e	tc 1:			of Casing		Pump Inta			NA				
measuring Fornt (toc, tor, e	1		100	a deading	Specific	Tump ma	ke Depui	icetj.	110				
Time Water Level (feet)	Flow Rate (mL/min)	Cum. Volume (gal.)	Temp. (°C)	pH (SU)	Electrical Conductance (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Comments/Observations During Purging				
	Stabilization	n Criteria	±0.5°C	±0.1	±3%	±10%	±10%	±10% and <10 NTU	(color, sediment, odor, etc.)				
22:26	NA .								Pumping/Purging Started				
							0 0		202-010				
	100												
						1							
	-												
	-				_								
	-					+							
						+							
						+							
								 		+			
										 			
						i e							
		+											
Stability Reached (Y/N):			Yes		If No, Provide b	xplanation			NA				
Committy (1000)									1177				
	Final	Values:	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A					
Sample ID:						Method of	Sampling	_					
QA/QC Samples (Yes/No):	1					Sample Da	ate:	<u> </u>	1				
Duplicate ID:	-		NA.			Sample Co	ollection T	ime:					
Sample Container Type(s):						Total Volu	me Purge	d (gal):					
Preservative(s):						Sample De	epth (ft):		NA .				
Analysis/Method(s):	56 _{23 1000}	0.622 (0.05	525 55		33	Depth to V	Vater After	Sampling (ft):					
Instruments (Manufactur Equipment Calibrated (Y/N):		l No.):		Calibrated Within	Criteria (Y/N):			Yes					
	lait.				r Quality Meter, W	ater Level Met	er, Peristaltic	Pump					
			Н	ach 2100Q 8	See calibration, YS	556 MPS See	calibration	5 (1.20) A					
Calculations:									Signature:				
Saturated well casing volu	ma: V= Π/D/	2)LI+7 49 A	CABILLO						i -				
Saturated well cashing volul	ine. v-right	2)11 1,40 y	ant 5										
V=Volume (gal/ft))H*7.48 gal/		1/2~				
Π = 3.14					= П 1 (1.			00 * 7.48 gal/ft*3	-//				
R = well radius (ft) = (well diameter (in)/12 (in/ft))/2) H = height of water column (ft)							= gal.						
Notes:									Name (print):				
				Dry					Jeremiah Morse				
				100000									
QA/QC'd by:								QA/QC Date:					



wheeler											
Project Name:					Per-Fluorinal uard Installation	ted Compounds ons	Project Nu	ımber:			291330006
Contract:			W	9133L-14-D	-0002		Task Orde	er:			0006
Installation:	- 7			GPEOR			Technicia	n(s):			Jeremiah Morse
Well ID:				TW11			Date:				09/22/17
Initial Depth to Water				999.0			Well Diam	eter (in):			1.0
Total Depth of Well (ft):			15.0				Volume (ga			
Method of Purging:				NA.			3 Casing \			<u> </u>	
Measuring Point (too	c, tor, etc	c.):		Тор	of Casing		Pump Inta	ke Depth (feet):		NA NA
Timo	er 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
		Stabilization	Criteria	±0.5°C	±0.1	±3%	±10%	±10%	±10% and <10 NTU	("	color, sediment, odor, etc.)
22:28		NA.									Pumping/Purging Started
		20 112						2			
	\rightarrow		$\overline{}$				-				
	_		$\overline{}$		_		+				
					_	_	+				
	$\overline{}$						+				
							1				
	\rightarrow		\longrightarrow		-		+				
	$\overline{}$				_		+			1	
	$\overline{}$				_	 	+				
							1				
			\longrightarrow								
	\rightarrow				-		+				
	\rightarrow		$\overline{}$		_		+				
	$\overline{}$				_	_					
							1				
								İ			
Stability Reached (Y	/N):			Yes		If No, Provide b	:xplanation			NA	
		Final '	Values:	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		
Sample ID:	- 6				100		Method of	Sampling	:		
QA/QC Samples (Yes	s/No):						Sample Da	ate:			
Duplicate ID:				NA.				ollection T			
Sample Container Ty	ype(s):							me Purge	d (gal):	<u> </u>	
Preservative(s):							Sample De				NA .
Analysis/Method(s):		- Madal a	- 10-7-1	W- V-			Depth to V	Nater After	Sampling (ft):		
Instruments (Manu Equipment Calibrated (Yo	No.):		Calibrated Within	Criteria (Y/N)				Yes			
						r Quality Meter, Wa See calibration, YSI			c Pump		
Calculations:											Signature:
Saturated well casin	a volum	φ. V= Π/P/	2)H*7.49 a	N/fil^3						1	
V=Volume (gal/ft) Π = 3.14 R = well radius (ft) = (well H = height of water colum	Il diamete	resucci statistic				= П° (1.)	0 (in)/12 (in/ft))	2)H*7,48 gal/)/2)^2 * -984, = gal.	ft^3 .00 * 7.48 gal/ft^3		Ann
Notes:											Name (print):
Hotes.											reams thanks
					Dry						Jeremiah Morse
					1000000						0.55 (1
OA/OC'd by:									QA/QC Date:		



wheeler													
Project Name:			spections for l		ted Compounds ons	Project Nu	ımber:		291330006				
Contract:		V	/9133L-14-D-	1002		Task Orde	er:	0-	0006				
Installation:			GPEOR	0002		Technicia		10	Jeremiah Morse				
Well ID:			TWBB04			Date:	101.	17 <u>-</u>	09/22/17				
Initial Depth to Water (ft):			999.0			Well Diam	eter (in)	-	1.0				
Total Depth of Well (ft):			15.0			1 Casing \		all:	1.0				
Method of Purging:			NA		 -	3 Casing \							
Measuring Point (toc, tor, e	te 1:			of Casing		Pump Inta			NA NA				
measuring Folit (toc, tor, e	10.7.	0.000	100	/ Goorig	Specific	Tump ma	ke Depui	ieetj.	THE STATE OF THE S				
Time Water Level (feet)	Flow Rate (mL/min)	Cum. Volume (gal.)	Temp. (°C)	pH (SU)	Electrical Conductance (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Comments/Observations During Purging				
,	Stabilization	n Criteria	±0.5°C	±0.1	±3%	±10%	±10%	±10% and <10 NTU	(color, sediment, odor, etc.)				
22:22	NA:								Pumping/Purging Started				
			9				0 0		20-016				
	-												
						1							
						<u> </u>							
					_	+							
						+							
		+		-		+							
							+						
											_	+	
						+							
					_	+							
			=					+					
					_	+							
						+							
						+							
						+							
Stability Reached (Y/N):			Yes		If No, Provide E	explanation		a	NA .				
	Final	Values:	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A					
Sample ID:	101				-	Method of							
QA/QC Samples (Yes/No):						Sample Da		· \					
Duplicate ID:			NA.			Sample Co		ime:					
Sample Container Type(s):						Total Volu							
Preservative(s):						Sample De		a (gai).	NA .				
Analysis/Method(s):								Sampling (ft):	183				
Instruments (Manufacture	er Model :	and Seria	No Y			Depui to 1	rater Arter	Sampling (it).					
Equipment Calibrated (Y/N):		es .		Calibrated Within	Criteria (Y/N):			Yes					
					r Quality Meter, Wasee calibration, YS			c Pump					
				001121000	occ station above 1 or	000 1111 0 000	o done rouder		F45.555 - 705				
Calculations:									Signature:				
Caturated well easing volum	no: V= 0/0/	2)U*7 40 A	ol/BA2						i				
Saturated well casing volun	ne. v= ri(rc	z/11 1.40 g	ant 3										
V=Volume (gal/ft))H*7.48 gal/		711				
Π = 3.14				= П 1 (1.			.00 * 7,48 gal/ft*3	Th					
R = well radius (ft) = (well diamete H = height of water column (ft)	er (in)/12 (in/ft))/2)					= gal.						
resigns of realist solution (iii)													
Notes:									Name (print):				
1000													
				Dry					Jeremiah Morse				
04/06/4								ONIOC Data:					
QA/QC'd by:								QA/QC Date:					



wheeler																
Project Name:			spections for l ir National Gu		ted Compounds ons	Project Nu	ımber:		291330006							
Contract:		1/	/9133L-14-D-	0002		Task Orde	er:	e -	0006							
Installation:			GPEOR	0002		Technicia		10.	Jeremiah Morse							
Well ID:			TWBB05			Date:	101.	12 <u>-</u>	09/22/17							
Initial Depth to Water (ft):			999.0			Well Diam	eter (in)	-	1.0							
Total Depth of Well (ft):			15.0			1 Casing \		an:	1.0.							
Method of Purging:	2		NA		 -	3 Casing \										
Measuring Point (toc, tor, et	c)·			of Casing		Pump Inta			NA NA							
measuring Forit (toc, tor, et			100	a deading	Specific	Tump ma	ke Depui	icetj.	THE STATE OF THE S							
Time Water Level (feet)	Flow Rate (mL/min)	Cum. Volume (gal.)	Temp. (°C)	pH (SU)	Electrical Conductance (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Comments/Observations During Purging							
70	Stabilization	n Criteria	±0.5°C	±0.1	±3%	±10%	±10%	±10% and <10 NTU	(color, sediment, odor, etc.)							
22:18	NA .								Pumping/Purging Started							
							0 0		20200							
	5.															
		$\overline{}$			_											
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						+										
							+									
											 					
													1			
						1										
		+														
Stability Reached (Y/N):			Yes		If No, Prowde b	xplanation			NA							
,	er					1										
	Final	Values:	#N/A	#N/A	#N/A	_	#N/A									
Sample ID:						Method of		_								
QA/QC Samples (Yes/No):						Sample Da		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1								
Duplicate ID:			NA.			Sample Co										
Sample Container Type(s):						Total Volu	me Purge	d (gal):	1							
Preservative(s):						Sample De			NA							
Analysis/Method(s):	il 100 1000	0.02 .00	124 124			Depth to V	Vater After	Sampling (ft):								
Instruments (Manufacture Equipment Calibrated (Y/N):		l No.): es		Calibrated Within	Criteria (Y/N):			Yes								
				r Quality Meter, W			Pump									
North Company			Н	ach 2100Q 8	See calibration, YS	1556 MPS See	e calibration	7 10.00								
Calculations:									Signature:							
Caturated well easing value	V- E/DA	DILL#7 40 a	a LIBAO						i							
Saturated well casing volun	ie: v= ri(rc	2)H 7.48 g	aut.2						1 5							
V=Volume (gal/ft))H*7.48 gal/		111							
Π = 3.14				= П 1 (1.			00 * 7.48 gal/ft^3	41/								
R = well radius (ft) = (well diamete	er (in)/12 (in/ft))/2)					= gal.		1 /							
H = height of water column (ft)																
Notes:									Name (print):							
notes.									reactive (provings							
				Dry					Jeremiah Morse							
QA/QC'd by:																
								QA/QC Date:								



wheeler													
Project Name:				spections for ir National Gu		ed Compounds	Project Nu	mber:		291330006			
Contract:			.W	/9133L-14-D-	0002		Task Orde	r:		0006			
Installation:				GPEOR		- 5	Technician	n(s):		Adam Davis			
Well ID:	24 20 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -			TW01.A			Date:			05/10/18			
Initial Depth to	Water (ft):			-17.1			Well Diam	eter (in):		1.0			
Total Depth of				28.9		-	1 Casing \			0.5			
Method of Purg	T			peristaltic		- 5	3 Casing V			1.5			
Measuring Poi	nt (toc, tor, et	c.):		Тор	of Casing		Pump Inta	ke Depth	(feet):	25			
Time	Water Level (feet)	Flow Rate (mL/min)	Cum. Volume (gal.)	Temp. (°C)	pH (SU)	Specific Electrical Conductance	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Comments/Observations During Purging			
		Stabilization		±0.5°C	±0.1	(mS/cm) ±3%	±10%	±10%	±10% and <10 NTU	(color, sediment, odor, etc.)			
08:05		300				_	+		1110	Pumping/Purging Started			
09:05	20.9	200		15.7	10.23	1.29	0.23	-367	121	that the same of t			
09:10	20.7	200		15.7	10.58	1.29	0.19	-371.1	116				
09:15	20.7	200		15.7	10.77	1.29	0.19	-368.7	119				
							1						
							1						
Stability Reach	ed (Y/N):			Yes		If No, Provide E	-xplanation			NA			
The state of the s	to things												
		Final	Values:	15.7	10.77	1.29	0.19	-368.7	119	2000			
Sample ID:			PANG	8-GW-TW01	-05-10-18		Method of	Sampling	:	low flow			
QA/QC Sample	s (Yes/No):			Yes DUP			Sample Da	ate:		05/14/18			
Duplicate ID:			PANG	8-GE-DUPA	05-10-18		Sample Co	ollection T	ime:	09:20			
Sample Contai	ner Type(s):			HDPE bottle	35	- 3	Total Volu	me Purge	d (gal):	4			
Preservative(s)):			Ice (4 °C)	N.		Sample De	epth (ft):		25			
Analysis/Metho	od(s):		PFA	S (EPA 537-n	nodified)	- 8	Depth to V	Vater After	Sampling (ft):	20.7			
Instruments (Equipment Calibra		l No.): es		Calibrated Within	Criteria (Y/N):		No -	pH probe seems to be having trouble					
0.00				Turbidity		Quality Meter, W 20we FA00433, Y			c Pump				
Calculations:	8									Signature:			
Saturated well V=Volume (gal/ft) Π = 3.14 R = well radius (ft	casing volum) = (well diamete			al/ft^3		= n ~ (1	.0 (in)/12 (in/ft)	()H*7,48 gal/ ()/2)*2 * 11.6 0.5 gal.	/ft^3 80 * 7.48 gal/ft*3	Oder 2			
H = height of wate	s column (II)									Marra (mint):			
Notes:										Name (print): Adam Davis			
										5-11-200000-0-1-1-1-1-1-1-1-1-1-1-1-1-1-1			
OA/OC'd by:									QA/QC Date:				



wheeler										
Project Name:				spections for ir National Gu		ed Compounds	Project Nu	ımber:		291330006
Contract:			.W	/9133L-14-D-	0002		Task Orde	r:		0006
Installation:				GPEOR			Technician	n(s):		Adam Davis
Well ID:	24 20 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -			TW08.A			Date:			05/10/18
Initial Depth to	Water (ft):			11.5			Well Diam	eter (in):		1.0
Total Depth of				21,7			1 Casing \			0.4
Method of Purg	T			peristaltic			3 Casing V			1.3
Measuring Poi	nt (toc, tor, et	c.):		Тор	of Casing		Pump Inta	ke Depth (feet):	20
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
		Stabilization	n Criteria	±0.5°C	±0.1	±3%	±10%	±10%	±10% and <10 NTU	(color, sediment, odor, etc.)
10:03		300								Pumping/Purging Started
11:30	12.35	200		17.6	9.77	1.02	1.68	-153.5	1704	
11:35	12.4	200		17.5	10.10	1.03	1.67	-158.1	2281	1.55
11:40	12.4	200		17.5	10.17	1.00	1.72	-147.4	2447	
						_				
						_				
	10/00									
Stability Reach	ied (Y/N):	Final	Values:	Yes	40.47	If No, Provide b		447.4	2447	NA
Sample ID:		rillai	Values: PANG	17.5 B-GW-TW08	-05-10-18	1.00	1.72 Method of	-147.4 Sampling	2447	low flow
QA/QC Sample	s (Yes/No):		1,17172	Yes			Sample Da		* 0	05/10/18
Duplicate ID:	. (NA.			Sample Co		ime:	11:45
Sample Contai	ner Type(s):			HDPE bottle	95	- 5	Total Volu			4
Preservative(s)				Ice (4 °C)	N.		Sample De			20
Analysis/Metho	od(s):	2000 C. S. L.	PFA	S (EPA 537-ri	nodified)	- 57			Sampling (ft):	12.4
Instruments (Equipment Calibra		No.):		Calibrated Within	Criteria (Y/N):		No -	pH probe seems to be having trouble		
				Turbidity		r Quality Meter, W 020we FA00439, Y			c Pump	
Calculations:	0									Signature:
Saturated well	casing volum	ie: V= Π(R^	2)H*7.48 g	al/ft^3						i 1 _
V=Volume (gal/ft) П = 3.14 R = well radius (ft)		er (in)/12 (in/ft)	W21			= T * (1	.0 (in)/12 (in/ft)	()H*7.48 gal/ ())/2)*2 * 10.2 0.4 gal.	ft^3 20 * 7.48 gal/ft^3	Oder 2
H = height of water		A STATE OF STREET	5000							
Notes:										Name (print):
										Adam Davis
OA/OC'd by:									QA/QC Date:	



wheeler												
Project Name:				spections for ir National Gu		ed Compounds	Project Nu	mber:		291330006		
Contract:	9		V	/9133L-14-D-	0002		Task Orde	r:		0006		
Installation:				GPEOR		- 5	Technician	n(s):		Adam Davis		
Well ID:				TW11.A			Date:			05/14/18		
Initial Depth to	Water (ft):			6.0			Well Diam	eter (in):		1.0		
Total Depth of				19.0		-	1 Casing \			0.5		
Method of Purg				peristaltic		- 5	3 Casing V			1.6		
Measuring Poir	nt (toc, tor, et	c.):		Тор	of Casing		Pump Inta	ke Depth (feet):	15		
Time	Water Level (feet)	Flow Rate (mL/min)	Cum. Volume (gal.)	Temp. (°C)	pH (SU)	Specific Electrical Conductance	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Comments/Observations During Purging		
		Stabilization	n Criteria	±0.5°C	±0.1	(mS/cm) ±3%	±10%	±10%	±10% and <10 NTU	(color, sediment, odor, etc.)		
16:23		300								Pumping/Purging Started		
17:35	6.5	200		13.2	12.62	1,36	0.06	-253.3	59			
17:40	6.5	200		13,4	12.52	1,38	0.07	-253.3	56			
17:45	6.5	200		13.0	12.49	1.38	0.06	-236.8	689			
	\vdash						+					
							+					
	-						+					
						_	+					
						_	+					
								+				
							1					
						_	+					
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						_	+					
							+					
Ctability Basel	ad OVAN			Was		JENie Demide I	and the settlement					
Stability Reach	ea (T/N):			Yes		If No, Provide E	explanation	3 22		NA		
		Final	Values:	13.0	12.49	1,38	0.06	-236.8	689			
Sample ID:			PANG	B-GW-TW11	-05-10-18		Method of	Sampling	:	low flow		
QA/QC Sample	s (Yes/No):			No			Sample Da	ate:		05/10/18		
Duplicate ID:				NA.			Sample Co	ollection T	ime:	17:50		
Sample Contain	ner Type(s):			HDPE bottle	is	- 2	Total Volu	me Purge	d (gal):	4		
Preservative(s)	:			Ice (4 °C)			Sample De	epth (ft):		15		
Analysis/Metho		1000000		S (EPA 537-n	nodified)	67.	Depth to V	Vater After	Sampling (ft):	6,5		
Instruments (Equipment Calibra		l No.):		Calibrated Within	Criteria (Y/N):		No -	pH probe seems to be having trouble				
				Turbidity		r Quality Meter, W 020we FA00439, Y			c Pump			
Calculations:	0									Signature:		
Saturated well casing volume: V= $\Pi(R^2)H^*7.48 \text{ gal/ft}^3$										1		
V=Volume (gal/ft) П = 3.14						= T * (1	.0 (in)/12 (in/ft)		ft^3 00 * 7.48 gal/ft^3	Oder 2		
R = well radius (ft) H = height of wate		er (in)/12 (in/ft)	()/2)				-	0.5 gal.		not selection.		
Notes:										Name (print):		
	Sampl	e taken when	turbidity jum	ped because	we did not w	ant it to go higher	and everything	else was st	able.	Adam Davis		
OA/OC'd by:									QA/QC Date:	-		



wheeler																			
Project Name:				spections for ir National Gu		ted Compounds ons	Project Nu	ımber:		291330006									
Contract:			V	V9133L-14-D-	0002		Task Orde	er:		0006									
Installation:				GPEOR			Technicia	n(s):		Adam Davis									
Well ID:	90000 8887 79			TWB804.	1		Date:			05/10/18									
Initial Depth to	Water (ft):			15.65			Well Diam		2	1.0									
Total Depth of				29.5			1 Casing \			0.6									
Method of Pur		- 1:		peristaltic	of Casing		3 Casing \			1.7									
Measuring Poi	nt (toc, tor, et	c.j;		Top	or Casing	Specific	Pump Inta	ke Depth i	(reet):	22									
Time	Water Level (feet)	Flow Rate (mL/min)	Cum. Volume (gal.)	Temp. (°C)	pH (SU)	Electrical Conductance (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Comments/Observations During Purging (color, sediment, odor, etc.)									
		Stabilization	n Criteria	±0.5°C	±0.1	±3%	±10%	±10%	±10% and <10 NTU										
12:31		300	_	7.0	0.00		-	-		Pumping/Purging Started									
13:25 13:30	17	200		16.7	9.68	5,44	1.44	-221.3	168 54										
13:35	17	200		16.7	8.99	5.49	1.48	-215.6 -212.6	45	+									
13.33	11	200		10.7	. 0.00	5.45	1.50	-212.0	45	+									
						_				 									
										1									
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						_													
										1									
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										<u> </u>									
	_						+			<u> </u>									
	_						+			+									
	1.0/00					WW 0 -													
Stability Reach	ned (Y/N):	Final	Values	Yes		If No, Provide E	1			NA .									
		Final	Values:	16.7	8,99	5,49	1.58	-212.6	45										
Sample ID:	(W (M).		PA	NGB-GW-TV No	VBB04		Method of		1	low flow									
QA/QC Sample Duplicate ID:	es (Yes/No):			NA.			Sample Da		ima:	05/10/18 13:40									
Sample Contai	iner Type(s)			HDPE bottle	95		Total Volu			4									
Preservative(s				Ice (4 °C)	_		Sample De		u (gar).	22									
Analysis/Meth		1.041 Ve 20 L	PFA	S (EPA 537-r					Sampling (ft):	17.0									
Instruments		er, Model, a																	
Equipment Calibr		es		Calibrated Within	Criteria (Y/N)		No	- pH probe seems to be having trouble											
				Turbidity		r Quality Meter, W 020we FA00439, Y			c Pump										
Calculations:	18									Signature:									
Saturated well	casing volum	ne: V= Π(R^	2)H*7.48 g	al/ft^3						i 1									
Malfohama (nalifi)							V= D/PM)H*7,48 gal/	MA3										
V=Volume (gal/ft) П = 3,14	100					= II * (1			35 * 7.48 gal/ft*3	(Jelput a 2									
R = well radius (ft H = height of water		er (in)/12 (in/ft))/2)				=	0.6 gal.											
Notes:										Name (print):									
					953					Adam Davis									
l										Public Davis									
OA/OC'd by:									QA/QC Date:										



wheeler										
Project Name:		Phase 1 Reg	ional Site In at Multiple A	spections for ir National Gu	Per-Fluorinat ard Installation	ed Compounds	Project Nu	ımber:		291330006
Contract:	9		V	/9133L-14-D-	0002		Task Orde	r:		0006
Installation:				GPEOR			Technician	n(s):		Adam Davis
Well ID:				TWB805./	1		Date:			05/10/18
Initial Depth to	Water (ft):			11.8			Well Diam	eter (in):		1.0
Total Depth of				20,1			1 Casing V			0.3
Method of Purg	T. () T.			peristaltic			3 Casing V			1.0
Measuring Poi	nt (toc, tor, et	c.):		Тор	of Casing		Pump Inta	ke 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
		Stabilization	n Criteria	±0.5°C	±0.1	±3%	±10%	±10%	±10% and <10 NTU	(color, sediment, odor, etc.)
13:56		300								Pumping/Purging Started
14:45	11.8	200		14,5	10.61	1.35	0.14	-350.9	64.9	
14;50	11.8	200		14,4	10.73	1,36	0.13	-358.8	56.7	
14:55	11.8	200		14.1	10.75	1.35	0.13	-346.6	45.8	
						_				
Stability Reach	ed (Y/N):	Fi11	Values	Yes	40.75	If No, Provide E	1			NA
Sample ID:		Final	Values:	-GW-TWBB0	4-05-10-18	1,35	0.13 Method of	-346.6	45.8	low flow
QA/QC Sample	s (Yes/No)		778700	No	1 00 10 10		Sample Da		• 0	05/10/18
Duplicate ID:	s (resinto).			NA			Sample Co		ime:	15:00
Sample Contai	ner Type(s):			HDPE bottle	95		Total Volu			4
Preservative(s)				Ice (4 °C)			Sample De		a (gar).	16
Analysis/Metho	G-01-00-00-01		PFA	S (EPA 537-r					Sampling (ft):	14.1
Instruments (Calibrated Within				pH probe seems to be having trouble		
Equipment Calibrated (Y/N): Yes Calibrated Wi Turbidity Meter, Water Quality Meter										
				11000,000	Lamotte 20	20we FA00439, Y	'SI 556 MPS F	A00777		
Calculations:				The same						Signature:
Saturated well V=Volume (gal/ft) Π = 3.14 R = well radius (ft)			*A.G. (1) (1) (2) (3)	al/ft^3		= n · (1.0 (in)/12 (in/fi	()H*7,48 gal/ ())/2)*2 * 8,3/ 0,3 gal.	ff^3 0 * 7,48 gal/ft^3	Oder 2
H = height of wate			1078							
Notes:										Name (print):
					-					Adam Davis
OA/OC'd by:									QA/QC Date:	



wheeler										
Project Name: Phase 1 Regional Site Inspections for Per-Fluorinated Compounds at Multiple Air National Guard Installations							Project Nu	ımber:		291330006
Contract:			V	V9133L-14-D-	0002		Task Orde	er:		0006
Installation:				GPEOR		18	Technician	n(s):		Adam Davis
Well ID:				TW03.A			Date:			05/11/18
Initial Depth to	Water (ft):			7.0			Well Diam			1.0
Total Depth of				22.0			1 Casing \			0.6
Method of Pur		- 1-		peristaltic			3 Casing \			1.8
Measuring Poi	nt (toc, tor, et	c.):	_	- Top	of Casing	CII-	Pump Inta	ke Depth	reet):	T
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	n Criteria	±0.5°C	±0.1	±3%	±10%	±10%	±10% and <10 NTU	
11:30		300							-	Pumping/Purging Started
12:15	7.2	200		16.3	10.07	0.543	0.22	-144.7	78	
12:20 12:25	7.2	200		16.2 16.2	10.09	0.536 0.539	0.21	-137.4 -131.7	67.6 46.6	_
12.25	1.2	200		10.2	10.10	0.535	0.20	-131.7	40.0	+
	 									+
							1			1
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	_									+
	 									+
	-					_				
	_						+	-		-
	_									+
	 									+
										†
										<u> </u>
	_					_				
Stability Reach	ned (Y/N):	Final	Values	Yes	40.40	If No, Provide I	1			NA .
0 1 - 10		rinai	Values:	16.2	10.10	0.539	0.20	-131.7	46.6	In the second
Sample ID: QA/QC Sample	o (Vacilla)		PANG	B-GW-TW03 No	-05-11-18		Method of		1	low flow
Duplicate ID:	es (Yes/No):			NA.			Sample Da		ima:	05/11/18
Sample Contai	iner Type(s)			HDPE bottle	95	- 10	Total Volu			4
Preservative(s				Ice (4 °C			Sample De		a (gar).	20
Analysis/Metho		1.041 Ve 20 L	PFA	S (EPA 537-r					Sampling (ft):	7.2
Instruments (Manufacture	er, Model, a								
Equipment Calibra	ated (Y/N):	_	Y	es		Calibrated Within	r Criteria (Y/N):		No.	- pH probe seems to be having trouble
				Turbidity		Quality Meter, W 20we FA00439, Y			c Pump	
Calculations:	89									Signature:
Saturated well	casing volum	ne: V= Π(R^	2)H*7.48 g	al/ft^3						٨
V=Volume (gal/ft)			20.000 May 3				V= \(\Omega(R^2)\)	2)H*7,48 gal/	11/3	
Π = 3.14						= [] * (1	1.0 (in)/12 (in/ft))y2)^2 * 15.0	00 ° 7.48 gal/ft*3	(select a 2
R = well radius (ft H = height of water		er (in)/12 (in/ft))/2)				=	0.6 gal.		000
Notes:										Name (print):
					923					Adam Davis
l					-					Audit Davis
OA/OC'd by:									QA/QC Date:	



wneeler												
Project Name: Phase 1 Regional Site Inspections for Per-Fluorinated Compounds at Multiple Air National Guard Installations						Project Number: 291330006						
Contract:	9		V	/9133L-14-D-	0002		Task Orde	AFT :	0006			
Installation:				GPEOR	0002		Technicia			Adam Davis		
Well ID:	-			TW06.A			Date:			05/11/18		
Initial Depth to V	Vater (ft):			17.55			Well Diam	eter (in):		1.0		
Total Depth of W		22.0						Volume (g	al):	0.2		
Method of Purgi				peristaltic		- E	3 Casing \			0,5		
Measuring Point	t (toc, tor, et	c.):		Тор	of Casing		Pump Inta			21		
Time	Water Level	Flow Rate Cum. Volume		Temp.	рН	Specific: Electrical	DO	ORP	Turbidity	Comments/Observations		
11110	(feet)	(mL/min)	(gal.)	(°C)	(SU)	Conductance (mS/cm)	(mg/L)	(mV)	(NTU)	During Purging (color, sediment, odor, etc.)		
		Stabilization	n Criteria	±0.5°C	±0.1	±3%	±10%	±10%	±10% and <10 NTU			
07:49		300	_	479.4	0.00	0.70	4.00			Pumping/Purging Started		
10:00	19	200 200		17.1	9.36	0.76	4.09	46.2	184			
		200					_	_				
		200					_					
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\vdash						_						
						 						
Stability Reache	d (Y/N):			No		If No, Provide b	xplanation			No - ran dry		
		Final	Values:	17.1	9.36	0.76	4.09	46.2	184			
Sample ID:			PANG	B-GW-TW06	-05-11-18		Method of	Sampling		low flow		
QA/QC Samples	(Yes/No):			No			Sample Date: 05/15/18					
Duplicate ID:	0.014/0.014/0.014			NA			Sample Co			10:05		
Sample Contain	er Type(s):			HDPE bottle	_		Total Volu	110000000000000000000000000000000000000	d (gal):	2		
Preservative(s):			DEA	Ice (4 °C)			Sample Depth (ft): 21					
Analysis/Method		w Madel		S (EPA 537-r	nodified)		Depth to V	Vater After	r Sampling (ft):	19		
Instruments (N Equipment Calibrate		er, woder, a		es		Calibrated Within	Criteria (Y/N)	c c	No -	pH probe seems to be having trouble		
				Turbidity		r Quality Meter, Wi 020we FA00439, Y			c Pump			
Calculations:										Signature:		
										Signature.		
Saturated well c V=Volume (gal/ft)	asing volum	ne: V= Π(R^	2)H*7.48 g	al/ft^3		- 5.4		2)H*7.48 gal	/ft^3 5 * 7,48 gal/ft^3	along 3		
R = 3.14 R = well radius (ft) = H = height of water		er (in)/12 (in/ft))/2)			-10 (0.2 gal.	5 7,40 gant 5	000 \$ 2		
Notes:										Name (print):		
		pumped	dry three tir	nes and then	a grab samp	le and one YSI rea	ding were colle	ected		Adam Davis		
QA/QC'd by:									QA/QC Date:			
GAVAC a by:									WALGO Date:			



wneeler										
Project Name:				spections for ir National Gu		ed Compounds	Project Nu	ımber:		291330006
Contract:			1/	/9133L-14-D-	0002		Task Orde	AFT.	-	0006
Installation:				GPEOR	0002	- 8	Technicia		- 5	Adam Davis
Well ID:				TWB801.A			Date:		-	05/09/18
Initial Depth to Wa	iter (ft):			9.0			Well Diam	eter (in):	-	1.0
Total Depth of Wel		250						Volume (ga	al):	0.7
Method of Purging				peristaltic		8	3 Casing \			2.0
Measuring Point (t	toc, tor, et	c.):		Тор	of Casing		Pump Inta			22.5
			Cum.			Specific:				
Time	(feet)	Flow Rate (mL/min)	Volume (gal.)	Temp. (°C)	pH (SU)	Electrical Conductance (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Comments/Observations During Purging (color, sediment, odor, etc.)
		Stabilization	n Criteria	±0.5°C	±0.1	±3%	±10%	±10%	±10% and <10 NTU	
10:32		300		90000		-				Pumping/Purging Started
11:33	22.5	200		15,8	3.36	0.80	4.69	245.8	97.1	
11:42				16.1	3.6 4.41	0.78	3.87	182.5	54.6	
11:46 11:49	-			16.1	4.26	0.78	3.95 4.01	165.6 177.7	48.9 45.7	
11.49			\vdash	10.2	4.20	0.76	4.01	177.7	45.7	
							+			
							1			
							1			
							1			
\vdash						_				
\vdash							1			
\vdash						_				
						_	+			
\vdash										
Stability Reached	(Y/N):			Yes		If No, Provide E	xplanation			NA
- same same same same same same same same	()	en:					1			
		Final	Values:	16.2		0.78	-	177.7		
Sample ID:			PANGE	-GW-TWBB0			Method of		: <u> </u>	low flow
QA/QC Samples (Y	Yes/No):			Yes MS/MS	D		Sample D		2	05/09/18
Duplicate ID:				NA.			The second secon	ollection T		11:50
Sample Container	Type(s):			HDPE bottle			Total Volu		d (gal):	4
Preservative(s):				Ice (4 °C)			Sample De		energementer occurrence =	22.5
Analysis/Method(s				S (EPA 537-n	nodified)	597	Depth to V	Nater After	Sampling (ft):	16,2
Instruments (Mai Equipment Calibrated		er, Model, a		No.):		Calibrated Within	Criteria (Y/N)		No-p	oH probe seems to be having trouble
				Turbidity		r Quality Meter, Wi 020we FA00439, Y			c Pump	
Calculations:										Signature:
Saturated well cas V=Volume (gal/ft)	sing volum	ie: V= Π(R^	2)H*7.48 g	al/ft^3				2)H*7.48 gal		nolon Co
Π = 3.14 R = well radius (ft) = (v H = height of water col		er (in)/12 (in/ft))/2)			-11 (1		0.7 gal.	00 * 7.48 gal/ft*3	000 \$ 2
Notes:										Name (print):
										Adam Davis
QA/QC'd by:									QA/QC Date:	
arriad a by.									art do Date.	

APPENDIX D

SURFACE WATER AND SEDIMENT SAMPLING LOGS

NGB/A4OR

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Wileelei										
Project Name:		nal Site Inspect Multiple Air Nat			Project Nu	mber:		291330006		
Contract:		W9133L-14-	D-0002		Task Orde	r:	-	0006		
Installation:							-	09/20/17		
Location ID:		PRL 9			Date: Northing/E	asting:		Not Collected		
Technician(s):					devin pe		-			
				SEDIMEN'	TSAMPLE					
6				Descr						
	NAME	(USCS Symbol): color, mois	ture, % by wt, plas	sticity, dilatano	y, toughnes	is, dry strength,cons	sistency		
				N	A					
Sample Depth (ft):		NA			Sample ID	8		GPEOR-09-SD01		
MS/MSD Collected:		No			Sample Da			09/20/17		
Duplicate ID:		NA			Sample Co		ime:	13:40		
Sample Container Typ	oe(s):	unpresi	erved 6.5 oz		Sample Co	lection N	lethods:	trowel		
Preservative(s):	S155555	Ice (4 *	C)		Analysis/N	lethod(s):	UCMR3 List			
				SURFACE S	OIL SAMP	.E				
				Descr	iption					
	NAME	(USCS Symbol): color, mois	ture, % by wt, pla:	sticity, dilatano	y, toughnes	is, dry strength,cons	sistency		
		SILT	(ML): dark b	rown, dry, 80%	silt 20% san	d, low plas	sticity, soft			
Sample Depth (ft):		NA.			Sample ID			NA:		
MS/MSD Collected:		NA			Sample Da			NA.		
Duplicate ID:		NA			Sample Collection Time:			NA		
Sample Container Typ	oe(s):		NA		Sample Co		50.00 0.00 0.00 0.00 <u> </u>	NA		
Preservative(s):		NA			Analysis/N			NA		
				URFACE WA	TER SAM	LE				
Time	Intake Depth (in)	Temp. (°C)	pH (units)	Specific Electrical Conductance (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Comments/Observations During Purging (color, sediment, etc.)		
13:30	NA	22.9	9.43	0.363	8.05	83.7	3.07	NA		
Sample Depth (ft):		NA	2000		Sample Da	te:		09/20/17		
Sample ID:		GPEOR-09-	SW01		Sample Co	lection T	ime:	13:40		
MS/MSD Collected:		No			Sample Co			direct sample into bottle		
Duplicate ID:		NA			Surface Water Depth (ft): 2*					
Sample Container Typ	e(s):		erved plastic		Water Body and Water Quality Characteristics:					
Preservative(s):		Ice (4 *)					Outfa	all, Flowing.		
Analysis/Method(s): Location Image:		OCMIRCS	List		Inetrume	ate /Man	ufacturer Med	lel, and Serial No.):		
Location image.		PER CHARLES AND A	CONTRACT AND					Yes		
- A		至言。東西			Equipment C Calibrated W			Yes		
100		學學是這個			Calibrated V	main Criteri	a (1/14).	163		
							Hach 2100	Water Quality Meter DQ 3241-2013, IPS 14f100349		
					Notes:		none	Signature: Au Name (print):		
Continu		an at ton of di			I			jeremiah morse		
Caption:	sample locat	ion at top of dra	mageway				IOC Datas	₩.		
QA/QC'd by:						QA	/QC Date:			



Wiletter										
Project Name:		nal Site Inspec Multiple Air Na			Project Nu	mber:		291330006		
Contract:		W9133L-14-	D-0002		Task Orde	r:	-	0006		
Installation:		GPEO			Date:	50			9/20/17	
Location ID:		PRL 9			Northing/E	asting:			Collected	
Technician(s):					devin pe		-			
				SEDIMEN	SAMPLE					
				Descr						
	NAME	(USCS Symbo	l): color, mois	ture, % by wt, plas	sticity, dilatano	y, toughnes	s, dry strength,co	nsistency		
			SAND (SP)	: light brown, sa	turated, med	f-coarse, lo	oose			
Sample Depth (ft):		NA.			Sample ID			GPEC	OR-09-SD02	
MS/MSD Collected:	2	No			Sample Da				9/20/17	
Duplicate ID:		NA			Sample Co	ollection T	ime:		14:20	
Sample Container Typ	pe(s):	1 6.5 oz un	preserved pla	stic	Sample Co	ollection M	lethods:		trowel	
Preservative(s):	30000000	Ice (4 *	C)		Analysis/N	lethod(s):		UC	MR3 List	
0 10/0				SURFACE S	OIL SAMP	LE				
				Descr	*					
	NAME	(USCS Symbo	l): color, mois	ture, % by wt, pla:	sticity, dilatano	y, toughnes	s, dry strength,co	nsistency		
		NA.		N		2.10			NA.	
Sample Depth (ft): MS/MSD Collected:	NA NA				Sample ID		-	NA NA		
Duplicate ID:		NA.			Sample Da Sample Co		ime:	NA NA		
Sample Container Typ	ne(s):	INIT	NA		Sample Co			NA NA		
Preservative(s):	pe(5).	NA	101		Analysis/N		90.001 000000 0000		NA	
i reservative(s).				SURFACE WA						
			T	Specific						
Time	Intake Depth (in)	Temp. (°C)	pH (units)	Electrical Conductance (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Durin	s/Observations ng Purging sediment, etc.)	
14:20	NA	22.1	8.92	0.402	8.92	108.6	2.28		NA	
Sample Depth (ft):		NA.			Sample Da	ite:	- 84		9/20/17	
Sample ID:		GPEOR-09	SW02		Sample Co				14:25	
MS/MSD Collected:		No			Sample Co			direct in	nto containers.	
Duplicate ID:		NA.			Surface W	4"				
Sample Container Typ	pe(s):	loe (4 *	served plastic		Water Boo	y and Wat	er Quality Cha	racteristics:		
Preservative(s): Analysis/Method(s):	DEAS	EPA 537-modi		Liet			Stre	eam, Flowing		
Location Image:	1170	El Moor-linear	near, commo	2131	Instrume	nte /Man	ufacturer Mc	del, and Serial	No.1:	
Location image.		AND STATE OF	100000		Equipment 0			dei, and Serial	Yes	
Sec.		CONTRACTOR OF THE PARTY OF THE			Calibrated V		- C. C. C. C. C. C. C. C. C. C. C. C. C.		Yes	
5735		ALC: NO.			Calibratou v	mmi Cineia			100	
							Hach 21	or, Water Quality Me 00Q 3241-2013, MPS 14F100349	ter	
7.8		1	4		Notes:				Signature:	
							none		AA ~~ Name (print):	
Caption:	suface water and s	ediment sampl	e along chann	nel					jeremiah morse	
QA/QC'd by:						QA	QC Date:			



12170-0101											
Project Name:		nal Site Inspect Multiple Air Nat			Project Nu	mber:		2	291330006		
Contract:		W9133L-14-E	0-0002		Task Order:				0006		
Installation:		GPEOF			Date:	10			09/20/17		
Location ID:		PRL 11	1		Northing/E	asting:		N	ot Collected		
Technician(s):					devin pe	terson	135				
				SEDIMEN	TSAMPLE						
15				Descr							
	NAME	(USCS Symbol): color, mois	ture, % by wt, pla	sticity, dilatano	y, toughnes	is, dry strengt	h,consistency			
			silt	(ml): brown, sa	turated, 90%	fines					
Sample Depth (ft):		NA			Sample ID:			GPE	EOR-11-SD01		
MS/MSD Collected:		No			Sample Da				09/20/17		
Duplicate ID:		NA			Sample Co	llection T	ime:		13:00		
Sample Container Typ	oe(s):	1-6.5 oz	unpreserved	ý.	Sample Co	llection N	lethods:	to particular	trowel		
Preservative(s):	S020000 PL	lce (4 °0			Analysis/M			PFAS (E	EPA 537-modified)		
0 000				SURFACE S	OIL SAMPL	.E					
8'				Descr							
	NAME	(USCS Symbol): color, mois	ture, % by wt, pla	sticity, dilatano	y, toughnes	is, dry strengt	th,consistency			
D 11 150				N	A						
Sample Depth (ft):		NA NA			Sample ID:			NA NA			
MS/MSD Collected: Duplicate ID:		NA.			Sample Da		ima	NA NA			
Sample Container Typ	ne(s).	TAIN.	NA		Sample Collection Time: Sample Collection Methods:			NA NA			
Preservative(s):	re(s).	NA	104		Analysis/M				NA		
rieseivative(s).		147		URFACE WA					1875		
				Specific		Na San					
Time	Intake Depth (in)	Temp. (°C)	pH (units)	Electrical Conductance (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Dui	nts/Observations ring Purging , sediment, etc.)		
13:10	NA	25.4	9.23	0.403	14.65 mg/L	49.5	6.36		water as high DO after checkir verify proper function.		
Sample Depth (ft):		NA			Sample Da			09/20/17 13:00 direct into container			
Sample ID:		GPEOR-11-	SW01		Sample Co						
MS/MSD Collected:		No No	N IPARA		Sample Co						
Duplicate ID:	no fals	GPEOR-SW-E	erved plastic		Surface Wa			Characteristics:	6°		
Sample Container Typ Preservative(s):	e(s):	loe (4 °C			water Body	y and vva	ter Quality (Characteristics:			
Analysis/Method(s):		UCMR3						Pond			
Location Image:					Instrumer	nts (Man	ufacturer.	Model, and Seria	al No.):		
Location image.	-			ř.	Equipment C			model, and cont	Yes		
L 350	The same				Calibrated W				Yes		
							Turbidity I	Meter, Water Quality N h 2100Q 3241-2013. 556 MPS 14F100349			
					Notes:		none		Name (print):		
Caption:	sample loca	tion on east side	or pond				100 D-1	-			
QA/QC'd by:						QA	/QC Date:				



Project Name:		nal Site Inspec Multiple Air Na			Project Nu	mber:		291330006		
Contract:		W9133L-14-	D-0002		Task Order:			0006		
Installation:		GPEO	R		Date:		10-	09/20/17		
Location ID:		PRL 1	1		Northing/E	asting:		Not Collected		
Technician(s):					devin p	terson				
*				SEDIMEN'	T SAMPLE					
				Descr	iption					
	NAME	(USCS Symbo	l): color, mois	ture, % by wt, pla	sticity, dilatano	y, toughnes	s, dry strength,con	sistency		
				silt (ml): brow	vn, saturated					
Sample Depth (ft):		NA			Sample ID	8		GPEOR-11-SD02		
MS/MSD Collected:		No			Sample Da		49	09/20/17		
Duplicate ID:		NA			Sample Co		ime:	12:40		
Sample Container Typ	pe(s):	1-6.5oz ung	preserved pla	stic	Sample Co			trowel		
Preservative(s):	5195500 	lce (4 "			Analysis/N			UCMR3 List		
				SURFACE S						
					iption					
	NAME	(USCS Symbo	D color mais		*	v toughnes	is, dry strength,con	sistency		
	TO SING	(occo o)mac	g. color, mois	inter to by me pro-	sectify distant	y, wagenes	is, any such gar, con	and the same of th		
Samula Double (ff)		NA	_	N	A Second of ID			NA NA		
Sample Depth (ft): MS/MSD Collected:		NA.			Sample ID		-	NA.		
Duplicate ID:		NA.			Sample Da		ima:	NA NA		
Sample Container Typ	pa(e):	INC	NA		Sample Collection Time: Sample Collection Methods:			NA NA		
	pe(s).	NA	104		Analysis/Method(s):			NA NA		
Preservative(s):		no.	-	SURFACE WA			-	NA.		
					TER SAM	LE		Dec 11 House Work		
Time	Intake Depth (in)	Temp. (°C)	pH (units)	Specific Electrical Conductance (mS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Comments/Observations During Purging (color, sediment, etc.)		
12:45	NA	21.0	7.64	0.71	6.65	93.5	7.75	NA		
Sample Depth (ft):		NA	Leanner		Sample Da	te:	- 84	09/20/17		
Sample ID:		GPEOR-11-	SW02		Sample Co	lection T	ime:	12:30		
MS/MSD Collected:		No			Sample Co	lection N	lethods:	direct into container		
Duplicate ID:		NA			Surface W			6*		
Sample Container Typ	pe(s):		served plastic		Water Body and Water Quality Characteristics:					
Preservative(s):		lce (4 °					3	Stream		
Analysis/Method(s):		UCMR3	List					50 -65 V		
Location Sketch:					Instrume	nts (Man	ufacturer, Mod	del, and Serial No.):		
					Equipment 0	alibrated (Y	//N):	Yes		
					Calibrated V	ithin Criteri	a (Y/N):	Yes		
					l		97			
~	stream	n	士				Hach 210	t; Water Quality Meter 2002 3241-2013, MPS 14f10049		
			outfall		Notes:		none	Signature:		
10		l	1 1					Name (print):		
_					I			jeremiah morse		
0.1.001.1.	road						100 D-1			
QA/QC'd by:						QA	/QC Date:			

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APPENDIX E

IDW MANIFESTS

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CAD	ase print or type. (Form designed for use on eithe (12-prich) typewriter.)
1	UNIFORM HAZARDOUS 1. Generator 10 Number 2. Page 1 of 3. Emergency Response Phone 313-724-860 010937110 FLE
11	Consented Name and Mallow Address (II & Reseat these mallow subtages)
П	Pearia ANG Base lieoria. Ang Desled Generalors Phone: a. IL 61607-5033
П	Generalors Phone a, IL 61607-5033 309-633-5217 Peoria, IL 61607-5033
П	Midwest Transport 6000) 313-724-816101 MIK788363422
II	7. Transporter 2 Company Name U.S. EPA ID Number
П	8. Designated Facility Name and Site Address U.S. EPA ID Number
П	Advanced Integrated Solutions 2.214 & Designation
П	Edwardster M148141 313-724-8600 1M1K368545912
П	9a. 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, 10. Containers 11. Total 12. Unit 4. Master Codes 12. Unit 13. Waster Codes 14. Web. 15. Waster Codes 15. Total 15. Waster Codes 15. Web. 16. Web. 16. Web. 17. Total 16. Web. 17. Total 17. Waster Codes 16. Web. 17. Total 17. Waster Codes 16. Web. 17. Total 17. Waster Codes 17. Total 18. Waster Codes 17. Total 18. Waster Codes 18. Web. 18. Web. 18. Web. 18. Waster Codes 18. Web. 18.
8	1 1 2 1 2 2 1
RATO	Nontaz Nongeg Material Hong DM 1293 P
GENERATOR	
Ĭ	Liquid Industrial By Product 204 P. DM 204 P. 028
Ш	3.
II	
П	· ·
Ш	14 Special Handling Instructions and Artificial Information
11	1) Approval#7644-23. AR Soil Cathings 2) Approval#7645-23-AR Groundwater
11	2) Approval#7645-23-AR Groundwater
П	15. GENERATOR'S/OFFEROR'S CERTIFICATION: 1 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 informational 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. Levilly 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.
II	Generalor's Differor's Printed Typed Name Molly H. STEARNS Signalure Molly H. STEARNS Molly H. Steam 1/2/13/17
1,	16. International Shipments Import to U.S. Export from U.S. Port gentry/exit:
INI S	Transporter signature (for exports only): Date leaving U.S.:
TRANSPORTER	17. Transporter Acknowledgment of Receipt of Meterials Transporter 1 Printed/Typed Name / Month Day Year Month Day Year
NSPC	MANG HULSON Mank Judson 1121/3/17 Transporter 2 Printed Typed Name Month Day Year
TRA	
1	18. Discrepancy 18a. Discrepancy Indication Space Quantity Type Residue Partial Rejection Full Rejection
Ł	Manilest Reference Number: 18b. Allemate Facility (or Generator) U.S. EPAID Number
ACIL	
TED F	Facility's Phone: 18c, Signature of Alternate Facility (or Generator) Month Day Year
DESIGNATED FACILITY	19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
DES	1. 2. 3. 4.
	20. Designated Facility Owner or Operator: Certificating of receipt of hazardous materials covered by the manifest discept of right in Item 18a
	PrintedTyped Name Signature Signature Name North Day Year
EP/	Form 8700-22 (Rev. 3-05) Previous editions are obsoicie.

2. Page 1 of 3. Emergency Res 1. Generator ID Number 4. Waste Tracking Number NON-HAZARDOUS WASTE MANIFEST 200-498-2847 201200085 5. Generator's Name and Mailing Generator's Site Address (if different than mailing address) Peoria Air Mattenat Guard Ba Peorla Air Mational Guard Base 2416 S. Palcon Blvd., 2416 S. Falcow High. U.S. EPA ID Number Generator's Phone: 11 04 07 07 07 0 (300) 833 5277 7. Transpoliting Company Warner Harris Company City. U.S. EPA D'NIMESTO DUESTO 8. Designated Facility Name and Site Address U.S. EPA ID Number Advanced Resource Repriery 27146 Princeton Avenue Facility's Phone: - 641 48141 383-724-8660 865088002860 10. Containers 12. Unit 11. Total 9. Waste Shipping Name and Description Quantity WL/Vol. Type RCRA Non-Hazardous and Non DOT Regulated Material -(non-hazardous soil) RCRA Non-Hazardous and Non OOT Regulated By Product (non-hazardaus syster) 13. Special Handling Instructions and Additional Information 9.1. Centains Non-Hazardous Soft. Approval # 7644-23-AR 9.2 Contains Non-Hazardous Vilater Approval # 7645-23-AR "if spiiled, ditar area, contain in drams" 14: 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. Generator's/Offeror's Printed/Typed Name 15/International Shipments Import to U.S. Port of entry/exit Export from U.S. Transporter Signature (for exports only): Date leaving U.S. 16. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name Signature Transporter 2 Printed/Typed Name 17. Discrepancy 17a. Discrepancy Indication Space Type Quantity Residue Partial Rejection Full Rejection Manifest Reference Number: 17b. Alternate Facility (or Generator) U.S. EPA ID Number FACILITY Facility's Phone: DESIGNATED 17c. Signature of Alternate Facility (or Generator) 18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Refn 17a

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APPENDIX F

DATA VALIDATION REPORTS

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DATA VALIDATION REPORT

FY16 Phase 1 Regional Site Inspections for Perfluorinated Compounds
Multiple Air National Guard Installations
Samples Collected Between 5 and 22 September 2017
Greater Peoria Airport
Peoria, Illinois

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. 291330006.016.****

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Amec Foster Wheeler Environment & Infrastructure, Inc.

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 Polyfluoroalky 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

SDG Sample Delivery Group

Vista Analytical Laboratory

Data Validation Report FY16 Phase 1 Regional Site Inspections for Perfluorinated Compounds Samples Collected September 2017 | Greater Peoria Airport Peoria, Illinois

DATA VALIDATION REPORT FY16 PHASE 1 REGIONAL SITE INSPECTIONS FOR PERFLUORINATED COMPOUNDS

Multiple Air National Guard Installations Samples Collected 5 through 22 September 2017 Greater Peoria Airport, Peoria, Illinois

1.0 INTRODUCTION

Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler) collected 53 soil samples (including 5 field duplicates), 6 sediment samples (including 1 field duplicate), and 14 water samples (including 2 field duplicates, 1 field blank, and 1 equipment blank) between 5 and 22 September 2017, from the Greater Peoria Airport, located in Peoria, Illinois. Amec Foster Wheeler submitted the samples to Vista Analytical Laboratory (Vista), located in El Dorado Hills, California, where they were received between 6 and 23 September 2017. Vista assigned the samples to sample delivery groups (SDGs) 1701192, 1701312, 1701313, 1701314, 1701315, 1701316, and 1701317. 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.

Amec Foster Wheeler Environment & Infrastructure, Inc.

Data Validation Report FY16 Phase 1 Regional Site Inspections for Perfluorinated Compounds Samples Collected September 2017 | Greater Peoria Airport Peoria, Illinois

- 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.

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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.

Field blanks are prepared by pouring an aliquot of analyte-free water into a sample container in the field. Field blanks are analyzed for the analytical suite required for the project. Field blanks are

Data Validation Report FY16 Phase 1 Regional Site Inspections for Perfluorinated Compounds Samples Collected September 2017 | Greater Peoria Airport Peoria, Illinois

used to monitor for possible sample contamination originating from the water used for equipment decontamination.

Laboratory, equipment, and field 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:

Data Validation Report FY16 Phase 1 Regional Site Inspections for Perfluorinated Compounds Samples Collected September 2017 | Greater Peoria Airport Peoria, Illinois

- FDD Field duplicate imprecision.
- ISH High internal standard recovery. Analytical result may be biased low.
- MSD High RPD between MS and MSD results. Potential analytical imprecision.
- MSH High MS recovery. Analytical result may be biased high.
- MSL Low MS recovery. Analytical result may be biased low.
- 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 the samples in SDG 1701315. The laboratory contacted Amec Foster
 Wheeler and confirmed that the IDs on the COC were correct.
- The collection time listed for sample GPEOR-09-SD02-0-1 on the COC did not match the time written on the container label. The laboratory contacted Amec Foster Wheeler for clarification and was told that the time listed on the COC is correct.
- The ID written on the lid of sample GPEOR-SW-DUP001-092017 did not match the ID written on the sample label. Amec Foster wheeler confirmed that the ID written on the COC is correct.
- Sample GPEOR-09-SW01-0-1 was listed as a solid on the COC. Amec Foster Wheeler submitted a revised COC that correctly identified the sample as water.

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.

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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 Field Blanks

PFAS were not detected in the equipment and field 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).

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7.1.8 Matrix Spikes/ Matrix Spike Duplicates

Vista performed MS and MSD analyses on samples GPEOR-04-SB02-0.5-1, GPEOR-06-SB02-0.5-1, and GPEOR-GW-TWBB02-092117. 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 143% in the MSD performed on sample GPEOR-04-SB02-0.5-1. Amec Foster Wheeler J qualified the detected PFOS result from this sample because of potential high analytical bias. (Qualifier and reason code: J-MSH)
- PFHxS recovery was low at 55.3% in the MS and PFOS recoveries were low at -19.3% and
 -40%, respectively, in the MS and MSD performed on sample GPEOR-06-SB02-0.5-1.
 Additionally, the RPD between MS and MSD results for PFHxS was high at 29%. Data
 limitations are summarized below.
 - Amec Foster Wheeler J qualified the detected PFHxS and PFOS results from sample GPEOR-06-SB02-0.5-1 due to potentially low analytical bias. (Qualifier and reason code J-MSL)
 - Amec Foster Wheeler J qualified the detected PFHxS result from sample GPEOR-06-SB02-0.5-1 due to potentially analytical imprecision. (Qualifier and reason code J-MSD)
- PFHxS recoveries were outside of QAPP-specified limits at 136% in the MS and 57.2% in the MSD performed on sample GPEOR-GW-TWBB02-092117. The PFHxS concentration detected in the unspiked native sample was more than twice the spike concentration and it is not possible to determine data usability based on MS and MSD recoveries for this analyte in this sample.

7.1.9 Surrogate Recoveries

Vista uses labeled internal standards, which are added before extraction to quantify their analytical results and do 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, with the following exception:

Recoveries of the extracted internal standard ¹³C₃-PFBS were high in samples GPEOR-05-SB01-0.5-1 (160%), GPEOR-05-SB01-12.5-13 (156%), GPEOR-05-SB02-4.5-5 (166%), GPEOR-05-SB03-3.5-4 (162%), GPEOR-06-SB02-9.5-10 (157%), GPEOR-06-SB03-0.5-1 (159%), GPEOR-06-SB03-6.5-7 (160%), GPEOR-07-SB02-1.5-2 (169%), GPEOR-07-SB03-1-1.5 (164%), GPEOR-07-SB03-14.5-15 (157%), GPEOR-GW-DUP001-092117 (157%), and GPEOR-SO-DUP005-092017 (159%). Amec Foster Wheeler J qualified the detected and UJ qualified the non-detected PFBS results from these samples because of potentially low analytical bias. (Qualifiers and reason code: J/UJ-ISH)

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:

- GPEOR-GW-TW04-092117 (GPEOR-GW-DUP001-092117),
- GPEOR-09-SD03-0-1 (GPEOR-SD-DUP001-092017),
- GPEOR-02-SB01-0.5-1 (GPEOR-SO-DUP001-092017),
- GPEOR-04-SB03-5-5.5 (GPEOR-SO-DUP002-092017),
- GPEOR-06-SB01-0.5-1 (GPEOR-SO-DUP003-092117),
- GPEOR-05-SB03-0.5-1 (GPEOR-SO-DUP004-091917),
- GPEOR-08-SB03-0.5-1 (GPEOR-SO-DUP005-092017), and
- GPEOR-11-SW01-0-1 (GPEOR-SW-DUP001-092017).

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, with the following exceptions:

 The RPD between PFOS results from sample GPEOR-02-SB01-0.5-1 and its field duplicate GPEOR-SO-DUP001-092017 was high at 45%. Amec Foster Wheeler J qualified the detected PFOS results from these samples because of potential sampling or analytical imprecision. (Qualifier and reason code: J-FDD)

Amec Foster Wheeler Environment & Infrastructure, Inc.

Project No.: 291330006.016

December 14, 2017

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 RPDs between PFBS (167%), PFHxS (178%), PFOA (181%), and PFOS (185%) results from sample GPEOR-08-SB03-0.5-1 and its field duplicate GPEOR-SO-DUP005-092017 were high. Amec Foster Wheeler J qualified the detected PFBS, PFHxS, PFOA, and PFOS results from these samples because of potential sampling or analytical imprecision. (Qualifier and reason code: J-FDD)

9.0 SUMMARY AND CONCLUSIONS

Amec Foster Wheeler evaluated a total of 432 data records from field samples during the validation. Amec Foster Wheeler J or UJ qualified 94 records (22%) as estimated values because of high or low MS recoveries, imprecision between MS and MSD results, high internal standard recoveries, field duplicate imprecision, and/or analyte concentrations outside the instrument's calibration range. Qualified data are summarized in Table 3.

Project No.: 291330006.016

December 14, 2017

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 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.



TABLES

Table 1 Field Duplicate Detections Greater Peoria Airport Peoria, Illinois

FY16 Phase 1 Regional Site Inspection for Per-Fluorinated Compounds

Field Sample ID	Collection	Sample Matrix	Lab Sample ID	Notes		
GPEOR-FB-090517	5-Sep-17	Water	1701192-01	Field Blank		
GPEOR-05-SB01-0.5-1	19-Sep-17	Soil	1701312-01	I IOM DIMIN		
GPEOR-05-SB01-12.5-13	19-Sep-17	Soil	1701312-02	Stage 4		
GPEOR-05-SB02-0.5-1	19-Sep-17	Soil	1701312-03	Stage 4		
GPEOR-05-SB02-4.5-5	19-Sep-17	Soil	1701312-04	Stage 4		
GPEOR-05-SB03-0.5-1	19-Sep-17	Soil	1701312-05	Stage 4		
GPEOR-05-SB03-3.5-4	19-Sep-17	Soil	1701312-06	Stage 4		
GPEOR-07-SB03-1-1.5	19-Sep-17	Soil	1701312-07			
GPEOR-07-SB03-14.5-15	19-Sep-17	Soil	1701312-08			
GPEOR-07-SB01-1-1.5	19-Sep-17	Soil	1701312-09			
GPEOR-07-SB01-11.5-12	19-Sep-17	Soil	1701312-10			
GPEOR-07-SB02-1.5-2	19-Sep-17	Soil	1701312-11			
GPEOR-07-SB02-14.5-15	19-Sep-17	Soil	1701312-12	***************************************		
GPEOR-04-SB02-0.5-1	19-Sep-17	Soil	1701313-01	MS/MSD		
GPEOR-04-SB02-14.5-15	19-Sep-17	Soil	1701313-02	- CONTROL CONTROL		
GPEOR-04-SB01-0.5-1	19-Sep-17	Soil	1701313-03			
GPEOR-04-SB01-6-7	19-Sep-17	Soil	1701313-04			
GPEOR-SO-DUP004-091917	19-Sep-17	Soil	1701313-05	Field duplicate of GPEOR-05-SB03-0.5-1		
GPEOR-08-SB03-0.5-1	20-Sep-17	Soil	1701313-06			
GPEOR-08-SB03-14.5-15	20-Sep-17	Soil	1701313-07			
GPEOR-08-SB01-0.5-1	20-Sep-17	Soil	1701313-08			
GPEOR-08-SB01-14.5-15	20-Sep-17	Soil	1701313-09			
GPEOR-08-SB02-0.5-1	20-Sep-17	Soil	1701313-10			
GPEOR-08-SB02-14.5-15	20-Sep-17	Soil	1701313-11			
GPEOR-01-SB02-1-1.5	20-Sep-17	Soil	1701313-12			
GPEOR-01-SB02-14.5-15	20-Sep-17	Soil	1701314-01			
GPEOR-01-SB01-1-1.5	20-Sep-17	Soil	1701314-02			
GPEOR-01-SB01-14.5-15	20-Sep-17	Soil	1701314-03			
GPEOR-01-SB03-1-1.5	20-Sep-17	Soil	1701314-04			
GPEOR-01-SB03-14.5-15	20-Sep-17	Soil	1701314-05			
GPEOR-02-SB03-0.5-1	20-Sep-17	Soil	1701314-06			
GPEOR-02-SB03-5-5.5	20-Sep-17	Soil	1701314-07			
GPEOR-11-SW02-0-1	20-Sep-17	Surface Water	1701314-08	Stage 4		
GPEOR-11-SD02-0-1	20-Sep-17	Sediment	1701314-09	Stage 4		
GPEOR-02-SB02-0.5-1	20-Sep-17	Soil	1701314-10			
GPEOR-02-SB02-5-5.5	20-Sep-17	Soil	1701314-11			
GPEOR-11-SD01-0-1	20-Sep-17	Sediment	1701314-12			
GPEOR-11-SW01-0-1	20-Sep-17	Surface Water	1701315-01			
GPEOR-02-SB01-0.5-1	20-Sep-17	Soil	1701315-02			
GPEOR-02-SB01-5-5.5	20-Sep-17	Soil	1701315-03			
GPEOR-09-SD01-0-1	20-Sep-17	Sediment	1701315-04			
GPEOR-09-SW01-0-1	20-Sep-17	Surface Water	1701315-05			
GPEOR-04-SB03-0.5-1	20-Sep-17	Soil	1701315-06			
GPEOR-04-SB03-5-5.5	20-Sep-17	Soil	1701315-07			
GPEOR-09-SD02-0-1	20-Sep-17	Sediment	1701315-08			
GPEOR-09-SW02-0-1	20-Sep-17	Surface Water	1701315-09			
GPEOR-09-SD03-0-1	20-Sep-17	Sediment	1701315-10			
GPEOR-09-SW03-0-1	20-Sep-17	Surface Water	1701315-11			
GPEOR-SD-DUP001-092017	20-Sep-17	Sediment	1701315-12	Field duplicate of GPEOR-09-SD03-0-1		

Table 1 Field Duplicate Detections Greater Peoria Airport Peoria, Illinois

FY16 Phase 1 Regional Site Inspection for Per-Fluorinated Compounds

Field Sample ID	Collection Date	Sample Matrix	Lab Sample ID	Notes
GPEOR-SO-DUP001-092017	20-Sep-17	Soil	1701316-01	Field duplicate of GPEOR-02-SB01-0.5-1
GPEOR-SO-DUP002-092017	20-Sep-17	Soil	1701316-02	Field duplicate of GPEOR-04-SB03-5-5.5
GPEOR-SO-DUP005-092017	20-Sep-17	Soil	1701316-03	Field duplicate of GPEOR-08-SB03-0.5-1
GPEOR-SW-DUP001-092017	20-Sep-17	Surface Water	1701316-04	Field duplicate of GPEOR-11-SW01-0-1
GPEOR-GW-TW02-092117	21-Sep-17	Groundwater	1701316-05	Stage 4
GPEOR-GW-TW05-092117	21-Sep-17	Groundwater	1701316-06	ēt i
GPEOR-GW-TW07-092117	21-Sep-17	Groundwater	1701316-07	
GPEOR-06-SB02-0.5-1	21-Sep-17	Soil	1701316-08	MS/MSD
GPEOR-GW-TW04-092117	21-Sep-17	Groundwater	1701316-09	
GPEOR-06-SB02-9.5-10	21-Sep-17	Soil	1701316-10	
GPEOR-06-SB03-0.5-1	21-Sep-17	Soil	1701316-11	
GPEOR-06-SB03-6.5-7	21-Sep-17	Soil	1701316-12	
GPEOR-GW-TWBB02-092117	21-Sep-17	Groundwater	1701317-01	MS/MSD
GPEOR-06-SB01-0.5-1	21-Sep-17	Soil	1701317-02	
GPEOR-06-SB01-14.5-15	21-Sep-17	Soil	1701317-03	
GPEOR-03-SB01-0.5-1	21-Sep-17	Soil	1701317-04	
GPEOR-03-SB01-10-10.5	21-Sep-17	Soil	1701317-05	
GPEOR-03-SB02-0.5-1	21-Sep-17	Soil	1701317-06	
GPEOR-03-SB02-11.5-12	21-Sep-17	Soil	1701317-07	
GPEOR-03-SB03-0.5-1	21-Sep-17	Soil	1701317-08	
GPEOR-03-SB03-14.5-15	21-Sep-17	Soil	1701317-09	
GPEOR-SO-DUP003-092117	21-Sep-17	Soil	1701317-10	Field duplicate of GPEOR-06-SB01-0.5-1
GPEOR-GW-DUP001-092117	21-Sep-17	Groundwater	1701317-11	Field duplicate of GPEOR-GW-TW04-092117
GPEOR-EB001-JM-092217	22-Sep-17	Water	1701317-12	Equipment blank

Note:

ID = identification

Table 2 Field Duplicate Detections Greater Peoria Airport Peoria, Illinois

FY16 Phase 1 Regional Site Inspection for Per-Fluorinated Compounds

Analyte	LOQ Primary Sample Field Duplica		Field Duplicate	Units	RPD	Notes
	amples GPEOR-GV	V-TW04-092117 and	GPEOR-GW-DUP00	1-092117		
PFBS	0.0471	0.214	0.173	μg/L	21%	
PFHpA	0.00854	0.161	0.155	μg/L	3.8%	
PFHxS	0.00854	1.98	1.92	μg/L	3.1%	
PFOA	0.00854	0.128	0.13	μg/L	1.6%	
PFOS	0.0642	7.82	7.32	μg/L	6.6%	
PFNA	0.00854	0.00815 J	0.0108	μg/L	28%	
	Samples GPEOF	R-09-SD03-0-1 and G	PEOR-SD-DUP001-09	2017		
PFHxS	1.99	1.00 J	1.40 J	μg/kg	33%	± LOQ
PFOS	1.99	4.72	5.46 J	μg/kg	15%	
	Samples GPEOR-		PEOR-SO-DUP001-0	92017	71	100
PFHxS	1.93	0.293 J	0.277 J	μg/kg	5.6%	1.00.200000
PFOS	1.93	4.92	7.75	μg/kg	45%	J-FDD
	Samples GPEOR-	04-SB03-5-5.5 and G	PEOR-SO-DUP002-0	92017		931
PFHxS	1.98	1.92 J	2.06	μg/kg	7.0%	
PFOA	1.98	0.580 J	0.564 J	μg/kg	2.8%	
PFOS	1.98	0.981 U	0.356 J	μg/kg	NC	± LOQ
			PEOR-SO-DUP003-0	92117		
PFHxS	1.98	0.479 J	0.999 U	μg/kg	NC	± LOQ
PFOS	1.98	3.64	2.29	μg/kg	46%	± LOQ
			PEOR-SO-DUP004-0			
PFHxS	1.98	1.20 J	2.71	μg/kg	77%	± LOQ
PFOS	1.98	22.7	26.9	μg/kg	17%	
			PEOR-SO-DUP005-0			
PFBS	1.99	3.34	0.298 J	μg/kg	167%	J-FDD
PFHpA	1.99	1.47 J	0.991 U	μg/kg	NC	± LOQ
PFHxS	1.99	175	9.99	μg/kg	178%	J-FDD
PFOA	1.99	8.87	0.440 J	μg/kg	181%	J-FDD
PFOS	21.0	2,410	94.4	μg/kg	185%	J-FDD
PENA	1.99	1.50	0.991 U	μg/kg	NC	± LOQ
			PEOR-SW-DUP001-0			
PFBS	0.00887	0.0467	0.0556	μg/L	17%	
PFHpA	0.00887	0.0469	0.0462	μg/L	1.5%	
PFHxS	0.00887	0.362	0.351	μg/L	3.1%	
PFOA	0.00887	0.0870	0.0872	μg/L	0.23%	
PFOS	0.00887	0.368	0.385	μg/L	4.5%	0.000
PFNA	0.00887	0.00543 U	0.00350 J	μg/L	NC	± LOC

Notes:

μg/kg = micrograms per kilogram
μg/L = micrograms per liter

LOQ = limit of quantification

PFBS = perfluorobutanesulfonic acid

PFHpA = perfluorobutanesulfonic acid

PFHpA = perfluorobetanoic acid

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 above the reported limit of detection.

Reason Codes:

 \pm LOQ = The difference between analyte concentrations is less than the LOQ, indicating acceptable analytical precision. FDD = Field duplicate imprecision.

Table 3 Field Duplicate Detections Greater Peoria Airport Peoria, Illinois

FY16 Phase 1 Regional Site Inspection for Per-Fluorinated Compounds

Sample Identification	Analyte	Results	Qualifiers and Reason Codes
GPEOR-01-SB01-1-1.5	PFBS	0.391 μg/kg	J TR
GPEOR-01-SB01-1-1.5	PFHpA	0.338 μg/kg	J TR
GPEOR-01-SB01-1-1.5	PFOA	0.546 μg/kg	J TR
GPEOR-01-SB01-14.5-15	PFOS	0.312 μg/kg	J TR
GPEOR-01-SB02-1-1.5	PFBS	0.356 μg/kg	J TR
GPEOR-01-SB02-14.5-15	PFOS	1.12 μg/kg	J TR
GPEOR-01-SB03-1-1.5	PFBS	0.535 μg/kg	J TR
GPEOR-01-SB03-1-1.5	PFNA	0.381 μg/kg	J TR
GPEOR-01-SB03-1-1.5	PFOA	0.75 μg/kg	J TR
GPEOR-01-SB03-14.5-15	PFHpA	0.377 μg/kg	J TR
GPEOR-01-SB03-14.5-15	PFOA	0.518 μg/kg	J TR
GPEOR-02-SB01-0.5-1	PFHxS	0.293 μg/kg	J TR
GPEOR-02-SB01-0.5-1	PFOS	4.92 μg/kg	J FDD
GPEOR-02-SB01-5-5.5	PFOS	1.24 μg/kg	J TR
GPEOR-02-SB02-0.5-1	PFOS		J TR
GPEOR-02-3B02-0.5-1	PFHxS	1.75 μg/kg	J TR
GPEOR-03-SB01-0.5-1	PFOA	0.807 μg/kg	J TR
		0.285 μg/kg	
GPEOR-03-SB01-10-10.5	PFHxS	0.335 μg/kg	J TR
GPEOR-03-SB01-10-10.5	PFOS	0.919 μg/kg	J TR
GPEOR-03-SB02-0.5-1	PFBS	0.523 μg/kg	J TR
GPEOR-03-SB02-0.5-1	PFHpA	0.483 μg/kg	J TR
GPEOR-03-SB02-0.5-1	PFOA	0.392 μg/kg	J TR
GPEOR-03-SB02-11.5-12	PFOS	0.846 μg/kg	J TR
GPEOR-03-SB03-0.5-1	PFHxS	1.62 μg/kg	J TR
GPEOR-04-SB01-0.5-1	PFHxS	1.46 μg/kg	J TR
GPEOR-04-SB02-0.5-1	PFOS	1.34 μg/kg	J MSH, TR
GPEOR-04-SB02-14.5-15	PFOS	0.289 μg/kg	J TR
GPEOR-04-SB03-0.5-1	PFHxS	0.679 μg/kg	J TR
GPEOR-04-SB03-5-5.5	PFHxS	1.92 μg/kg	J TR
GPEOR-04-SB03-5-5.5	PFOA	0.58 μg/kg	J TR
GPEOR-05-SB01-0.5-1	PFBS	0.777 μg/kg	J ISH, TR
GPEOR-05-SB01-0.5-1	PFHpA	1.2 μg/kg	J TR
GPEOR-05-SB01-12.5-13	PFBS	1.01 µg/kg	UJ ISH
GPEOR-05-SB01-12.5-13	PFHxS	0.866 µg/kg	J TR
GPEOR-05-SB01-12.5-13	PFOS	1.11 µg/kg	J TR
GPEOR-05-SB02-0.5-1	PFHxS	1.29 µg/kg	J TR
GPEOR-05-SB02-4.5-5	PFBS	1.01 µg/kg	UJ ISH
GPEOR-05-SB02-4.5-5	PFHxS	0.454 μg/kg	J TR
GPEOR-05-SB03-0.5-1	PFHxS	1.2 μg/kg	J TR
GPEOR-05-SB03-3.5-4	PFBS	0.299 μg/kg	J ISH, TR
GPEOR-05-SB03-3.5-4	PFOS	1.24 μg/kg	J TR
GPEOR-06-SB01-0.5-1	PFHxS	0.479 μg/kg	J TR
GPEOR-06-SB01-14.5-15	PFHxS	0.448 μg/kg	J TR
GPEOR-06-SB02-0.5-1	PFHxS	1.41 µg/kg	J MSL, MSD, TR
GPEOR-06-SB02-0.5-1	PFOS	9.51 µg/kg	J MSL
GPEOR-06-SB02-9.5-10	PFBS	0.959 μg/kg	UJ ISH
GPEOR-06-SB02-9.5-10	PFHxS	1.82 µg/kg	J TR
GPEOR-06-SB03-0.5-1	PFBS	0.992 μg/kg	UJ ISH
GPEOR-06-SB03-0.5-1	PFHxS	1.44 µg/kg	J TR
GPEOR-06-SB03-6.5-7	PFBS	1.01 µg/kg	UJ ISH

Table 3 Field Duplicate Detections Greater Peoria Airport Peoria, Illinois

FY16 Phase 1 Regional Site Inspection for Per-Fluorinated Compounds

Sample Identification	Analyte	Results	Qualifiers and Reason Codes
GPEOR-07-SB01-1-1.5	PFOS	0.371 μg/kg	J TR
GPEOR-07-SB02-1.5-2	PFBS	0.987 μg/kg	UJ ISH
GPEOR-07-SB02-1.5-2	PFOS	0.372 μg/kg	J TR
GPEOR-07-SB03-1-1.5	PFBS	0.933 µg/kg	UJ ISH
GPEOR-07-SB03-14.5-15	PFBS	1 μg/kg	UJ ISH
GPEOR-08-SB01-0.5-1	PFBS	1.1 μg/kg	J TR
GPEOR-08-SB01-0.5-1	PFHpA	0.844 μg/kg	J TR
GPEOR-08-SB01-0.5-1	PFNA	0.927 μg/kg	J TR
GPEOR-08-SB01-14.5-15	PFBS	1.29 µg/kg	J TR
GPEOR-08-SB01-14.5-15	PFHpA	0.346 μg/kg	J TR
GPEOR-08-SB01-14.5-15	PFOA	0.613 μg/kg	J TR
GPEOR-08-SB02-14.5-15	PFBS	1.22 µg/kg	J TR
GPEOR-08-SB02-14.5-15	PFHpA	0.58 μg/kg	J TR
GPEOR-08-SB03-0.5-1	PFBS	3.34 µg/kg	J FDD
GPEOR-08-SB03-0.5-1	PFHpA	1.47 µg/kg	J TR
GPEOR-08-SB03-0.5-1	PFHxS	175 μg/kg	J FDD
GPEOR-08-SB03-0.5-1	PFNA	1.5 µg/kg	J TR
GPEOR-08-SB03-0.5-1	PFOA	8.87 µg/kg	J FDD
GPEOR-08-SB03-0.5-1	PFOS	2410 μg/kg	J FDD
GPEOR-08-SB03-14.5-15	PFBS	0.942 μg/kg	J TR
GPEOR-08-SB03-14.5-15	PFOA	0.733 μg/kg	J TR
GPEOR-09-SD01-0-1	PFHpA	0.547 μg/kg	J TR
GPEOR-09-SD01-0-1	PFNA	0.328 μg/kg	J TR
GPEOR-09-SD01-0-1	PFOA	0.549 μg/kg	J TR
GPEOR-09-SD02-0-1	PFHxS	0.36 μg/kg	J TR
GPEOR-09-SD02-0-1	PFOS	1.68 µg/kg	J TR
GPEOR-09-SD03-0-1	PFHxS	1 μg/kg	J TR
GPEOR-11-SD01-0-1	PFBS	0.418 μg/kg	J TR
GPEOR-11-SD01-0-1	PFHpA	0.739 μg/kg	J TR
GPEOR-11-SD01-0-1	PFNA	0.46 µg/kg	J TR
GPEOR-11-SD02-0-1	PFHxS	0.501 μg/kg	J TR
GPEOR-GW-DUP001-092117	PFBS	0.173 μg/L	J ISH
GPEOR-GW-TW04-092117	PFNA	0.00815 μg/L	J TR
GPEOR-GW-TW05-092117	PFNA	0.00269 µg/L	J TR
GPEOR-SD-DUP001-092017	PFHxS	1.4 µg/kg	J TR
GPEOR-SO-DUP001-092017	PFHxS	0.277 μg/kg	J TR
GPEOR-SO-DUP001-092017	PFOS	7.75 µg/kg	J FDD
GPEOR-SO-DUP002-092017	PFOA	0.564 μg/kg	J TR
GPEOR-SO-DUP002-092017	PFOS	0.356 μg/kg	J TR
GPEOR-SO-DUP005-092017	PFBS	0.298 μg/kg	J ISH, TR, FDD
GPEOR-SO-DUP005-092017	PFHxS	9.99 µg/kg	J FDD
GPEOR-SO-DUP005-092017	PFOA	0.44 μg/kg	J TR, FDD
GPEOR-SO-DUP005-092017	PFOS	94.4 μg/kg	J FDD
GPEOR-SW-DUP001-092017	PFNA	0.0035 μg/L	J TR

Table 3 Field Duplicate Detections Greater Peoria Airport Peoria, Illinois

FY16 Phase 1 Regional Site Inspection for Per-Fluorinated Compounds

Notes:

 μg/L = micrograms per liter
 PFHxS = perfluorohexanesulfonic acid

 μg/kg = micrograms per kilogram
 PFNA = perfluorononanoic acid

 PFBS = perfluorobutanesulfonic acid
 PFOA = perfluoroctanoic acid

 PFHpA = perfluoroheptanoic acid
 PFOS = perfluoroctanesulfonic acid

Qualifier Definitions:

- 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.

Reason Codes:

FDD = Field duplicate imprecision.

ISH = High internal standard recovery. Analytical result may be biased low.

MSD = High relative percent difference between matrix spike (MS) and MS duplicate results. Potential analytical imprecision.

MSH = High MS recovery. Analytical result may be biased high.

MSL = Low MS recovery. Analytical result may be biased low.

TR = Detected concentration is less than the limit of quantification.



DATA VALIDATION REPORT

FY16 Phase 1 Regional Site Inspections for Perfluorinated Compounds
Multiple Air National Guard Installations
Samples Collected Between 9 and 11 May 2018
Greater Peoria Airport
Peoria, Illinois

Prepared for:

National Guard Bureau

Prepared by:

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ACRONYMS AND ABBREVIATIONS

% percent

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 Polyfluoroalky 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

SDG Sample Delivery Group

Vista Analytical Laboratory

DATA VALIDATION REPORT FY16 PHASE 1 REGIONAL SITE INSPECTIONS FOR PERFLUORINATED COMPOUNDS

Multiple Air National Guard Installations Samples Collected 9 through 11 May 2018 Greater Peoria Airport, Peoria, Illinois

1.0 INTRODUCTION

Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler) collected 10 water samples (including 1 field duplicate and 1 equipment blank) between 9 and 11 May 2018, from the Greater Peoria Airport, located in Peoria, Illinois. Amec Foster Wheeler submitted the samples to Vista Analytical Laboratory (Vista), located in El Dorado Hills, California, where they were received on 15 May 2018. Vista assigned the samples to sample delivery group (SDG) 1800956. 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.

Field blanks are prepared by pouring an aliquot of analyte-free water into a sample container in the field. Field blanks are analyzed for the analytical suite required for the project. Field blanks are

used to monitor for possible sample contamination originating from the water used for equipment decontamination.

Laboratory, equipment, and field 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 codes to the data during validation:

- EBG Equipment blank contamination.
- FDD Field duplicate imprecision.
- TR Detected concentration is less than the limit of quantitation (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 the samples in SDG 1800956. The laboratory contacted Amec Foster
 Wheeler and corrected sample IDs were provided on a revised COC.
- On the COC for sample GPEOR-EB1-050918 the "relinquished by" signature was omitted.
 The laboratory contacted Amec Foster Wheeler and Amec Foster Wheeler supplied a signed COC and requested that they proceed with the analyses.

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.

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 Field Blanks

PFOS was detected in the equipment blank GPEOR-EB1-050918 (0.0165 ug/L) associated with all samples. The PFOS results in sample GPEOR-GW-TWBB01-050918 was ND and not impacted. The PFOS results in samples GPEOR-GW-TW01-051018, GPEOR-GW-TW03-051118, GPEOR-GW-TW06-051118, GPEOR-GW-TW08-051018, GPEOR-GW-TW11-051018, and GPEOR-DUPA-051018 were > 10X the blank concentration and were not impacted. The PFOS results in samples GPEOR-GW-TWBB04-051018 and GPEOR-GW-TWBB05-051018 were < 10X the blank concentration and were B qualified. (Qualifier and reason code: B-EBG)

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 sample GPEOR-GW-TWBB01-050918. 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%.

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.

7.1.9 Surrogate Recoveries

Vista uses labeled internal standards, which are added before extraction to quantify their analytical results and do 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:

GPEOR-GW-TW01-051018 (GPEOR-DUPA-051018).

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, with the following exceptions:

 The RPD between PFOA results from sample GPEOR-GW-TW01-051018 and its field duplicate GPEOR-DUPA-051018 was high at 69.5%. Amec Foster Wheeler J qualified the detected PFOA results from these samples because of potential sampling or analytical imprecision. (Qualifier and reason code: J-FDD)

9.0 SUMMARY AND CONCLUSIONS

Amec Foster Wheeler evaluated a total of 60 data records from field samples during the validation. Amec Foster Wheeler J or B qualified 9 records (15%) as estimated values because of equipment blank contamination, field duplicate imprecision, and/or analyte concentrations outside the instrument's calibration range. Qualified data are summarized in Table 3.

REFERENCES

- 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.



TABLES

Table 1 Field Samples Submitted to Vista Analytical Laboratory Greater Peoria Airport Peoria, Illinois

FY16 Phase 1 Regional Site Inspection for Per-Fluorinated Compounds

Field Sample ID	Collection Date	Sample Matrix	Lab Sample ID	Notes
GPEOR-GW-TWBB01-050918	9-May-18	Water	1800956-01	MS/MSD
GPEOR-GW-TWBB04-051018	10-May-18	Soil	1800956-02	Stage 4 Validation
GPEOR-GW-TWBB05-051018	10-May-18	Soil	1800956-03	
GPEOR-GW-TW01-051018	10-May-18	Soil	1800956-04	
GPEOR-GW-TW03-051118	11-May-18	Soil	1800956-05	
GPEOR-GW-TW06-051118	11-May-18	Soil	1800956-06	
GPEOR-GW-TW08-051018	10-May-18	Soil	1800956-07	
GPEOR-GW-TW11-051018	10-May-18	Soil	1800956-08	
GPEOR-DUPA-051018	10-May-18	Soil	1800956-09	Field duplicate of GPEOR-GW-TW01-051018
GPEOR-EB1-050918	9-May-18	Soil	1800956-10	Equipment Blank

Note:

ID = identification

MS/MSD = Matrix spike/matrix spike duplicate

Table 2 Field Duplicate Detections Greater Peoria Airport Peoria, Illinois

FY16 Phase 1 Regional Site Inspection for Per-Fluorinated Compounds

Analyte	LOQ	Primary Sample	Field Duplicate	Units	RPD	Notes
	Samples GPEOR	-GW-TW01-051018	and GPEOR-DUPA-05	1018		
PFBS	0.1655	4.33	4.67	μg/L	8%	
PFHpA	0.1655	3.17	2.95	µg/L	7.2%	
PFHxS	0.1655	29.7	36.8	µg/L	21.4%	
PFOA	0.0871	2.87	1.39	μg/L	69.5%	J-FDD
PFOS	0.1655	41	30.5	μg/L	29.4%	
PFNA	0.00828	0.524	0.541	μg/L	3%	

Notes:

 µg/L = micrograms per liter
 PFOA = perfluorooctanoic acid

 LOQ = limit of quantification
 PFOS = perfluorooctanesulfonic acid

 PFBS = perfluorobutanesulfonic acid
 PFNA = perfluorononanoic acid

 PFHAS = perfluorohexanesulfonic 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.

Reason Codes:

FDD = Field duplicate imprecision.

Table 3 Qualifiers Added During Validation Greater Peoria Airport

Peoria, Illinois

FY16 Phase 1 Regional Site Inspection for Per-Fluorinated Compounds

Sample Identification	Analyte	Resu	ilts	Qualifiers and Reas	
GPEOR-GW-TWBB01-050918	PFHXS	0.00716	μg/L	J	TR
GPEOR-GW-TWBB04-051018	PFHPA	0.00507	μg/L	J	TR
GPEOR-GW-TWBB04-051018	PFOA	0.00411	μg/L	J	TR
GPEOR-GW-TWBB04-051018	PFOS	0.0505	μg/L	В	EBG
GPEOR-GW-TWBB05-051018	PFHXS	0.00227	μg/L	J	TR
GPEOR-GW-TWBB05-051018	PFOS	0.00736	μg/L	JB	TR,EBG
GPEOR-GW-TW01-051018	PFOA	2.87	μg/L	J	FDD
GPEOR-GW-TW11-051018	PFNA	0.00316	μg/L	J	TR
GPEOR-DUPA-051018	PFOA		μg/L	J	FDD

Notes:

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.

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.

Reason Codes:

EBG = Equipment blank contamination

FDD = Field duplicate imprecision.

TR = Detected concentration is less than the limit of quantification.



September 08, 2017

Vista Work Order No. 1701192

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 September 06, 2017. This sample set was analyzed on a rush turn-around time, under your Project Name 'Phase I SI Peoria'.

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; 516-673-1520 fx; 916-673-0106 www.vista-analytical.com

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Vista Work Order No. 1701192 Case Narrative

Sample Condition on Receipt:

One equipment wash water 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.

A discrepancy between the collection date on the CoC and bottle label was noted. A revised CoC was received on September 7, 2017 to confirm collection date of September 5, 2017 and update the sample ID from "Source Water" to "GPEOR-FB-090517".

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 for all QC and field samples were within the acceptance criteria.

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Sample Inventory Report

Vista Client Sample ID Sampled Received Components/Containers

1701192-01 GPEOR-FB-090517 05-Sep-17 09:30 06-Sep-17 09:06 HDPE Bottle, 125 mL HDPE Bottle, 125 mL

Vista Project: 1701192 Client Project: Phase I SI Peoria

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ANALYTICAL RESULTS

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Sample ID: Method Blank Modified EPA Method 537

Client Data

Name: AMEC Foster Wheeler Project: Phase I SI Peoria

Matrix: Aqueous

Laboratory Data

Lab Sample: B7I0020-BLK1

QC Batch: B7I0020 Date Extracted: 06-Sep-17

Sample Size: 0.125 L Column: BEH C18

Analyte	Conc. (ug/L)	DL	LOD	LOQ	Qualifiers	Analyzed	Dilution
PFBS	ND	0.00218	0.00500	0.00800		07-Sep-17 17:31	1
PFHpA	ND	0.00218	0.00500	0.00800		07-Sep-17 17:31	1
PFHxS	ND	0.00218	0.00500	0.00800		07-Sep-17 17:31	1
PFOA	ND	0.00218	0.00500	0.00800		07-Sep-17 17:31	1
PFOS	ND	0.00218	0.00500	0.00800		07-Sep-17 17:31	1
PFNA	ND	0.00218	0.00500	0.00800		07-Sep-17 17:31	1
Labeled Standards	Type	% Recovery	Limits	310735.002	Qualifiers	Analyzed	Dilution
13C3-PFBS	IS	75.0	50 - 150			07-Sep-17 17:31	1
13C4-PFHpA	IS	63.2	50 - 150			07-Sep-17 17:31	1
18O2-PFHxS	IS	80.8	50 - 150			07-Sep-17 17:31	1
13C2-PFOA	IS	81.2	50 - 150			07-Sep-17 17:31	1
13C8-PFOS	IS	92.4	50 - 150			07-Sep-17 17:31	1
13C5-PFNA	IS	84.2	50 - 150			07-Sep-17 17:31	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.

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ethod 53	Sample ID: OPR Modified EPA Method 5						
	06-Sep-17 BEH C18	Date Extracted: Column:	B7I0020-BS1 B7I0020 0.125 L	Laboratory Data Lab Sample: QC Batch: Sample Size:		EC Foster Wheeler se I SI Peoria eous	Client Data Name: Project: Matrix:
Dilutio	Analyzed	Qualifiers	Limits	% Recovery	Spike Amt	Amt Found (ug/L)	Analyte
:41 1	07-Sep-17 16:41		70-130	94.6	0.0800	0.0757	PFBS
:41 1	07-Sep-17 16:41		70-130	118	0.0800	0.0942	PFHpA
:41 1	07-Sep-17 16:41		70-130	119	0.0800	0.0952	PFHxS
:41 1	07-Sep-17 16:41		70-130	105	0.0800	0.0844	PFOA
:41 1	07-Sep-17 16:41		70-130	108	0.0800	0.0868	PFOS
:41 1	07-Sep-17 16:41		70-130	87.3	0.0800	0.0698	PFNA
Dilutio	Analyzed	Qualifiers	Limits	% Recovery		Type	Labeled Standard
:41 1	07-Sep-17 16:41		50-150	69.4		IS	13C3-PFBS
:41 1	07-Sep-17 16:41		50-150	60.0		IS	13C4-PFHpA
:41 1	07-Sep-17 16:41		50-150	77.6		IS	18O2-PFHxS
:41 1	07-Sep-17 16:41		50-150	65.4		IS	13C2-PFOA
:41 1	07-Sep-17 16:41		50-150	83.2		IS	13C8-PFOS
	07-Sep-17 16:41		50-150	62.2		IS	13C5-PFNA

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Sample ID: GPEOR-FB-090517 Modified EPA Method 53'							od 537	
Client Data Name: AMEC Foster Wheeler Project: Phase I SI Peoria Matrix: Equipment Wash Water Date Collected: 05-Sep-17 09:30		pment Wash Water QC Batch: B710020 Sample Size: 0.119 L		1701192-01 B7I0020	Date Received: Date Extracted: Column:		06-Sep-17 09:06 06-Sep-17 BEH C18	
Analyte	Conc. (ug/L)	DL		LOD	LOQ	Qualifiers	Analyzed	Dilution
PFBS	ND	0.00228		0.00525	0.00838		07-Sep-17 19:36	1
PFHpA	ND	0.00228		0.00525	0.00838		07-Sep-17 19:36	
PFHxS	ND	0.00228		0.00525	0.00838		07-Sep-17 19:36	1
PFOA	ND	0.00228		0.00525	0.00838		07-Sep-17 19:36	1
PFOS	ND	0.00228		0.00525	0.00838		07-Sep-17 19:36	1
PFNA	ND	0.0	0228	0.00525	0.00838		07-Sep-17 19:36	1
Labeled Standard	ls Type	% Recove	ery	Limits	,	Qualifiers	Analyzed	Dilution
13C3-PFBS	IS	67.2		50 - 150			07-Sep-17 19:36	1
13C4-PFHpA	IS	62.6		50 - 150			07-Sep-17 19:36	1
18O2-PFHxS	IS	81.2		50 - 150			07-Sep-17 19:36	1
13C2-PFOA	IS	78.4		50 - 150			07-Sep-17 19:36	1
13C8-PFOS	IS	85.3		50 - 150			07-Sep-17 19:36	1
13C5-PFNA	IS	67.4		50 - 150			07-Sep-17 19:36	

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.

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DATA QUALIFIERS & ABBREVIATIONS

В	This compound was also detected in the method blank.
D	Dilution
E	The associated compound concentration exceeded the calibration range of the instrument.
Н	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.

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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.

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NELAP Accredited Test Methods

MATRIX: Air	
Description of Test	Method
Determination of Polychlorinated p-Dioxins & Polychlorinated	EPA 23
Dibenzofurans	

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

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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

Work Order 1701192 Page 12 of 185

* Revised CDC received via email on 9/1/2017* 9/6/2017 DATE: M 9/7/2017 CHAIN OF CUSTODY Vista Analytical SHP TO

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Amec Fosser Wheeler Environment & Infrastructure 271 MR Road Chelmsford, MA 01824 (978) 692-5090

1104 Wardfeld Way B Dorado Hits, CA 95762 (916) 673-1520

0.1 PAGE: 1 OF 1701192

BR To Americasis Wheeling Environment & Headlingtons | Dispose instructions | LAB |
8216 Sky Park Court #200 | Shypment Method | FEDEX |
San Dispose CA 92123 | Wanted Number | NA

Project Contact Denies King Phone Mumber 978-392-5339 Project Phase 016****

Phase 151 - Peorta 201330005 Kerry Tull

Project Number:

Project Name: Project Manager.

Sample Information			0.000	The state of the s	Method	Methods for Analysis		RUSH	
No. Sample ID	Date & Time Sampled	Materia	Sample Type	T. TEZ bortson - 121J ERMOU				And the most of the second of	TOTAL BOTTLES HOLD All Analyses
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Resilvado de la Sala Marie Colo.	- AMERICA	1 Date / 1	7 Time: 1000	Breken Centainer. COC seal intact:	emples. Y or N Y or N Y or N	Comments: X=Analyz 48 Hour TAT	Miss: X=Analyze H=Hold Analysis Request Hour TAT	Request	
State Bruelid	WAL	02/06/17	Time: 9/18	Other problems: WSDOT contacted:	* *	Confract # W913 PO # F013200677	W9133L-14-D-0002 TO0006 00677	TO0006	
Relinquished BylAffiliation:		Date:	Time:	Date confacted:		ATTN: Tammic Rippie Base Lead: Thomas.Ki	ATTN: Tammie Rippie Base Lead: Thomas, Kaugher@amecfw.com	necfw.com	
Roceived By:		Date:	Time:	Cooler Temperature at receipt:	o at receipt.	Also report to Jeremiah NUMBER OF COOLERS SENT:	Also report to Jeremiah.Morse@amecfw.com rBER of COOLERS SENT:	mecfw.com	
Relinquished Bylaffiliation:		Date:	Time:						
Received By (LAB):		Date:	Time:						

NUMBER OF COOLERS SENT:

Time: Time: Time:

Date: Date:

Relinquished By/Affiliation:

Received By (LAB):

Date:



Amec Foster Wheeler Environment & Infrastructure Chelmsford, MA 01824 (978) 692-9090 271 Mill Road

1104 Windfield Way El Dorado Hills, CA 95762 (916) 673-1520 Vista Analytical SHIP TO:

CHAIN OF CUSTODY

9/5/2017 DATE:

COC #:

PP

FEDEX

Disposal instructions LAB Shipment Method: FEDEX Waybill Number N/A

0.1% PAGE: 1701192

Bill To. Amed Foster Wheeler Environment & Infrastructura

8210 Sky Park Court #200 San Diego, CA 92123

Project Contact: Denise King Phone Number: 978-392-5339 Project Phase: 016 ***

Phase I SI - Peoria

Project Name: Project Number: Project Manager.

291330006 Kerry Tull

Sample Information							Method	Methods for Analysis			RUSH	
No.		Date & Time Sampled	Matrix	Sample Type	dsw/sw	UCMR3 List - Method 537.1				\$ MDK\$	48 Hour	23JTTOE DOTTLES esechant IA OJOH
1 Source Water	9/15/	9/15/17 @0930	WH	FS	N	×				_	-	2
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Sample And Manual Manual	1	\	1/6/1	7 1000	2	Dog COC match comples	N N N	Commanter			ı	
Religique field By fastillabor.	The Age	Martin	1 Date / 17	7 Time: 108	8	Broken Container: COC seal intact.		X=Analyz	X=Analyze H=Hold Analysis Request Hour TAT	ysis Requi	ast	
Elema	IN MI	0	8/00/17	Time: 7/8		Other problems: WSDOT contacted:	z z 5 5 > >	Contract PO# FO	Contract # W9133L-14-D-0002 TO0006 PO # F013200677 ATTN: Tammin Binds	1002 TO000	9	
remiquence Dynamicson.			Care	j.		Date of Recipies	Ī	Base Lea	Base Lead: Thomas.Kaugher@amecfw.com	фатесћи.	moo	
Received By:			Date:	Time:		Cooler Temperature at receipt:	C.	Also repo	Also report to Jeremiah. Morse@amecfw.com	e@amecfw	com	



Sample Log-in Checklist

Samples Arrival:	09/06/17	- 098	06 (nitials:		Location Shelf/R	4.0			
Logged In:	Date/Time 09/06/13	7 0	000	nitials:		Location	n:	W	R-2	-
Delivered By:	redEx U	IPS	On Trac	GSO	DHL	10000	Hand livered		Oth	er
Preservation:	Ice)	Blue	Ice		Dry Ic	е		No	ne
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Temp °C: ().	(corrected	Pro	be used	l: Yes□ l	Note	Thermo	meter	ID:	IK-1	
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Sample Contain	er Intact?							~		
Sample Custody	Seals Intact?								-	V
Chain of Custod	y / Sample Doo	umenta	ation Pres	sent?			1			
COC Anomaly/S	ample Accepta	nce Fo	rm comp	leted?				V		
	Drinking Wate	r Sampl	les, Acce	ptable Pro	eservati	on?				
If Chlorinated or		Nass	S ₂ O ₃	Frizma) N	one	O	es)	No.	NA
If Chlorinated or Preservation Do	cumented:	14020		1						

ID.: LR - SLC

Rev No.: 0

Rev Date: 05/18/2017

Page: 1 of 1

Chain of Custody Anomaly/Sample Acceptance Form



AMEC Foster Wheeler Workorder Number: 1701192 Client: Date Received: 06-Sep-17 09:06 Contact: Denise King Documented by/date: Email: Denise.king@amecfw.com B.Benedict 09/06/2017 (978) 392-5339 Phone: 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: See Comments Sample Location Other: The following anomalies were noted. Authorization is needed to proceed with analysis. Temperature outside < 6°C Range Samples Affected: Temperature ___ °C Melted Ice Present? Insufficient Sample Size Sample ID Discrepancy Sample Holding Time Missed Sample Container(s) Broken Incorrect Container Type Custody Seals Broken

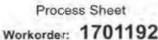
Proceed with Analysis: VES NO Signature and Date Kanantony 9-7-2017 Client Comments/Instructions Per email from Denive King on 9-7-2017, the sample	Client Authorization	
Client Comments/Instructions Per email from Denive king on 9-7-2017, the sample	Proceed with Analysis: YES NO	Signature and Date KANWKVIII 9-7-2017
	Client Comments/Instructions Per email	
And one of a follow to the tenter of the tenter of the the		17. A revised coc was received documenting the

Collection date on COC: 09/15/2017 Collection date on Label: 09/05/2017

Comments:

EXTRACTION INFORMATION

Work Order 1701192 Page 17 of 185





Prep Batch:

RUSH

Prep Expiration: 2017-Sep-29

Client: AMEC Foster Wheeler

Workorder Due: 08-Sep-17 00:00

TAT: 2

Method: 537M PFAS DOD (LOQ as mRL)

Matrix: Aqueous

Client Matrix: Equipment Wash Water

Version: UCMR3 (6 Analyte) DoD: DoD QSM 5.1

B710020

Prep Data Entered:

c 9.7.17

ate and Initials

Initial Sequence:

1701192-01

Recon ClientSampleID

Source Water

Date Received

Location Comments

06-Sep-17 09:06

WR-2 E-4

Vista PM:Martha Maier

Vial Box ID: HOMY POTU

Sample Reconciled By:

Page 1 of 1

96,17

Work Order 1701192 Page 18 of 185

Batch: B7I0020

Matrix: Aqueous

LabNumber	WetWeight (Initial)	% Solids (Extraction Solids) DryWeight	DryWeight	Final	Extracted	Ext By	Spike	SpikeAmount	Ext By Spike SpikeAmount ClientMatrix Analysis	Analysis
1701190-01	0.1213 /	NA	AN	1000	06-Sep-17 10:03	HAC			Groundwater	Groundwater 537M PFAS DOD (LOQ as
1701190-02	0.11721	1	-	1000	06-Sep-17 10:03 HAC	HAC			Groundwater	Groundwater 537M PFAS DOD (LOQ as
1701191-01	0.11802			1000	1000 06-Sep-17 10:03 HAC	HAC			Aqueous	Aqueous 537M PFAS DOD (LOQ as
1701192-01	0.11927 V			1000	1000 06-Sep-17 10:03 HAC	HAC		1	upment Wash W	uipment Wash Wa537M PFAS DOD (LOQ as
B710020-BLK1	0.125			1000	1000 06-Sep-17 10:03 HAC	HAC				00
B710020-BS1	0.125	->	>	1000	1000 06-Sep-17 10:03 HAC 17G2428 V 10 V	HAC	17G2428	101		000

KC 9.7.17

PREPARATION BENCH SHEET

Matrix: Aqueous

Method: 537M PFAS DOD (LOQ as mRL)

B710020

Chemist: 7

Prep Date/Time: 06-Sep-17 10:03

Prepared using: LCMS - SPE Extraction-LCMS

		Date/Inital	5. 9.6 S	Date/Initals: 9417 77	1	BalanceID:	Hrds.8			The second secon	
Cen	VISTA Sample ID	pH Before	pH After	Chlorine (CI)	Drops HCl Added	Bottle + Sample (g)	Bottle Only (g)	Sample Amt. (L)	IS/NS CHEM/WIT DATE	SPE	RS CHEM/WIT DATE
	B710020-BLK1	S	2	0	2	42	2	(521.0)	The W 9-6-17 24		7.6.17 76 W 9.6.17
П	B710020-BS1	8	1	0	1	H	1-	\ \rightarrow \rightarrow \ \rightarrow \ \rightarrow \ \rightarrow \rightarrow \ \rightarrow \rightarrow \ \rightarrow \rightarrow \ \rightarrow \rightarro	+	1	1
3	1701190-01	و	4	0	1	148.33	27.03	0,17130			
区	1701190-02	و	2	0	2	lh.hhl	23.20	12 11.0			
	170[191-0]	٥	2	0	2	144.84	28.97	0.11902			
	1701192-01	4	4	0	n	146.19	26.92	6.11973	7	4	7

174 501, 10 mland spe chem: Strata X-Aw 33m 2000 Notes: A BLE SOLV: 0.57. WHYOH'Y HOR / WLOTH 1762428 10 Mely Final Volume(s). 17HITIG 10ML (VY

Comments: Assume 1 g = 1 mL Cen = Welfrighted 1701792

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SAMPLE DATA - MODIFIED EPA METHOD 537

Work Order 1701192 Page 21 of 185

LA 9/8/2017

U:\G1.PRO\Results\2017\170907G4\170907G4-10.qld Dataset: Friday, September 08, 2017 09:49:42 Pacific Daylight Time Friday, September 08, 2017 09:51:19 Pacific Daylight Time Last Altered: Printed: Method: U:\G1.pro\MethDB\PFAS_14or16_2trans_0712.mdb 12 Jul 2017 13:38:17 Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_9-5-17_A_2Trans.cdb 06 Sep 2017 12:51:47

ID: B710020-BLK1 Method Blank 0.125, Description: Method Blank, Name: 170907G4_10, Date: 07-Sep-2017, Time: 17:31:22

	Pea	Peak Area	IS Resp	RRF Mean	wt/vol	Ħ	Conc.	%Rec
3 PFBS	299.0 > 79.7		2.500e3		0.125			
5 PFHpA	363 > 318.9		3.748e3		0.125			
6 PFHxS	398.9 > 79.6	2.511e1	2.199e3		0.125	3.87	0.143	
7 PFOA	413.0 > 368.7	1,751e2	8.952e3		0.125	4.17		
8 PFNA	463.0 > 418.8		3.876e3		0.125			
9 PFOS	499.0 >79.9		4.066e3		0.125			
12 13C3-PFBS	302.0 > 98.8	2.500e3	1.03164	0.323	0.125	2.82	75.0	75.0
15 13C4-PFHpA	367.2 > 321.8	3.748e3	1.03164	0.575	0.125	3.73	63.2	63.2
16 18O2-PFHxS	403 > 102.6	2.199e3	5.558e3	0.489	0.125	3.87	80.8	80.8
17 13C2-PF0A	414.9 > 369.7	8.952e3	3.362e3	3.278	0.125	4.17	81.2	81.2
18 13C5-PFNA	468.2 > 422.9	3.876e3	4.958e3	0.929	0.125	4.52	84.2	84.2
20 13C8-PF0S	507.0 > 79.9	4.056e3	4.45163	0.989	0.125	4.59	92.4	92.4
22 13C5-PFHxA	318>272.9	1.03164	1.03164	1.000	0.125	3.21	100	100
23 13C3-PFHxS	401.9 > 79.9	5.558e3	5.558e3	1.000	0.125	3.87	100	100
24 13C8-PF0A	421.3 > 376	3.352e3	3.362e3	1.000	0.125	4.17	100	100
25 13C9-PFNA	472.2 > 426.9	4.958e3	4.958e3	1.000	0.125	4.52	100	100
26 13C4-PF0S	503.0 > 79.9	4.451e3	4.45183	1.000	0.125	4.59	100	100

Last Altered:

Friday, September 08, 2017 09:49:42 Pacific Daylight Time Friday, September 08, 2017 09:52:08 Pacific Daylight Time Printed:

Method: U:\G1.pro\MethDB\PFAS_14or16_2trans_0712.mdb 12 Jul 2017 13:38:17 Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_9-5-17_A_2Trans.cdb 06 Sep 2017 12:51:47

ID: B710020-BLK1 Method Blank 0.125, Description: Method Blank, Name: 170907G4_10, Date: 07-Sep-2017, Time: 17:31:22

# Name	Trace	Peak Area	IS Resp	RRF Mean	wt/vol	HT	Conc.	%Rec
28 Total PFBS	299.0 > 79.7		2.500e3		0.125			
29 Total PFHxS	398.9 > 79.6		2.199e3		0.125		0.143	
30 Total PFOA	413.0 > 368.7		8.952e3		0.125			
31 Total PFOS	499.0 >79.9		4.066e3		0.125			

Vista Analytical Laboratory Q1

Friday, September 08, 2017 09:49:42 Pacific Daylight Time Friday, September 08, 2017 09:51:19 Pacific Daylight Time Last Altered:

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Printed:

Method: U:\G1.pro\MethDB\PFAS_14or16_2trans_0712.mdb 12 Jul 2017 13:38:17 Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_9-5-17_A_2Trans.cdb 06 Sep 2017 12:51:47

ID: B710020-BLK1 Method Blank 0.125, Description: Method Blank, Name: 170907G4_10, Date: 07-Sep-2017, Time: 17:31:22

Total PFBS

-	
Conc	
IS Area	
Area	
RT	
Trace	
# Name	
	-

Total PFHxS

# Name	Trace	H	Area	IS Area	Conc.
6 PFHxS	398.9 > 79.6	3.87	25.108	2199.197	0.1

Total PFOA

# Name	Trace	HT	Area	IS Area	Conc.
7 PFOA	413.0 > 368.7	4.17	176.079	8951.848	

Total PFOS

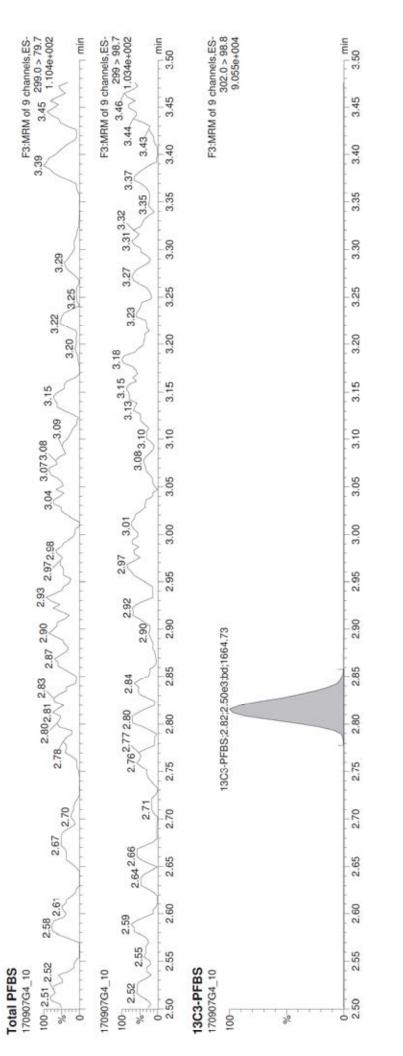
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Page 24 of 185

Vista Analytical Laboratory Q1

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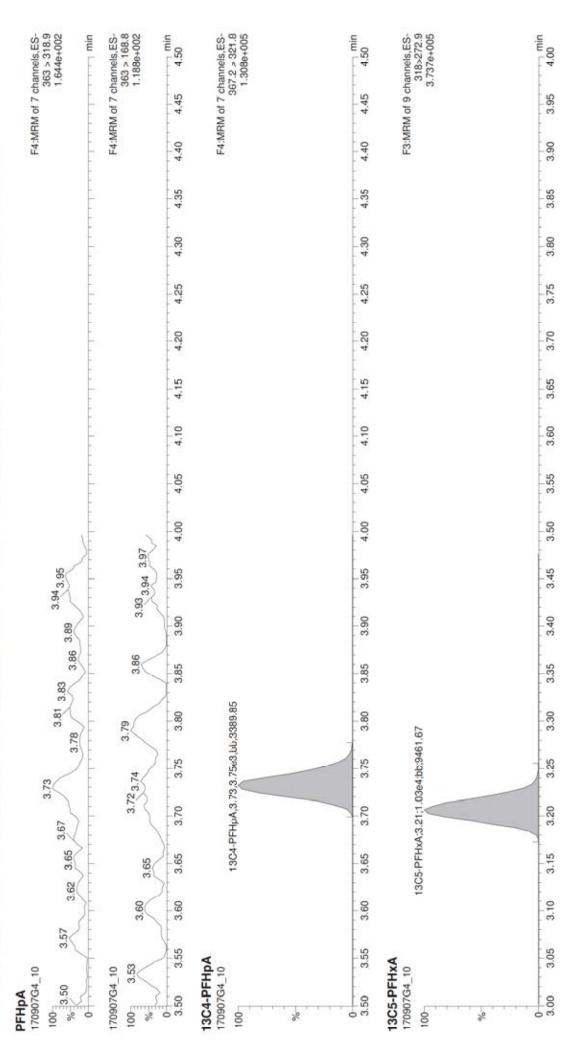
Method: U:\G1.pro\MethDB\PFAS_14or16_2trans_0712.mdb 12 Jul 2017 13:38:17 Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_9-5-17_A_2Trans.cdb 06 Sep 2017 12:51:47



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Dataset: U:\G1.PRO\Results\2017\170907G4\170907G4-10.qld

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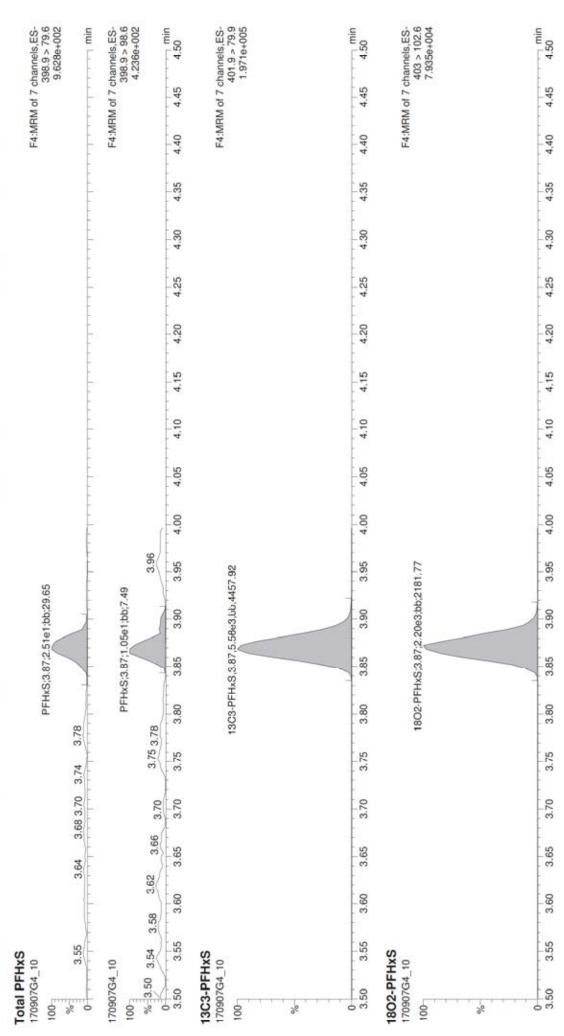


MassLynx 4.1 SCN815

Quantify Sample Report Vista Analytical Laboratory Q1 Dataset: U:\G1.PRO\Results\2017\170907G4\170907G4-10.qld

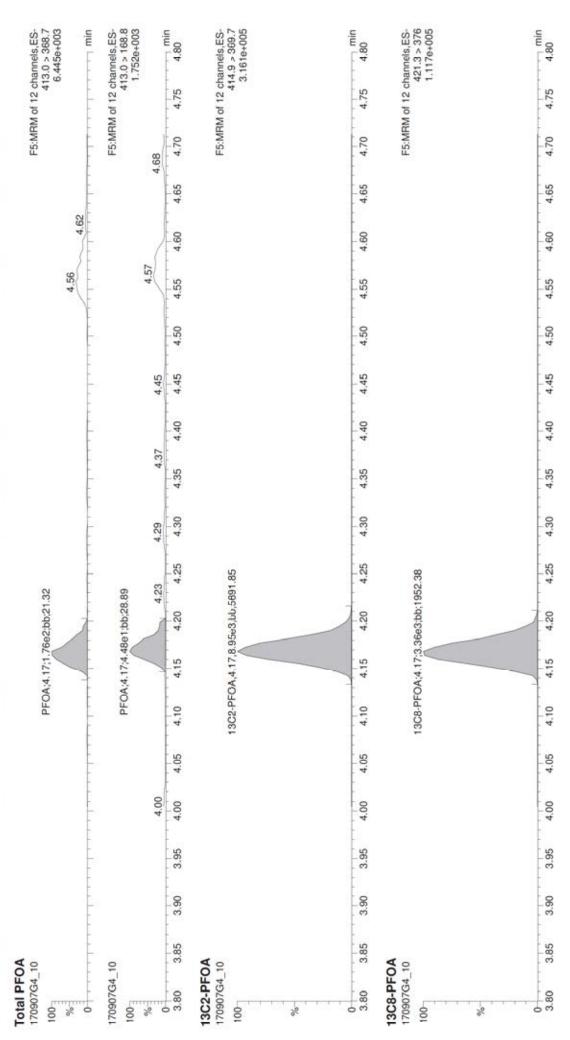
Last Altered: Friday, September 08, 2017 09:49:42 Pacific Daylight Time Printed: Friday, September 08, 2017 09:51:19 Pacific Daylight Time

D: B710020-BLK1 Method Blank 0.125, Description: Method Blank, Name: 170907G4_10, Date: 07-Sep-2017, Time: 17:31:22, Instrument: , Lab: , User:

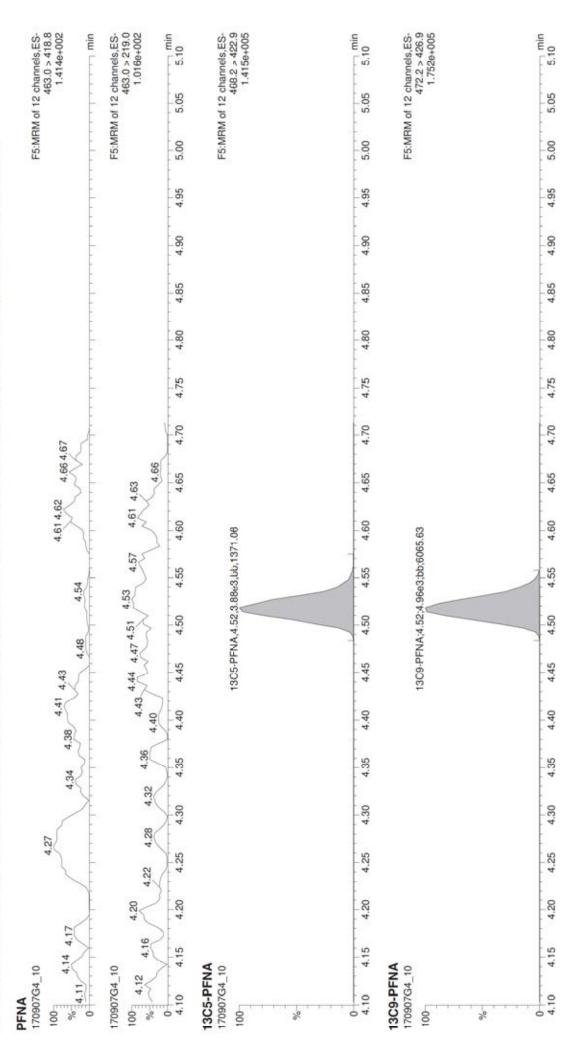


Work Order 1701192

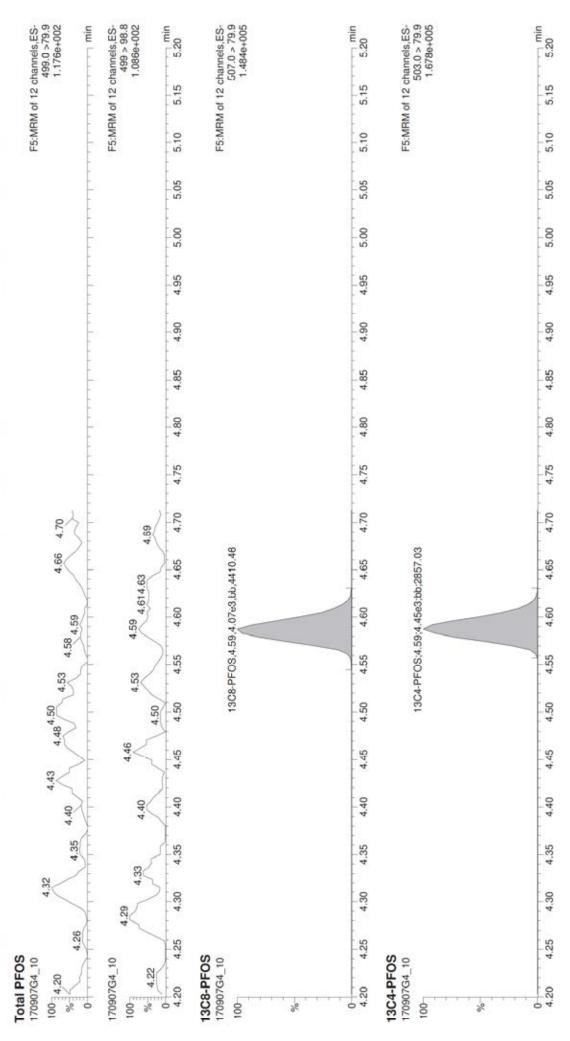
Friday, September 08, 2017 09:49:42 Pacific Daylight Time Friday, September 08, 2017 09:51:19 Pacific Daylight Time Last Altered: Printed:



Friday, September 08, 2017 09:49:42 Pacific Daylight Time Friday, September 08, 2017 09:51:19 Pacific Daylight Time Last Altered: Printed:



Friday, September 08, 2017 09:49:42 Pacific Daylight Time Friday, September 08, 2017 09:51:19 Pacific Daylight Time Last Altered: Printed:



LA 9/8/2017

U:\G1.PRO\Results\2017\170907G4\170907G4-6.qld Dataset: Friday, September 08, 2017 08:48:02 Pacific Daylight Time Friday, September 08, 2017 08:49:28 Pacific Daylight Time Last Altered: Printed: Method: U:\G1.pro\MethDB\PFAS_14or16_2trans_0712.mdb 12 Jul 2017 13:38:17 Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_9-5-17_A_2Trans.cdb 06 Sep 2017 12:51:47

ID: B710020-BS1 OPR 0.125, Description: OPR, Name: 170907G4_6, Date: 07-Sep-2017, Time: 16:41:09

	11 11 11	F	Description Assessment	1000	TOOL MAN	TANKS A	444		2000
	# Name	Lace	Feak Area	dsau cı	HHP MEAN	MOVON	Ē	COLIC:	20Hec
-	3 PFBS	299.0 > 79.7	3.132e3	2.188e3		0.125	2.81	75.7	94.6
2	5 PFHpA	363 > 318.9	7.013e3	3.365e3		0.125	3.73	94.2	118
9	6 PFHxS	398.9 > 79.6	3.229e3	2.122e3		0.125	3.87	95.2	119
4	7 PFOA	413.0 > 368.7	5.914e3	7.763e3		0.125	4.16	84.4	105
2	8 PFNA	463.0 > 418.8	5.741e3	3.277e3		0.125	4.51	69.8	87.3
9	9 PFOS	499.0 >79.9	1.514e3	3.84963		0.125	4.58	86.8	108
	12 13C3-PFBS	302.0 > 98.8	2.188e3	9.754e3	0.323	0.125	2.81	69.4	69.4
80	15 13C4-PFHpA	367.2 > 321.8	3.365e3	9.754e3	0.575	0.125	3.73	0.09	0.09
6	16 18O2-PFHxS	403 > 102.6	2.122e3	5.588e3	0.489	0.125	3.86	77.6	77.6
10	17 13C2-PFOA	414.9 > 369.7	7.753e3	3.623e3	3.278	0.125	4.16	65.4	65.4
1	18 13C5-PFNA	468.2 > 422.9	3.277e3	5.668e3	0.929	0.125	4.51	62.2	62.2
12	20 13C8-PFOS	507.0 > 79.9	3.849e3	4.682e3	0.989	0.125	4.58	83.2	83.2
13	22 13C5-PFHxA	318>272.9	9.754e3	9.75463	1.000	0.125	3.20	100	100
14	23 13C3-PFHxS	401.9 > 79.9	5.588e3	5.588e3	1.000	0.125	3.87	100	100
15	24 13C8-PFOA	421.3 > 376	3.623e3	3.623e3	1.000	0.125	4.16	100	100
16	25 13C9-PFNA	472.2 > 426.9	5.658e3	5.668e3	1.000	0.125	4.51	100	100
17	26 13C4-PF0S	503.0 > 79.9	4.682e3	4.682e3	1.000	0.125	4.58	100	100

Friday, September 08, 2017 08:48:02 Pacific Daylight Time Friday, September 08, 2017 08:50:03 Pacific Daylight Time Last Altered: Printed:

Method: U:\G1.pro\MethDB\PFAS_14or16_2trans_0712.mdb 12 Jul 2017 13:38:17 Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_9-5-17_A_2Trans.cdb 06 Sep 2017 12:51:47

95.2 84.4 Conc. 75.7 86.8 늄 ID: B710020-BS1 OPR 0.125, Description: OPR, Name: 170907G4_6, Date: 07-Sep-2017, Time: 16:41:09 0.125 0.125 wt/vol 0.125 RRF Mean IS Resp 7.763e3 2.12263 2.188e3 3.849e3 Peak Area 413.0 > 368.7 398.9 > 79.6 299.0 > 79.7 499.0 > 79.9 Trace 29 Total PFHxS 30 Total PFOA 31 Total PFOS 28 Total PFBS # Name

%Rec

Quantify Totals Report MassLynx 4.1 SCN815 Vista Analytical Laboratory Q1 U:\G1.PRO\Results\2017\170907G4\170907G4-6.qld Dataset: Friday, September 08, 2017 08:48:02 Pacific Daylight Time Friday, September 08, 2017 08:49:28 Pacific Daylight Time Last Altered:

Printed:

Method: U:\G1.pro\MethDB\PFAS_14or16_2trans_0712.mdb 12 Jul 2017 13:38:17 Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_9-5-17_A_2Trans.cdb 06 Sep 2017 12:51:47

ID: B710020-BS1 OPR 0.125, Description: OPR, Name: 170907G4_6, Date: 07-Sep-2017, Time: 16:41:09

Total PFBS

# Name	Trace	RT	Area	IS Area	Conc.
3 PFBS	299.0 > 79.7	2.81	3132.285	2188.037	75.7

Total PFHxS

# Name	Trace	H	Area	IS Area	Conc.
6 PFHxS	398.9 > 79.6	3.87	3229.407	2121.994	95.2

Total PFOA

# Name	Trace	HT	Area		Conc.
7 PFOA	413.0 > 368.7	4.16	5914.196	7763.000	84.4

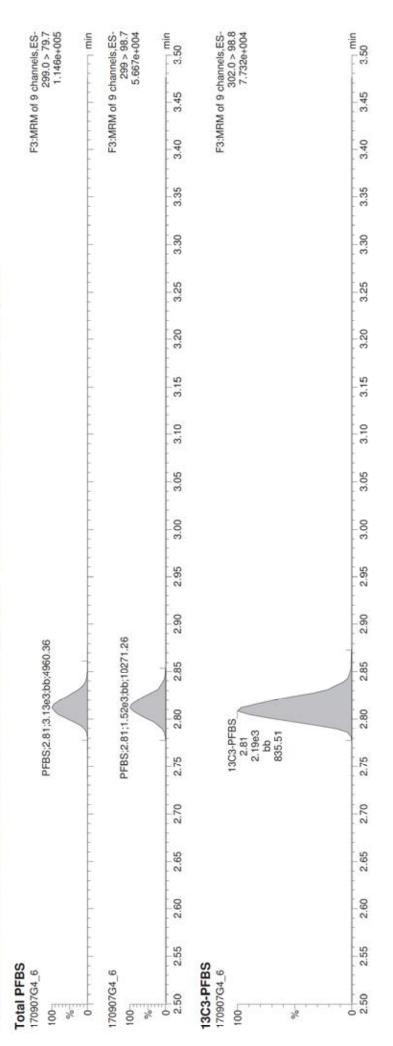
Total PFOS

# Name	Trace	HT	Area	IS Area	Conc.
9 PFOS	499.0 >79.9	4.58	1513.833	3849.254	86.8

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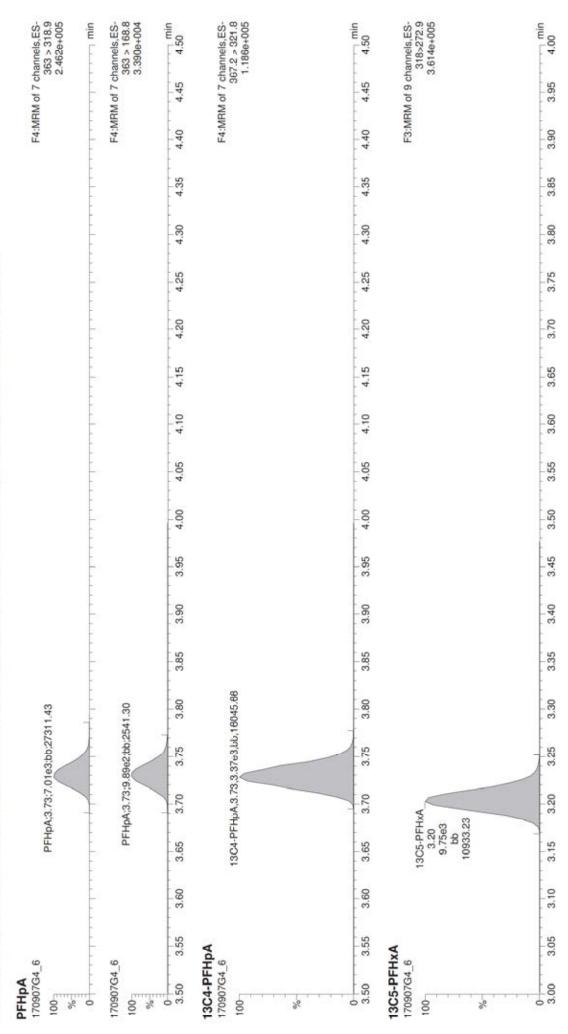
Friday, September 08, 2017 08:48:02 Pacific Daylight Time Friday, September 08, 2017 08:49:28 Pacific Daylight Time Last Altered: Printed:

Method: U:\G1.pro\MethDB\PFAS_14or16_2trans_0712.mdb 12 Jul 2017 13:38:17 Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_9-5-17_A_2Trans.cdb 06 Sep 2017 12:51:47

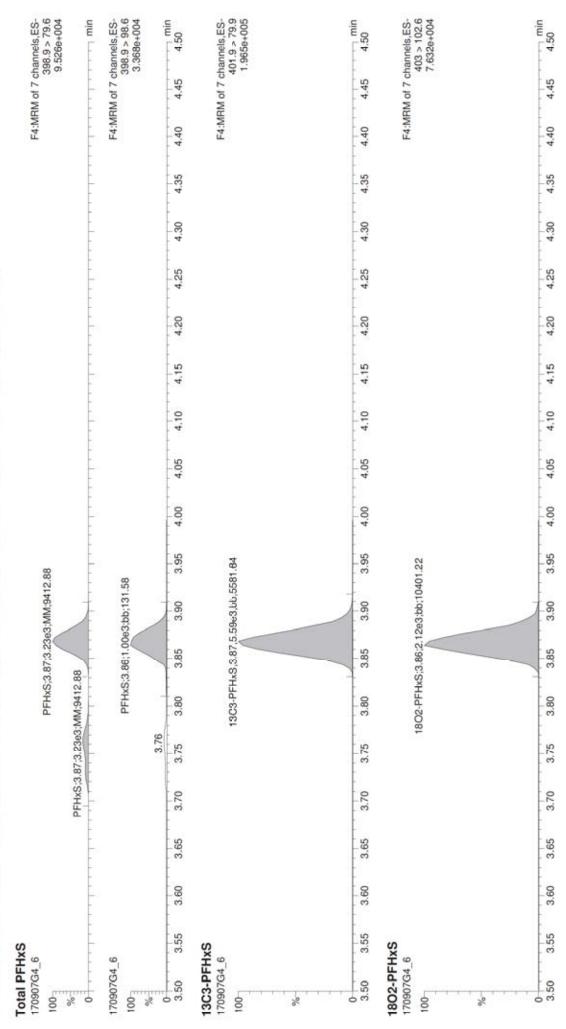


Dataset: U:\G1.PRO\Results\2017\170907G4\170907G4-6.qld

Last Altered: Friday, September 08, 2017 08:48:02 Pacific Daylight Time Printed: Friday, September 08, 2017 08:49:28 Pacific Daylight Time

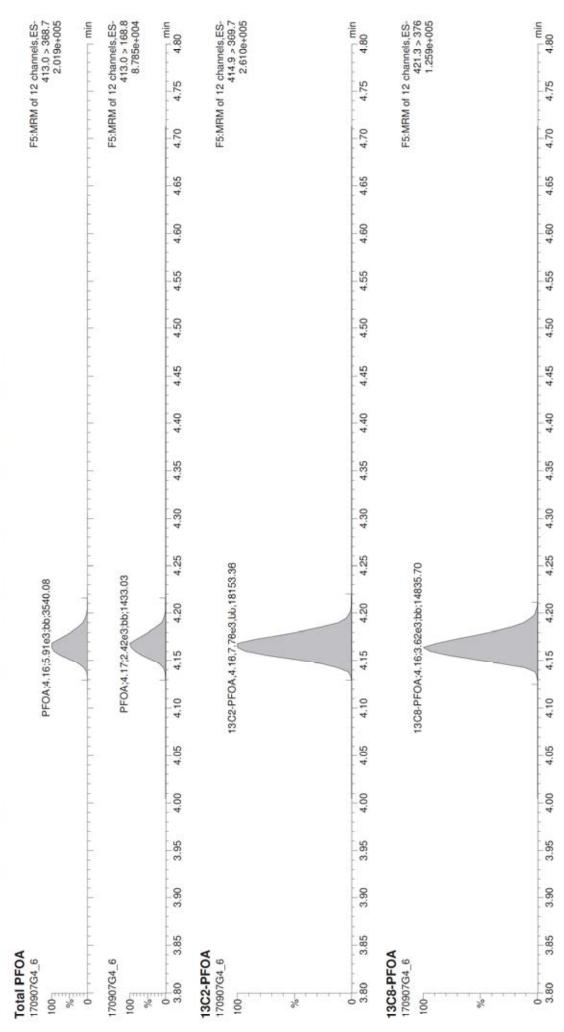


Friday, September 08, 2017 08:48:02 Pacific Daylight Time Friday, September 08, 2017 08:49:28 Pacific Daylight Time Last Altered: Printed:



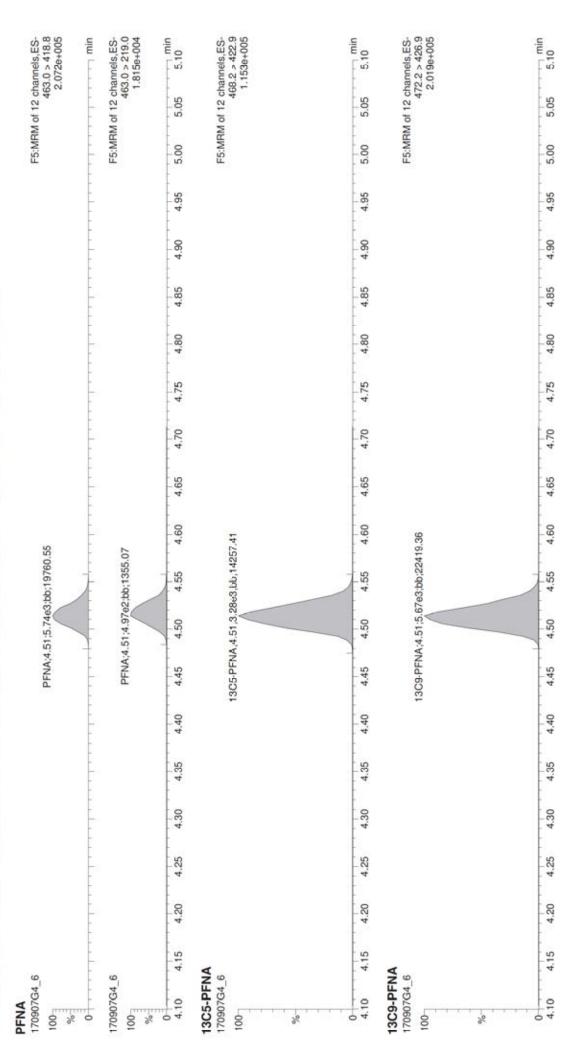
Vista Analytical Laboratory Q1

U:\G1.PRO\Results\2017\170907G4\170907G4-6.qld Dataset: Friday, September 08, 2017 08:48:02 Pacific Daylight Time Friday, September 08, 2017 08:49:28 Pacific Daylight Time Last Altered: Printed:

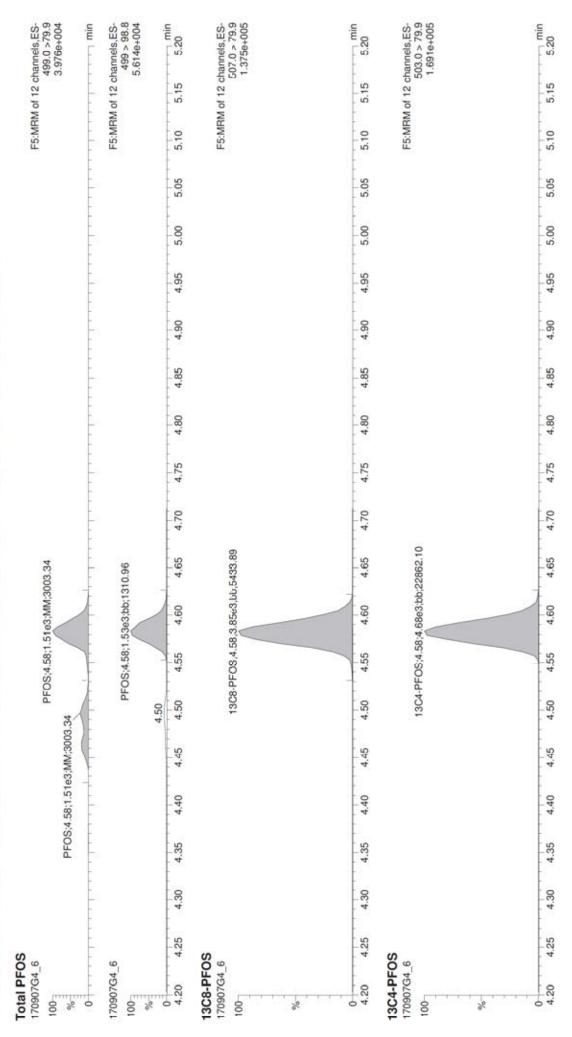


Vista Analytical Laboratory Q1

U:\G1.PRO\Results\2017\170907G4\170907G4-6.qld Dataset: Friday, September 08, 2017 08:48:02 Pacific Daylight Time Friday, September 08, 2017 08:49:28 Pacific Daylight Time Last Altered: Printed:



Friday, September 08, 2017 08:48:02 Pacific Daylight Time Friday, September 08, 2017 08:49:28 Pacific Daylight Time Last Altered: Printed:



Friday, September 08, 2017 09:57:01 Pacific Daylight Time Friday, September 08, 2017 09:57:07 Pacific Daylight Time Last Altered:

Printed:

Method: U:\G1.pro\MethDB\PFAS_14or16_2trans_0712.mdb 12 Jul 2017 13:38:17 Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_9-5-17_A_2Trans.cdb 06 Sep 2017 12:51:47

ID: 1701192-01 Source Water 0.125, Description: Source Water, Name: 170907G4_20, Date: 07-Sep-2017, Time: 19:36:48

	# Name	Trace	Peak Area	IS Resp	RRF Mean	wt/vol	H	Conc.	%Rec
-	3 PFBS	299.0 > 79.7		2.063e3		0.119			
2	5 PFHpA	363 > 318.9		3,417e3		0.119			
9	6 PFHxS	398.9 > 79.6		1.758e3		0.119			
4	7 PFOA	413.0 > 368.7	1,499e2	8.213e3		0.119	4.17		
5	8 PFNA	463.0 > 418.8		3.392e3		0.119			
9	9 PFOS	499.0 >79.9		2.815e3		0.119			
h	12 13C3-PFBS	302.0 > 98.8	2.053e3	9.500e3	0.323	0.119	2.81	70.5	67.2
80	15 13C4-PFHpA	367.2 > 321.8	3.417e3	9.500e3	0.575	0.119	3.73	65.6	62.6
6	16 18O2-PFHxS	403 > 102.6	1.758e3	4.422e3	0.489	0.119	3.86	85.2	81.2
0	17 13C2-PFOA	414.9 > 369.7	8.213e3	3.197e3	3.278	0.119	4.16	82.1	78.4
-	18 13C5-PFNA	468.2 > 422.9	3.392e3	5.417e3	0.929	0.119	4.52	7.07	67.4
12	20 13C8-PFOS	507.0 > 79.9	2.815e3	3.340e3	0.989	0.119	4.59	89.4	85.3
13	22 13C5-PFHxA	318>272.9	9.500e3	9.500e3	1.000	0.119	3.20	105	100
14	23 13C3-PFHxS	401.9 > 79.9	4.422e3	4.422e3	1.000	0.119	3.87	105	100
15	24 13C8-PFOA	421.3 > 376	3.197e3	3.197e3		0.119	4.16	105	100
16	25 13C9-PFNA	472.2 > 426.9	5.417e3	5.417e3	1.000	0.119	4.52	105	100
17	26 13C4-PFOS	503.0 > 79.9	3.340e3	3.340e3	_	0.119	4.59	105	100

LA 9/8/2017

U:\G1.PRO\Results\2017\170907G4\170907G4-20.qld Dataset: Friday, September 08, 2017 09:57:01 Pacific Daylight Time Friday, September 08, 2017 09:57:16 Pacific Daylight Time Last Altered: Printed:

Method: U:\G1.pro\MethDB\PFAS_14or16_2trans_0712.mdb 12 Jul 2017 13:38:17 Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_9-5-17_A_2Trans.cdb 06 Sep 2017 12:51:47

ID: 1701192-01 Source Water 0.125, Description: Source Water, Name: 170907G4_20, Date: 07-Sep-2017, Time: 19:36:48

# Name	Trace	Peak Area	IS Resp	RRF Mean	wt/vol	FI	Conc.	%Rec
28 Total PFBS	299.0 > 79.7		2.063e3		0.119			
29 Total PFHxS	398.9 > 79.6		1.758e3		0.119			
30 Total PFOA	413.0 > 368.7		8.213e3		0.119			
31 Total PFOS	499.0 >79.9		2.815e3		0.119			

Friday, September 08, 2017 09:57:01 Pacific Daylight Time Friday, September 08, 2017 09:57:07 Pacific Daylight Time Last Altered:

Printed:

Method: U:\G1.pro\MethDB\PFAS_14or16_2trans_0712.mdb 12 Jul 2017 13:38:17 Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_9-5-17_A_2Trans.cdb 06 Sep 2017 12:51:47

ID: 1701192-01 Source Water 0.125, Description: Source Water, Name: 170907G4_20, Date: 07-Sep-2017, Time: 19:36:48

Total PFBS

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Conc	
Area	
IS	
Area	
RT	
m	
Trace	
Name	
#	
	2010

Total PFHxS

|--|--|

Total PFOA

# Name	Trace	HT	Area	IS Area	Conc.
7 PFOA	413.0 > 368.7	4.17	149.909	8212.742	

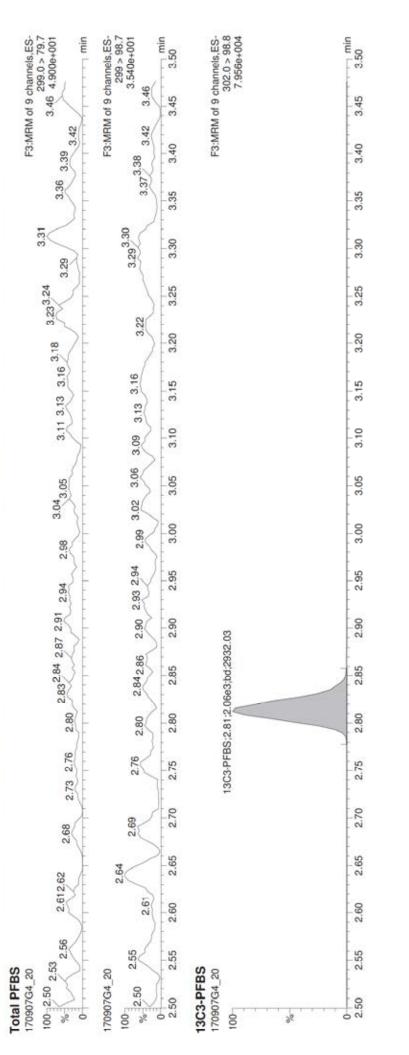
Total PFOS

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Friday, September 08, 2017 09:57:01 Pacific Daylight Time Friday, September 08, 2017 09:57:07 Pacific Daylight Time ast Altered: Printed:

Method: U:\G1.pro\MethDB\PFAS_14or16_2trans_0712.mdb 12 Jul 2017 13:38:17 Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_9-5-17_A_2Trans.cdb 06 Sep 2017 12:51:47

D: 1701192-01 Source Water 0.125, Description: Source Water, Name: 170907G4_20, Date: 07-Sep-2017, Time: 19:36:48, Instrument: , Lab: , User:

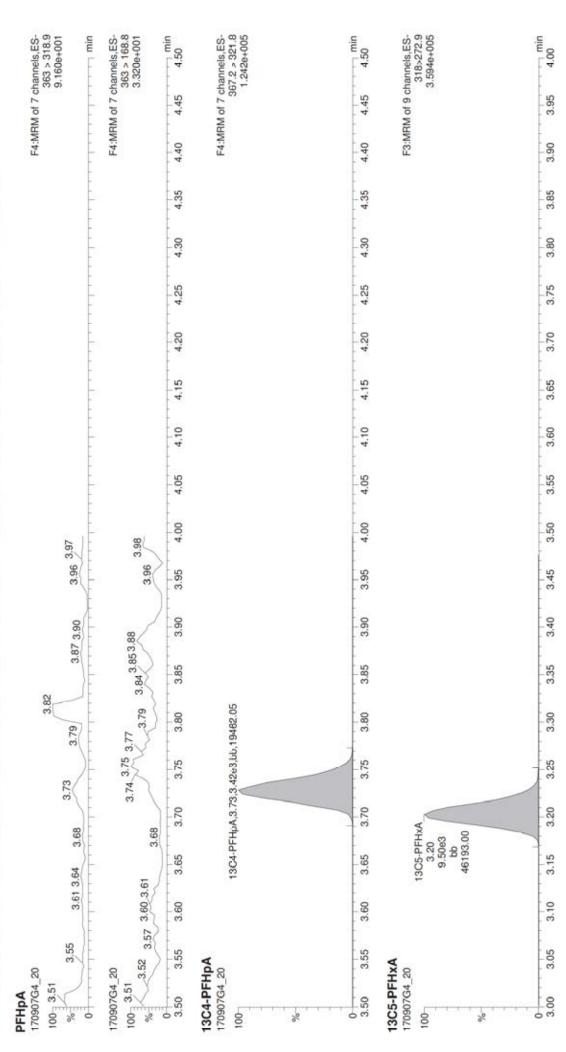


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Dataset: U:\G1.PRO\Results\2017\170907G4\170907G4-20.qld

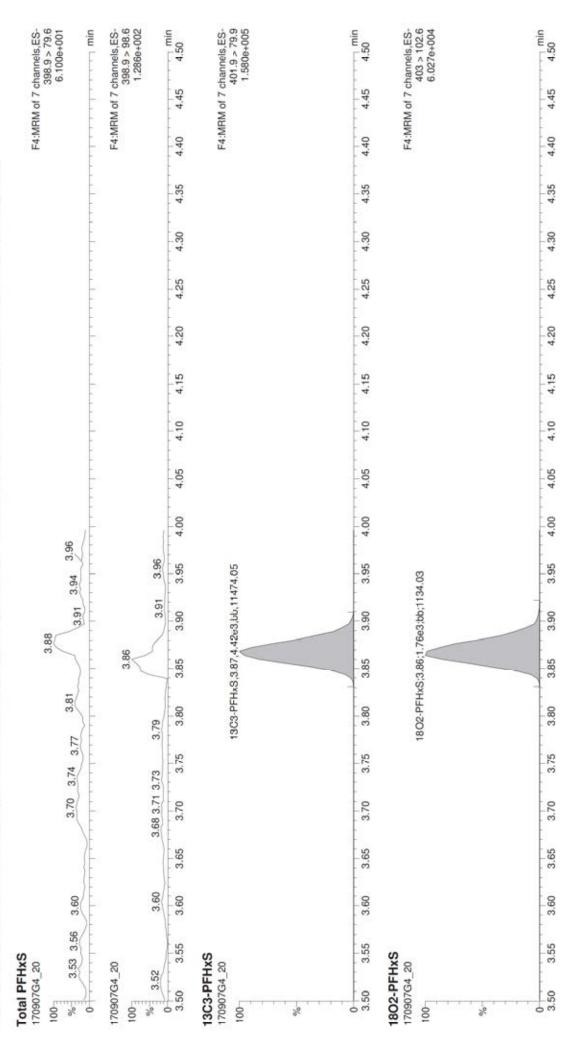
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D: 1701192-01 Source Water 0.125, Description: Source Water, Name: 170907G4_20, Date: 07-Sep-2017, Time: 19:36:48, Instrument: , Lab: , User:



Friday, September 08, 2017 09:57:01 Pacific Daylight Time Friday, September 08, 2017 09:57:07 Pacific Daylight Time Last Altered: Printed:

D: 1701192-01 Source Water 0.125, Description: Source Water, Name: 170907G4_20, Date: 07-Sep-2017, Time: 19:36:48, Instrument: , Lab: , User:



Vista Analytical Laboratory Q1

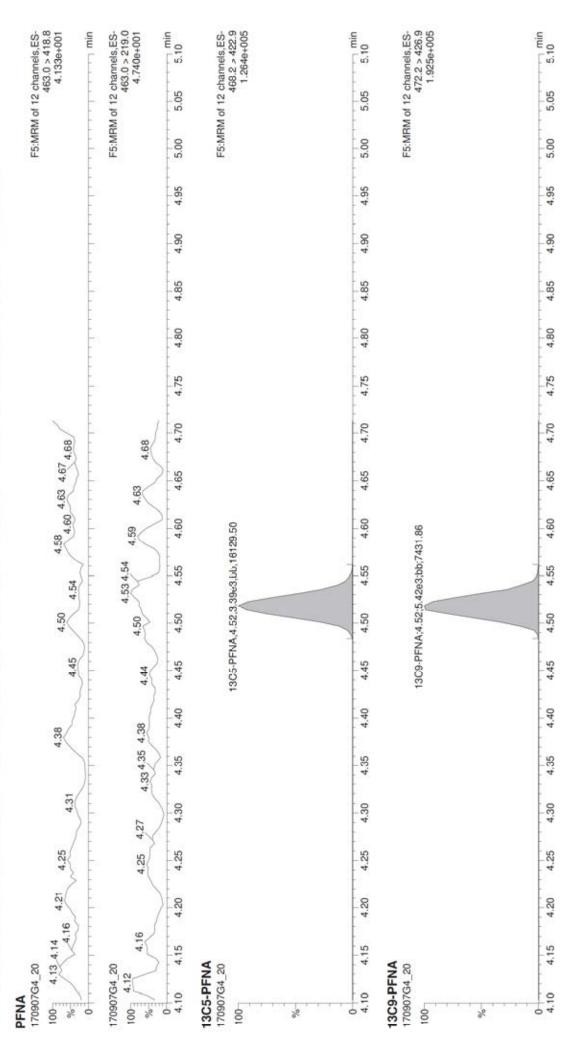
U:\G1.PRO\Results\2017\170907G4\170907G4-20.qld Dataset: Friday, September 08, 2017 09:57:01 Pacific Daylight Time Friday, September 08, 2017 09:57:07 Pacific Daylight Time Last Altered: Printed:

D: 1701192-01 Source Water 0.125, Description: Source Water, Name: 170907G4_20, Date: 07-Sep-2017, Time: 19:36:48, Instrument: , Lab: , User:

413.0 > 368.7 5.312e+003 F5:MRM of 12 channels,ES-414.9 > 369.7 2.841e+005 F5:MRM of 12 channels, ES-421.3 > 376 1.108e+005 413.0 > 168.8 E F5:MRM of 12 channels, ESmin min _ F5:MRM of 12 channels, ES-2.306e+003 4.80 4.80 4.80 4.75 4.75 4.75 4.70 4.70 4.70 4.69 4.65 4.65 4.65 4.63 4.60 4.60 4.60 4.56 4.58 4.58 4.55 4.55 4.55 4.50 4.50 4.50 4.45 4.45 4.45 4.40 4.40 4.40 4.35 4.35 4.35 4.30 4.30 4.30 4.25 4.25 4.25 13C8-PFOA;4,16;3,20e3;bb;7517,91 PFOA;4.17;5.65e1;bb;404.88 PFOA;4.17;1.50e2;bb;26.32 4.20 4.20 4.20 4.15 4.15 4.15 3C2-PFCA 4.16 8.21e3 bb 39247.63 4.10 4.10 4.10 4.05 4.05 4.05 4.00 4.00 4.00 3.95 3.95 3.95 3.90 3.90 3.90 3.85 3.85 3.85 3C2-PFOA 13C8-PFOA Total PFOA 170907G4 20 70907G4 20 170907G4 20 170907G4 20 3.80 3.80 3.80 100 100 E -% % 100 0 % 100 %

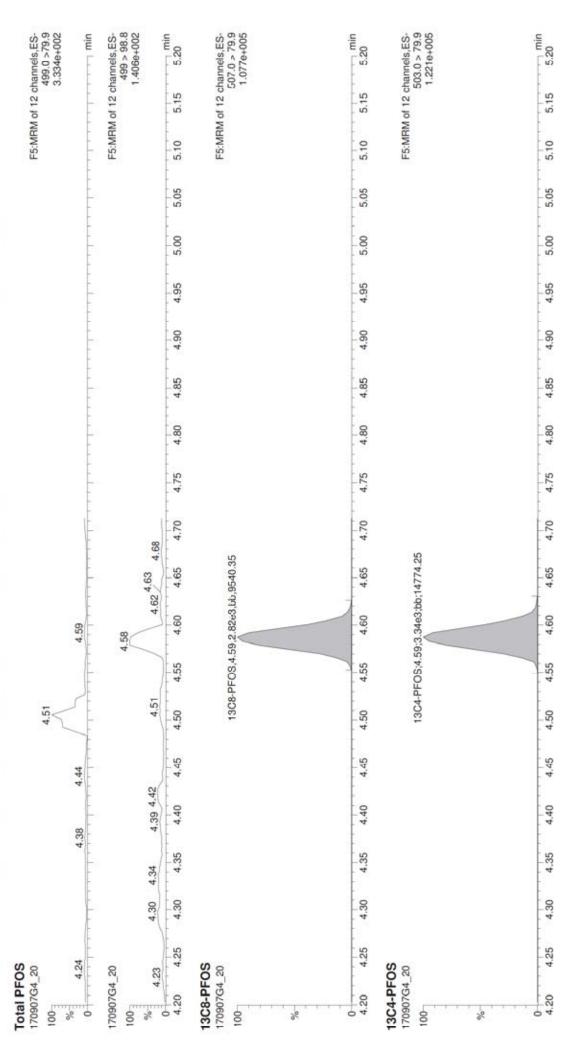
U:\G1.PRO\Results\2017\170907G4\170907G4-20.qld Dataset: Friday, September 08, 2017 09:57:01 Pacific Daylight Time Friday, September 08, 2017 09:57:07 Pacific Daylight Time Last Altered: Printed:

D: 1701192-01 Source Water 0.125, Description: Source Water, Name: 170907G4_20, Date: 07-Sep-2017, Time: 19:36:48, Instrument: , Lab: , User:



U:\G1.PRO\Results\2017\170907G4\170907G4-20.qld Dataset: Friday, September 08, 2017 09:57:01 Pacific Daylight Time Friday, September 08, 2017 09:57:07 Pacific Daylight Time Last Altered: Printed:

D: 1701192-01 Source Water 0.125, Description: Source Water, Name: 170907G4_20, Date: 07-Sep-2017, Time: 19:36:48, Instrument: , Lab: , User:



INJECTION INTERNAL STANDARD (IIS) AREAS, INSTRUMENT BLANKS (IB)

AND

CONTINUTING CALIBRATION VERIFICATIONS CCV)

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Untitled Dataset:

Last Altered: Printed:

Friday, September 08, 2017 11:39:42 Pacific Daylight Time Friday, September 08, 2017 11:45:15 Pacific Daylight Time

Method: U:\G1.PRO\MethDB\PFAS_RS AREAS_0809.mdb 12 Aug 2017 22:31:21

Calibration: 08 Sep 2017 11:39:42

ID: ST170907G4-1 PFC CS3 17I0720, Description: PFC CS3 17I0720, Name: 170907G4_2, Date: 07-Sep-2017, Time: 15:50:40,

Instrument:

	Name	Quan Trace	Area	RRF	wt/vol	RT	Conc.	%Rec	Recovery
1	13C3-PFBS	302.0 > 98.8	1790.408	143.233	1.000	2.80	12.5	100	NO
2	13C4-PFBA	216.9 > 17	3232.468	258.597	1.000	1.49	12.5	100	NO
3	13C5-PFHxA	318.0 > 27	5938.332	475.067	1.000	3.21	12.5	100	NO
4	13C3-PFHxS	401.9 > 79.9	4047.434	323.795	1.000	3.87	12.5	100	NO
5	13C8-PFOA	421.3 > 376	2840.400	227.232	1.000	4.16	12.5	100	NO
6	13C4-PFOS	503.0 > 79.9	3497.573	279.806	1.000	4.58	12.5	100	NO
7	13C9-PFNA	472.2 > 42	4105.360	328.429	1.000	4.51	12.5	100	NO
8	13C6-PFDA	519.1 > 47	3910.079	312.806	1.000	4.81	12.5	100	NO

ID: IPA, Description: IPA, Name: 170907G4_3, Date: 07-Sep-2017, Time: 16:03:10, Instrument:

	Name	Quan Trace	Area	RRF	wt/vol	RT	Conc.	%Rec Recovery
1	13C3-PFBS	302.0 > 98.8			1.000			NO
2	13C4-PFBA	216.9 > 17			1.000			NO
3	13C5-PFHxA	318.0 > 27			1.000			NO
4	13C3-PFHxS	401.9 > 79.9			1.000			NO
5	13C8-PFOA	421.3 > 376			1.000			NO
6	13C4-PFOS	503.0 > 79.9			1.000			NO
7	13C9-PFNA	472.2 > 42			1.000			NO
8	13C6-PFDA	519.1 > 47			1.000			NO

ID: B7I0006-BS1 OPR 0.125, Description: OPR, Name: 170907G4_4, Date: 07-Sep-2017, Time: 16:15:58, Instrument:

	Name	Quan Trace	Area	RRF	wt/vol	RT	Conc.	%Rec	Recovery
1	13C3-PFBS	302.0 > 98.8	2737.132	218.971	0.1250	2.82	153	153	YES
2	13C4-PFBA	216.9 > 17	6726.917	538.153	0.1250	1.53	208	208	YES
3	13C5-PFHxA	318.0 > 27	9804.491	784.359	0.1250	3.20	165	165	YES
4	13C3-PFHxS	401.9 > 79.9	5400.145	432.012	0.1250	3.87	133	133	NO
5	13C8-PFOA	421.3 > 376	3483.116	278.649	0.1250	4.17	123	123	NO
6	13C4-PFOS	503.0 > 79.9	4187.450	334.996	0.1250	4.58	120	120	NO
7	13C9-PFNA	472.2 > 42	5049.474	403.958	0.1250	4.51	123	123	NO
8	13C6-PFDA	519.1 > 47	4954.796	396.384	0.1250	4.81	127	127	NO

ID: B7I0013-BS1 OPR 1, Description: OPR, Name: 170907G4_5, Date: 07-Sep-2017, Time: 16:28:33, Instrument:

	Name	Quan Trace	Area	RRF	wt/vol	RT	Conc.	%Rec	Recovery
1	13C3-PFBS	302.0 > 98.8	2775.008	222.001	1.000	2.81	19.4	155	YES
2	13C4-PFBA	216.9 > 17	6633.247	530.660	1.000	1.50	25.7	205	YES
3	13C5-PFHxA	318.0 > 27	10686.390	854.911	1.000	3.21	22.5	180	YES
4	13C3-PFHxS	401.9 > 79.9	5944.411	475.553	1.000	3.87	18.4	147	NO
5	13C8-PFOA	421.3 > 376	4178.255	334.260	1.000	4.17	18.4	147	NO
6	13C4-PFOS	503.0 > 79.9	4459.624	356.770	1.000	4.58	15.9	128	NO
7	13C9-PFNA	472.2 > 42	5348.309	427.865	1.000	4.51	16.3	130	NO
8	13C6-PFDA	519.1 > 47	4629.168	370.333	1.000	4.81	14.8	118	NO

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Last Altered: Friday, S

Printed:

Friday, September 08, 2017 11:39:42 Pacific Daylight Time Friday, September 08, 2017 11:45:15 Pacific Daylight Time

ID: B7I0020-BS1 OPR 0.125, Description: OPR, Name: 170907G4_6, Date: 07-Sep-2017, Time: 16:41:09, Instrument:

	Name	Quan Trace	Area	RRF	wt/vol	RT	Conc.	%Rec	Recovery
1	13C3-PFBS	302.0 > 98.8	2188.037	175.043	0.1250	2.81	122	122	NO
2	13C4-PFBA	216.9 > 17	6559.841	524.787	0.1250	1.52	203	203	YES
3	13C5-PFHxA	318.0 > 27	9754.497	780.360	0.1250	3.20	164	164	YES
4	13C3-PFHxS	401.9 > 79.9	5587.725	447.018	0.1250	3.87	138	138	NO
5	13C8-PFOA	421.3 > 376	3622.617	289.809	0.1250	4.16	128	128	NO
6	13C4-PFOS	503.0 > 79.9	4682.123	374.570	0.1250	4.58	134	134	NO
7	13C9-PFNA	472.2 > 42	5667.699	453.416	0.1250	4.51	138	138	NO
8	13C6-PFDA	519.1 > 47	5022.393	401.791	0.1250	4.81	128	128	NO

ID: IPA, Description: IPA, Name: 170907G4_7, Date: 07-Sep-2017, Time: 16:53:42, Instrument:

Name	Quan Trace	Area	RRF	wt/vol	RT	Conc.	%Rec Recovery
13C3-PFBS	302.0 > 98.8			1.000			NO
13C4-PFBA	216.9 > 17			1.000			NO
13C5-PFHxA	318.0 > 27			1.000			NO
13C3-PFHxS	401.9 > 79.9			1.000			NO
13C8-PFOA	421.3 > 376			1.000			NO
13C4-PFOS	503.0 > 79.9			1.000			NO
13C9-PFNA	472.2 > 42			1.000			NO
13C6-PFDA	519.1 > 47			1.000			NO
	13C3-PFBS 13C4-PFBA 13C5-PFHxA 13C3-PFHxS 13C8-PFOA 13C4-PFOS 13C9-PFNA	13C3-PFBS 302.0 > 98.8 13C4-PFBA 216.9 > 17 13C5-PFHxA 318.0 > 27 13C3-PFHxS 401.9 > 79.9 13C8-PFOA 421.3 > 376 13C4-PFOS 503.0 > 79.9 13C9-PFNA 472.2 > 42	13C3-PFBS 302.0 > 98.8 13C4-PFBA 216.9 > 17 13C5-PFHxA 318.0 > 27 13C3-PFHxS 401.9 > 79.9 13C8-PFOA 421.3 > 376 13C4-PFOS 503.0 > 79.9 13C9-PFNA 472.2 > 42	13C3-PFBS 302.0 > 98.8 13C4-PFBA 216.9 > 17 13C5-PFHxA 318.0 > 27 13C3-PFHxS 401.9 > 79.9 13C8-PFOA 421.3 > 376 13C4-PFOS 503.0 > 79.9 13C9-PFNA 472.2 > 42	13C3-PFBS 302.0 > 98.8 1.000 13C4-PFBA 216.9 > 17 1.000 13C5-PFHxA 318.0 > 27 1.000 13C3-PFHxS 401.9 > 79.9 1.000 13C8-PFOA 421.3 > 376 1.000 13C4-PFOS 503.0 > 79.9 1.000 13C9-PFNA 472.2 > 42 1.000	13C3-PFBS 302.0 > 98.8 1.000 13C4-PFBA 216.9 > 17 1.000 13C5-PFHxA 318.0 > 27 1.000 13C3-PFHxS 401.9 > 79.9 1.000 13C8-PFOA 421.3 > 376 1.000 13C4-PFOS 503.0 > 79.9 1.000 13C9-PFNA 472.2 > 42 1.000	13C3-PFBS 302.0 > 98.8 1.000 13C4-PFBA 216.9 > 17 1.000 13C5-PFHxA 318.0 > 27 1.000 13C3-PFHxS 401.9 > 79.9 1.000 13C8-PFOA 421.3 > 376 1.000 13C4-PFOS 503.0 > 79.9 1.000 13C9-PFNA 472.2 > 42 1.000

ID: B7I0006-BLK1 Method Blank 0.125, Description: Method Blank, Name: 170907G4_8, Date: 07-Sep-2017, Time: 17:06:16, Instrument:

	Name	Quan Trace	Area	RRF	wt/vol	RT	Conc.	%Rec	Recovery
1	13C3-PFBS	302.0 > 98.8	2502.133	200.171	0.1250	2.81	140	140	NO
2	13C4-PFBA	216.9 > 17	5787.217	462.977	0.1250	1.52	179	179	YES
3	13C5-PFHxA	318.0 > 27	8467.029	677.362	0.1250	3.20	143	143	NO
4	13C3-PFHxS	401.9 > 79.9	4709.254	376.740	0.1250	3.87	116	116	NO
5	13C8-PFOA	421.3 > 376	3005.934	240.475	0.1250	4.17	106	106	NO
6	13C4-PFOS	503.0 > 79.9	2882.003	230.560	0.1250	4.58	82.4	82.4	NO
7	13C9-PFNA	472.2 > 42	4132.663	330.613	0.1250	4.51	101	101	NO
8	13C6-PFDA	519.1 > 47	2644.116	211.529	0.1250	4.81	67.6	67.6	NO

ID: B7I0013-BLK1 Method Blank 1, Description: Method Blank, Name: 170907G4_9, Date: 07-Sep-2017, Time: 17:18:49, Instrument:

	Name	Quan Trace	Area	RRF	wt/vol	RT	Conc.	%Rec	Recovery
1	13C3-PFBS	302.0 > 98.8	2444.181	195.534	1.000	2.82	17.1	137	NO
2	13C4-PFBA	216.9 > 17	6317.177	505.374	1.000	1.50	24.4	195	YES
3	13C5-PFHxA	318.0 > 27	10376.149	830.092	1.000	3.21	21.8	175	YES
4	13C3-PFHxS	401.9 > 79.9	5569.348	445.548	1.000	3.87	17.2	138	NO
5	13C8-PFOA	421.3 > 376	3612.663	289.013	1.000	4.17	15.9	127	NO
6	13C4-PFOS	503.0 > 79.9	3939.444	315.156	1.000	4.59	14.1	113	NO
7	13C9-PFNA	472.2 > 42	5508.412	440.673	1.000	4.52	16.8	134	NO
8	13C6-PFDA	519.1 > 47	4868.500	389.480	1.000	4.81	15.6	125	NO

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ID: B7I0020-BLK1 Method Blank 0.125, Description: Method Blank, Name: 170907G4_10, Date: 07-Sep-2017, Time: 17:31:22, Instrument:

	Name	Quan Trace	Area	RRF	wt/vol	RT	Conc.	%Rec	Recovery
1	13C3-PFBS	302.0 > 98.8	2499.719	199.978	0.1250	2.82	140	140	NO
2	13C4-PFBA	216.9 > 17	6521.468	521.717	0.1250	1.52	202	202	YES
3	13C5-PFHxA	318.0 > 27	10314.925	825.194	0.1250	3.21	174	174	YES
4	13C3-PFHxS	401.9 > 79.9	5558.085	444.647	0.1250	3.87	137	137	NO
5	13C8-PFOA	421.3 > 376	3361.969	268.958	0.1250	4.17	118	118	NO
6	13C4-PFOS	503.0 > 79.9	4450.932	356.075	0.1250	4.59	127	127	NO
7	13C9-PFNA	472.2 > 42	4958.107	396.649	0.1250	4.52	121	121	NO
8	13C6-PFDA	519.1 > 47	5766.246	461.300	0.1250	4.81	147	147	NO

ID: 1701169-01 S08257d2 0.125, Description: S08257d2, Name: 170907G4_11, Date: 07-Sep-2017, Time: 17:43:54, Instrument:

	Name	Quan Trace	Area	RRF	wt/vol	RT	Conc.	%Rec	Recovery
1	13C3-PFBS	302.0 > 98.8	2591.525	207.322	0.1146	2.81	158	145	NO
2	13C4-PFBA	216.9 > 17	7318.681	585.494	0.1146	1.53	247	226	YES
3	13C5-PFHxA	318.0 > 27	9684.476	774.758	0.1146	3.21	178	163	YES
4	13C3-PFHxS	401.9 > 79.9	4829.150	386.332	0.1146	3.87	130	119	NO
5	13C8-PFOA	421.3 > 376	3068.005	245.440	0.1146	4.16	118	108	NO
6	13C4-PFOS	503.0 > 79.9	2737.587	219.007	0.1146	4.59	85.4	78.3	NO
7	13C9-PFNA	472.2 > 42	4633.892	370.711	0.1146	4.51	123	113	NO
8	13C6-PFDA	519.1 > 47	2798.521	223.882	0.1146	4.81	78.0	71.6	NO

ID: 1701170-01 S08257C2 0.125, Description: S08257C2, Name: 170907G4_12, Date: 07-Sep-2017, Time: 17:56:23, Instrument:

	Name	Quan Trace	Area	RRF	wt/vol	RT	Conc.	%Rec	Recovery
1	13C3-PFBS	302.0 > 98.8	2724.380	217.950	0.2604	2.82	73.1	152	YES
2	13C4-PFBA	216.9 > 17	6142.673	491.414	0.2604	1.51	91.2	190	YES
3	13C5-PFHxA	318.0 > 27	9660.773	772.862	0.2604	3.20	78.1	163	YES
4	13C3-PFHxS	401.9 > 79.9	4861.252	388.900	0.2604	3.87	57.7	120	NO
5	13C8-PFOA	421.3 > 376	2933.728	234.698	0.2604	4.16	49.6	103	NO
6	13C4-PFOS	503.0 > 79.9	2907.317	232.585	0.2604	4.59	39.9	83.1	NO
7	13C9-PFNA	472.2 > 42	4344.939	347.595	0.2604	4.52	50.8	106	NO
8	13C6-PFDA	519.1 > 47	3354.694	268.376	0.2604	4.81	41.2	85.8	NO

ID: 1701055-09RE1 QUNST-04-SD01-0-1 1.23, Description: QUNST-04-SD01-0-1, Name: 170907G4_13, Date: 07-Sep-2017, Time: 18:08:56, Instrument:

	Name	Quan Trace	Area	RRF	wt/vol	RT	Conc.	%Rec	Recovery
1	13C3-PFBS	302.0 > 98.8	2512.657	201.013	1.002	2.81	17.5	140	NO
2	13C4-PFBA	216.9 > 17	5312.187	424.975	1.002	1.48	20.5	164	YES
3	13C5-PFHxA	318.0 > 27	10398.314	831.865	1.002	3.20	21.8	175	YES
4	13C3-PFHxS	401.9 > 79.9	6037.877	483.030	1.002	3.86	18.6	149	NO
5	13C8-PFOA	421.3 > 376	3919.881	313.590	1.002	4.16	17.2	138	NO
6	13C4-PFOS	503.0 > 79.9	4686.614	374.929	1.002	4.58	16.7	134	NO
7	13C9-PFNA	472.2 > 42	6213.139	497.051	1.002	4.51	18.9	151	YES
8	13C6-PFDA	519.1 > 47	5677.294	454.184	1.002	4.81	18.1	145	NO

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ID: B7I0013-MS1 Matrix Spike 1.19, Description: Matrix Spike, Name: 170907G4_14, Date: 07-Sep-2017, Time: 18:21:31, Instrument:

	Name	Quan Trace	Area	RRF	wt/vol	RT	Conc.	%Rec	Recovery
1	13C3-PFBS	302.0 > 98.8	2062.122	164.970	1.190	2.81	12.1	115	NO
2	13C4-PFBA	216.9 > 17	5911.781	472.942	1.190	1.50	19.2	183	YES
3	13C5-PFHxA	318.0 > 27	8258.175	660.654	1.190	3.20	14.6	139	NO
4	13C3-PFHxS	401.9 > 79.9	5517.219	441.378	1.190	3.86	14.3	136	NO
5	13C8-PFOA	421.3 > 376	3424.228	273.938	1.190	4.16	12.7	121	NO
6	13C4-PFOS	503.0 > 79.9	4176.486	334.119	1.190	4.58	12.5	119	NO
7	13C9-PFNA	472.2 > 42	5723.899	457.912	1.190	4.51	14.6	139	NO
8	13C6-PFDA	519.1 > 47	5329.508	426.361	1.190	4.81	14.3	136	NO

ID: B7I0013-MSD1 Matrix Spike Dup 1.24, Description: Matrix Spike Dup, Name: 170907G4_15, Date: 07-Sep-2017, Time: 18:34:03, Instrument:

	Name	Quan Trace	Area	RRF	wt/vol	RT	Conc.	%Rec	Recovery
1	13C3-PFBS	302.0 > 98.8	2428.071	194.246	1.240	2.81	13.7	136	NO
2	13C4-PFBA	216.9 > 17	6323.429	505.874	1.240	1.49	19.7	196	YES
3	13C5-PFHxA	318.0 > 27	10884.249	870.740	1.240	3.20	18.5	183	YES
4	13C3-PFHxS	401.9 > 79.9	6310.879	504.870	1.240	3.86	15.7	156	YES
5	13C8-PFOA	421.3 > 376	4313.832	345.107	1.240	4.16	15.3	152	YES
6	13C4-PFOS	503.0 > 79.9	4097.703	327.816	1.240	4.58	11.8	117	NO
7	13C9-PFNA	472.2 > 42	6532.740	522.619	1.240	4.51	16.0	159	YES
8	13C6-PFDA	519.1 > 47	5201.624	416.130	1.240	4.81	13.4	133	NO

ID: B7I0013-DUP1 Duplicate 1.24, Description: Duplicate, Name: 170907G4_16, Date: 07-Sep-2017, Time: 18:46:36, Instrument:

	Name	Quan Trace	Area	RRF	wt/vol	RT	Conc.	%Rec	Recovery
1	13C3-PFBS	302.0 > 98.8	2372.100	189.768	1.240	2.81	13.4	132	NO
2	13C4-PFBA	216.9 > 17	6739.993	539.199	1.240	1.50	21.0	209	YES
3	13C5-PFHxA	318.0 > 27	9707.957	776.637	1.240	3.20	16.5	163	YES
4	13C3-PFHxS	401.9 > 79.9	6221.966	497.757	1.240	3.86	15.5	154	YES
5	13C8-PFOA	421.3 > 376	4219.081	337.526	1.240	4.16	15.0	149	NO
6	13C4-PFOS	503.0 > 79.9	4179.236	334.339	1.240	4.58	12.0	119	NO
7	13C9-PFNA	472.2 > 42	6233.510	498.681	1,240	4.51	15.3	152	YES
8	13C6-PFDA	519.1 > 47	5290.898	423.272	1.240	4.80	13.6	135	NO

ID: 1701190-01 OF-IDW-AQ01-090117 0.125, Description: OF-IDW-AQ01-090117, Name: 170907G4_17, Date: 07-Sep-2017, Time: 18:59:13, Instrument:

	Name	Quan Trace	Area	RRF	wt/vol	RT	Conc.	%Rec	Recovery
1	13C3-PFBS	302.0 > 98.8	2322.319	185.786	0.1213	2.81	134	130	NO
2	13C4-PFBA	216.9 > 17	7317.144	585.372	0.1213	1.52	233	226	YES
3	13C5-PFHxA	318.0 > 27	9531.465	762.517	0.1213	3.20	165	161	YES
4	13C3-PFHxS	401.9 > 79.9	4942.888	395.431	0.1213	3.86	126	122	NO
5	13C8-PFOA	421.3 > 376	3426.865	274.149	0.1213	4.16	124	121	NO
6	13C4-PFOS	503.0 > 79.9	3848.878	307.910	0.1213	4.59	113	110	NO
7	13C9-PFNA	472.2 > 42	5060.375	404.830	0.1213	4.51	127	123	NO
8	13C6-PFDA	519.1 > 47	4902.176	392.174	0.1213	4.81	129	125	NO

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ID: 1701190-02 OF-IDW-AQ02-090117 0.125, Description: OF-IDW-AQ02-090117, Name: 170907G4_18, Date: 07-Sep-2017, Time: 19:11:45, Instrument:

	Name	Quan Trace	Area	RRF	wt/vol	RT	Conc.	%Rec	Recovery
1	13C3-PFBS	302.0 > 98.8	1954.554	156.364	0.1172	2.81	116	109	NO
2	13C4-PFBA	216.9 > 17	6205.098	496.408	0.1172	1.52	205	192	YES
3	13C5-PFHxA	318.0 > 27	6752.976	540.238	0.1172	3.20	121	114	NO
4	13C3-PFHxS	401.9 > 79.9	2695.289	215.623	0.1172	3.87	71.0	66.6	NO
5	13C8-PFOA	421.3 > 376	2395.701	191.656	0.1172	4.17	89.9	84.3	NO
6	13C4-PFOS	503.0 > 79.9	1289.136	103.131	0.1172	4.58	39.3	36.9	YES
7	13C9-PFNA	472.2 > 42	3841.855	307.348	0.1172	4.52	99.8	93.6	NO
8	13C6-PFDA	519.1 > 47	3312.005	264.960	0.1172	4.81	90.3	84.7	NO

ID: 1701191-01 STWRT-FB-KED-083017 0.125, Description: STWRT-FB-KED-083017, Name: 170907G4_19, Date: 07-Sep-2017, Time: 19:24:18, Instrument:

	Name	Quan Trace	Area	RRF	wt/vol	RT	Conc.	%Rec	Recovery
1	13C3-PFBS	302.0 > 98.8	1980.108	158.409	0.1180	2.81	117	111	NO
2	13C4-PFBA	216.9 > 17	6642.733	531.419	0.1180	1.51	218	206	YES
3	13C5-PFHxA	318.0 > 27	9435.272	754.822	0.1180	3.20	168	159	YES
4	13C3-PFHxS	401.9 > 79.9	5384.812	430.785	0.1180	3.86	141	133	NO
5	13C8-PFOA	421.3 > 376	3431.004	274.480	0.1180	4.16	128	121	NO
6	13C4-PFOS	503.0 > 79.9	2357.081	188.566	0.1180	4.59	71.4	67.4	NO
7	13C9-PFNA	472.2 > 42	4775.366	382.029	0.1180	4.51	123	116	NO
8	13C6-PFDA	519.1 > 47	4102.929	328.234	0.1180	4.81	111	105	NO

ID: 1701192-01 Source Water 0.125, Description: Source Water, Name: 170907G4_20, Date: 07-Sep-2017, Time: 19:36:48, Instrument:

	Name	Quan Trace	Area	RRF	wt/vol	RT	Conc.	%Rec	Recovery
1	13C3-PFBS	302.0 > 98.8	2062.993	165.039	0.1193	2.81	121	115	NO
2	13C4-PFBA	216.9 > 17	6927.263	554.181	0.1193	1.53	225	214	YES
3	13C5-PFHxA	318.0 > 27	9500.255	760.020	0.1193	3.20	168	160	YES
4	13C3-PFHxS	401.9 > 79.9	4421.684	353.735	0.1193	3.87	114	109	NO
5	13C8-PFOA	421.3 > 376	3196.609	255.729	0.1193	4.16	118	113	NO
6	13C4-PFOS	503.0 > 79.9	3339.612	267.169	0.1193	4.59	100	95.5	NO
7	13C9-PFNA	472.2 > 42	5416.989	433.359	0.1193	4.52	138	132	NO
8	13C6-PFDA	519.1 > 47	5200.937	416.075	0.1193	4.81	139	133	NO

ID: IPA, Description: IPA, Name: 170907G4_21, Date: 07-Sep-2017, Time: 19:49:21, Instrument:

	Name	Quan Trace	Area	RRF	wt/vol	RT	Conc.	%Rec Recovery
1	13C3-PFBS	302.0 > 98.8			1.000			NO
2	13C4-PFBA	216.9 > 17			1.000			NO
3	13C5-PFHxA	318.0 > 27			1.000			NO
4	13C3-PFHxS	401.9 > 79.9			1.000			NO
5	13C8-PFOA	421.3 > 376			1.000			NO
6	13C4-PFOS	503.0 > 79.9			1.000			NO
7	13C9-PFNA	472.2 > 42			1.000			NO
8	13C6-PFDA	519.1 > 47			1.000			NO

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ID: ST170907G4-2 PFC CS3 17I0720, Description: PFC CS3 17I0720, Name: 170907G4_22, Date: 07-Sep-2017, Time: 20:01:57, Instrument:

	Name	Quan Trace	Area	RRF	wt/vol	RT	Conc.	%Rec	Recovery
1	13C3-PFBS	302.0 > 98.8	2052.094	164.168	1.000	2.81	14.3	115	NO
2	13C4-PFBA	216.9 > 17	9072.310	725.785	1.000	1.55	35.1	281	YES
3	13C5-PFHxA	318.0 > 27	9256.390	740.511	1.000	3.21	19.5	156	YES
4	13C3-PFHxS	401.9 > 79.9	4730.433	378.435	1.000	3.87	14.6	117	NO
5	13C8-PFOA	421.3 > 376	4044.603	323.568	1.000	4.17	17.8	142	NO
6	13C4-PFOS	503.0 > 79.9	4731.709	378.537	1.000	4.59	16.9	135	NO
7	13C9-PFNA	472.2 > 42	6706.303	536.504	1.000	4.52	20.4	163	YES
8	13C6-PFDA	519.1 > 47	7809.232	624.739	1.000	4.81	25.0	200	YES

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MassLynx 4.1 SCN815

Quantify Sample Summary Report Vista Analytical Laboratory Q1

Untitled Dataset: Thursday, September 07, 2017 15:46:43 Pacific Daylight Time Thursday, September 07, 2017 15:47:00 Pacific Daylight Time Last Altered: Printed:

Method: U:\G1.pro\MethDB\PFAS_14or16_2trans_0712.mdb 12 Jul 2017 13:38:17 Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_8-30-17_2Trans_A_NEW_IS.cdb 31 Aug 2017 14:33:19

ID: IPA, Description: IPA, Name: 170907G3_3, Date: 07-Sep-2017, Time: 14:35:22

	# Name	Trace	Peak Area	IS Resp	RRF Mean	wt/vol	H	Conc.	%Rec
-	1 PFBA	212.9 > 168.9				1.00			
2	2 PFPeA	263.0 > 218.8				1.00			
9	3 PFBS	299.0 > 79.7				1.00			
4	4 PFHxA	312.9 > 268.9				1.00			
2	5 PFHpA	363 > 318.9				1.00			
9	6 PFHxS	398.9 > 79.6				1.00			
	7 PFOA	413.0 > 368.7				1.00			
8	8 PFNA	463.0 > 418.8				1.00			
6	9 PFOS	499.0 > 79.9				1.00			
10	10 PFDA	512.7 > 219.0				1.00			
-	11 13C3-PFBA	215.9 > 171.8				1.00			
12	12 13C3-PFBS	302.0 > 98.8				1.00			
13	13 13C3-PFPeA	266.0 > 221.8				1.00			
14	14 13C2-PFHxA	315.0 > 269.8				1.00			
15	15 13C4-PFHpA	367.2 > 321.8				1.00			
16	16 18O2-PFHxS	403 > 102.6				1.00			
17	17 13C2-PFOA	414.9 > 369.7				1.00			
18	18 13C5-PFNA	468.2 > 422.9				1.00			
19	19 13C2-PFDA	514.8 > 469.7				1.00			
20	20 13C8-PFOS	507.0 > 79.9				1.00			
21	21 13C4-PFBA	216.9 > 171.8				1.00			
22	22 13C5-PFHxA	318>272.9				1.00			
23	23 13C3-PFHxS	401.9 > 79.9				1.00			
24	24 13C8-PFOA	421.3 > 376				1.00			
25	25 13C9-PFNA	472.2 > 426.9				1.00			
26	26 13C4-PFOS	503.0 > 79.9				1.00			
27	27 13C6-PFDA	519.10 > 473.70				1.00			
28	28 Total PFBS	299.0 > 79.7				1.00			
59	29 Total PFHxS	398.9 > 79.6				1.00			
30	30 Total PFOA	413.0 > 368.7				1.00			
31	31 Total PFOS	499.0 >79.9				1.00			

Quantify Totals Report MassLynx 4.1 SCN815

Vista Analytical Laboratory Q1

Untitled Dataset: Thursday, September 07, 2017 15:46:43 Pacific Daylight Time Thursday, September 07, 2017 15:47:00 Pacific Daylight Time Last Altered:

Printed:

Method: U:\G1.pro\MethDB\PFAS_14or16_2trans_0712.mdb 12 Jul 2017 13:38:17 Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_8-30-17_2Trans_A_NEW_IS.cdb 31 Aug 2017 14:33:19

ID: IPA, Description: IPA, Name: 170907G3_3, Date: 07-Sep-2017, Time: 14:35:22

Total PFBS

Total PFHxS

			# Name	Lace	Ī	Area	IS Area	Conc.
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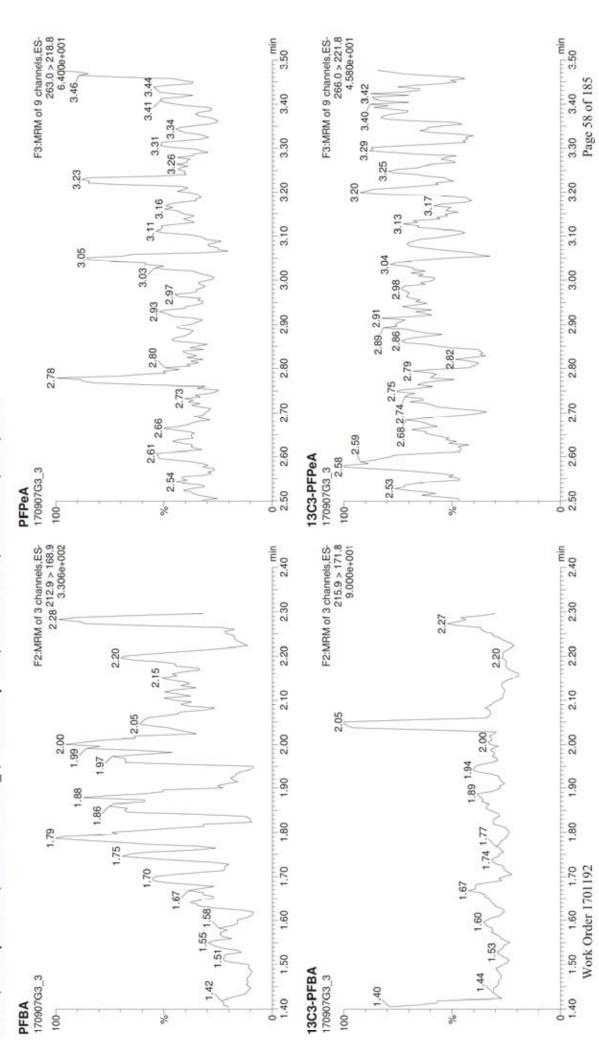
Total PFOA

Total PFOS

Vista Analytical Laboratory Q1

Untitled Dataset: Thursday, September 07, 2017 15:46:43 Pacific Daylight Time Thursday, September 07, 2017 15:47:00 Pacific Daylight Time ast Altered: Printed:

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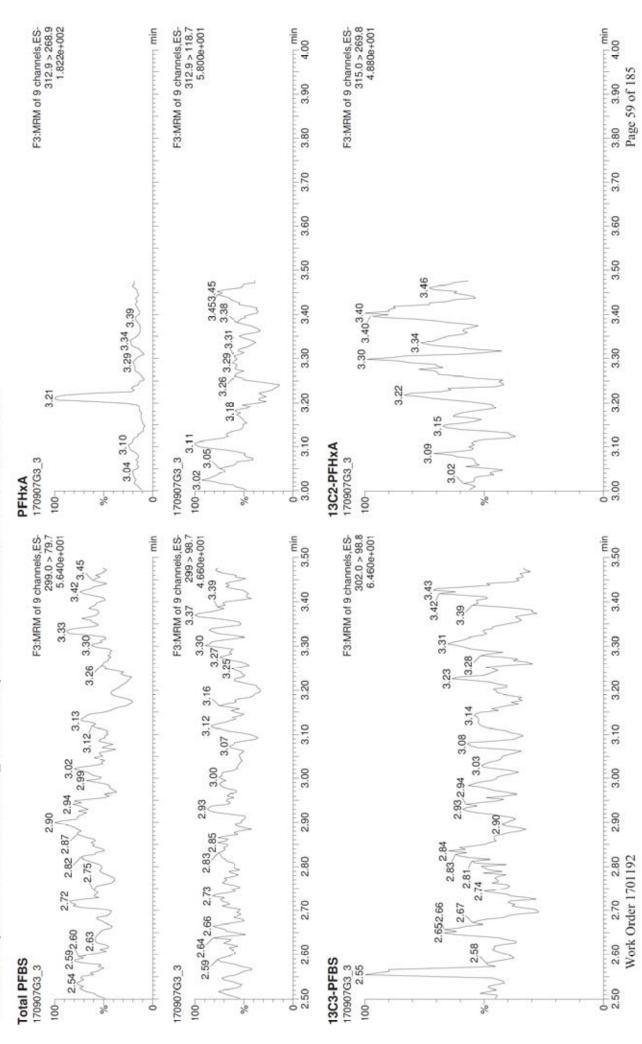


Quantify Sample Report MassLynx 4.1 SCN815

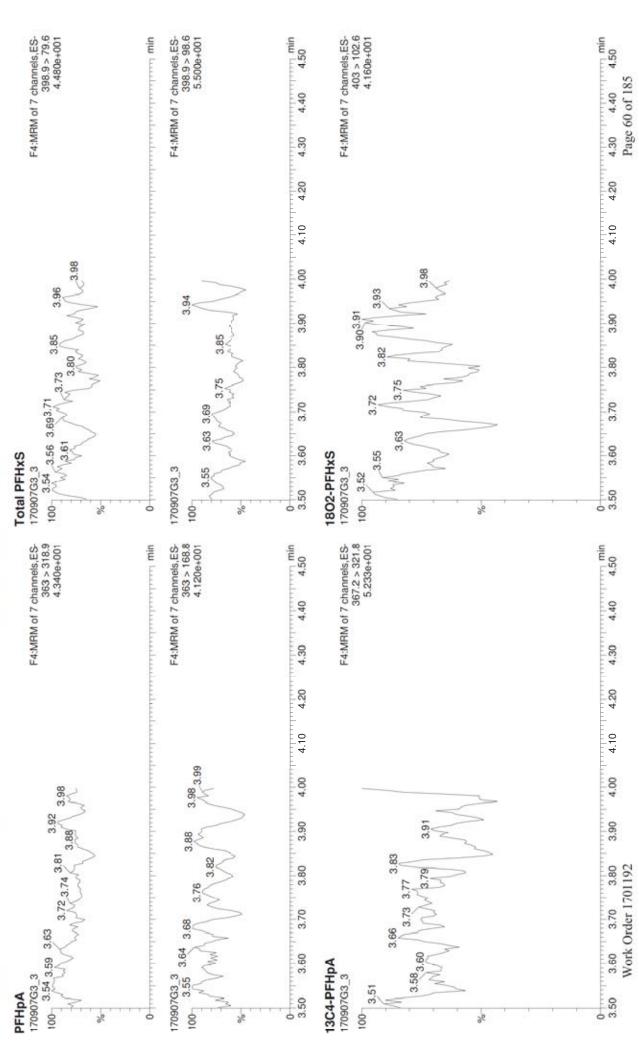
Vista Analytical Laboratory Q1

Dataset: Untitled

Last Altered: Thursday, September 07, 2017 15:46:43 Pacific Daylight Time Printed: Thursday, September 07, 2017 15:47:00 Pacific Daylight Time



Untitled Dataset: Thursday, September 07, 2017 15:46:43 Pacific Daylight Time Thursday, September 07, 2017 15:47:00 Pacific Daylight Time Last Altered: Printed:

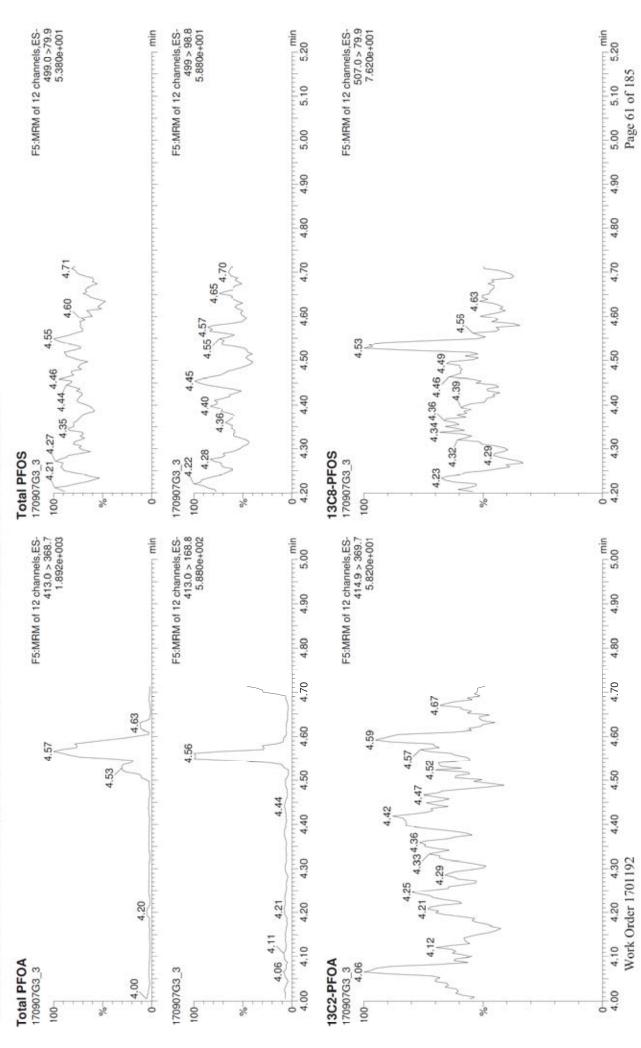


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Dataset:

Thursday, September 07, 2017 15:46:43 Pacific Daylight Time Thursday, September 07, 2017 15:47:00 Pacific Daylight Time Last Altered:

Printed:

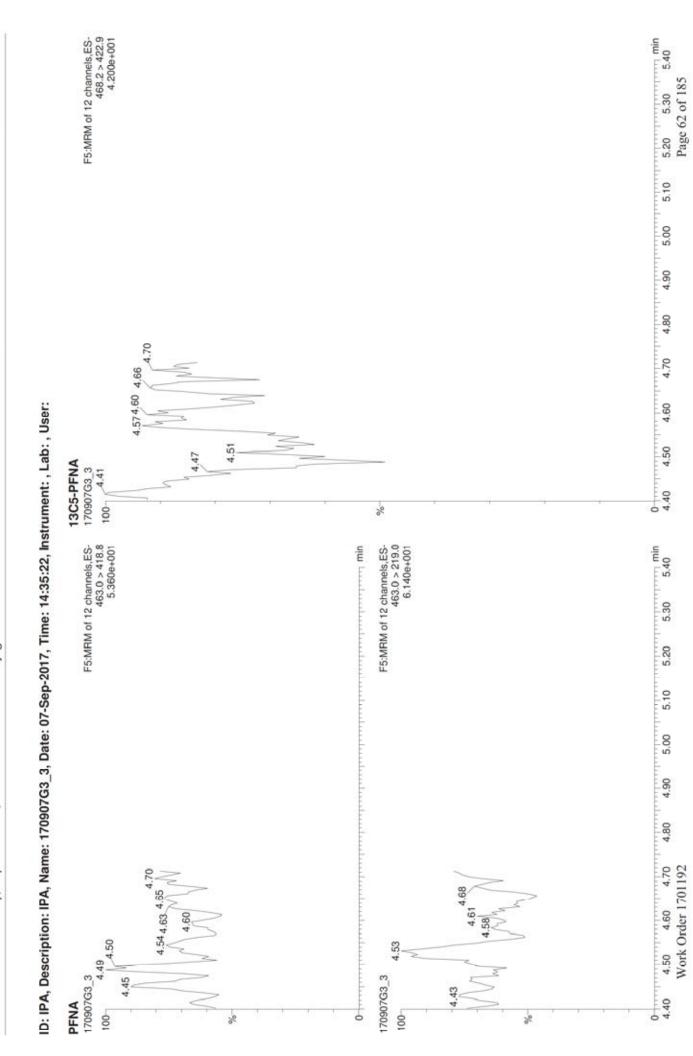


MassLynx 4.1 SCN815

Quantify Sample Report Vista Analytical Laboratory Q1

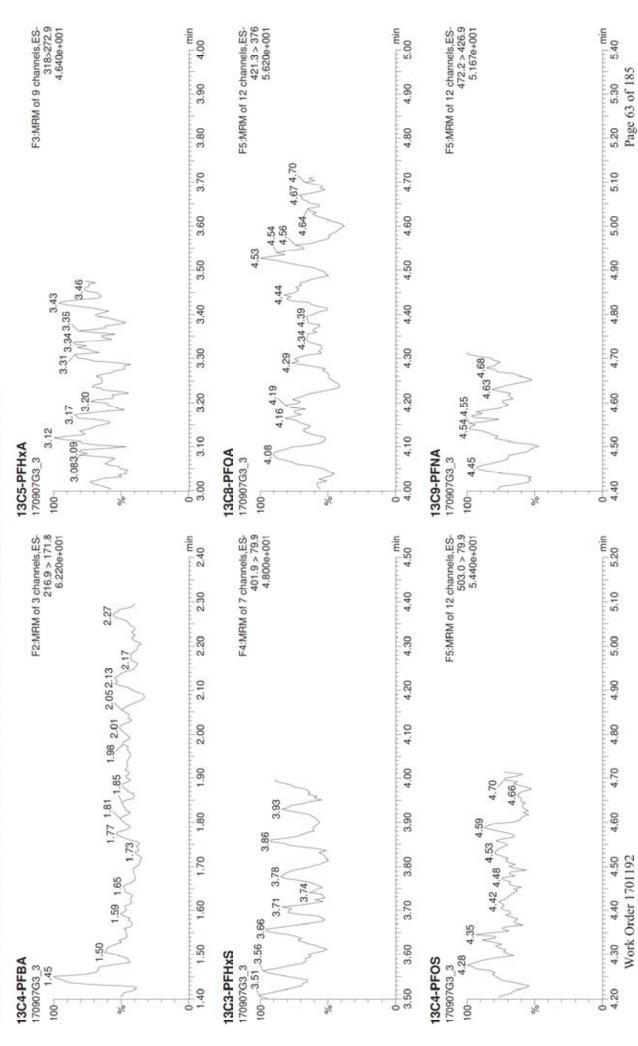
Untitled Dataset: Thursday, September 07, 2017 15:46:43 Pacific Daylight Time Thursday, September 07, 2017 15:47:00 Pacific Daylight Time Last Altered:

Printed:



Untitled Dataset: Thursday, September 07, 2017 15:46:43 Pacific Daylight Time Thursday, September 07, 2017 15:47:00 Pacific Daylight Time Last Altered:

Printed:



Quantify Sample Summary Report Vista Analytical Laboratory

Untitled Dataset: Friday, September 08, 2017 16:53:52 Pacific Daylight Time Friday, September 08, 2017 16:55:18 Pacific Daylight Time Last Altered: Printed:

Method: U:\G1.pro\MethDB\PFAS_14or16_2trans_0712.mdb 12 Jul 2017 13:38:17 Calibration: U:\G1.PRO\CurveDB\C18_VAL-PFC_Q1_9-5-17_A_2Trans.cdb 08 Sep 2017 16:50:10

Name: 170907G3_2, Date: 07-Sep-2017, Time: 14:22:47, ID: ST170907G3-1 PFC CS0 1710712, Description: PFC CS0 1710712 A

	# Name	Trace	Area	IS Resp	RRF	Wt. Nol F	Pred.RT	RT	Conc.	%Rec	40
100	3 PFBS	299.0 > 79.7	195,492	2439.964		1.000	2.80	2.80	0.91	26.06	20-150
	5 PFHpA	363 > 318.9	545.833	3158.982		1.000	3.73	3.73	0.97		-
3	6 PFHKS	398.9 > 79.6	264.096	2428.805		1.000	3.87	3.87	0.81	80,52	
	7 PFOA	413.0 > 368.7	612.054	7753.731		1.000	4.16	4.16	0.82	81.86	_
	8 PFNA	463.0 > 418.8	622.775	4191.435		1.000	4.51	4.52	0.78	77.72	_
1	9 PFOS	499.0 > 79.9	158.565	4473.818		1.000	4.58	4.57	0.99	98.86	*
	12 13C3-PFBS	302.0 > 98.8	2439,964	8740.831	0.323	1.000	3.20	2.80	10.80	86.42	86.42 50-150
-	15 13C4-PFHpA	367.2 > 321.8	3158.982	8740.831	0.575	1.000	3.75	3.73	7.86	62.89	-
	16 1802-PFHxS	403 > 102.6	2428.805	5275.648	0.489	1.000	3.87	3.87	11.76	94.06	
01	17 13C2-PFOA	414.9 > 369.7	7753.731	3277.389	3.278	1.000	4.16	4.16	9.05	72.17	
1000	18 13C5-PFNA	468.2 > 422.9	4191.435	4632.627	0.929	1.000	4.51	4.51	12.18	97.40	
12	20 13C8-PFOS	507.0 > 79.9	4473,818	4727.697	0.989	1.000	4.58	4.58	11.96	95.71	>
13	22 13C5-PFHxA	318>272.9	8740.831	8740.831	1.000	1.000	3.37	3.20	12.50	100.00	
4	23 13C3-PFHxS	401.9 > 79.9	5275,648	5275.648	1.000	1.000	4.03	3.87	12,50	100.00	
9	24 13C8-PFOA	421.3 > 376	3277,389	3277.389	1.000	1.000	4.31	4.16	12.50	100.00	
18	25 13C9-PFNA	472.2 > 426.9	4632,627	4632.627	1.000	1.000	4.66	4.51	12.50	100.00	
12	26 13C4-PFOS	503.0 > 79.9	4727.697	4727 697	1.000	1.000	4.73	4.58	12.50	100.00	3

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MassLynx MassLynx V4.1 SCN 945

Page 1 of 1

Quantify Compound Summary Report Vista Analytical Laboratory

Untitled Dataset: Friday, September 08, 2017 16:57:19 Pacific Daylight Time Friday, September 08, 2017 16:57:48 Pacific Daylight Time Last Altered: Printed:

Method: U:\G1.pro\MethDB\PFAS_14or16_2trans_0712.mdb 12 Jul 2017 13:38:17 Calibration: U:\G1.PRO\CurveDB\C18_VAL-PFC_Q1_9-5-17_A_2Trans.cdb 06 Sep 2017 12:51:47

Compound name: PFBA

Name	Ol.	- Acq. Date	Acq. Time
70907G3_1	IPA	07-Sep-17	14:10:34
70907G3_2	ST170907G3-1 PFC CS0 1710712	07-Sep-17	14:22:47
70907G3_3	IPA	07-Sep-17	14:35:22
70907G3_4	1701124-05@10X HA5 (4 1/2'-5 1/2') 1	07-Sep-17	14:47:56
70907G3_5	IPA	07-Sep-17	15:00:28
170907G3_6	ST170907G3-2 PFC CS3 1710711	07-Sep-17	
70907G3 7	IPA	07-Sep-17	

LC Calibration Standards Review Checklist

		(ION Ratio	Concentration		Sign	Correct	Manual	*
Calibration ID:	Calibration ID: STITING COS-1	CM H	直	B	1	7	7	7	Ð
Calibration ID:		LMH							
Calibration ID:		LMH							
Calibration ID:		LMH							
Calibration ID:		LMH							
Calibration ID:		LMH					0 0		
Calibration ID:		LMH							
Calibration ID:		LMH							
Calibration ID:		LMH							
Calibration ID:		LMH							
						Full Ma	ss Cal. D	ate: 4/5/15	4
Run Log Present:	7								

Work Order 1701192

Reviewed By: M. 91813

of Samples per Sequence Checked:

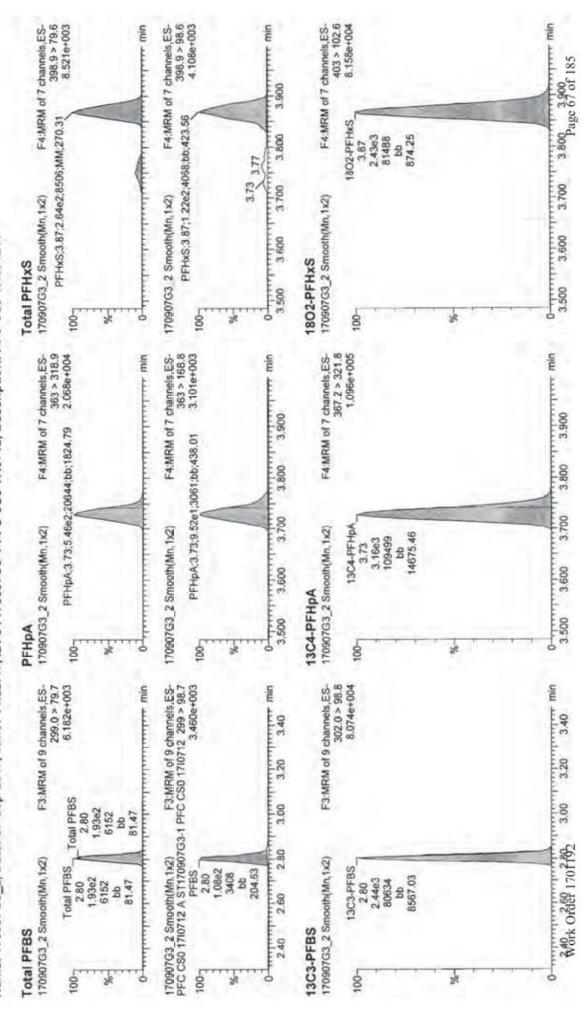
Page 66 of 185

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Last Altered: Friday, September 08, 2017 16:53:52 Pacific Daylight Time Printed: Friday, September 08, 2017 16:53:57 Pacific Daylight Time

Calibration: U:\G1.PRO\CurveDB\C18_VAL-PFC_Q1_9-5-17_A_2Trans.cdb 08 Sep 2017 16:50:10 Method: U:\G1.pro\MethDB\PFAS_14or16_2trans_0712.mdb 12 Jul 2017 13:38:17

Name: 170907G3_2, Date: 07-Sep-2017, Time: 14:22:47, ID: ST170907G3-1 PFC CS0 17I0712, Description: PFC CS0 17I0712 A



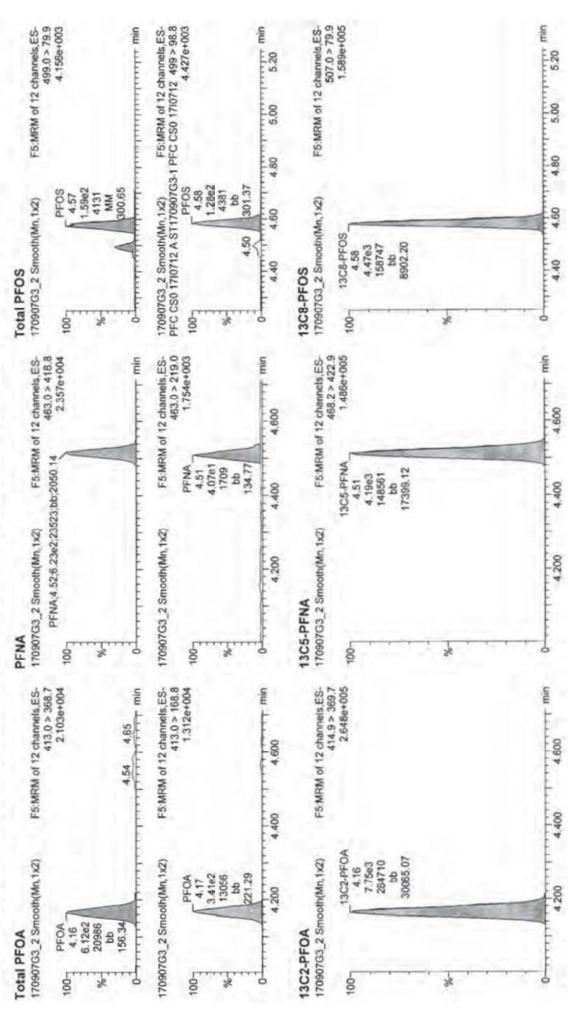
Quantify Sample Report Vista Analytical Laboratory

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Dataset: Untitled

Last Altered: Friday, September 08, 2017 16:53:52 Pacific Daylight Time Printed: Friday, September 08, 2017 16:53:57 Pacific Daylight Time

Name: 170907G3_2, Date: 07-Sep-2017, Time: 14:22:47, ID: ST170907G3-1 PFC CS0 1710712, Description: PFC CS0 1710712 A



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Vista Analytical Laboratory Quantify Sample Report

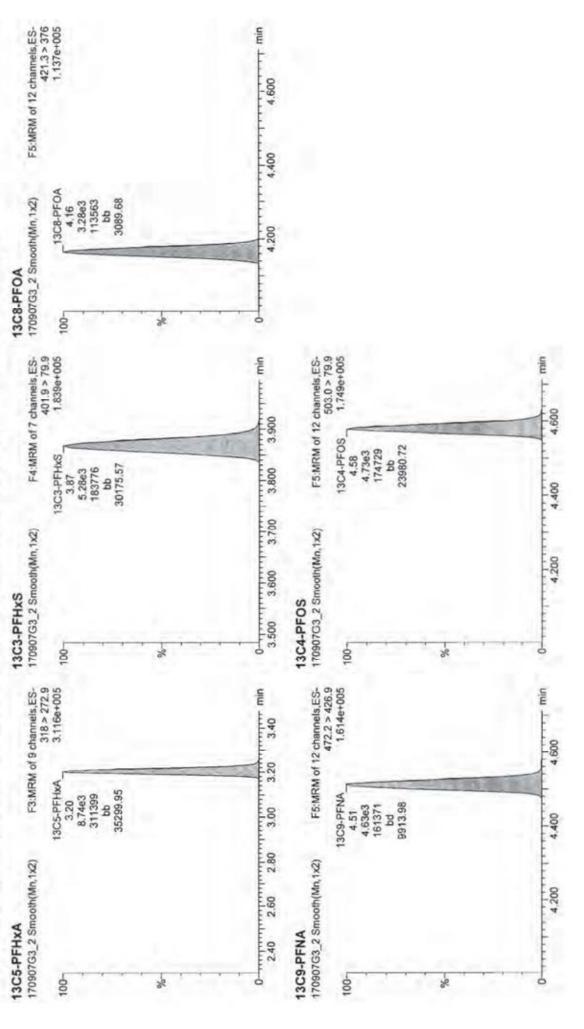
Dataset

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Friday, September 08, 2017 16:53:52 Pacific Daylight Time Friday, September 08, 2017 16:53:57 Pacific Daylight Time Last Altered: Printed:

Name: 170907G3_2, Date: 07-Sep-2017, Time: 14:22:47, ID: ST170907G3-1 PFC CS0 1710712, Description: PFC CS0 1710712 A





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MassLynx 4.1 SCN815 Quantify Sample Summary Report Vista Analytical Laboratory Q1

Page 1 of 1

U:\G1.PRO\Results\2017\170907G4\170907G4-2.qld Dataset:

Friday, September 08, 2017 08:32:23 Pacific Daylight Time Friday, September 08, 2017 08:32:50 Pacific Daylight Time Last Altered: Printed:

Method: Unititled 12 Jul 2017 13:38:17 Calibration: U:\G1.PRO\CurveDB\C18_VAL-PFC_Q1_9-5-17_A_2Trans.cdb 06 Sep 2017 12:51:47

Name: 170907G4_2, Date: 07-Sep-2017, Time: 15:50:40, ID: ST170907G4-1 PFC CS3 1710720, Description: PFC CS3 1710720

Conc. %Red	7.01 70.1 70-130	9.30 93.0	9.68 96.8	9.81 98.1	.11 81.1	8.49 84.9	11.7 93.3 50-150	10.6 84.6	10.5 84.1	8.84 70.7	10.9 87.1	13.2 105.4	12.5 100.0	12.5 100.0	12.5 100.0	12.5 100.0	
Co	7.	6	6	o,	60	89	•	10	10	80	1	7	+	7	1	1	
RT	2.80	3.73	3.87	4.17	4.51	4.58	2.80	3.73	3.87	4.17	4.51	4.58	3.21	3.87	4.16	4.51	
WEVOI	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000	
RRF							0.323	0.575	0.489	3.278	0.929	0.989	1.000	1.000	1.000	1.000	
IS Resp	1.79e3	2.89e3	1.67e3	6.58e3	3.32e3	3.64e3	5.94e3	5,94e3	4.05e3	2.84e3	4.11e3	3.50e3	5.94e3	4.05e3	2.84e3	4.11e3	
Response	1.90e3	4.75e3	2.05e3	4.67e3	5.41e3	1.12e3	1.79e3	2.89e3	1.67e3	6.58e3	3.32e3	3.64e3	5.94e3	4.05e3	2.84e3	4,1163	
Trace	299.0 > 79.7	363 > 318.9	398.9 > 79.6	413.0 > 368.7	463.0 > 418.8	499.0 > 79.9	302.0 > 98.8	367.2 > 321.8	403 > 102.6	414.9 > 369.7	468.2 > 422.9	6.67 < 0.703	318>272.9	401.9 > 79.9	421.3 > 376	472.2 > 426.9	The second secon
# Name	3 PFBS	5 PFHpA	6 PFHxS	7 PFOA	8 PFNA	9 PFOS	12 13C3-PFBS	15 13C4-PFHpA	16 1802-PFHxS	17 13C2-PFOA	18 13C5-PFNA	20 13C8-PFOS	22 13C5-PFHxA	23 13C3-PFHxS	24 13C8-PFOA	25 13C9-PFNA	
100		2	0	4	2 00 000	9	1	80	O	10	11	12	13	14	15	16	The same of the sa

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MassLynx 4.1 SCN815 Quantify Compound Summary Report Vista Analytical Laboratory VG-11

Untitled Dataset: Friday, September 08, 2017 08:38:07 Pacific Daylight Time Friday, September 08, 2017 08:38:29 Pacific Daylight Time Last Altered: Printed:

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Compound name: PFBA

To the same	Name	Of	A	Acq.Date	Acq Time	
1	170907G4_1	IPA	0	07-Sep-17	15:38:09	
2	170907G4_2	ST170907G4-1 PFC CS3 17I0720	0	07-Sep-17	15:50:40	
3	170907G4_3	IPA	0	07-Sep-17	16:03:10	
4	170907G4_4	◆ B710006-BS1 OPR 0,125	0	07-Sep-17	16:15:58	
9	170907G4_5	B710013-BS1 OPR 1	0	07-Sep-17	16:28:33	
9	170907G4_6	B710020-BS1 OPR 0.125	0	07-Sep-17	16:41:09	
1	170907G4 7	IPA	0	07-Sep-17	16:53:42	
8	170907G4_8	B P 10006-BLK1 Method Blank 0.125		07-Sep-17	17:06:16	
6	170907G4_9	B710013-BLK1 Method Blank 1		07-Sep-17	17:18:49	
10	170907G4_10		0	07-Sep-17	17:31:22	
11	17090764_11	Ø 1701169-01 S08257d2 0.125	0	07-Sep-17	17:43:54	
12	17090764_12		0	07-Sep-17	17:56:23	
13	170907G4_13	1701055-09RE1 QUNST-04-SD01-0-1 1.23	Ī	07-Sep-17	18:08:56	
4	170907G4_14	B710013-MS1 Matrix Spike 1.19	0	07-Sep-17	18:21:31	
15	170907G4_15	B710013-MSD1 Matrix Spike Dup 1.24		07-Sep-17	18:34:03	
16	17090764_16			07-Sep-17	18:46:36	
17	170907G4_17	1701190-01 OF-IDW-AQ01-090117 0.125		07-Sep-17	18:59:13	
18	17090764_18	1701190-02 OF-IDW-AQ02-090117 0.125		07-Sep-17	19:11:45	
19	17090764_19	1701191-01 STWRT-FB-KED-083017 0.125	Ī	07-Sep-17	19:24:18	
20	17090764_20	1701192-01 Source Water 0.125	0	07-Sep-17	19:36:48	
21	17090764_21	IPA	0	07-Sep-17	19:49:21	
22	170907G4_22	ST170907G4-2 PFC CS3 1710720	0	07-Sep-17	20:01:57	
23	17090764_23	I IPA	0	07-Sep-17	20:14:26	

TIP 418117 (1) Injections not used. Page 71 of 185

			ION Ratio	Concentration	Name	Date	I-Cal	Integrations	NA
Calibration ID:	Calibration ID: ST 1709 0764-1	HØ)	2-	Þ	7	7	7	Ы	0
Calibration ID:	7 - 7	L(M)H	<u>></u>	7	D	D	7	7	Ð
Calibration ID:		LMH							
Calibration ID:		LMH							
Calibration ID:		LMH							
Calibration ID:		LMH							
Calibration ID:		LMH							
Calibration ID:		LMH							
Calibration ID:		LMH							
Calibration ID:		LMH							
						Full Ma	Full Mass Cal. Date:	115/1 4/15/1	+

Run Log Present:

Reviewed By: 0M 9 WIT

Comments:
L6_2TYBNS

Wolken & C 5 192

2.65

2.60

2.55

2.50

170907G4 2

1001

13C3-PFBS

170907G4_2

Page 1 of 6

MassLynx 4.1 SCN815

Vista Analytical Laboratory Q1

Last Altered:

Printed:

Dataset

Total PFBS

170907G4_2

00 %

Quantify Sample Report

2.65

2.80

2.55

2.50

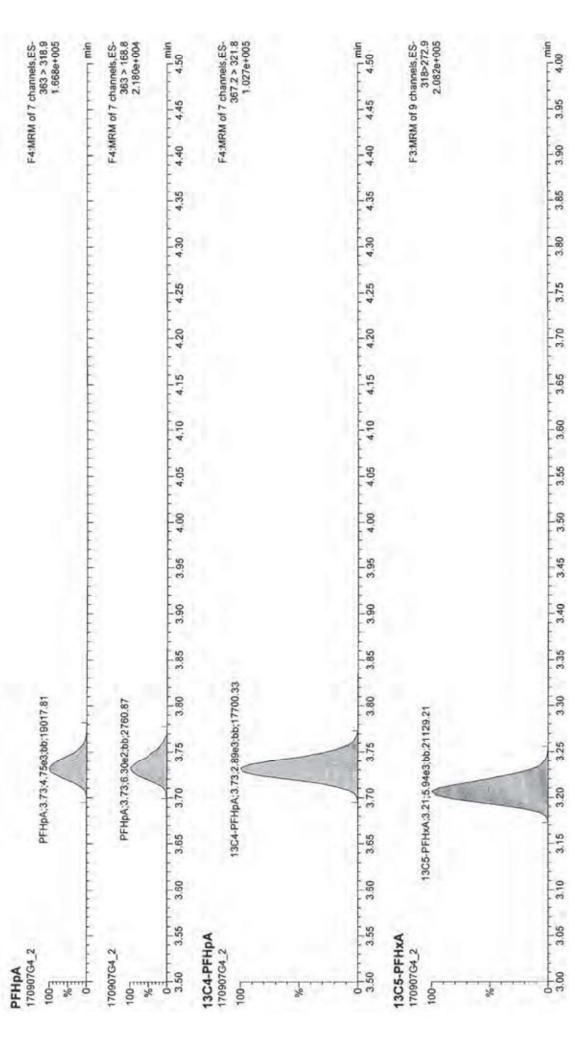
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Quantify Sample Report Vista Analytical Laboratory Q1

U:\G1.PRO\Results\2017\170907G4\170907G4-2.qld Dataset.

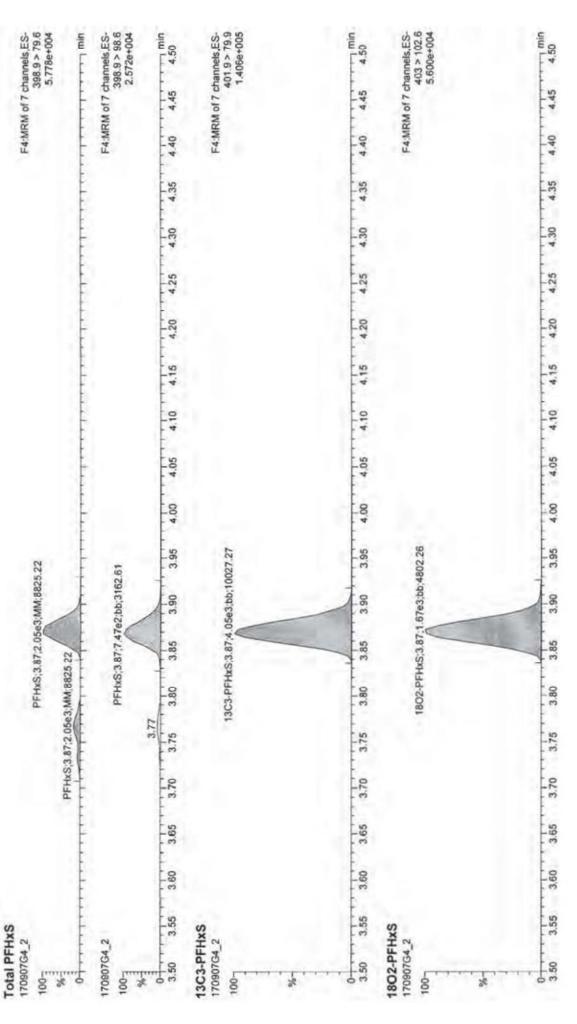
Friday, September 08, 2017 08:32:23 Pacific Daylight Time Friday, September 08, 2017 08:33:00 Pacific Daylight Time Last Altered:

Printed:



Dataset: U:\G1.PRO\Results\2017\170907G4\170907G4-2.qld

Last Altered: Friday, September 08, 2017 08:32:23 Pacific Daylight Time Printed: Friday, September 08, 2017 08:33:00 Pacific Daylight Time

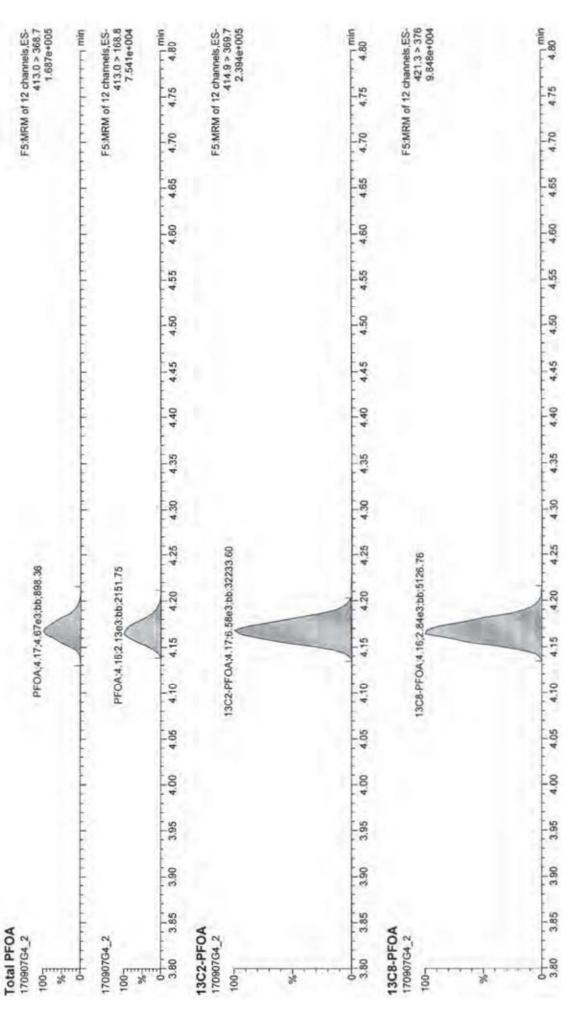


MassLynx 4.1 SCN815

Quantify Sample Report Vista Analytical Laboratory Q1 U:\G1.PRO\Results\2017\170907G4\170907G4-2.qld

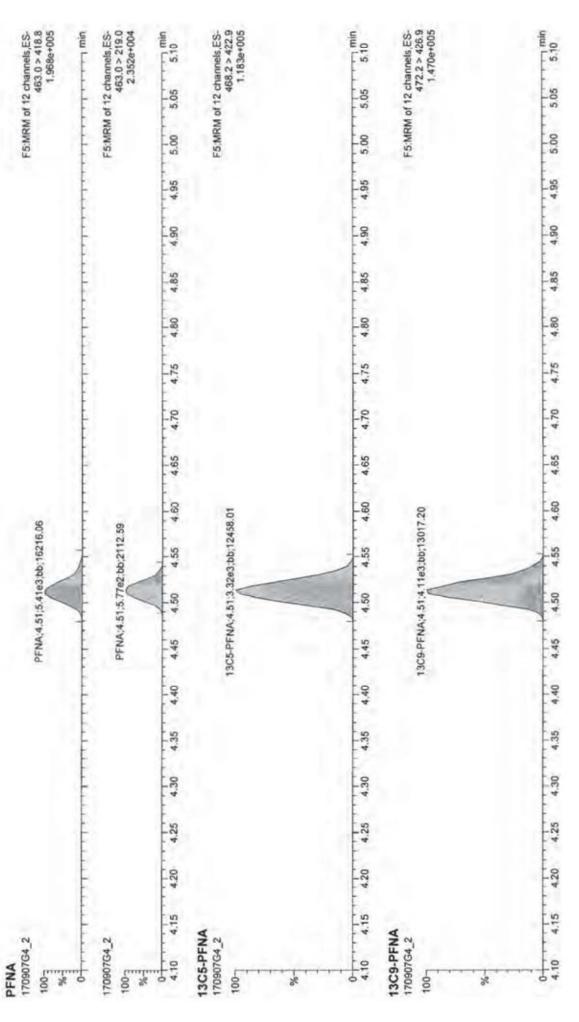
Dataset

Last Altered: Friday, September 08, 2017 08:32:23 Pacific Daylight Time Printed: Friday, September 08, 2017 08:33:00 Pacific Daylight Time



Dataset: U:\G1.PRO\Results\2017\170907G4\170907G4-2.qld

Last Altered: Friday, September 08, 2017 08:32:23 Pacific Daylight Time Printed: Friday, September 08, 2017 08:33:00 Pacific Daylight Time

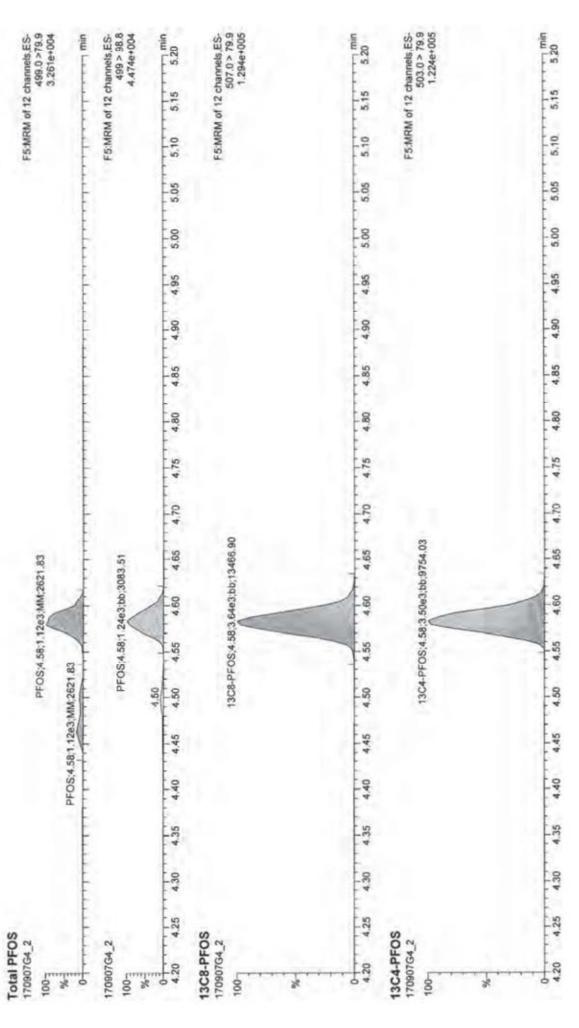


MassLynx 4.1 SCN815

Quantify Sample Report Vista Analytical Laboratory Q1 U:\G1.PRO\Results\2017\170907G4\170907G4-2.qld

Dataset

Last Altered: Friday, September 08, 2017 08:32:23 Pacific Daylight Time Printed: Friday, September 08, 2017 08:33:00 Pacific Daylight Time



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Quantify Sample Summary Report

MassLynx 4.1 SCN815

Vista Analytical Laboratory Q1

U:\G1.PRO\Results\2017\170907G4\170907G4-22.qld Dataset

Last Altered: Printed:

Friday, September 08, 2017 08:34:16 Pacific Daylight Time Friday, September 08, 2017 08:36:03 Pacific Daylight Time

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Name: 170907G4_22, Date: 07-Sep-2017, Time: 20:01:57, ID: ST170907G4-2 PFC CS3 1710720, Description: PFC CS3 1710720

	30-130					_	99-09					>					
%Rec	73.2 7	103.9	6.06	95.7	7.77	91.7	68.6	72.6	87.4	96.6	0.06	101.9	100.0	100.0	100.0	100.0	100.0
Conc	7.32	10.4	60.6	9.57	77.7	9.17	8.58	9.07	10.9	12.1	11.2	12.7	12,5	12.5	12.5	12.5	12.5
RI	2.81	3.73	3.87	4,17	4.52	4.59	2.81	3.73	3.87	4.17	4.52	4.59	3,21	3.87	4.17	4.52	4.59
MENOI	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000	1.000	1.000	1.000	1.000	1.000
RRF							0.323	0.575	0.489	3.278	0.929	0.989	1.000	1.000	1.000	1.000	1.000
IS Resp	2.05e3	3.86e3	2.02e3	1,2864	5.60e3	4.7763	9.26e3	9.2663	4.73e3	4.04e3	6.71e3	4.73e3	9.26e3	4.73e3	4.04e3	6.71e3	4.73e3
Response	2.27e3	7.10e3	2.34e3	8.88e3	8.74e3	1.58e3	2.05e3	3.86e3	2.02e3	1.28e4	5.60e3	4.77e3	9.26e3	4.73e3	4.04e3	6.71e3	4.73e3
Trace	299.0 > 79.7	363 > 318.9	398.9 > 79.6	413.0 > 368.7	463.0 > 418.8	499.0 > 79.9	302.0 > 98.8	367.2 > 321.8	403 > 102.6	414.9 > 369.7	468.2 > 422.9	507.0 > 79.9	318>272.9	401.9 > 79.9	421.3 > 376	472.2 > 426.9	503.0 > 79.9
# Name	3 PFBS	5 PFHpA	6 PFHXS	7 PFOA	8 PFNA	9 PFOS	12 13C3-PFBS	15 13C4-PFHpA	16 1802-PFHxS	17 13C2-PFOA	18 13C5-PFNA	20 13C8-PFOS	22 13C5-PFHXA	23 13C3-PFHxS	24 13C8-PFOA	25 13C9-PFNA	26 13C4-PFOS
W. C.	T.	2	3	4	2	9	1	10	6	10	11	12	13	14	15	16	17

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Untitled Dataset: Friday, September 08, 2017 08:38:07 Pacific Daylight Time Friday, September 08, 2017 08:38:29 Pacific Daylight Time Last Altered: Printed:

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Compound name: PFBA

Name		いる。	יימל יחפום	200
170907G4_1		IPA	07-Sep-17	15:38:09
170907G4_2		ST170907G4-1 PFC CS3 1710720	07-Sep-17	15:50:40
170907G4_3		IPA	07-Sep-17	16:03:10
170907G4_4	9	B710006-BS1 OPR 0.125	07-Sep-17	16:15:58
170907G4_5		B710013-BS1 OPR 1	07-Sep-17	16:28:33
170907G4_6		B710020-BS1 OPR 0.125	07-Sep-17	16:41:09
170907G4_7	-	IPA	07-Sep-17	16:53:42
170907G4_8	0	B710006-BLK1 Method Blank 0.125	07-Sep-17	17:06:16
170907G4_9		B710013-BLK1 Method Blank 1	07-Sep-17	17:18:49
170907G4_10		B710020-BLK1 Method Blank 0.125	07-Sep-17	17:31:22
170907G4_11		Ø 1701169-01 S08257d2 0.125	07-Sep-17	17:43:54
170907G4_12		1701170-01 S08257C2 0.125	07-Sep-17	17:56:23
170907G4_13	_	1701055-09RE1 QUNST-04-SD01-0-1 1,23	07-Sep-17	18:08:56
170907G4_14	_	B710013-MS1 Matrix Spike 1.19	07-Sep-17	18:21:31
17090764_15		B710013-MSD1 Matrix Spike Dup 1.24	07-Sep-17	18:34:03
17090764_16		B710013-DUP1 Duplicate 1.24	07-Sep-17	18:46:36
170907G4_17		1701190-01 OF-IDW-AQ01-090117 0:125	07-Sep-17	18:59:13
17090754 18	_	1701190-02 OF-IDW-AQ02-090117 0.125	07-Sep-17	19:11:45
170907G4_19		1701191-01 STWRT-FB-KED-083017 0.125	07-Sep-17	19:24:18
17090764_20		1701192-01 Source Water 0.125	07-Sep-17	19:36:48
17090764_21		IPA	07-Sep-17	19:49:21
170907G4_22		ST170907G4-2 PFC CS3 1710720	07-Sep-17	20:01:57
17090764_23	_	IPA	07-Sep-17	20:14:26

@ Injections not used. LA 918117

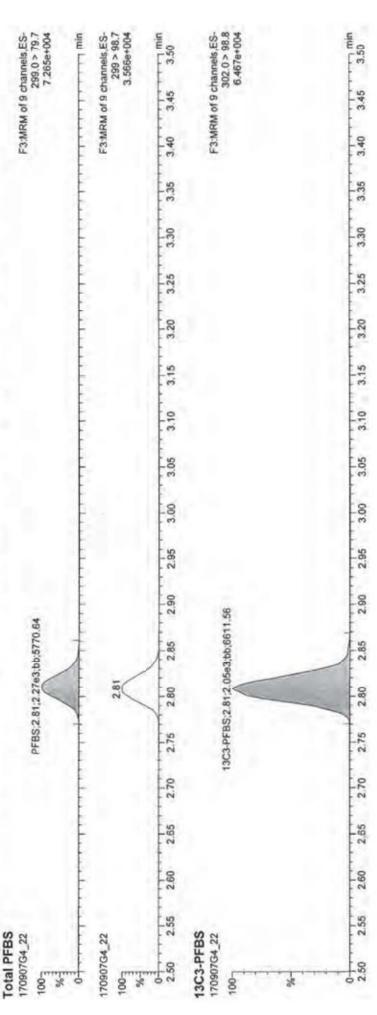
MassLynx 4.1 SCN815 Vista Analytical Laboratory Q1 Quantify Sample Report

U:\G1.PRO\Results\2017\170907G4\170907G4-22.qld Dataset:

Friday, September 08, 2017 08:34:16 Pacific Daylight Time Friday, September 08, 2017 08:34:42 Pacific Daylight Time Last Altered. Printed:

Method: U:\G1.pro\MethDB\PFAS_14or16_2trans_0712.mdb 12 Jul 2017 13:38:17 Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_9-5-17_A_2Trans.cdb 06 Sep 2017 12:51:47

D: ST170907G4-2 PFC CS3 1710720, Description: PFC CS3 1710720, Name: 170907G4_22, Date: 07-Sep-2017, Time: 20:01:57, Instrument: , Lab: , User:



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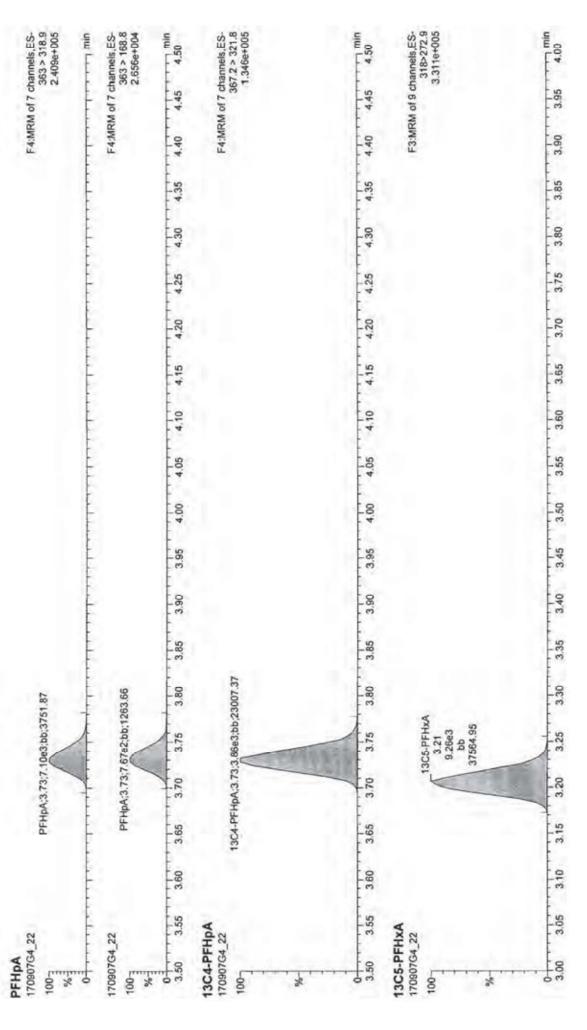
MassLynx 4.1 SCN815

Quantify Sample Report Vista Analytical Laboratory Q1

U:\G1.PRO\Results\2017\170907G4\170907G4-22.qld Dataset:

Friday, September 08, 2017 08:34:16 Pacific Daylight Time Friday, September 08, 2017 08:34:42 Pacific Daylight Time Last Altered: Printed:

D: ST170907G4-2 PFC CS3 1710720, Description: PFC CS3 1710720, Name: 170907G4_22, Date: 07-Sep-2017, Time: 20:01:57, Instrument: , Lab: , User:

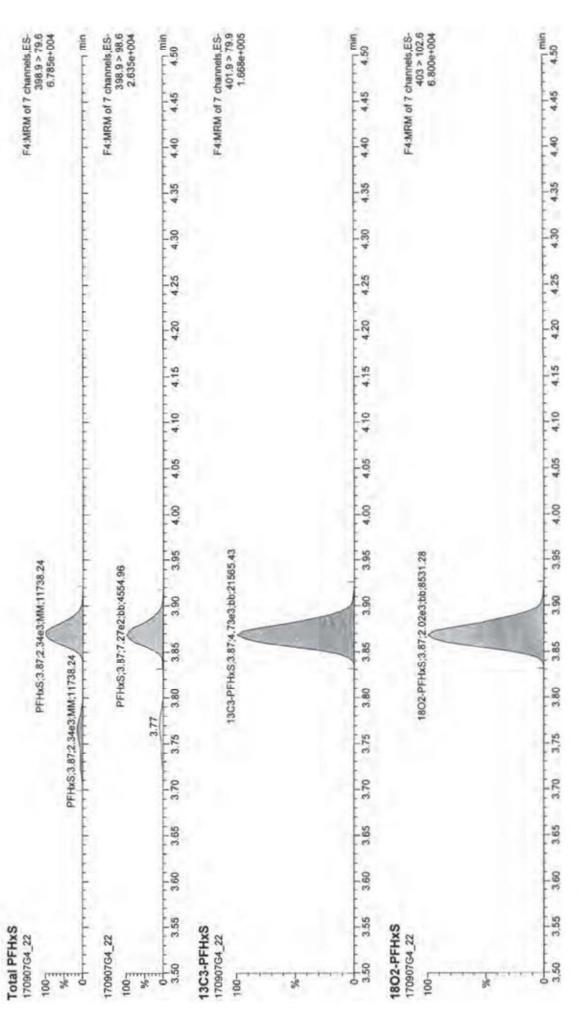


MassLynx 4.1 SCN815

Quantify Sample Report Vista Analytical Laboratory Q1 Dataset: U:\G1.PRO\Results\2017\170907G4\170907G4-22.qld

Last Altered: Friday, September 08, 2017 08:34:16 Pacific Daylight Time Printed: Friday, September 08, 2017 08:34:42 Pacific Daylight Time

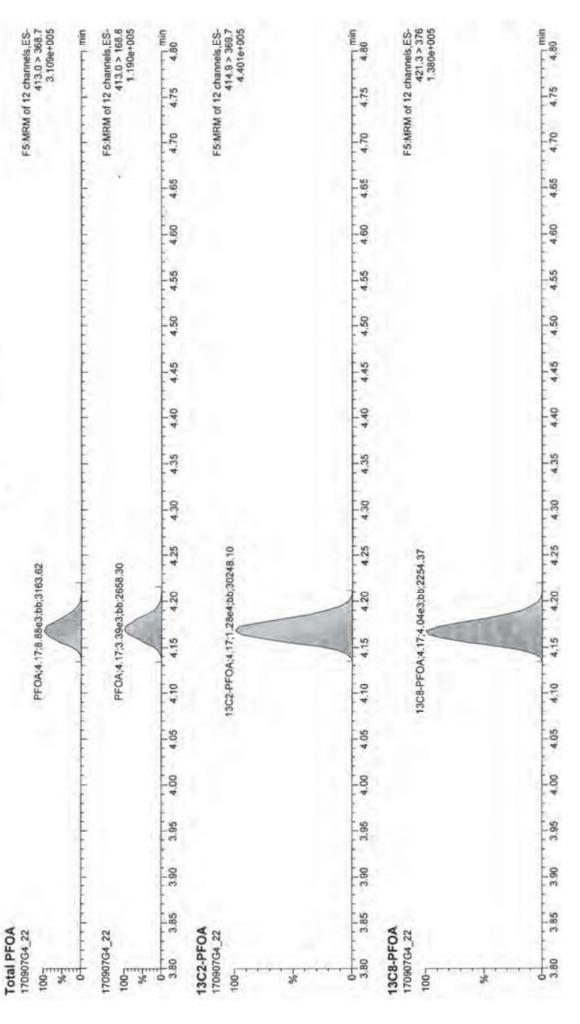
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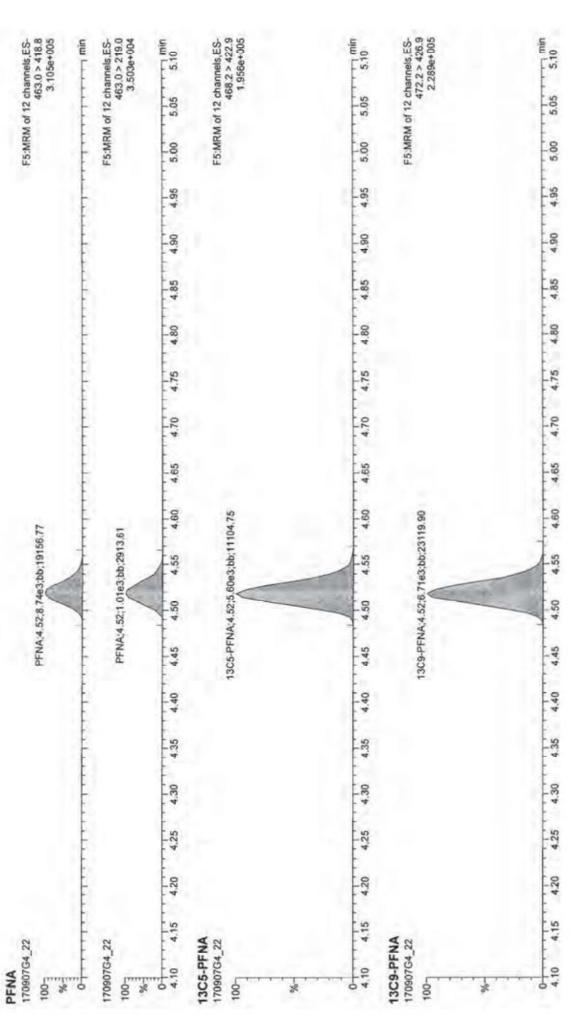
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Dataset: U:\G1.PRO\Results\2017\170907G4\170907G4-22.qid

Last Altered: Friday, September 08, 2017 08:34:16 Pacific Daylight Time Printed: Friday, September 08, 2017 08:34:42 Pacific Daylight Time

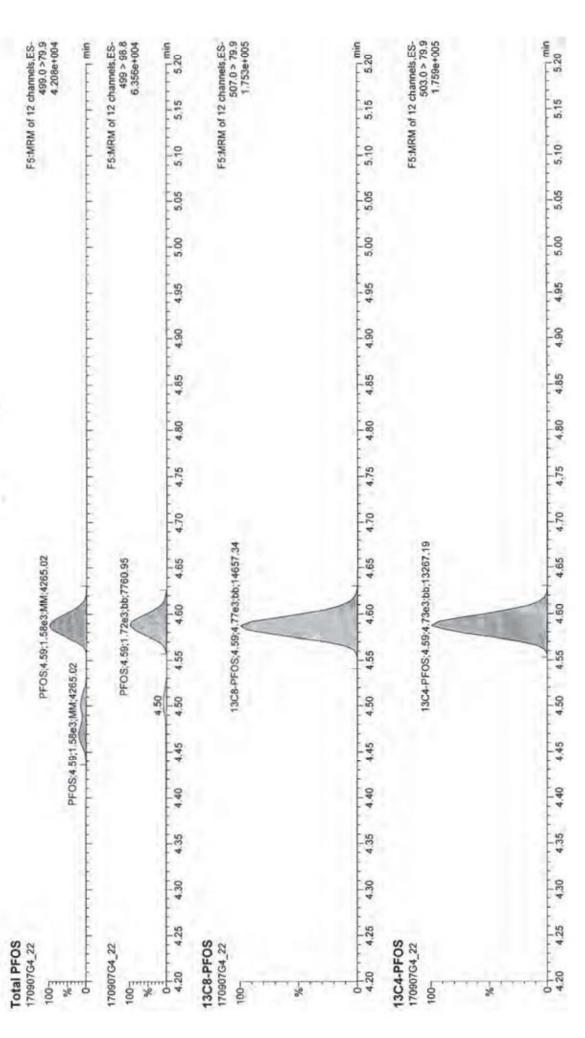
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Last Altered: Friday, September 08, 2017 08:34:16 Pacific Daylight Time Printed: Friday, September 08, 2017 08:34:42 Pacific Daylight Time

ID: ST170907G4-2 PFC CS3 1710720, Description: PFC CS3 1710720, Name: 170907G4_22. Date: 07-Sep-2017, Time: 20:01:57, Instrument: , Lab: , User:

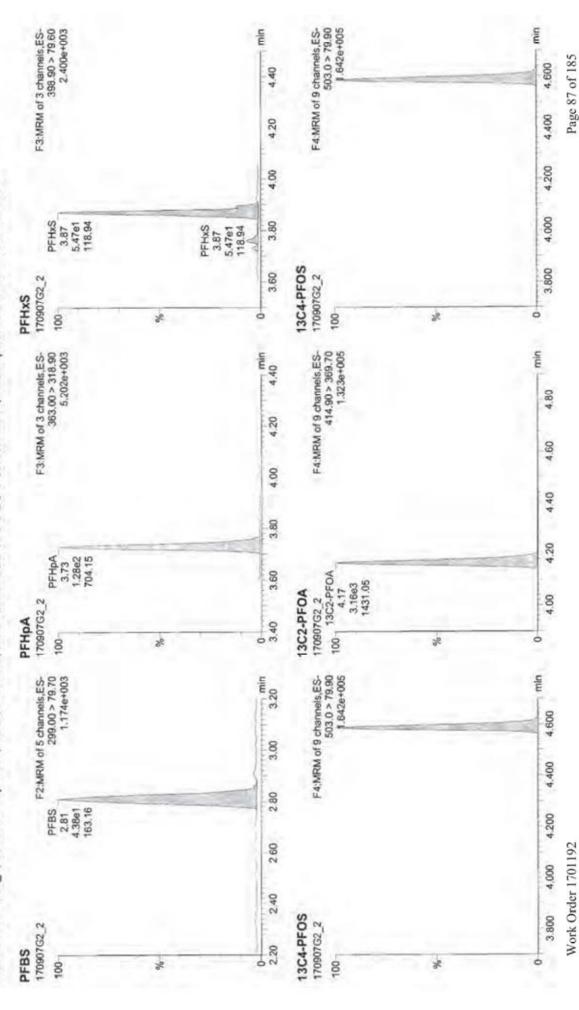


Dataset: U:\G1.PRO\Results\2017\170907G2\170907G2-CRV.qld

Last Altered: Friday, September 08, 2017 10:45:50 AM Pacific Daylight Time Printed: Friday, September 08, 2017 11:07:57 AM Pacific Daylight Time

Calibration: U:\G1.PRO\CurveDB\C18_537_Q1_09-07-17_L6.cdb 08 Sep 2017 10:45:50 Method: C:\Projects\Q1.PRO\MethDB\PFAS_L6_DW_0905.mdb 05 Sep 2017 09:31:57

Name: 170907G2_2, Date: 07-Sep-2017, Time: 20:39:46, ID: ST170907G2-1 PFC CS-3 537 17H2814, Description: PFC CS-3 537 17H2814



INITIAL CALIBRATION (ICAL)

INCLUDING ASSOCIATED

INITIAL CALIBRATION VERIFICATION (ICV) AND INSTRUMENT BLANK (IB)

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MassLynx 4.1 SCN815 Quantify Compound Summary Report

Vista Analytical Laboratory

U:\G1.PRO\Results\2017\170905G4\170905G4-CRV.qld Dataset: Wednesday, September 06, 2017 12:51:47 Pacific Daylight Time Wednesday, September 06, 2017 14:01:54 Pacific Daylight Time Last Altered: Printed

Method: U:\G1.pro\MethDB\PFAS_14or16_2trans_0712.mdb 12 Jul 2017 13:38:17 Calibration: U:\G1.PRO\CurveDB\C18_VAL-PFC_Q1_9-5-17_A_2Trans.cdb 06 Sep 2017 12:51:47

Compound name: PFBA

Correlation coefficient: r = 0.999659, r² = 0.999317

Calibration curve: 0.738358 * x + 0.0295764

Response type: Internal Std (Ref 11), Area* (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

-	# Name	Std. Conc.	RT	Resp	S Resp	Conc.	%Dev	RRF
	1 170905G4 2	0.250	1.63	2.76e2	1.67e4	0.240	4.0	0.827
	2 17090564_3	0.500	1.63	4.60e2	1.65e4	0.432	-13.7	0.697
\$10 345	3 17090564_4	1.00	1.63	1.03e3	1.56e4	1.07	7.2	0.821
	4 170905G4_5	2.00	1.64	2.10e3	1,6164	2.17	8.3	0.814
100	5 170905G4_6	5.00	1.63	4.87e3	1,61e4	5.08	1.6	0.756
	6 170905G4_7	10.0	1.63	1.0164	1,7264	9.92	-0.8	0.736
	7 170905G4_8	50.0	1.63	4.96e4	1,63e4	51.6	3.1	0.762
	8 170905G4 9	100	1.62	9.10e4	1.5764	98.3	-1.7	0.726

Compound name: PFPeA

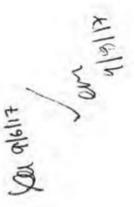
Correlation coefficient: r = 0.999677, r^2 = 0.999354

Calibration curve: 1.1555 * x + -0.0139097

Response type: Internal Std (Ref 13), Area* (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

- NO. 189	# Name	Std. Conc.	RT	Resp	(S Resp	Cor	IC	%Dev	RRF
1	1 170905G4_2	0.250	2.58	1.15e2	5,64e3	0.2	32	-7.1	1.02
2	2 170905G4_3	0.500	2.58	2.98e2	5.14e3	0.640	90	27.9	1.45
3	3 170905G4_4	1.00	2.58	4.39e2	5.34e3	0.90	10	6.6-	1.03
4	4 170905G4_5	2.00	2.58	1.03e3	5.66e3	1.9	1	-1.3	1.13
9	5 170905G4_6	5.00	2.58	2.39e3	5.68e3	4.5	1	-8.7	1.05
9	6 170905G4_7	10.0	2.58	4.81e3	5.26e3	9.6	0	-1.0	1.14
1	7 170905G4_8	80.0	2.58	2.26e4	4.93e3	49	2	6.0-	1.14
80	8 170905G4_9	100	2.58	4.05e4	4.3463	10		1.0	1.17



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MassLynx 4.1 SCN815 Quantify Compound Summary Report

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Vista Analytical Laboratory

U:\G1.PRO\Results\2017\170905G4\170905G4-CRV.qld Dataset

Wednesday, September 06, 2017 12:51:47 Pacific Daylight Time Wednesday, September 06, 2017 14:01:54 Pacific Daylight Time Last Altered: Printed:

Compound name: PFBS

Correlation coefficient: r = 0.999298, r^2 = 0.998597

Calibration curve: 1.89462 * x + -0.022234

Response type: Internal Std (Ref 12), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

Resp	RT Resp
7999°	
3.40e2	
3.03e2	
.33e3	
3.01e3	
5.92e3	
2.67e4	
1 82e4	

Compound name: PFHxA

Correlation coefficient: r = 0.999152, r^2 = 0.998305 Calibration curve: 1.60648 * x + 0.0512237

Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area) Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Std Conc	RT	Resp	IS Resp	Conc	%Dev	RRF
1	1 170905G4_2	0.250	3.25	1.75e2	5.20e3	0.230	-8.1	1.68
2	2 170905G4_3	0.500	3.25	4.01e2	5.46e3	0.540	8.0	1.84
0	3 17090564 4	1.00	3.24	6.78e2	5.28e3	996'0	-3.4	1.60
4	4 170905G4_5	2.00	3.24	1.43e3	5.18e3	2,11	5.7	1.72
9	5 170905G4_6	5.00	3.25	3.26e3	5.29e3	4.76	8.4	1.54
9	6 17090564_7	10.0	3.25	6.47e3	5.05e3	9.94	9.0-	1.60
2	7 17090564_8	50.0	3.25	3.18e4	4.67e3	52.9	5.9	1.70
8	8 170905G4_9	100	3.25	5.39e4	4.31e3	97.3	-2.7	1.56

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MassLynx 4.1 SCN815 Quantify Compound Summary Report

Vista Analytical Laboratory

U:\G1.PRO\Results\2017\170905G4\170905G4-CRV.qld Dataset Wednesday, September 06, 2017 12:51:47 Pacific Daylight Time Wednesday, September 06, 2017 14:01:54 Pacific Daylight Time Last Altered: Printed:

Compound name: PFHpA

Correlation coefficient: r = 0.998923, r^2 = 0.997847

Calibration curve: 2.21082 * x + 0.0226464

Response type: Internal Std (Ref 15), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

# Name	Std Conc	RT	Reso	IS Resp	Conc	%Dev	RRF
Control of the Same		STATE OF THE PERSON NAMED IN		10000			September 1
1 170905G4_2	0.250	3.77	3.80e2	7.88e3	0.262	4.9	2.41
2 17090564 3	0.500	3.77	7.29e2	7.67e3	0.527	5.4	2.37
3 170905G4_4	1.00	3,77	1.24e3	7.41e3	0.937	-6.3	2.09
4 170905G4_5	2.00	3.76	2.81e3	7.57e3	2.08	4.2	2.32
5 170905G4_6	5.00	3.77	6.00e3	7.03e3	4.82	-3.7	2.13
6 170905G4 7	10.0	3.77	1.28e4	7.36e3	9.84	-1.6	2.18
7 170905G4_8	20.0	3.77	5.63e4	6.80e3	46.8	-6.4	2.07
8 170905G4 9	100	377	1.0205	5 5703	103	3.5	2.29

Compound name: PFHxS

Coefficient of Determination: R² = 0.999022

Calibration curve: 0.00390989 * x^2 + 1.54175 * x + 0.115221
Response type: Internal Std (Ref 16), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

To the second	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	%Dev	RRF
The second	1 170905G4_2	0.250	3.90	1.83e2	4.36e3	0.266	6.4	2.10
2	2 170905G4_3	0.500	3.90	3.01e2	4.53e3	0.463	-7.4	1.66
3	3 17090564_4	1.00	3.90	6.1262	4.66e3	0.988	-1.2	1.64
4	4 170905G4_5	2.00	3.90	1.07e3	4.38e3	1.90	-5.2	1.53
10	5 170905G4_6	5.00	3.90	Z.80e3	4.51e3	4.90	-2.0	1.55
9	6 170905G4_7	10.0	3.90	6.19e3	4.34e3	11.2	11.6	1.78
7	7 170905G4_8	90.09	3.90	2.61e4	3.86e3	48.6	-2.8	1.69
8	8 170905G4_9	100	3.90	5.3164	3.41e3	100	0.5	1.95

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MassLynx 4.1 SCN815 Quantify Compound Summary Report Vista Analytical Laboratory U.\G1.PRO\Results\2017\170905G4\170905G4-CRV.qld Dataset: Wednesday, September 06, 2017 12:51:47 Pacific Daylight Time Wednesday, September 06, 2017 14:01:54 Pacific Daylight Time Last Altered: Printed:

Compound name: PFOA

Correlation coefficient: r = 0.999428, r^2 = 0.998857

Calibration curve: 0.877405 * x + 0.268472

Response type: Internal Std (Ref 17), Area * (IS Conc. / IS Area) Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

S 52 306	# Name	Std. Conc	RT	Resp	(S Resp	Conc.	%Dev	RRF
	1 170905G4_2	0.250	4.20	6.31e2	1,5864	0.261	4.4	1.99
	2 17090564_3	0.500	4.19	7.76e2	1.56e4	0.403	-19.4	1.24
	3 17090564_4	1.00	4.19	1,54e3	1.51e4	1,14	14.3	1.27
	4 170905G4_5	2.00	4.19	2.78e3	1.59e4	2.18	9.1	1.09
	5 170905G4_6	5.00	4.20	5.58e3	1.48e4	5.06	17	0.941
	6 170905G4_7	10.0	4.19	1.02e4	1.54e4	9.07	-9.3	0.823
	7 170905G4_8	50.0	4.20	5.09e4	1,4764	49.1	-1.8	0.867
	8 170905G4 9	100	4.20	9.80e4	1.3764	102	1.5	0.894

Compound name: PFNA

Coefficient of Determination: R^2 = 0.999700 Calibration curve: 0.000156123 * x^2 + 2.52033 * x + -0.101685

Response type: Internal Std (Ref 18), Area * (IS Conc. / IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

# Name	Std. Conc.	RT	Resp	IS Resp	Conc.	%Dev
1 170905G4_2	0.250	4.55	2.49e2	5.92e3	0.249	9.0-
2 170905G4_3	0.500	4.54	5.65e2	6,49e3	0.472	-5.0

THE REAL PROPERTY.	# Name	Std. Conc	RT		IS Resp	Conc.	%Dev	RRF
1	1 170905G4_2	0.250	4.55		5.92e3	0.249	9.0-	2.10
7	2 17090564_3	0.500	4.54	5.65e2	6.49e3	0.472	-5.6	2.18
er	3 17090564_4	1.00	4.54		5.12e3	1.08	8.1	2.62
Y	4 170905G4_5	2.00	4.54		5.20e3	2.03	1,3	2.50
49	5 17090564_6	2.00	4.54		5.50e3	4.66	-6.9	2.33
9	6 170905G4 7	10.0	4.54		4.96e3	10.4	3.9	2.61
7	7 17090564_8	50.0	4.54		5.09e3	49.8	-0.4	2.52
80	8 170905G4_9	100	4.54		4.86e3	100	0.1	2.54

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Quantify Compound Summary Report MassLynx 4.1 SCN815

Vista Analytical Laboratory

Dataset: U:\G1.PRO\Results\2017\170905G4\170905G4-CRV.qld

Last Altered: Wednesday, September 06, 2017 12:51:47 Pacific Daylight Time Printed: Wednesday, September 06, 2017 14:01:54 Pacific Daylight Time

Compound name: PFOS

Correlation coefficient: r = 0.999289, r^2 = 0.998579

Calibration curve: 0.453717 * x + -0.00549883

Response type: Internal Std (Ref 20), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

Minne	Old Cons	TO.	Owner	IO Design	- Constitution	2000	200
	Sid. Conc	3	Kesp	O Mesp	Conc	76Dev	KRF
	0.250	4.61	6.53e1	6.22e3	0.301	20.6	0.525
	0.500	4.61	1.34e2	7.11e3	0.532	6.4	0.472
	1.00	4.61	2.14e2	6.58e3	0.907	-9.3	0.406
	2.00	4.61	4.66e2	7.04e3	1.84	-8.2	0.414
	5.00	4.61	1.25e3	6.73e3	5.12	2.3	0.463
	10.0	4.61	2.22e3	7.05e3	8.69	-13.1	0.394
	50.0	4.61	1.20e4	6,63e3	50.0	-0.1	0.453
	100	4.61	2,53e4	6.88e3	101	1.4	0.460

Compound name: PFDA

Coefficient of Determination: R^A2 = 0.998972

Calibration curve: -0.000198075 * x^2 + 0.199553 * x + 0.00733412

Response type: Internal Std (Ref 19), Area * (IS Conc. / IS Area) Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

1000	# Name	Std. Conc	RI	Resp	IS Resp	Conc	%Dev	RRF
700-1	1 170905G4_2	0.250	4.83	7.39e1	1.45e4	0.283	13.4	0.255
2	2 170905G4_3	0.500	4.83	1.18e2	1.47e4	0.467	-6.6	0.201
3	3 170905G4_4	1.00	4.83	2.54e2	1.4764	1.05	5,0	0.217
4	4 170905G4_5	2.00	4,83	4.54e2	1.4064	1.99	-0.3	0.202
25	5 170905G4_6	5.00	4.83	1.03e3	1,4164	4.56	8.8	0.183
9	6 170905G4_7	10.0	4.83	2.16e3	1,4464	9.45	-5.5	0.187
2	7 170905G4_8	90.0	4.83	1.1464	1.45e4	51.9	3.8	0.197
8	8 170905G4 9	100	4.83	2.15e4	1.51e4	0.66	-1.0	0.178

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MassLynx 4.1 SCN815 Quantify Compound Summary Report Vista Analytical Laboratory

U:\G1.PRO\Results\2017\170905G4\170905G4-CRV.qld Dataset: Wednesday, September 06, 2017 12:51:47 Pacific Daylight Time Wednesday, September 06, 2017 14:01:54 Pacific Daylight Time Last Altered:

Printed:

Compound name: 13C3-PFBA

Response Factor: 1.31138

RRF SD: 0.0275781, Relative SD: 2.10299

Response type: Internal Std (Ref 21), Area * (IS Conc. / IS Area) Curve type: RF

# Name	Std. Conc	RT	Resp	IS Resp	Conc.	%Dev	RRF
1 170905G4_2	12.5	1.63	1.67e4	1.26e4	12.6	1.0	1.32
2 170905G4_3	12.5	1.63	1.65e4	1.23e4	12.8	2.1	1.34
3 170905G4_4	12.5	1.62	1.56e4	1,23e4	12.2	-2.8	1.27
170905G4_5	12.5	1.63	1.61e4	1.22e4	12.6	7.0	1.32
5 170905G4_6	12.5	1.64	1.61e4	1.25e4	12.3	-1.6	1.29
3 170905G4_7	12.5	1.63	1.72e4	1.2864	12.8	2.5	1.34
7 170905G4_8	12.5	1.62	1.63e4	1,28e4	12.1	-2.8	1.27
3 170905G4 9	12.5	1.63	1.57e4	1.18e4	12.6	0.9	1.32

Compound name: 13C3-PFBS

Response Factor: 0.323019

RRF SD: 0.0161747, Relative SD: 5.00736

Response type: Internal Std (Ref 22), Area * (IS Conc. / IS Area) Curve type: RF

1	# Name	Std, Conc	RT	Resp	IS Resp	Cone.	%Dev	RRF
1	1 170905G4_2	12.5	2.87	4.15e3	1.31e4	12.3	-1.8	0.317
2	2 17090564_3	12.5	2.87	4.52e3	1.33e4	13.2	5.5	0.341
67	3 170905G4_4	12.5	2.87	4.29e3	1.30e4	12.8	2.1	0.330
4	4 170905G4_5	12.5	2.87	4.15e3	1.27e4	12.6	6.0	0.326
2	5 170905G4_6	12.5	2.87	4.05e3	1.27e4	12.3	-1.6	0.318
9	6 17090564_7	12.5	2.87	4.3183	1,2464	13,4	7.4	0.347
7	7 17090564_8	12.5	2.87	3.64e3	1.2264	11.6	-7.5	0.299
80	8 170905G4 9	12.5	2.87	3.10e3	1.01e4	11.9	4.9	0.307

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U:\G1.PRO\Results\2017\170905G4\170905G4-CRV.qid Dataset Wednesday, September 06, 2017 12:51:47 Pacific Daylight Time Wednesday, September 06, 2017 14:01:54 Pacific Daylight Time Last Altered: Printed:

Compound name: 13C3-PFPeA

RRF SD: 0.0204225, Relative SD: 4.83811 Response Factor: 0.422117

Response type: Internal Std (Ref 22), Area * (IS Conc. / IS Area)

Curve type: RF

# Nome	Ctd Cons	10	Daen	10 Dans	Contro	04. Down	300
# (Adillia	SIG. COM	N.	dean	dean o	CONC	AACO	LUN
1 170905G4_2	12.5	2.58	5.64e3	1.31e4	12.8	2.0	0.431
2 170905G4_3	12.5	2.58	5.14e3	1.33e4	11.5	-8.3	0.387
3 170905G4_4	12.5	2.58	5.34e3	1.30e4	12.2	-2.8	0.410
4 170905G4_5	12,5	2.58	5.66e3	1.27e4	13.2	5,4	0,445
5 170905G4_6	12.5	2.58	5.68e3	1.27e4	13.2	5.7	0.446
6 170905G4_7	12.5	2.58	5.28e3	1.24e4	12.5	0.3	0.423
7 170905G4_8	12.5	2.58	4.93e3	1.22e4	12.0	4.2	0.405
8 170905G4 9	12.5	2.58	4.34p3	1.01e4	12.7	4.0	0.430

Compound name: 13C2-PFHxA

Response Factor: 0.40666 RRF SD: 0.0127439, Relative SD: 3.1338

Response type: Internal Std (Ref 22), Area * (IS Conc. / IS Area) Curve type: RF

A COLUMN	# Name	Std Conn.	TO		IS Doen	CAMP	W.Dou	add
	A Manua	Sea. Conn.	1		dean ci	1000	Anne	NAV.
在 一日	1 170905G4_2	12.5	3.25		1.31e4	12.2	-2.3	0.397
2	2 170905G4_3	12.5	3.25	5,46e3	1.33e4	12.6	1.2	0.411
0	3 170905G4_4	12.5	3.25		1.30e4	12.5	-0.1	0.406
4	4 170905G4_5	12.5	3.24		1.2764	12.5	-0.1	0.406
9	5 170905G4_6	12.5	3.25		1.27e4	12.8	2.1	0.415
9	6 170905G4_7	12.5	3.25		1.2464	12.5	-0.1	0.406
7	7 17090564_8	12.5	3.25		1.22e4	11.8	-5.7	0.384
8	8 170905G4_9	12.5	3.25		1.01e4	13.1	5.0	0.427

U:\G1.PRO\Results\2017\170905G4\170905G4-CRV.qld Dataset: Wednesday, September 06, 2017 12:51:47 Pacific Daylight Time Wednesday, September 06, 2017 14:01:54 Pacific Daylight Time Last Altered: Printed:

Compound name: 13C4-PFHpA

Response Factor: 0.574694

RRF SD: 0.0199199, Relative SD: 3.46617

Response type: Internal Std (Ref 22), Area* (IS Conc. / IS Area) Curve type: RF

		The second second second		COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED STATE OF THE PERSON NAMED STATE OF THE PERSON NAMED STATE OF THE PERSON NAM			The state of the same	
10-4	# Name	Std. Conc	RT	Resp	IS Resp	Conc.	%Dev	RRF
	1 170905G4_2	12.5	3.77	7.88e3	1.31e4	13.1	4.7	0.602
1	2 17090564_3	12.5	3.77	7.67e3	1.33e4	12.6	9.0	0.578
	3 170905G4_4	12.5	3.77	7.41e3	1.30e4	12.4	-1.0	0.569
	4 17090564_5	12.5	3.76	7.57e3	1.27e4	12.9	3.4	0.594
15.7	5 170905G4_6	12.5	3.77	7.03e3	1.27e4	12.0	4.0	0.552
	6 170905G4_7	12.5	3.77	7.36e3	1.24e4	12.9	3.0	0.592
	7 170905G4_8	12.5	3.77	6.80e3	1.22e4	12.1	-2.8	0.559
THE REAL PROPERTY.	8 170905G4 9	12.5	377	5 5763	1.0164	12.0	-40	0.552

Compound name: 1802-PFHxS

Response Factor: 0.489447

RRF SD: 0.0229027, Relative SD: 4.67929

Response type: Internal Std (Ref 23), Area * (IS Conc. / IS Area) Curve type: RF

The second second second second	The second secon			Commence of the last of the la		-	1
# Name		RT	Resp	IS Resp	Conc.	%Dev	RRF
1 170905G4_2		3.90	4.36e3	9.79e3	11.4	-9.0	0.445
2 17090564_3	12.5	3.90	4.53e3	9.05e3	12.8	2.3	0.501
3 17090564 4		3.90	4.66e3	9.52e3	12.5	-0.1	0.489
4 17090564 5		3.90	4.38e3	9.07e3	12.3	4.1-	0.482
5 17090564_6		3.90	4.51e3	8.57e3	13,4	7.6	0.527
6 17090564_7		3.90	4.34e3	8.91e3	12.5	-0.4	0.488
7 17090564_8		3.90	3.86e3	7.72e3	12.8	2.3	0.501
8 170905G4 9		3.90	3.4163	7.06e3	12.3	-1.3	0.483

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U:\G1.PRO\Results\2017\170905G4\170905G4-CRV.qld Dataset Wednesday, September 06, 2017 12:51:47 Pacific Daylight Time Wednesday, September 06, 2017 14:01:54 Pacific Daylight Time Last Altered: Printed:

Compound name: 13C2-PFOA

Response Factor: 3.27813

RRF SD: 0.131273, Relative SD: 4.00451

Response type: Internal Std (Ref 24), Area * (IS Conc. / IS Area)

Curve type: RF

me	Std. Conc	RT	Resp	IS Resp	Conc.	%Dev	RRF
7090564_2	12.5	4.20	1.58e4	5.02e3	12.0	-3.8	3.16
170905G4_3	12.5	4.19	1.56e4	4.51e3	13.2	5.4	3.46
70905G4_4	12.5	4.19	1.5164	4.78e3	12.1	-3.4	3.17
7090564_5	12.5	4.19	1.59e4	5.09e3	11.9	8,4	3.12
70905G4_6	12.5	4.19	1,4864	4.36e3	12.9	3.6	3.40
70905G4_7	12.5	4.19	1.5484	4.79e3	12.3	-1.7	3.22
70905G4_8	12.5	4.20	1.4764	4.47e3	12.5	0.3	3.29
70905G4 9	12.5	4.19	1.3764	4.01e3	13.0	4.3	3.42

Compound name: 13C5-PFNA

Response Factor: 0.928876

RRF SD: 0.0786772, Relative SD: 8.47016 Response type: Internal Std (Ref 25), Area * (IS Conc. / IS Area) Curve type: RF

*	Name	Std. Conc	RT	Resn	IS Resp	Conc	%Dev	RRF
Y.		The state of the s	No. of Lot, House, etc.,	2000	dedica			
100	170905G4_2	12.5	4.54	5.92e3	6.21e3	12.8	2.6	0.953
N	17090564_3	12.5	4.54	6.45e3	5.99e3	14.6	16.8	1.09
6	17090564_4	12.5	4.54	5.12e3	5.35e3	12.9	3.0	0.956
4	4 170905G4_5	12.5	4.54	5.20e3	5.92e3	11.8	-5.3	0.879
40	170905G4_6	12.5	4.54	5.50e3	5.91e3	12.5	0.1	0.930
9	17090564_7	12.5	4.54	4.96e3	5.91e3	11.3	-8.7	0.839
7	170905G4_8	12.5	4.54	5.09e3	5.41e3	12.7	1.4	0.942
90)	170905G4 9	12.5	4.54	4.86e3	5.7463	11.4	-8.9	0.846

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Wednesday, September 06, 2017 12:51:47 Pacific Daylight Time Wednesday, September 06, 2017 14:01:54 Pacific Daylight Time Last Altered: Printed:

Compound name: 13C2-PFDA Response Factor: 2.50837

RRF SD: 0.112384, Relative SD: 4.48035

Response type: Internal Std (Ref 27), Area * (IS Conc. / IS Area) Curve type: RF

# Name	Std. Conc	RT	Resp	IS Resp	Conc	%Dev	RRF
The state of the s	Control of the contro		and the second	N. Colonial Property of the Colonial Property	Marie Confes	A STATE OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF T	TO STATE OF THE PERSON NAMED IN
1 170905G4 Z	12.5	4.83	1,45e4	5.53e3	13.0	4.3	2.61
2 170905G4_3	12.5	4.83	1.47e4	5.95e3	12.3	-1.8	2.46
3 170905G4_4	12.5	4.83	1,4764	5.87e3	12.5	-0.3	2.50
4 170905G4 5	12.5	4.83	1.40e4	5.96e3	11.7	-6.2	2.35
5 170905G4_6	12.5	4.83	1,4164	5.65e3	12.4	-0.7	2.49
6 170905G4_7	12.5	4.83	1.4464	5.95e3	12.0	-3.6	2.42
7 170905G4_8	12.5	4.83	1.45e4	5.75e3	12.5	0.3	2.52
8 170905G4 9	12.5	4 83	1.51pd	5 5793	13.5	8.2	271

Compound name: 13C8-PFOS

Response Factor: 0,988675

RRF SD: 0.095299, Relative SD: 9.63906

Response type: Internal Std (Ref 26), Area * (IS Conc. / IS Area) Curve type: RF

No Service	# Name	Std. Conc	RT	Resp	1S Resp	Conc.	%Dev	RRF
Tree of	1 17090564_2	12.5	4.61	6.22e3	7.26e3	10.8	-13,4	0.857
2	2 170905G4_3	12.5	4.61	7.11e3	7.15e3	12.6	0.5	0.993
3	3 17090564_4	12.5	4.61	6.58e3	6.98e3	11.9	9.4	0.944
4	4 170905G4_5	12.5	4.61	7.04e3	6.58e3	13.5	8.3	1.07
2	5 170905G4_6	12.5	4.61	6.73e3	7.22e3	11.8	-5.7	0.932
9	6 17090564_7	12.5	4.61	7.05e3	7.40e3	12.0	-3.7	0.952
2	7 170905G4_8	12.5	4.61	6.63e3	6.69e3	12.5	0.3	0.991
60	8 170905G4_9	12.5	4.61	6.88e3	5.88e3	14.8	18.3	1.17

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Wednesday, September 06, 2017 12:51:47 Pacific Daylight Time Wednesday, September 06, 2017 14:01:54 Pacific Daylight Time Last Altered: Printed:

Compound name: 13C4-PFBA

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std (Ref 21), Area * (IS Conc. / IS Area) Curve type: RF

# Name	Std. Conc	RT	Resp	IS Resp	Conc.	%Dev	RRF
1 170905G4_2	12.5	1.63	1.26e4	1.26e4	12.5	0.0	1.00
2 170905G4_3	12.5	1.62	1.23e4	1.23e4	12.5	0.0	1.00
3 170905G4_4	12.5	1.62	1.23e4	1.2364	12.5	0.0	1.00
4 170905G4_5	12.5	1.62	1,22e4	1.22e4	12.5	0.0	1.00
5 170905G4_6	12.5	1.63	1.25e4	1.25e4	12.5	0.0	1.00
6 170905G4_7	12.5	1.64	1.28e4	1.28e4	12.5	0.0	1.00
7 170905G4_8	12.5	1.62	1.28e4	1.28e4	12.5	0.0	1.00
8 170905G4 9	12.5	1.63	1.18e4	1.1864	12.5	0.0	1.00

Compound name: 13C5-PFHxA

Response Factor: 1

RRF SD: 8.3925e-017, Relative SD: 8.3925e-015

Response type: Internal Std (Ref 22), Area * (IS Conc. / IS Area) Curve type: RF

門の草	# Name	Std. Conc.	RT	Resp	IS Resp	Conc.	%Dev	RRF
1	1 170905G4_2	12.5	3.25	1.31e4	1.31e4	12.5	0.0	1.00
2	2 170905G4_3	12.5	3.25	1.33e4	1.33e4	12.5	0.0	1.00
(7)	3 170905G4_4	12.5	3.24	1.30e4	1.30e4	12.5	0.0	1.00
4	4 170905G4_5	12.5	3.24	1.27e4	1.2764	12.5	0.0	1.00
un.	5 170905G4_6	12.5	3.25	1.27e4	1.2764	12.5	0.0	1.00
9	6 170905G4_7	12.5	3.25	1.24e4	1.2464	12.5	0.0	1.00
7	7 170905G4_8	12.5	3.25	1.22e4	1.2264	12.5	0.0	1.00
00	8 170905G4 9	12.5	3.25	1.01e4	1.0164	12.5	0.0	1.00

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Compound name: 13C3-PFHxS

Response Factor: 1

RRF SD: 4.19625e-017, Relative SD: 4.19625e-015 Response type: Internal Std (Ref 23), Area* (IS Conc. / IS Area)

Curve type: RF

Std Conc
12.5 3.90
12.5
12.5
12.5
12.5
12.5
12.5
12.5

2 2 4 10 0

Compound name: 13C8-PFOA

Response Factor: 1

RRF SD: 4.19625e-017, Relative SD: 4.19625e-015 Response type: Internal Std (Ref 24), Area * (IS Conc. / IS Area) Curve type: RF

サルル	# Name	Std. Conc	RT	Resp	IS Resp	Coric	%Dev	RRF
1	1 17090564_2	12.5	4.20	5.02e3	5.02e3	12.5	0.0	1.00
2	2 17090564_3	12.5	4.19	4.51e3	4.51e3	12.5	-0.0	1.00
9	3 170905G4_4	12.5	4.19	4.78e3	4.78e3	12.5	0.0	1.00
4	4 170905G4_5	12.5	4.19	5.09e3	5.09e3	12.5	0.0	1.00
2	5 17090564_6	12.5	4.19	4.36e3	4.36e3	12.5	0.0	1.00
9	6 170905G4_7	12.5	4.20	4.79e3	4.79e3	12.5	0.0	1.00
1	7 170905G4_8	12.5	4.19	4.47e3	4.47e3	12.5	0.0	1.00
8	8 170905G4_9	12.5	4.20	4.01e3	4.01e3	12.5	0.0	1.00

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Wednesday, September 06, 2017 12:51:47 Pacific Daylight Time Wednesday, September 06, 2017 14:01:54 Pacific Daylight Time Last Altered: Printed:

Compound name: 13C9-PFNA

RRF SD: 0, Relative SD: 0 Response Factor: 1

Response type: Internal Std (Ref 25), Area* (IS Conc. / IS Area) Curve type: RF

# Name	Std. Conc	RI	Resp	IS Resp	Conc	%Dev	RRF
1 17090564_2	12.5	4.54	6.21e3	6.21e3	12.5	0.0	1.00
2 170905G4_3	12.5	4.54	5.99e3	5.99e3	12.5	0.0	1.00
3 170905G4_4	12.5	4.54	5.35e3	5.35e3	12.5	0.0	1.00
4 17090564_5	12.5	4.54	5.92e3	5.92e3	12.5	0.0	1.00
5 170905G4 6	12.5	4.54	5.91e3	5.91e3	12.5	0.0	1.00
6 170905G4_7	12.5	4.54	5.91e3	5.91e3	12.5	0.0	1.00
7 170905G4_8	12.5	4.54	5,4163	5.41e3	12.5	0.0	1.00
8 170905G4 9	12.5	4.54	5.74e3	5.74e3	12.5	0.0	1.00

Compound name: 13C4-PFOS

Response Factor: 1

RRF SD: 1.02787e-016, Relative SD: 1.02787e-014
Response type: Internal Std (Ref 26), Area * (IS Conc. / IS Area)
Curve type: RF

2000	# Name	Std. Conc	RT	Resp.	IS Resp	Conc	%Dev	RRF
-	1 170905G4_2	12.5	4.61	7.26e3	7.26e3	12.5	0.0	1.00
2	2 170905G4_3	12.5	4.61	7.15e3	7.15e3	12.5	-0.0	1.00
3	3 170905G4_4	12.5	4.61	6.98e3	6.98e3	12.5	0.0	1.00
4	4 170905G4_5	12.5	4.61	6.58e3	6.58e3	12.5	-0.0	1.00
5	5 170905G4_6	12.5	4.61	7.22e3	7.22e3	12.5	0.0	1.00
49	6 170905G4_7	12.5	4.61	7.40e3	7.40e3	12.5	0.0	1.00
~	7 170905G4_8	12.5	4.61	6.69e3	6.69e3	12.5	0.0	1.00
8	8 170905G4 9	12.5	4.61	5.88e3	5.88e3	12.5	0.0	1.00

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Wednesday, September 06, 2017 12:51:47 Pacific Daylight Time Wednesday, September 06, 2017 14:01:54 Pacific Daylight Time Last Altered: Printed:

Compound name: 13C6-PFDA

Response Factor: 1
RRF SD: 0, Relative SD: 0
Response type: Internal Std (Ref 27), Area* (IS Conc. / IS Area)
Curve type: RF

# Name	Std. Conc	RT	Resp	1S Resp	Conc.	%Dev	RRF
1 17090564_2	12.5	4.83	5.53e3	5.53e3	12.5	0.0	1.00
2 17090564_3	12.5	4.83	5.95e3	5.95e3	12.5	0.0	1.00
3 170905G4_4	12.5	4.83	5.87e3	5.87e3	12.5	0.0	1,00
4 170905G4_5	12.5	4.83	5.96e3	5,96e3	12.5	0.0	1.00
5 17090564_6	12.5	4.83	5.65e3	5.65e3	12.5	0.0	1.00
6 170905G4_7	12.5	4.83	5.95e3	5.95e3	12.5	0.0	1.00
7 17090564_8	12.5	4.83	5.75e3	5.75e3	12.5	0.0	1.00
8 170905G4 9	12.5	4.83	5.57e3	5.57e3	12.5	0.0	1.00

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Untitled Dataset: Wednesday, September 06, 2017 14:02:56 Pacific Daylight Time Wednesday, September 06, 2017 14:04:03 Pacific Daylight Time Last Altered: Printed:

Method: U:\G1.pro\MethDB\PFAS_14or16_2trans_0712.mdb 12_Jul 2017 13:38:17 Calibration: U:\G1.PRO\CurveDB\C18_VAL-PFC_Q1_9-5-17_A_2Trans.cdb 06 Sep 2017 12:51:47

Compound name: PFBA

	Name	O	Acq.Dafe	Acq.Time
	17090564_1	IPA	05-Sep-17	16:37:48
	17090564_2	ST170905G4-1 PFC CS-2 17H3127	05-Sep-17	16:50:01
	17090564_3	ST170905G4-2 PFC CS-1 17H3128	05-Sep-17	17:02:31
	170905G4_4	ST170905G44-3 PFC CS0 17H3129	05-Sep-17	17:15:02
	17090564_5	ST170905G4-4 PFC CS1 17H3130	05-Sep-17	17:27:41
	170905G4_6	ST170905G4-5 PFC CS2 17H3131	05-Sep-17	17:40:12
	170905G4 7	ST170905G4-6 PFC CS3 17H313Z	05-Sep-17	17:52:45
	17090564_8	ST170905G4-7 PFC CS4 17H3133	05-Sep-17	18:05:18
	17090564_9	ST170905G4-8 PFC CS5 17H3134	05-Sep-17	18:17:51
0	17090564_10	ST170905G4-9 PFC CS6 17H0517	05-Sep-17	18:30:24
-	170905G4_11	IPA	05-Sep-17	18:42:52
-	170905G4_12	ICV170905G4-1 PFC ICV 17H3126	05-Sep-17	18:55:29
m	170905G4 13	IPA	05-Sep-17	19:08:02

Page 1 of 10 Conc 99age 104 of 18500 85 80 15 2 65 9 Method: U;\G1.pro\MethDB\PFAS_14or16_2trans_0712.mdb 12_Jul 2017 13:38:17 Calibration: U:\G1.PRO\CurveDB\C18_VAL-PFC_Q1_9-5-17_A_2Trans.cdb 06 Sep 2017 12:51:47 22 20 Wednesday, September 06, 2017 12:51:47 Pacific Daylight Time Wednesday, September 06, 2017 14:01:25 Pacific Daylight Time 45 U:\G1.PRO\Results\2017\170905G4\170905G4-CRV.qld 40 Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None Calibration curve: 0.738358 * x + 0.0295764 Response type: Internal Std (Ref 11), Area * (IS Conc. / IS Area) 35 MassLynx 4.1 SCN815 30 Correlation coefficient: r = 0.999659, r² = 0.999317 25 20 5 Quantify Calibration Report Vista Analytical Laboratory Q1 Work Order 1701192 Compound name: PFBA Last Altered: Dataset: 100 Printed: 70.0-Response 35.0 25.0-5.0-55.0-30.05 20.05 10.0 65.0-60.0 50.05 45.0 15.0Page 2 of 10

UNG1.PRO/Results/2017/170905G4/170905G4-CRV.qld Dataset:

Wednesday, September 06, 2017 12:51:47 Pacific Daylight Time Wednesday, September 06, 2017 14:01:25 Pacific Daylight Time Last Altered: Printed:

Response type: Internal Std (Ref 13), Area * (IS Conc. / IS Area) Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None Correlation coefficient: r = 0.999677, $r^{4}2 = 0.999354$ Calibration curve: 1.1555 * x + -0.0139097Compound name: PFPeA

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Work Order 1701192

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Work Order 1701192

MassLynx 4.1 SCN815 Quantify Calibration Report Vista Analytical Laboratory Q1

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U:\G1.PRO\Results\2017\170905G4\170905G4-CRV.qld Dataset

Wednesday, September 06, 2017 12:51:47 Pacific Daylight Time Wednesday, September 06, 2017 14:01:25 Pacific Daylight Time Last Altered: Printed:

Calibration curve: 0.00390989 * x^2 + 1.54175 * x + 0.115221 Response type: Internal Std (Ref 16), Area * (IS Conc. / IS Area) Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None Coefficient of Determination: R² = 0.999022 Compound name: PFHxS

- Conc 100 Page 110 of 185 95 8 85 8 15 2 65 9 55 20 Wednesday, September 06, 2017 12:51:47 Pacific Daylight Time Wednesday, September 06, 2017 14:01:25 Pacific Daylight Time 45 U:\G1.PRO\Results\2017\170905G4\170905G4-CRV.qld 5 Calibration curve: 0.877405 * x + 0.268472 Response type: Internal Std (Ref 17), Area * (IS Conc. / IS Area) Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None 35 39 Correlation coefficient: r = 0.999428, r^2 = 0.998857 25 20 151 Quantify Calibration Report Vista Analytical Laboratory Q1

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Page 7 of 10

MassLynx 4.1 SCN815

Compound name: PFOA

85.0 80.0 75.0 70.0 65.0 60.0 55.0 50.0

Last Altered:

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Quantify Calibration Report MassLynx 4.1 SCN815 Vista Analytical Laboratory Q1

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Dataset: U:\G1.PRO\Results\2017\170905G4\170905G4-CRV.qld

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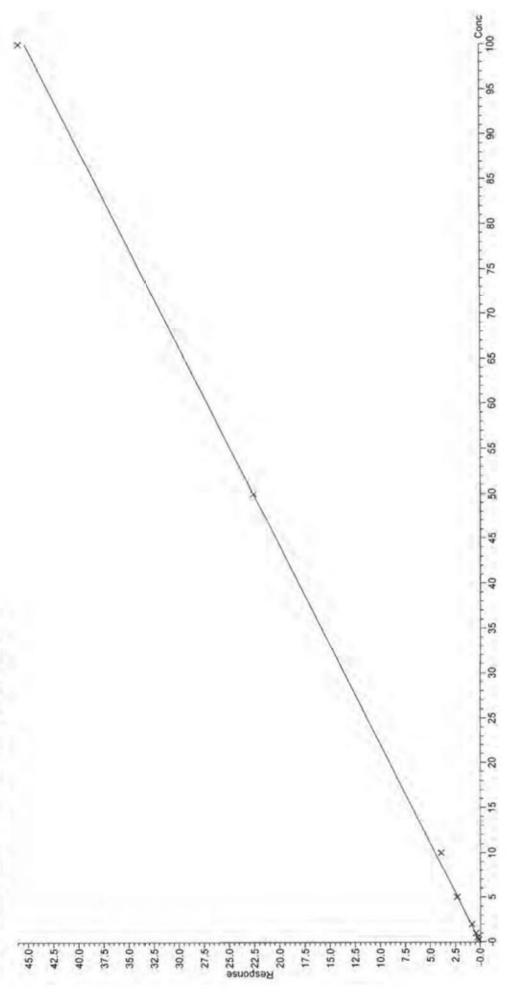
Compound name: PFOS

Correlation coefficient: r = 0.999289, r^2 = 0.998579

Calibration curve: 0.453717 * x + -0.00549883

Response type: Internal Std (Ref 20), Area * (IS Conc. / IS Area)

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

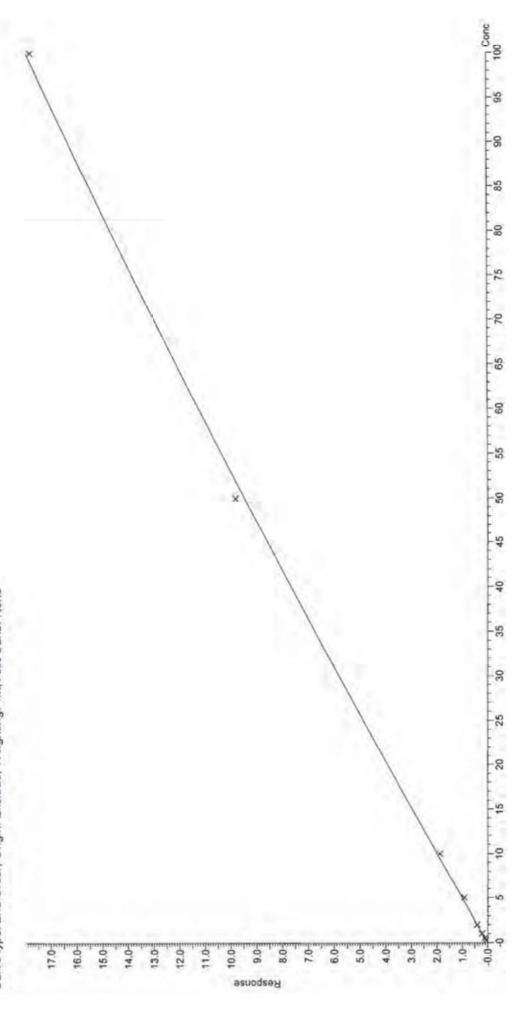


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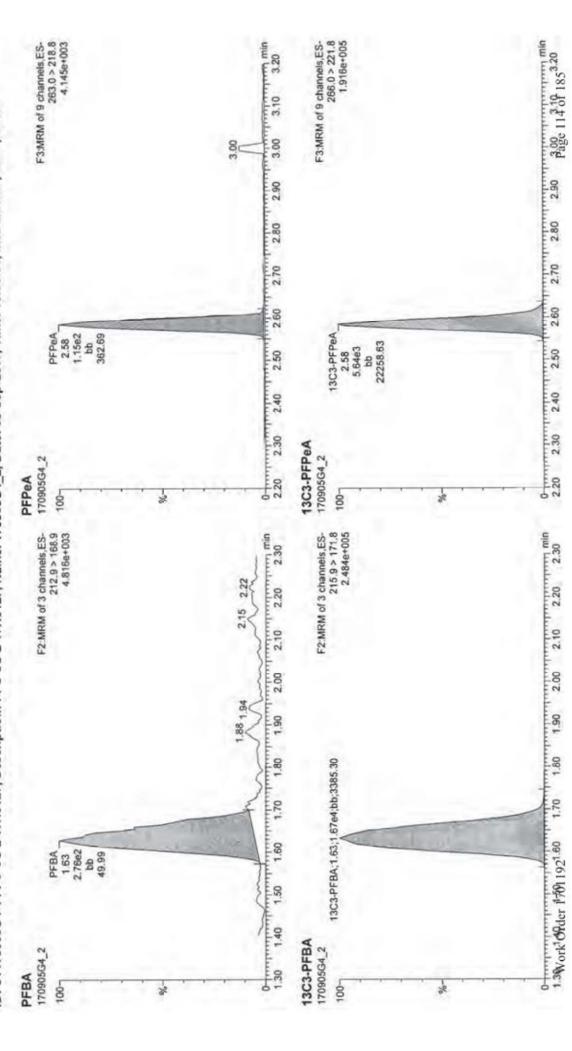
Calibration curve: -0.000198075 * x^2 + 0.199553 * x + 0.00733412 Response type: Internal Std (Ref 19), Area * (IS Conc. / IS Area) Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None Coefficient of Determination: R² = 0.998972 Compound name: PFDA



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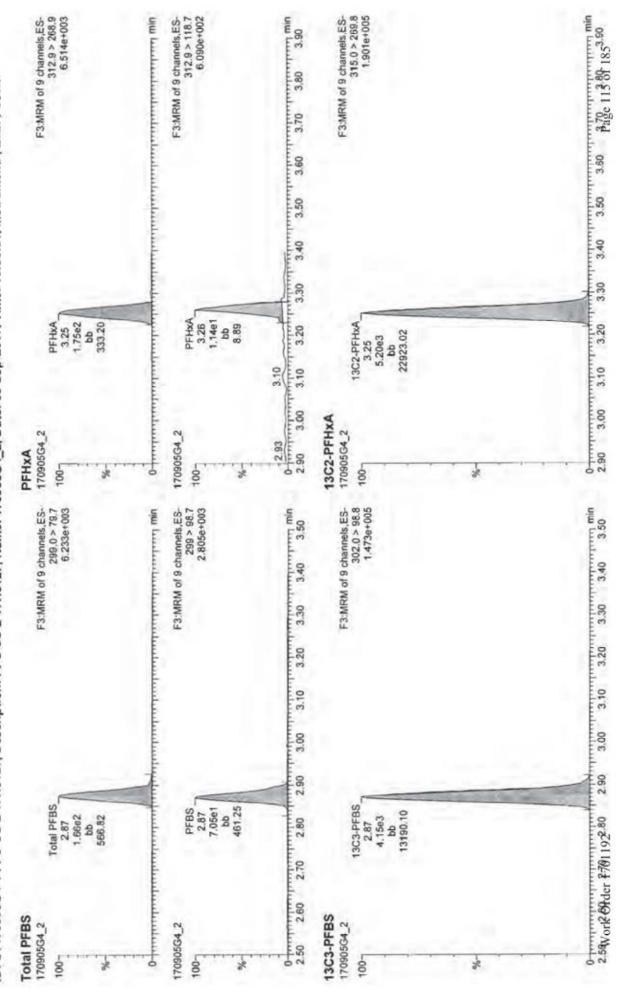
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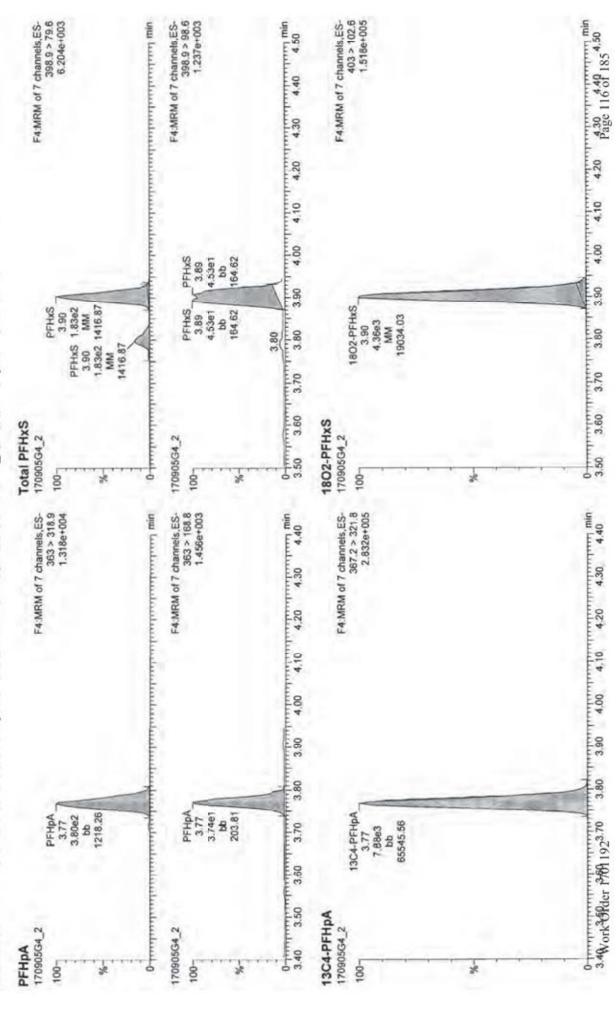
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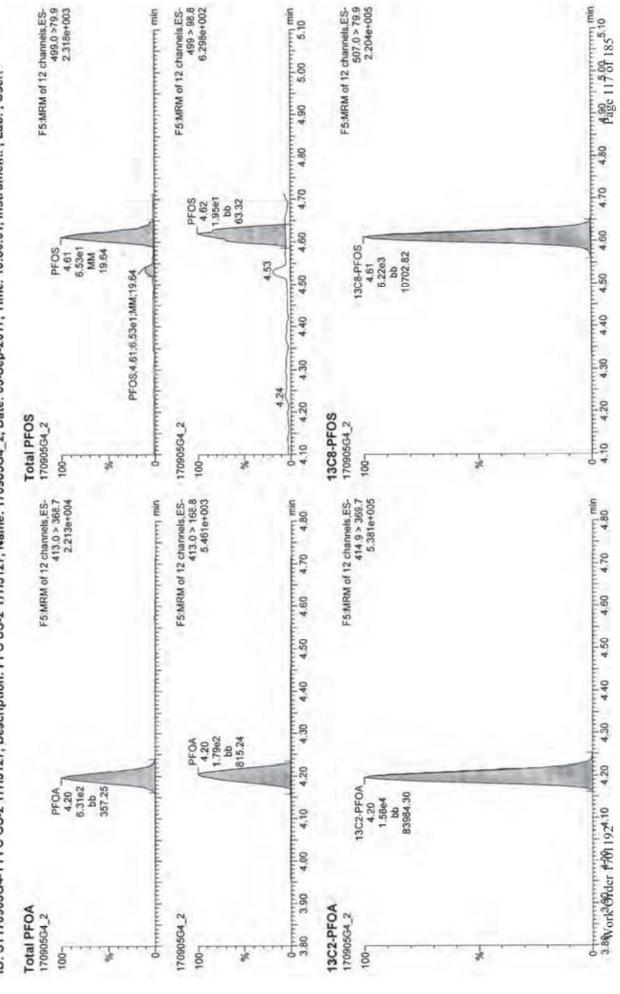


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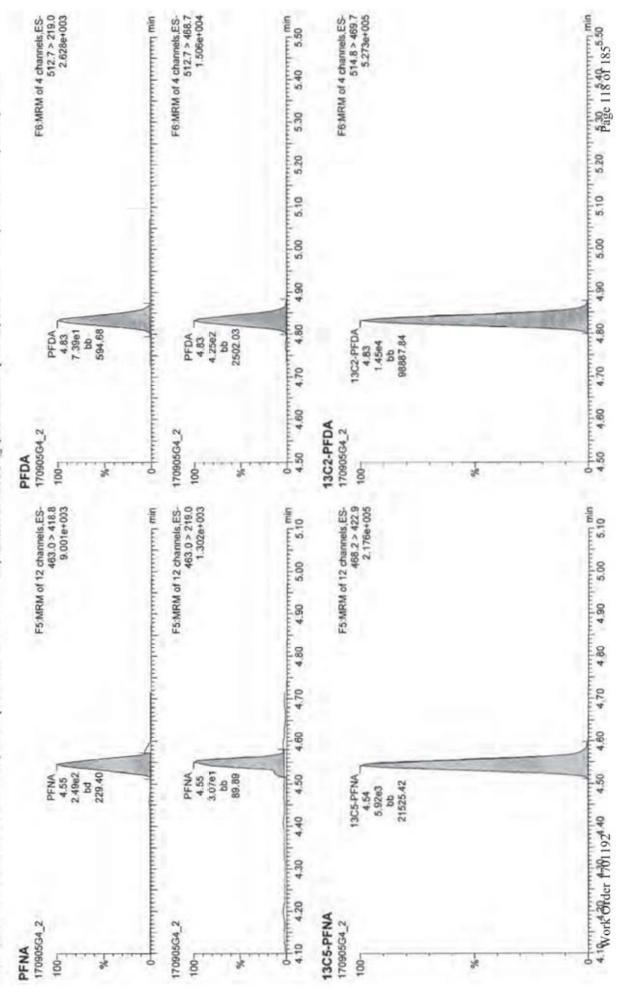


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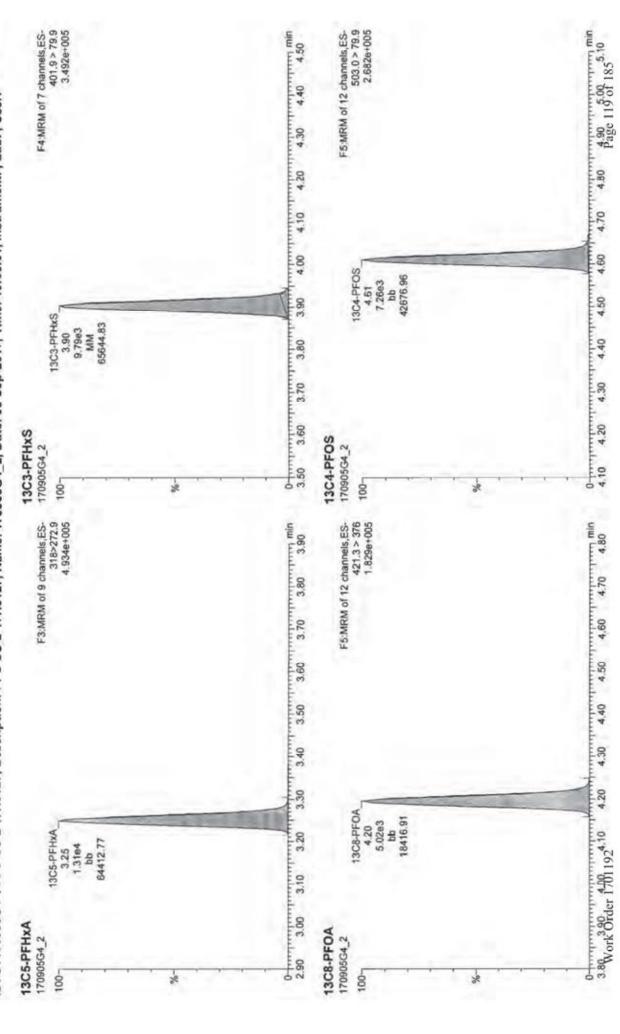


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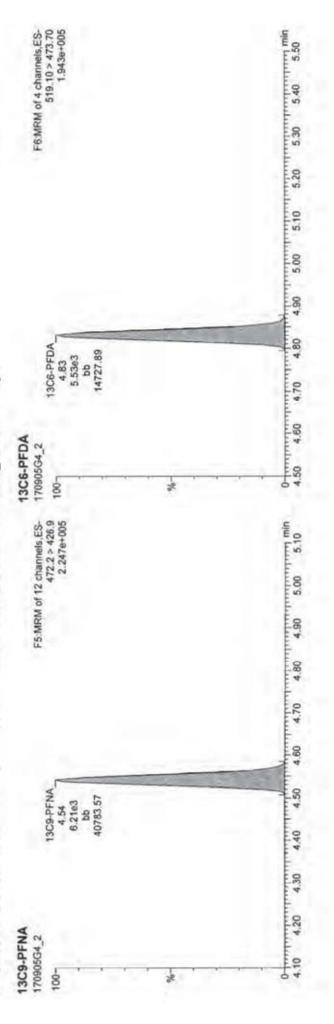


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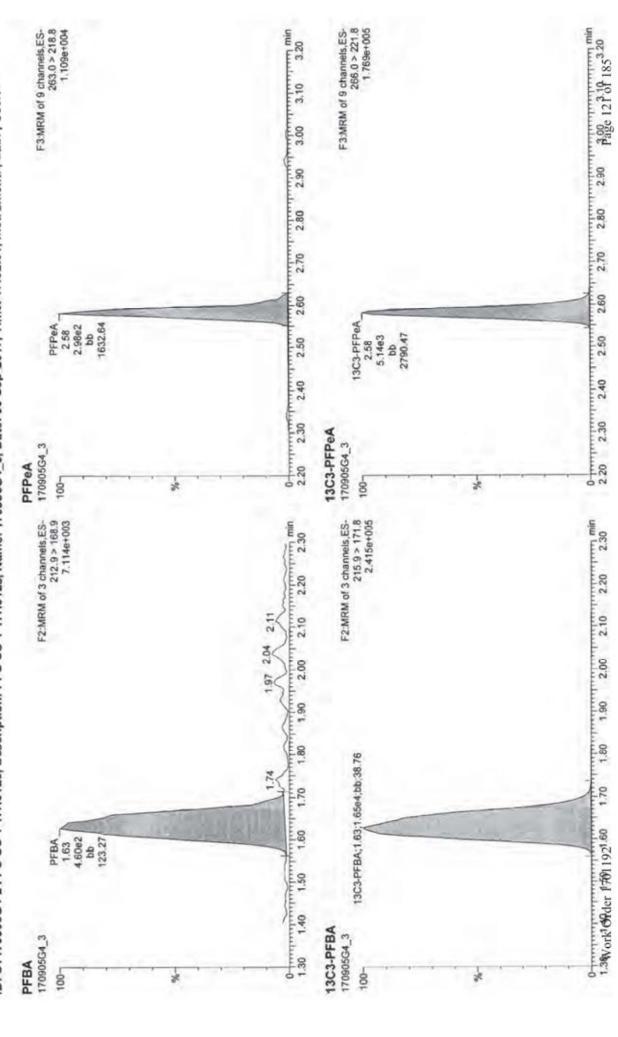
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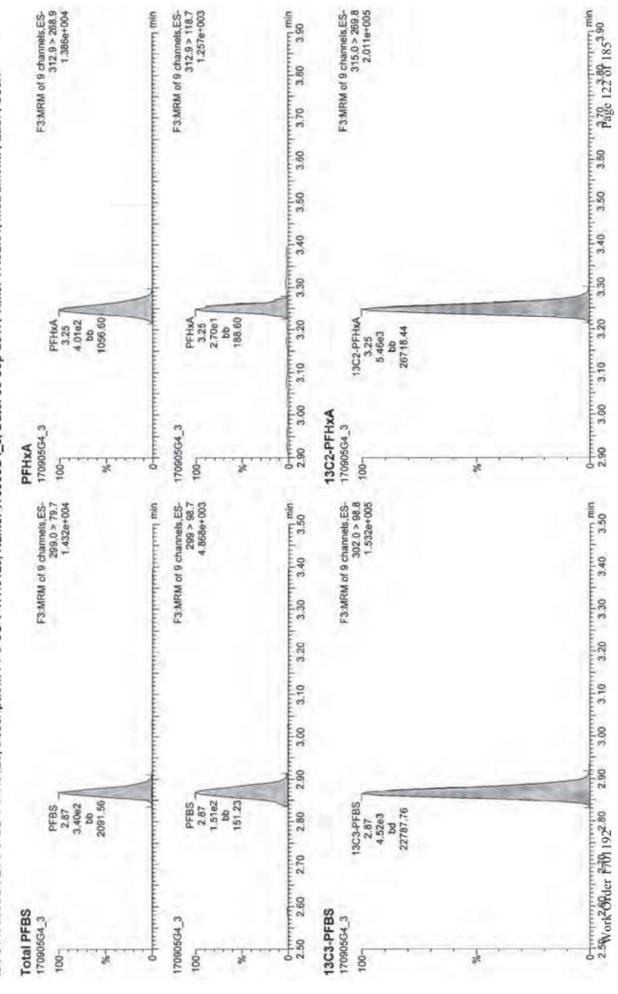
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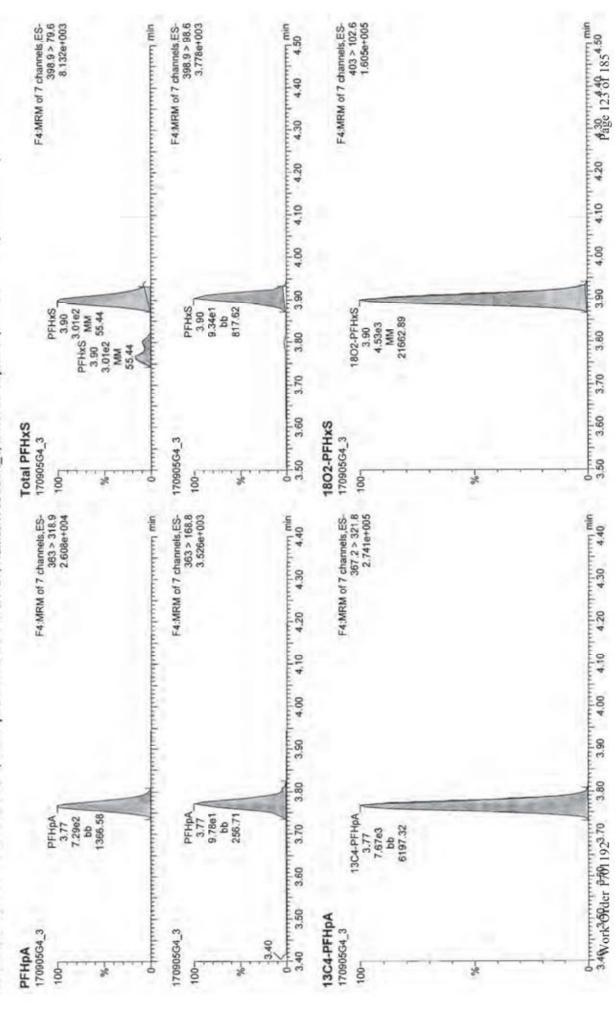
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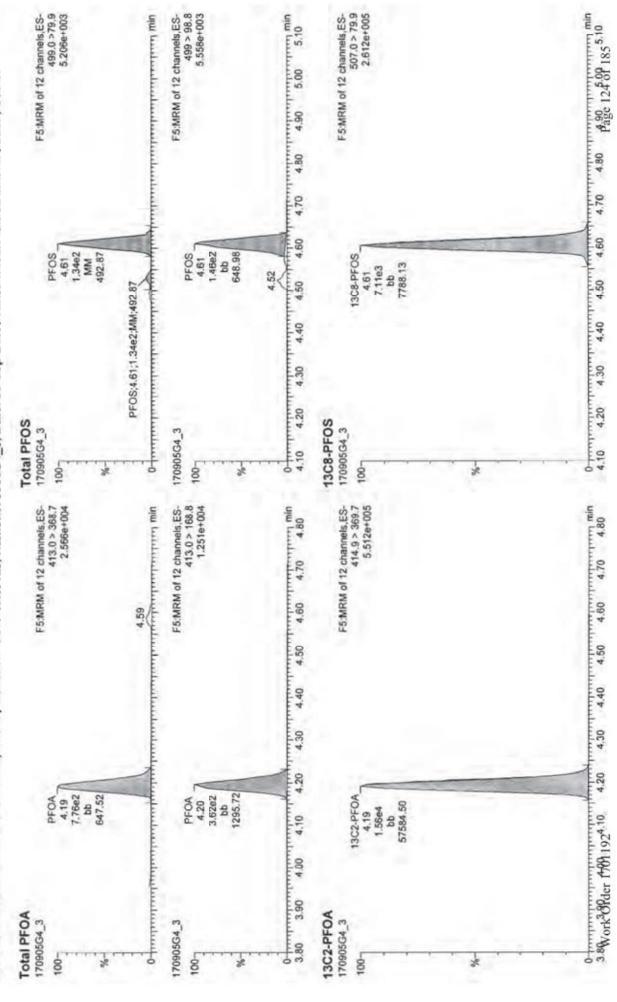
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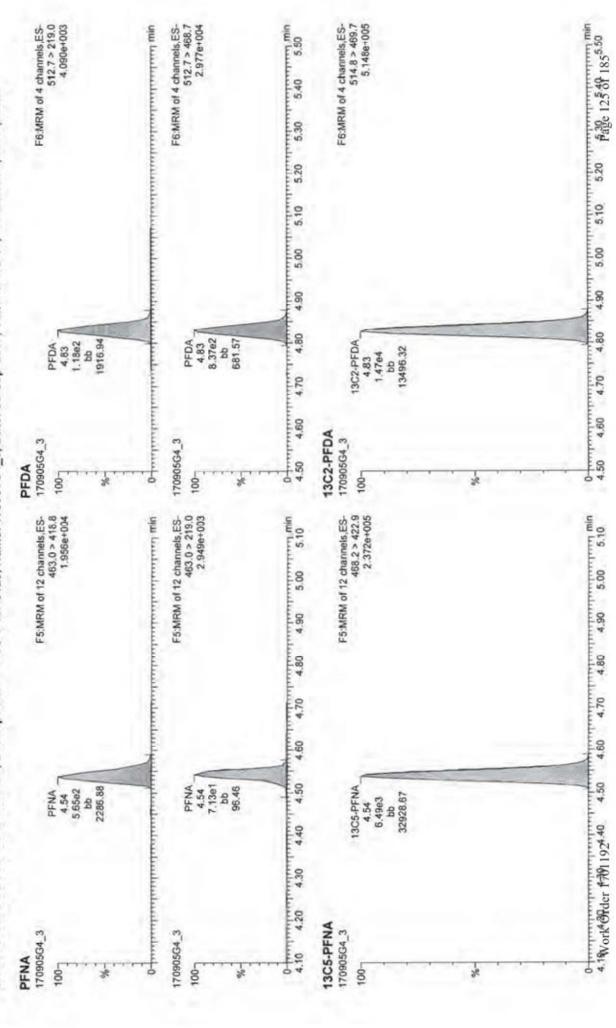
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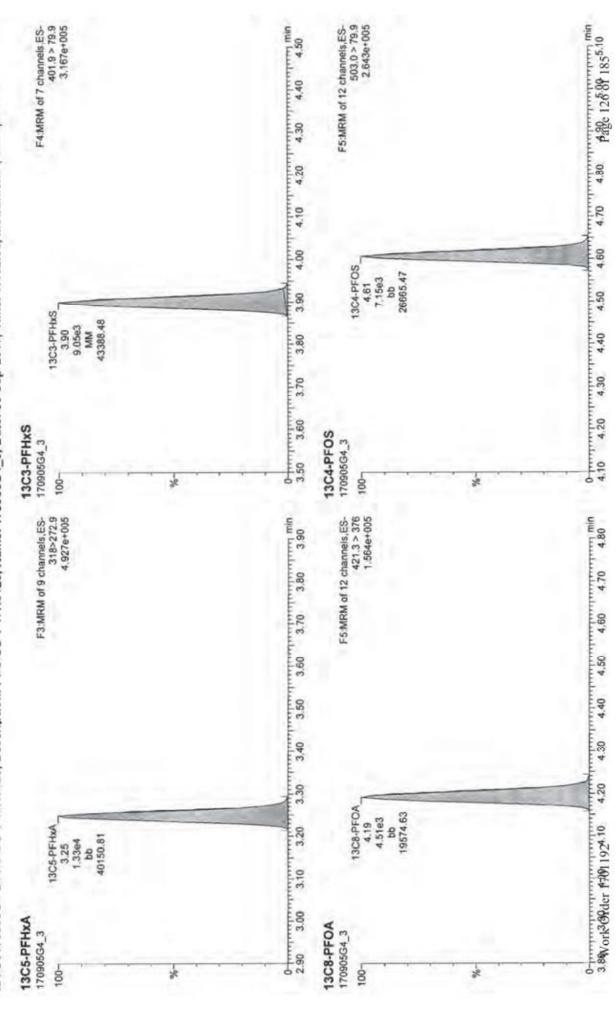


Quantify Sample Report MassLynx 4.1 SCN815

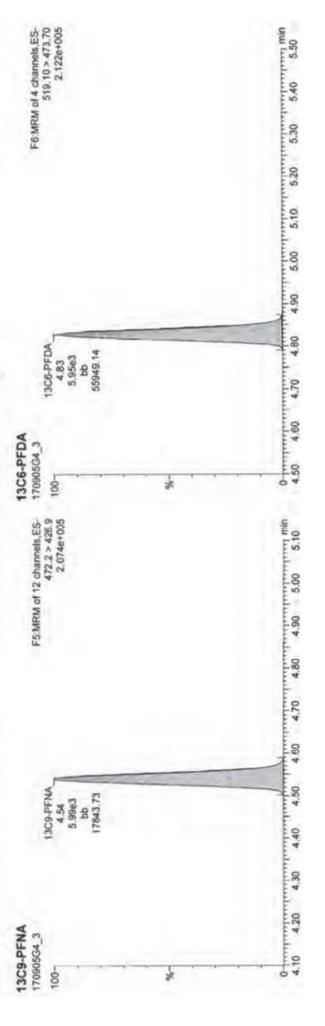
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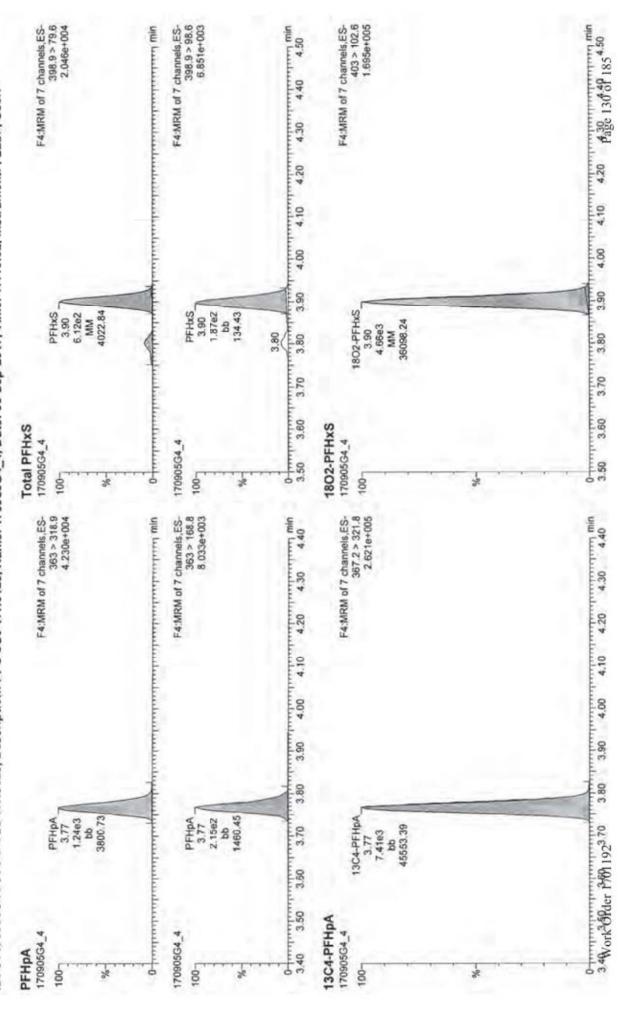
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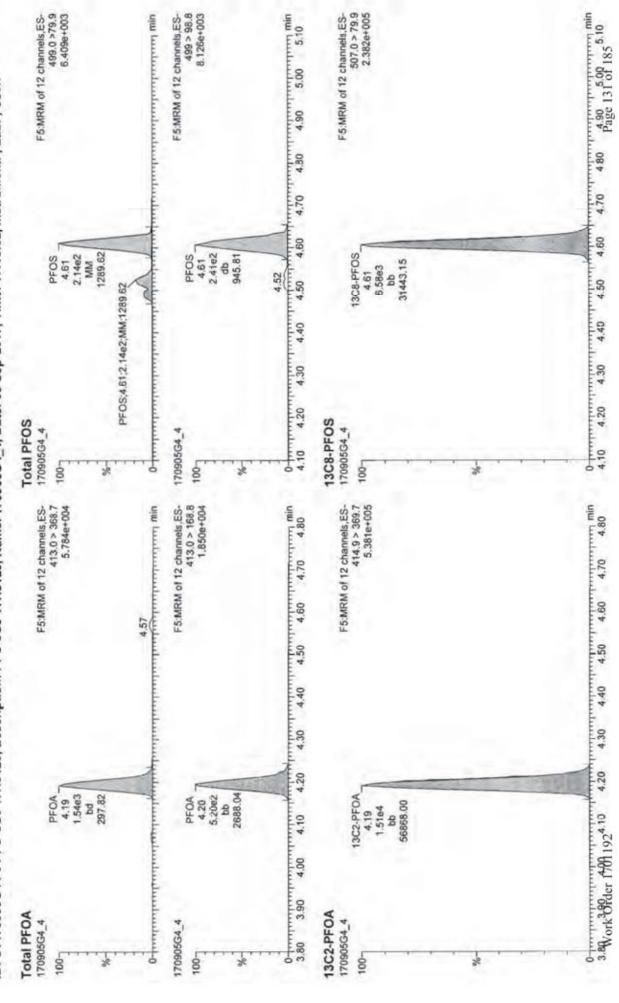
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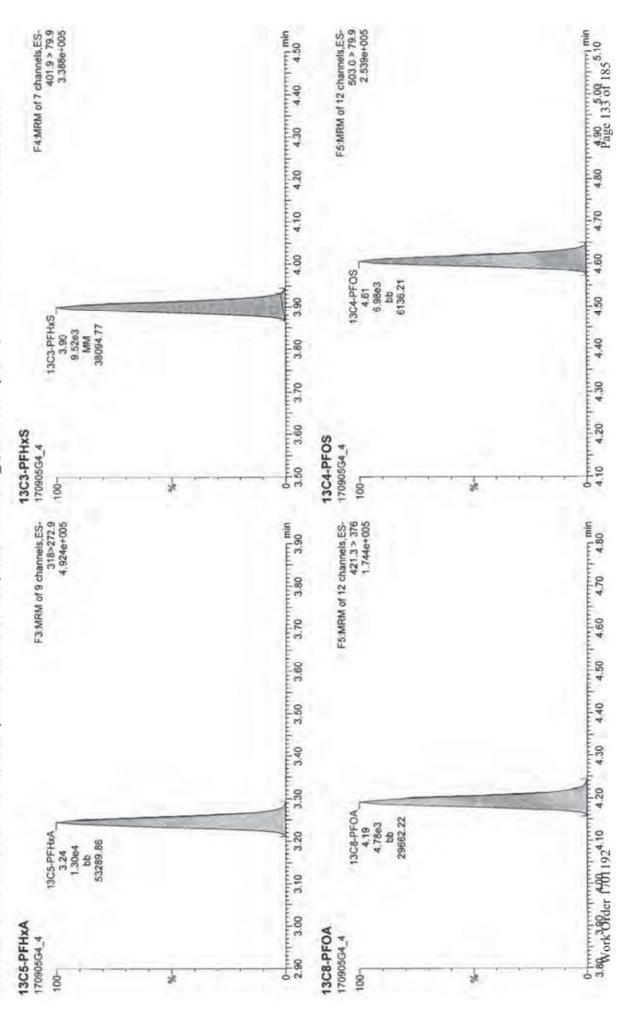
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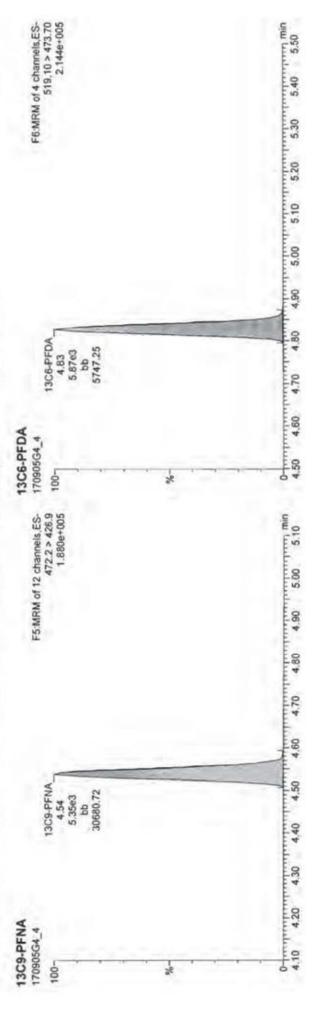
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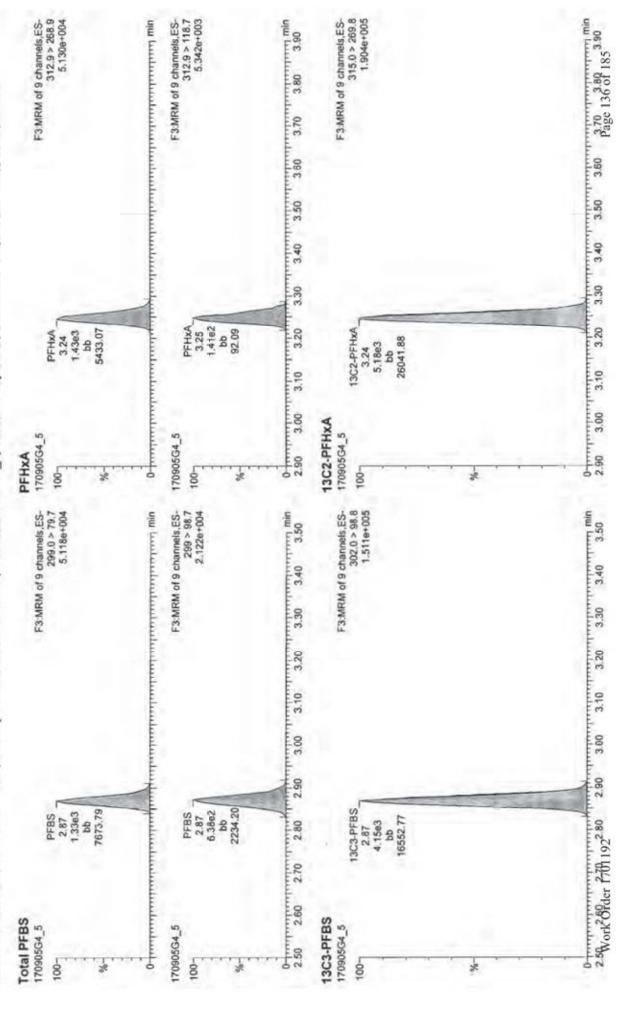
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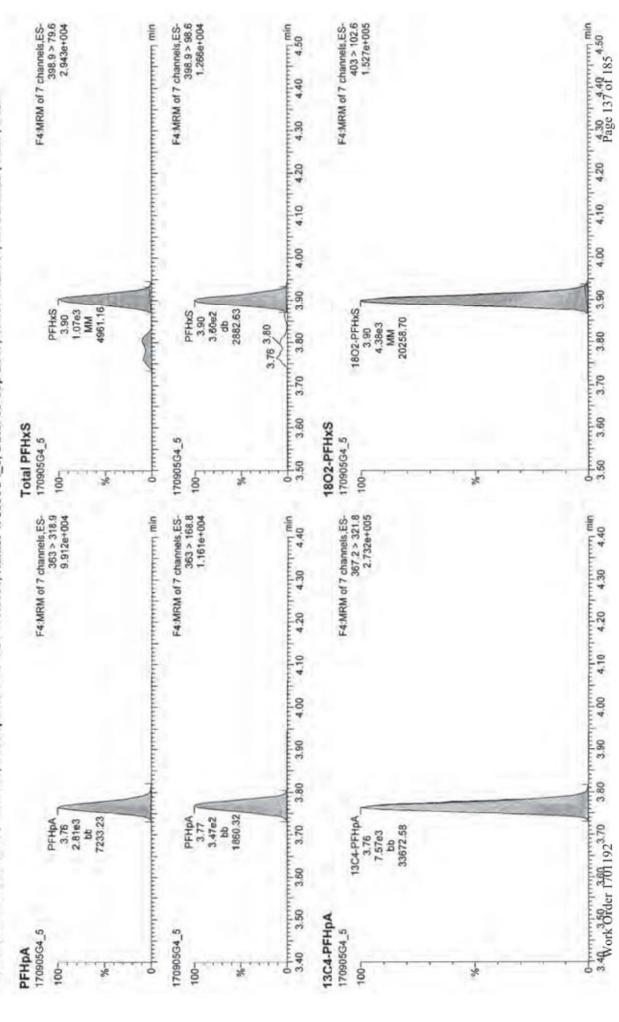
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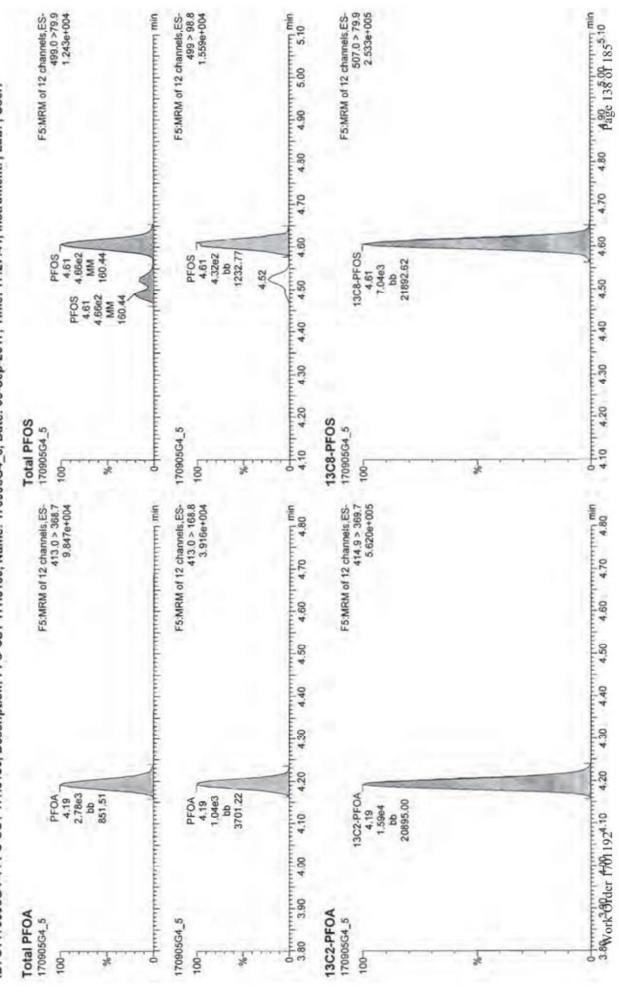
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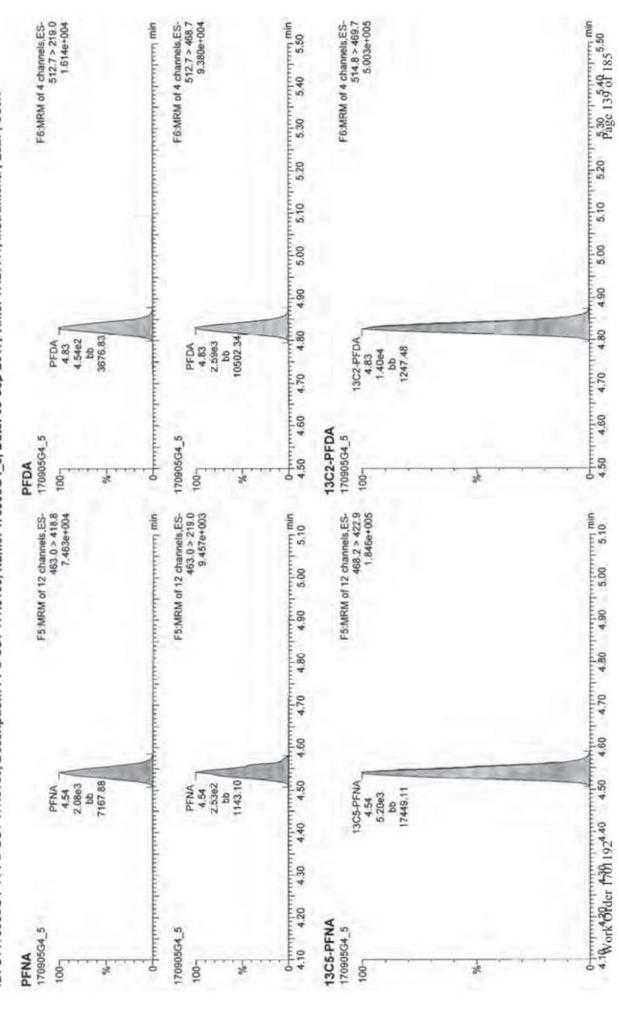


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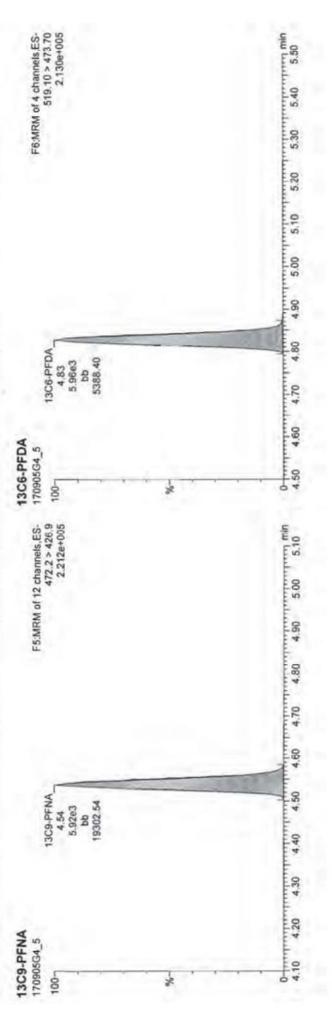
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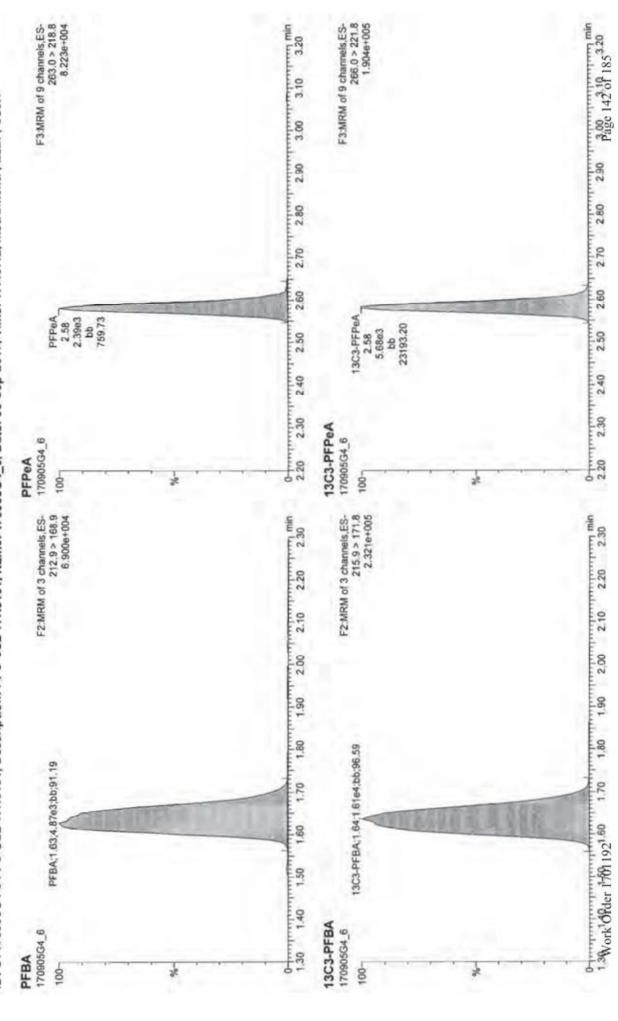


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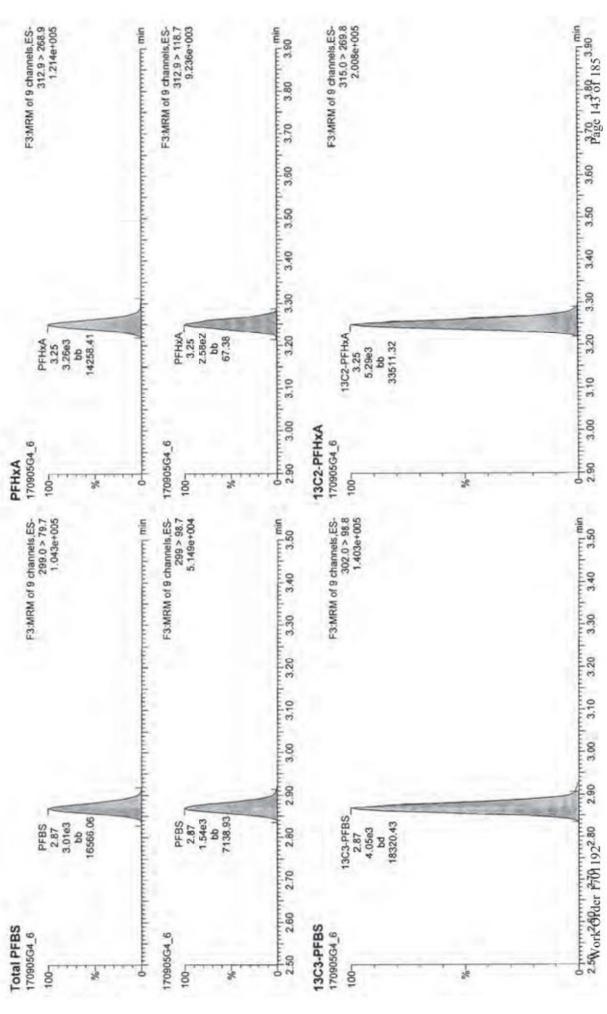
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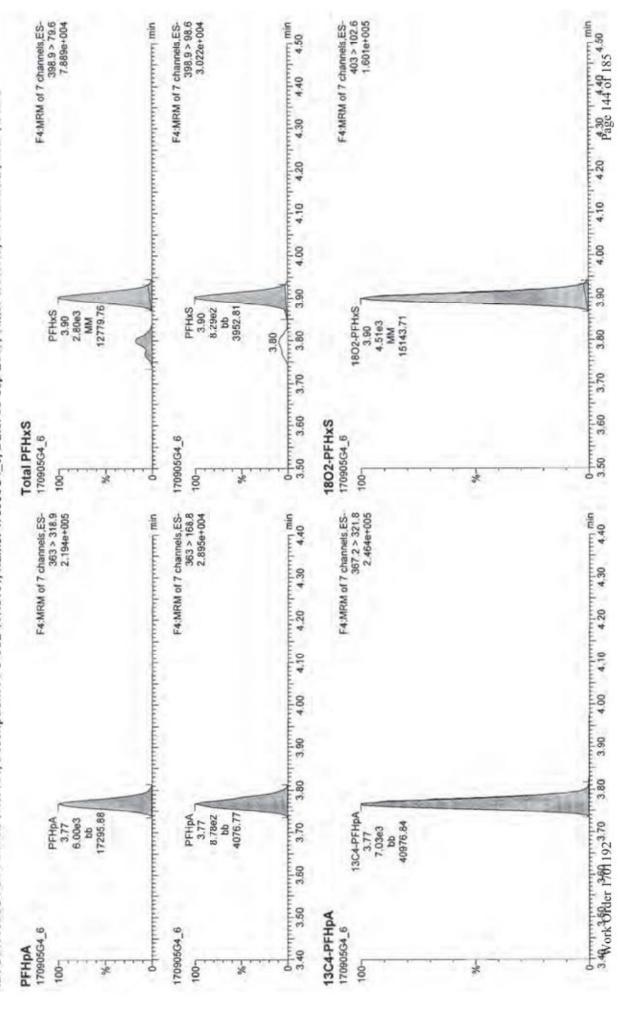
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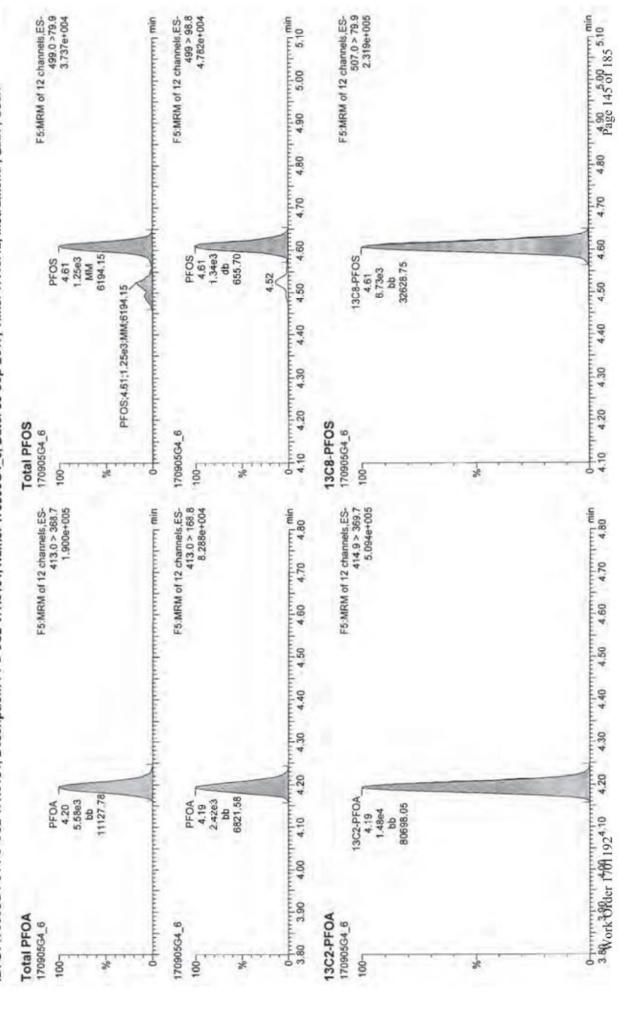
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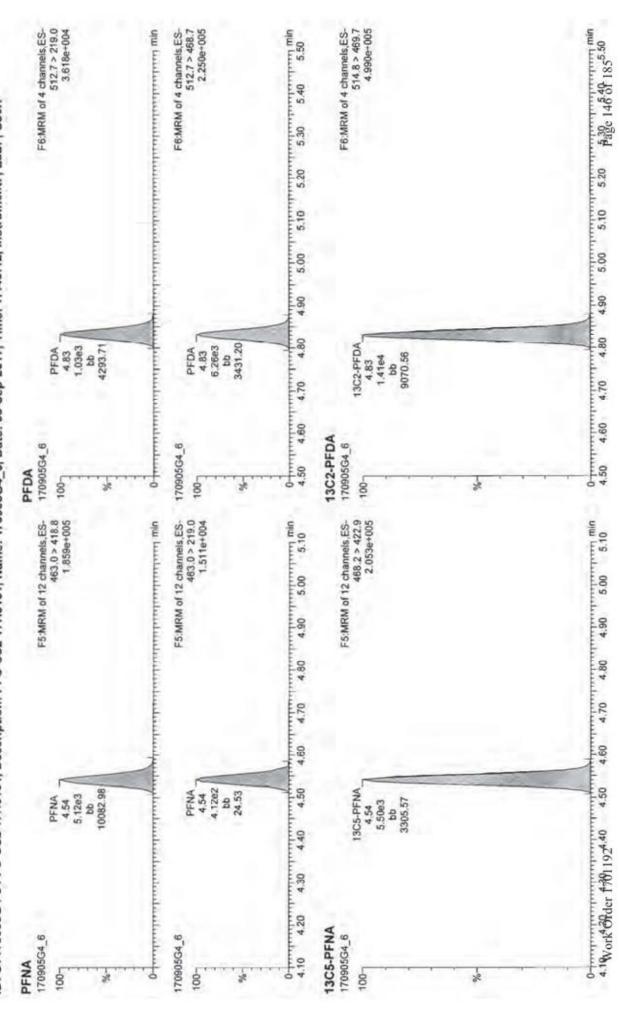
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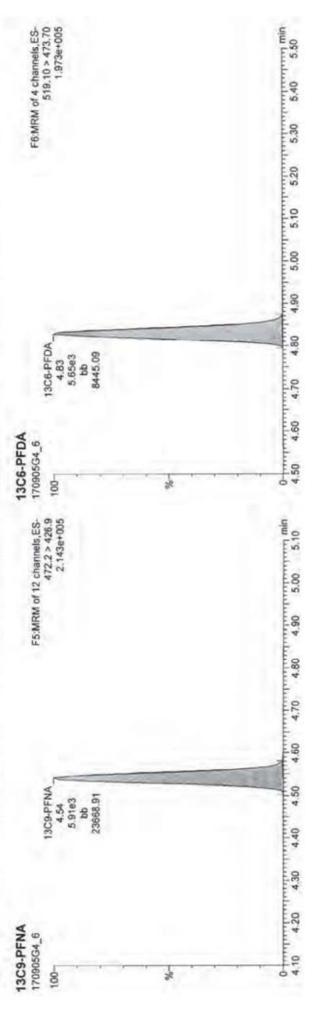
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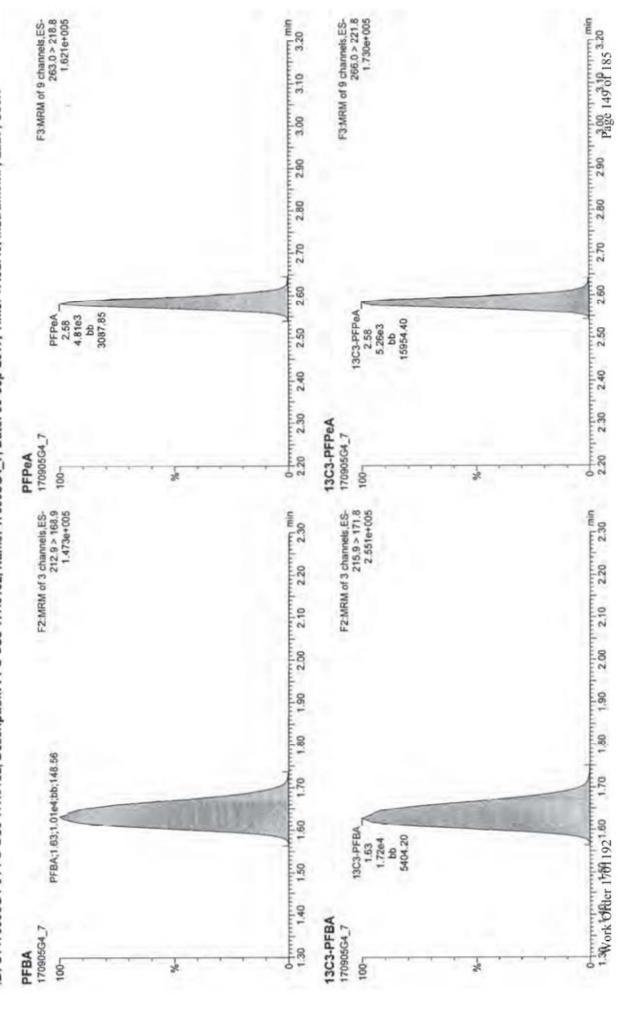
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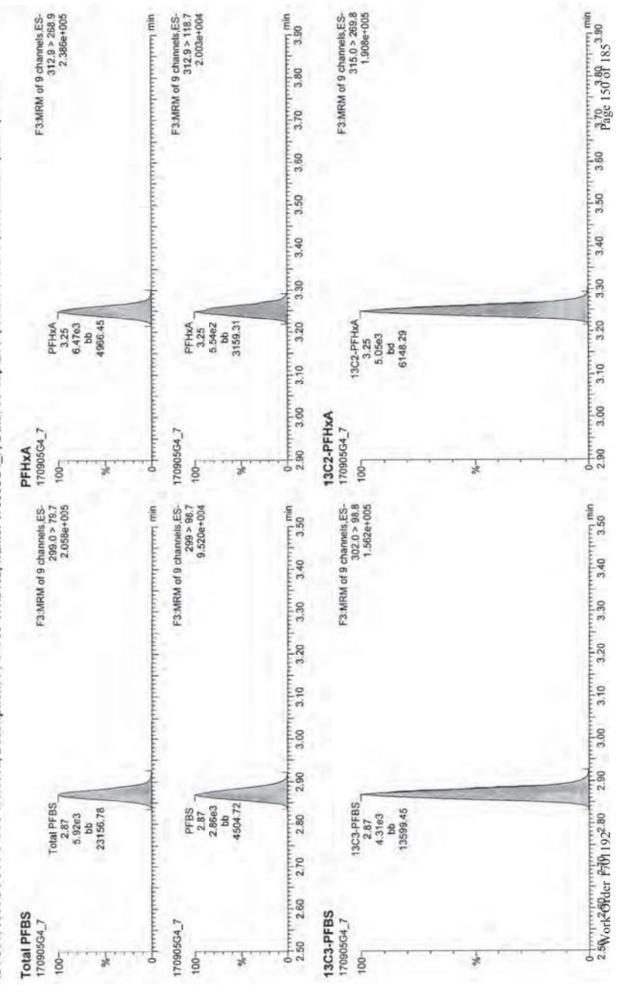
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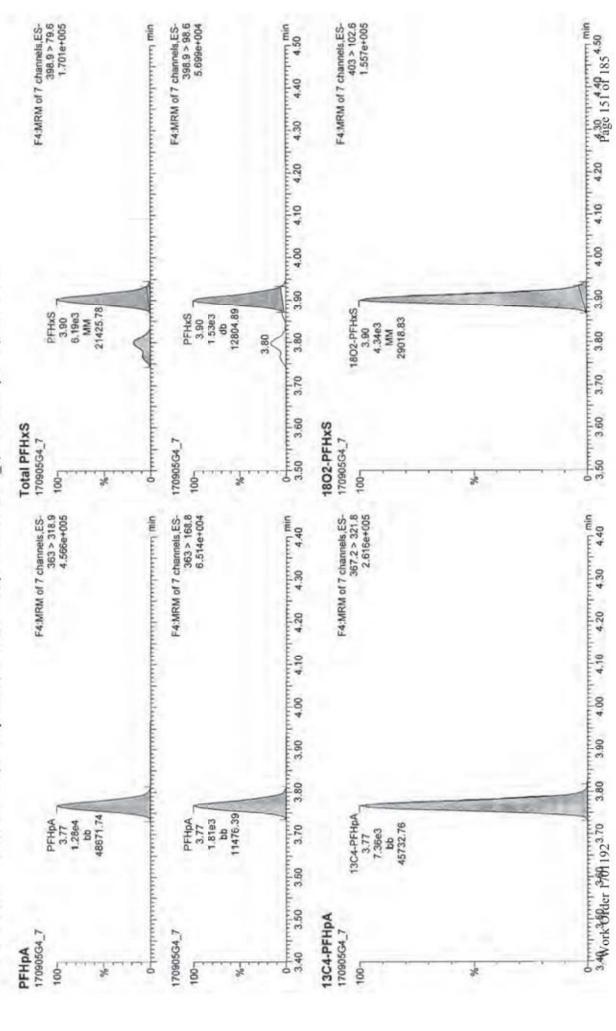
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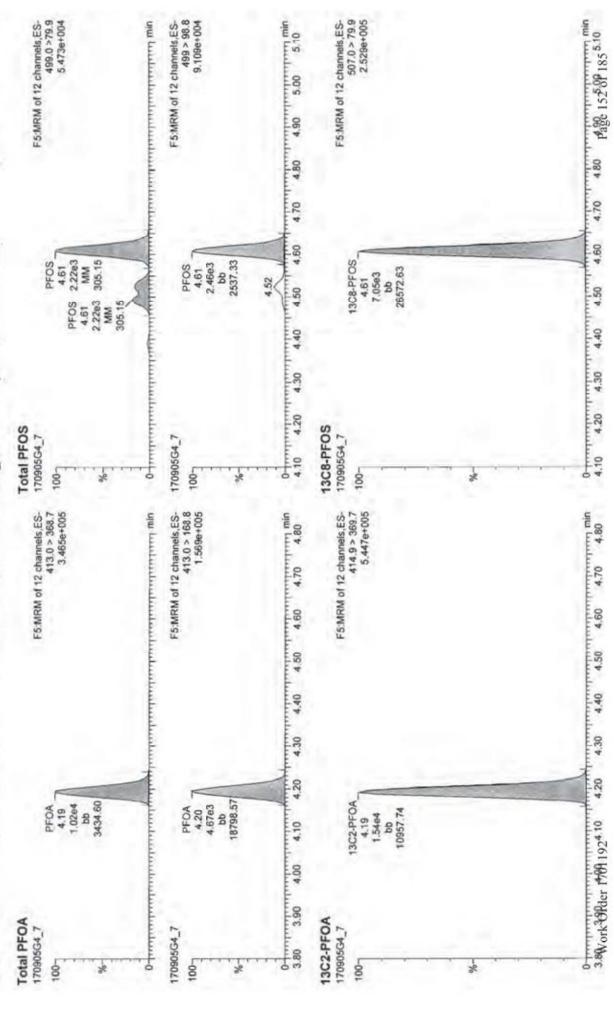
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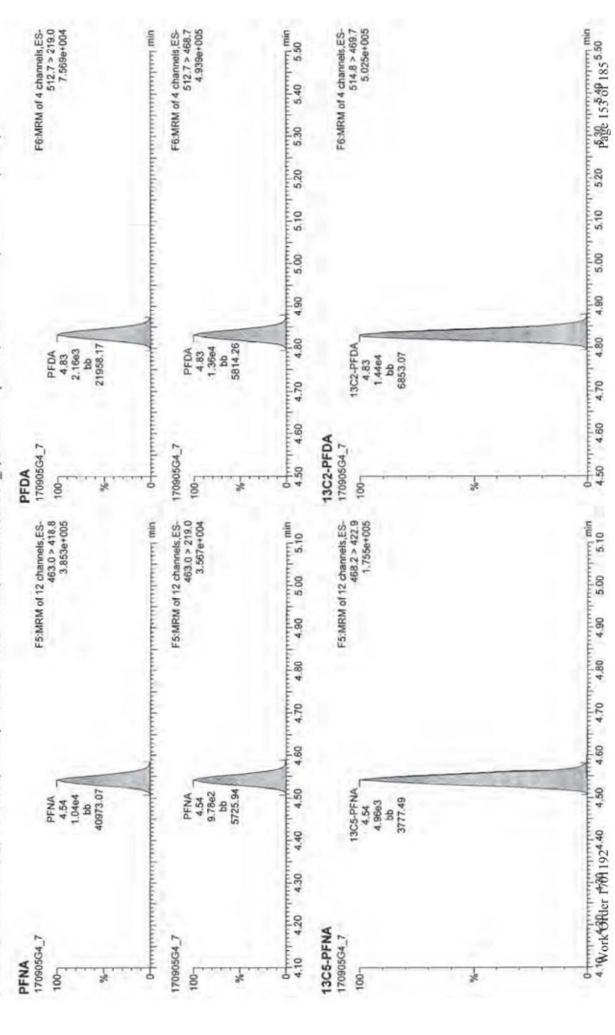


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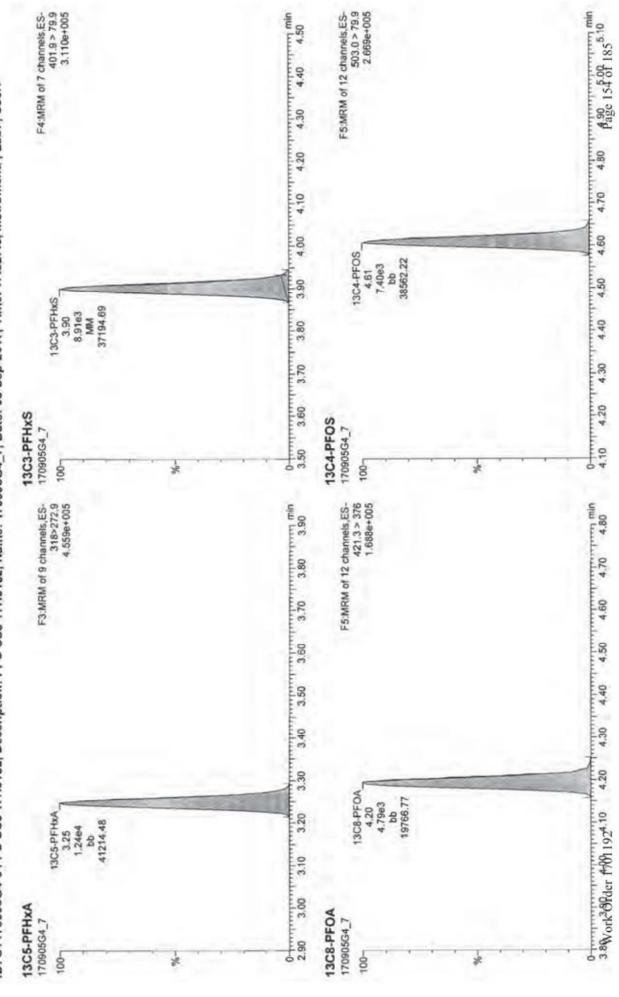
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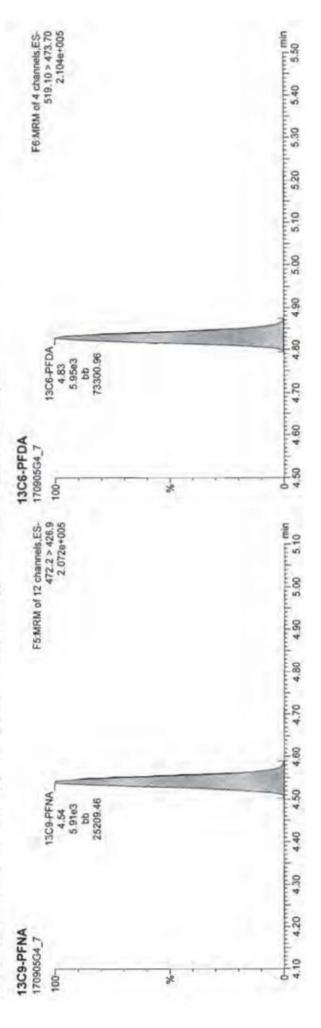


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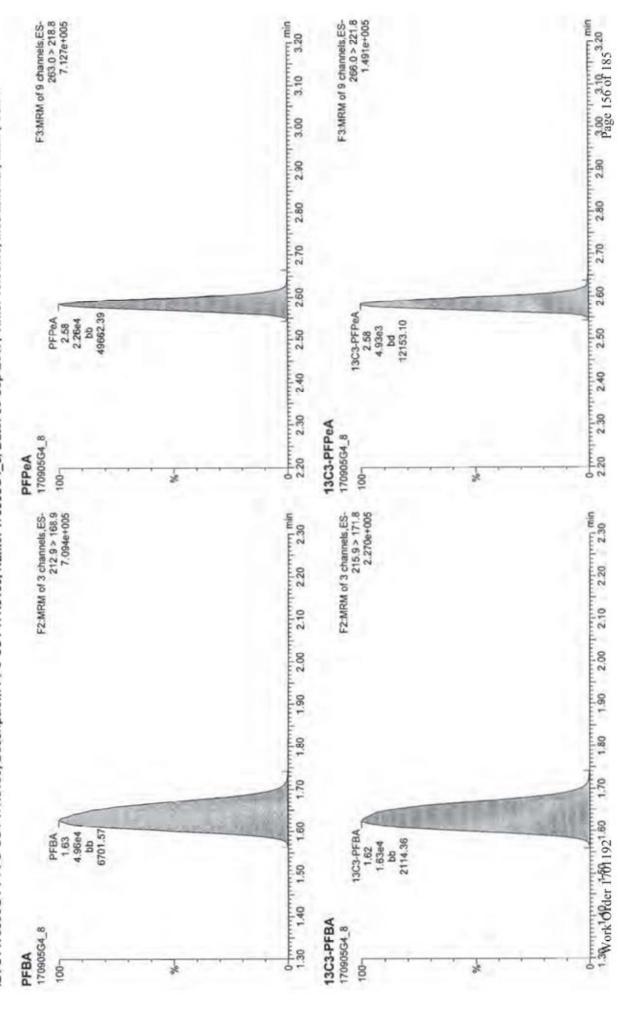
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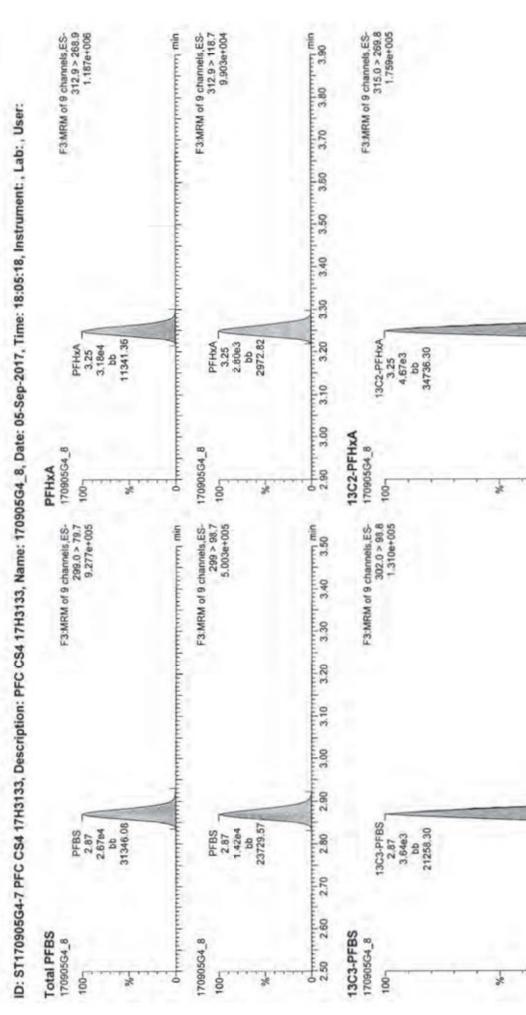
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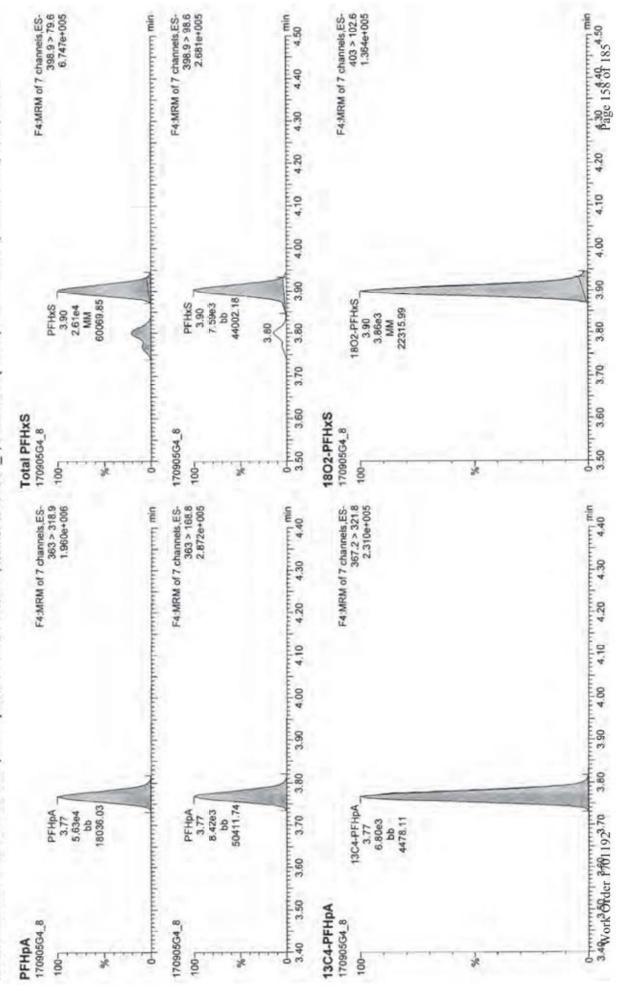
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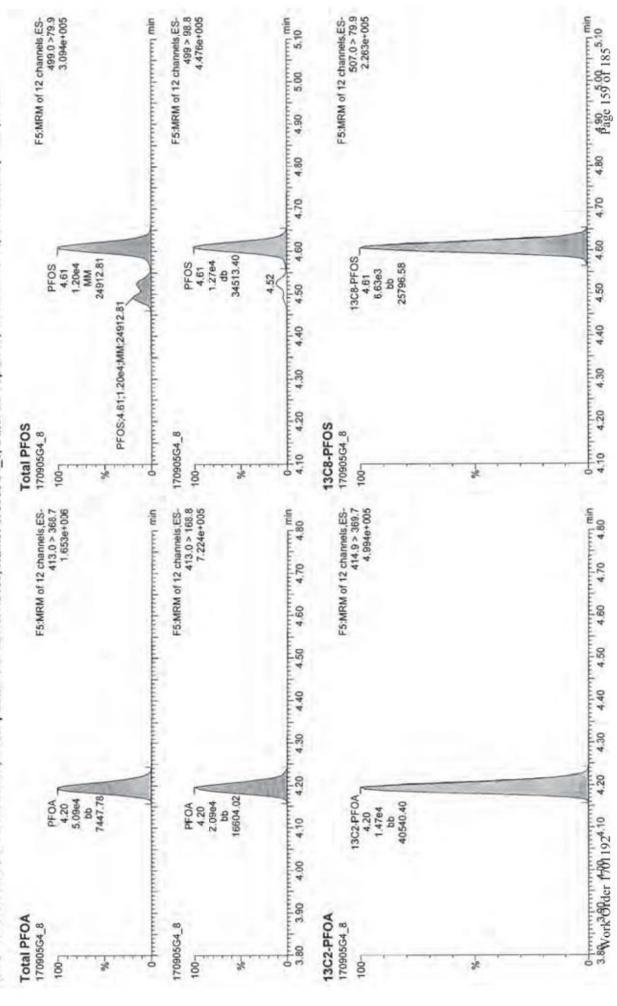
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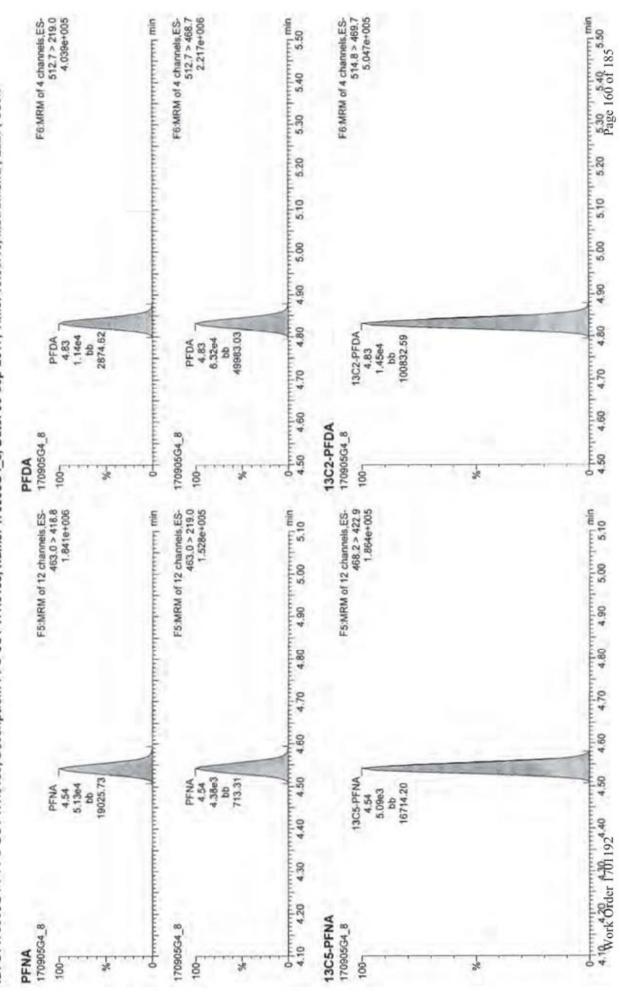
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Vista Analytical Laboratory Q1

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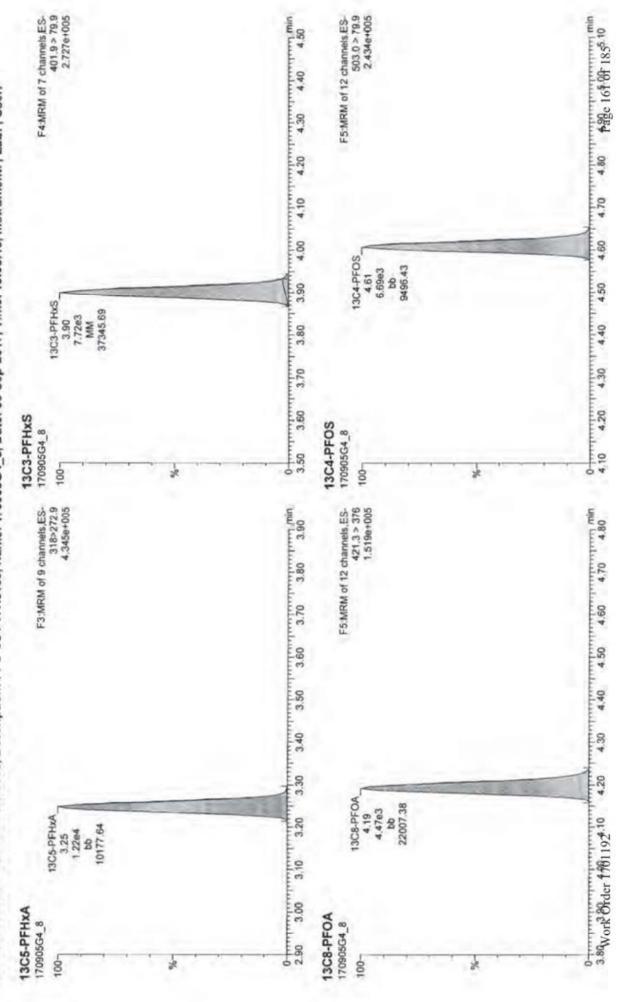
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Vista Analytical Laboratory Q1

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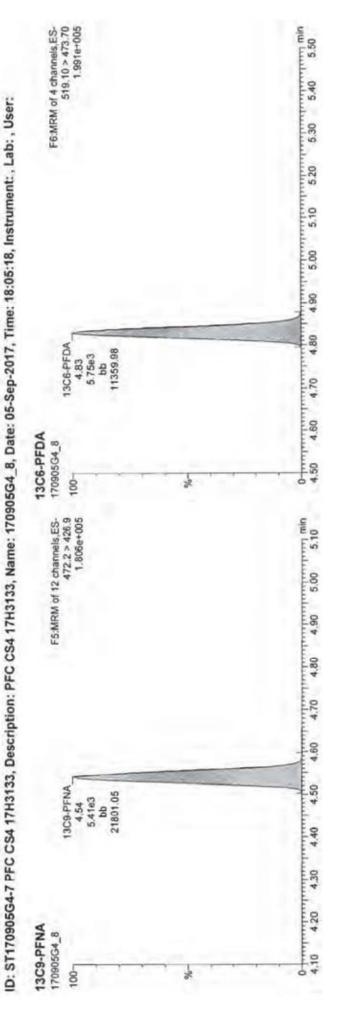
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Wednesday, September 06, 2017 12:51:47 Pacific Daylight Time Wednesday, September 06, 2017 13:56:30 Pacific Daylight Time Last Altered: Printed:



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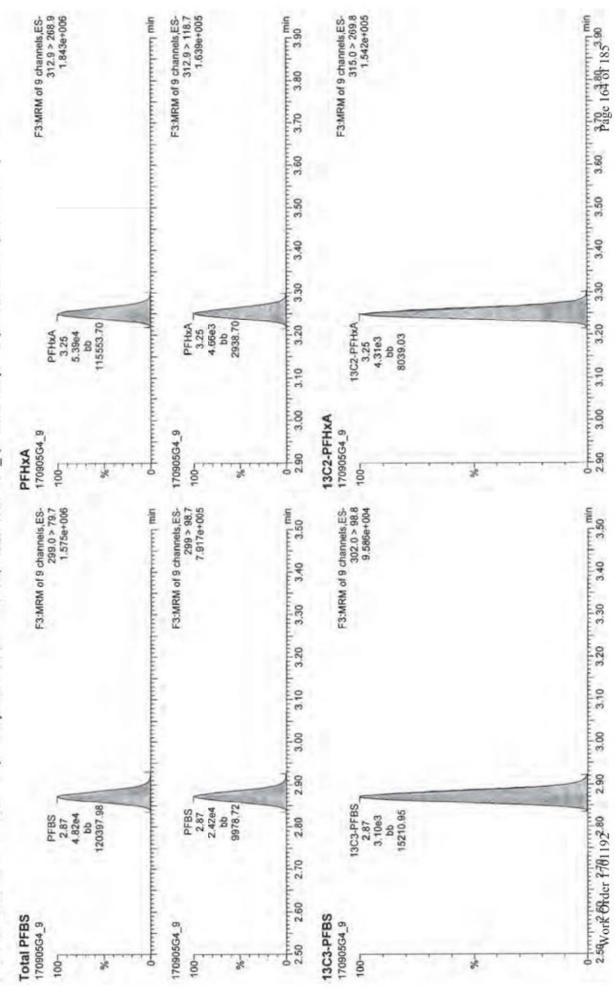
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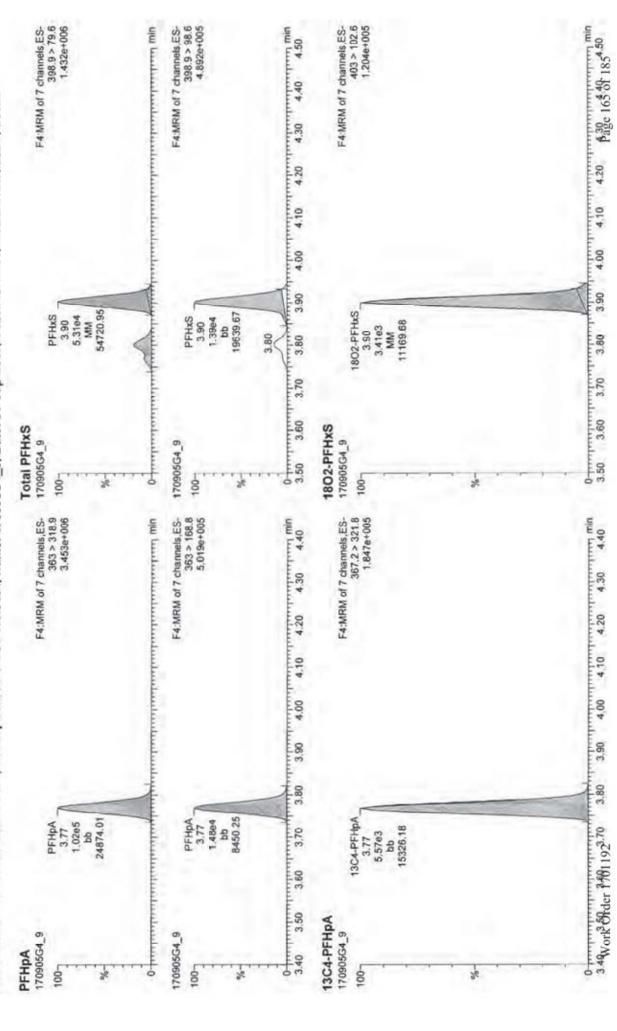
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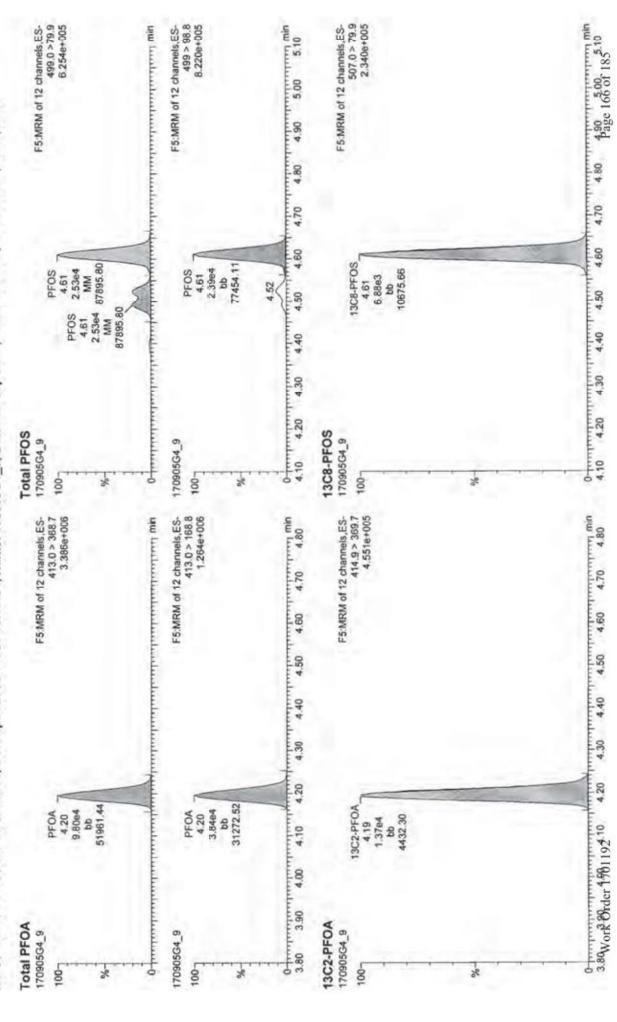
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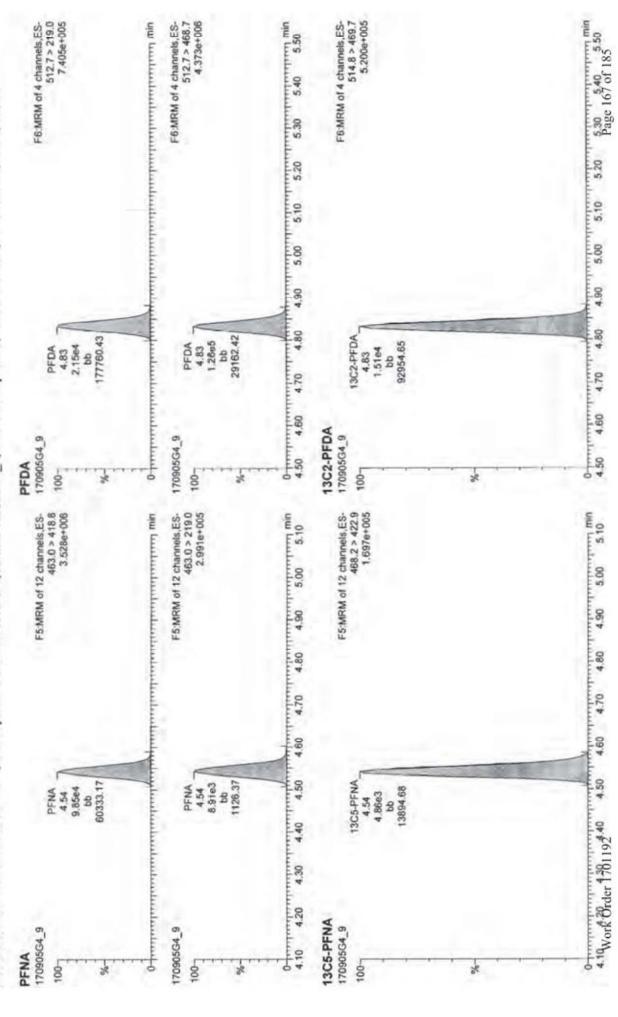
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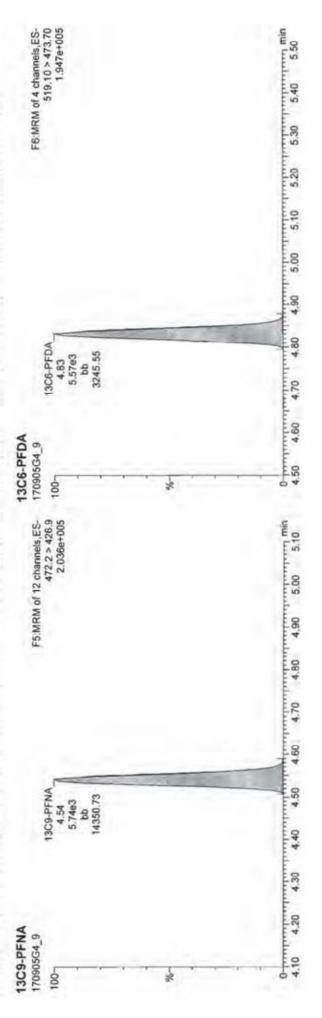
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Last Altered: Wednesday, September 06, 2017 12:51:47 Pacific Daylight Time Printed: Wednesday, September 06, 2017 13:56:30 Pacific Daylight Time

ID: ST170905G4-8 PFC CS5 17H3134, Description: PFC CS5 17H3134, Name; 170905G4_9, Date: 05-Sep-2017, Time: 18:17:51, Instrument: , Lab: , User:



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U:\G1.PRO\Results\2017\170905G4\170905G4-12.qld Dataset:

Friday, September 08, 2017 15:35:30 Pacific Daylight Time Friday, September 08, 2017 15:36:54 Pacific Daylight Time Last Altered:

Printed:

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ID: ICV170905G4-1 PFC ICV 17H3126, Description: PFC ICV 17H3126, Name: 170905G4_12, Date: 05-Sep-2017, Time: 18:55:29

	# Name	Trace	Peak Area	IS Resp	RRF Mean	MANOE	RT	Conc.	%Rec
	1 PFBA	212.9 > 168.9	1.028e4	1.63164		1.00	1.64	10.6	106 70-130
	2 PFPeA	263.0 > 218.8	4.831e3	5.474e3		1.00	2.59	9.56	95.6
	3 PFBS	299.0 > 79.7	5.344e3	4.154e3		1.00	2.87	8.50	85.0
	4 PFHXA	312.9 > 268.9	7.262e3	5.188e3		1.00	3,25	10.9	109
S. STANSFELL	5 PFHpA	363 > 318.9	1.338e4	7.153e3		1.00	3.77	10.6	106
	6 PFHxS	398.9 > 79.6	5,670e3	4.265e3		1.00	3,90	10.4	104
	7 PFOA	413.0 > 368.7	1.067e4	1.592e4		1.00	4.20	9.24	92.4
	8 PFNA	463.0 > 418.8	1.125e4	5.270e3		1.00	4,54	10.6	106
	9 PFOS	499.0 > 79.9	2.157e3	7.489e3		1.00	4.61	7.95	79.5
	10 PFDA	512.7 > 219.0	2.207e3	1,449e4		1.00	4.84	9.60	\$ 0.96
100	11 13C3-PFBA	215.9 > 171.8	1,631e4	1.24664	1.311	1.00	1.64	12.5	BS1-058.66
STATE OF THE STATE	12 13C3-PFBS	302.0 > 98.8	4.154e3	1.320e4	0.323	1.00	2.87	12.2	97.4
3	13 13C3-PFPeA	266.0 > 221.8	5.474e3	1.320e4	0.422	1.00	2.59	12.3	98.2
	14 13C2-PFHxA	315.0 > 269.8	5.188e3	1.320e4	0.407	1.00	3.25	12.1	9.96
	15 13C4-PFHpA	367.2 > 321.8	7.153e3	1.320e4	0.575	1.00	3.77	11.8	94.3
	16 1802-PFHxS	403 > 102.6	4.265e3	8.755e3	0.489	1.00	3.90	12.4	99.5
	17 13C2-PFOA	414.9 > 369.7	1.592e4	4.678e3	3.278	1.00	4.20	13.0	104
	18 13C5-PFNA	468.2 > 422.9	5.270e3	5.830e3	0.929	1.00	4.54	12.2	97.3
	19 13C2-PFDA	514.8 > 469.7	1.449e4	5.630e3	2.508	1.00	4.83	12.8	103
1	20 13C8-PFOS	6.67 < 0.708	7,489e3	6.493e3	0.989	1.00	4.61	14.6	117
	21 13C4-PFBA	216.9 > 171.8	1.246e4	1.245e4	1.000	1.00	1.62	12.5	100
	22 13C5-PFHxA	318>272.9	1.320e4	1.320e4	1.000	1.00	3.25	12.5	100
4	23 13C3-PFHxS	401.9 > 79.9	8.755e3	8.755e3	1.000	1.00	3.90	12.5	100
1000	24 13C8-PFOA	421.3 > 376	4.678e3	4.678e3	1,000	1.00	4.20	12.5	100
-	25 13C9-PFNA	472.2 > 426.9	5.830e3	5.830e3	1.000	1.00	4.54	12.5	100
3	26 13C4-PFOS	503.0 > 79.9	6.493e3	6.493e3	1.000	1.00	4.61	12.5	100
1	27 13C6-PFDA	519.10 > 473.70	5.630e3	5.630e3	1.000	1.00	4.83	12.5	100

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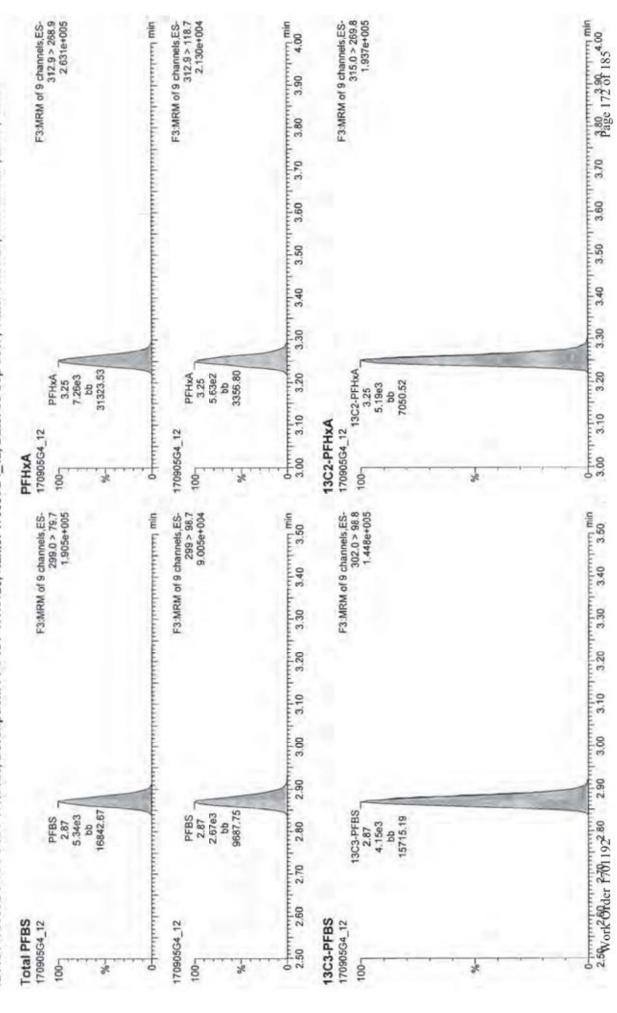
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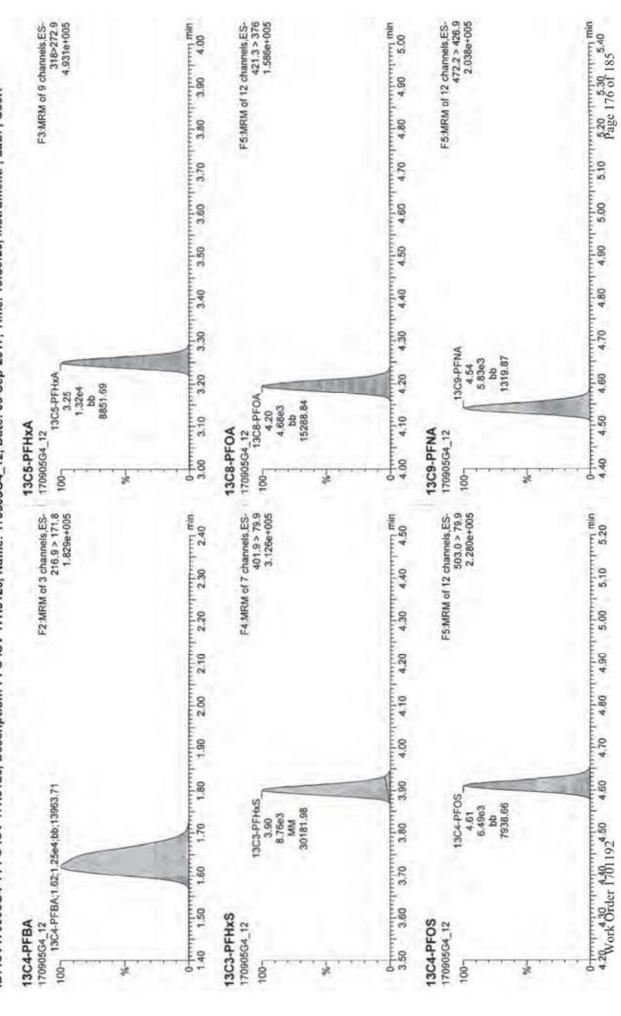
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U:\G1.PRO\Results\2017\170905G4\170905G4-12.qld Dataset Friday, September 08, 2017 15:35:30 Pacific Daylight Time Friday, September 08, 2017 15:36:54 Pacific Daylight Time Last Altered: Printed:

D: ICV170905G4-1 PFC ICV 17H3126, Description: PFC ICV 17H3126, Name: 170905G4_12, Date: 05-Sep-2017, Time: 18:55:29, Instrument: , Lab: , User:



Quantify Sample Summary Report

Vista Analytical Laboratory Q1

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늄 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 00. 00. 00. 00. 1.00 00. 8 00 00. 00 00 80 00. 1.00 00. 00. 00. Calibration: U:\G1.pro\CurveDB\C18_VAL-PFC_Q1_9-5-17_A_2Trans.cdb 06 Sep 2017 12:51:47 IS Resp RRF Mean ID: IPA, Description: IPA, Name: 170905G4_11, Date: 05-Sep-2017, Time: 18:42:52 Method: U:\G1.pro\MethDB\PFAS_14or16_2trans_0712.mdb 12 Jul 2017 13:38:17 Friday, September 08, 2017 15:50:42 Pacific Daylight Time Friday, September 08, 2017 15:51:06 Pacific Daylight Time MassLynx 4.1 SCN815 Peak Area 212.9 > 168.9 367.2 > 321.8 468.2 > 422.9 514.8 > 469.7 472.2 > 426.9 263.0 > 218.8 312.9 > 268.9 413.0 > 368.7 463.0 > 418.8 512.7 > 219.0 215.9 > 171.8 266.0 > 221.8 315.0 > 269.8 414.9 > 369.7 216.9 > 171.8 302.0 > 98.8 299.0 > 79.7 398.9 > 79.6 507.0 > 79.9 401.9 > 79.9 503.0 > 79.9 363 > 318.9 499.0 > 79.9 403 > 102.6 421.3 > 376 318>272.9

13 13C3-PFPeA

12 13C3-PFBS

11 13C3-PFBA

9 PFOS

10 PFDA

7 PFOA 8 PFNA 14 13C2-PFHXA 15 13C4-PFHpA 16 1802-PFHxS

17 13C2-PFOA 18 13C5-PFNA 22 13C5-PFHxA 23 13C3-PFHxS

8 8

24 13C8-PFOA 25 13C9-PFNA 26 13C4-PF0S

21 13C4-PFBA

19 13C2-PFDA 20 13C8-PF0S

8 6

%Rec

Conc.

Trace

Name 1 PFBA 2 PFPeA

4 PFHxA 5 PFHpA 6 PFHxS

3 PFBS

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1.00

519.10 > 473.70

299.0 > 79.7 398.9 > 79.6

29 Total PFHxS

30 Total PFOA

31 Total PFOS

27 13C6-PFDA

25 25 26 27 27 28 29 29 30

28 Total PFBS

413.0 > 368.7

499.0 > 79.9

00. 1.00 1.00

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Vista Analytical Laboratory Q1

Quantify Totals Report MassLynx 4.1 SCN815

Untitled Dataset: Friday, September 08, 2017 15:50:42 Pacific Daylight Time Friday, September 08, 2017 15:51:06 Pacific Daylight Time Last Altered:

Printed:

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ID: IPA, Description: IPA, Name: 170905G4_11, Date: 05-Sep-2017, Time: 18:42:52

Total PFBS

Total PFHxS

|--|--|--|

Total PFOA

		# Name T	race	RT	Area	IS Area	Conc.
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Total PFOS

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MassLynx 4.1 SCN815 Vista Analytical Laboratory Q1 Quantify Sample Report

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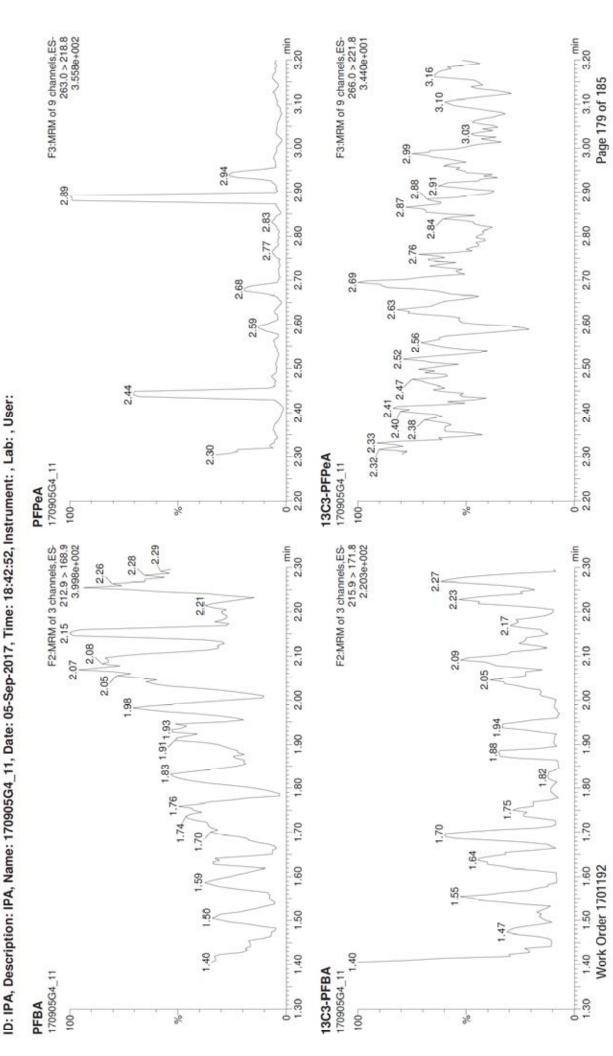
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MassLynx 4.1 SCN815

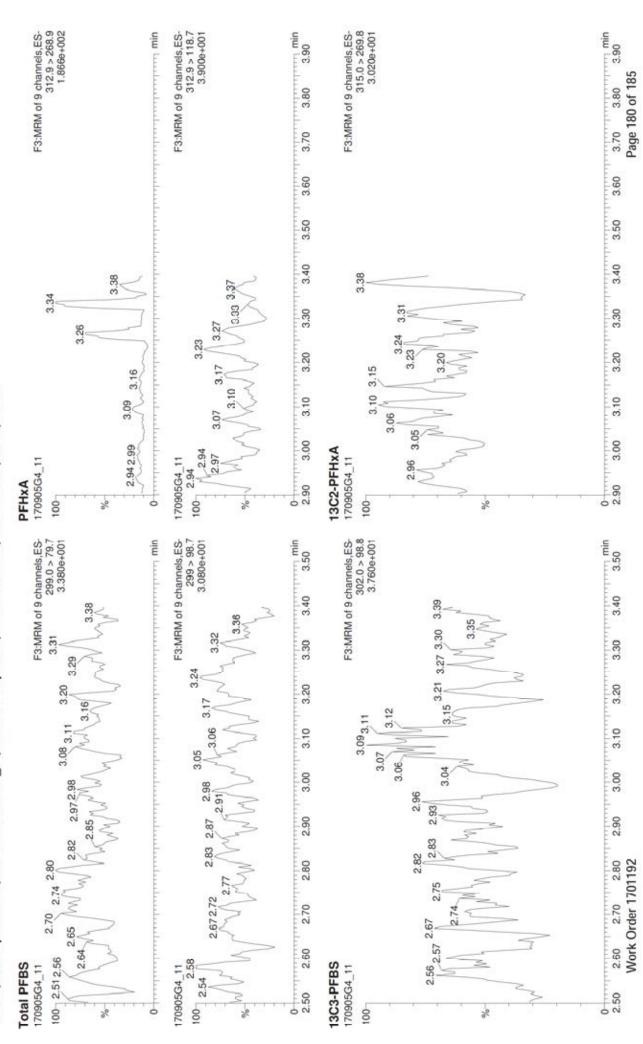
Quantify Sample Report Vista Analytical Laboratory Q1

Untitled Dataset:

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MassLynx 4.1 SCN815

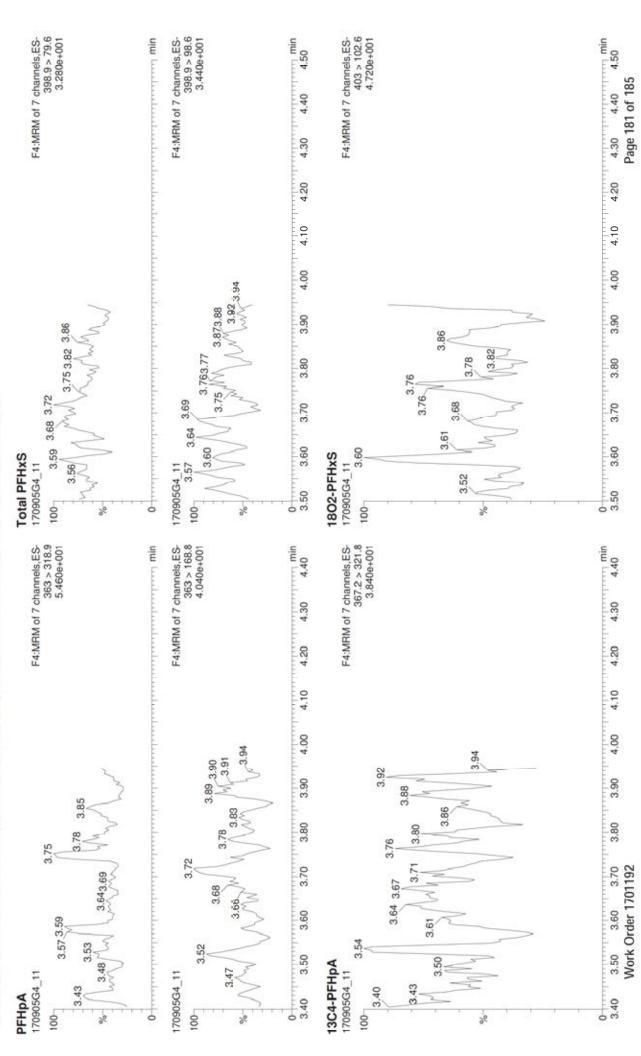
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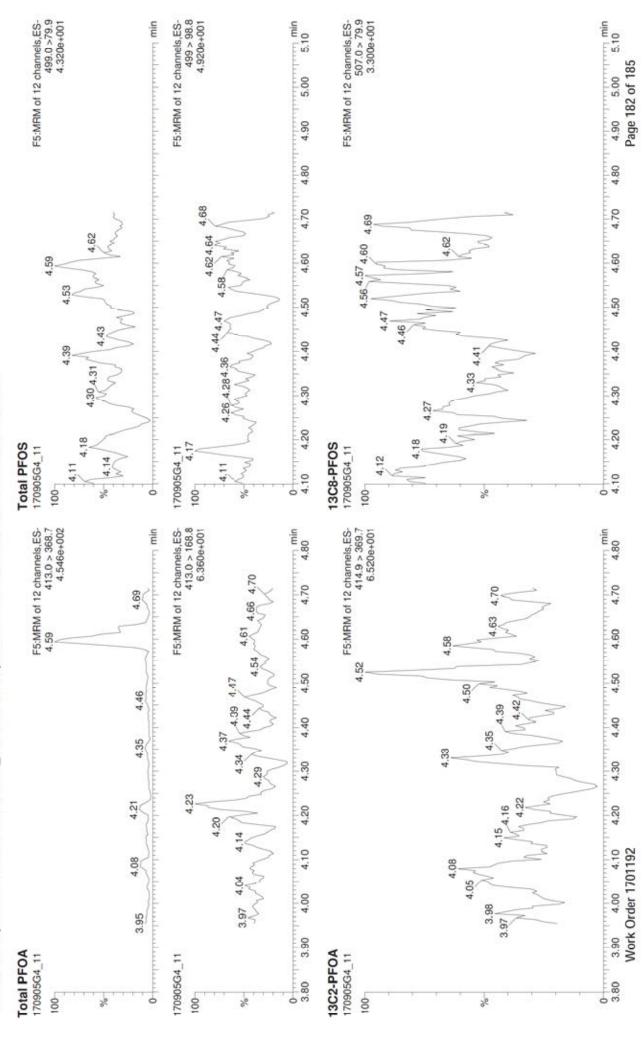
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MassLynx 4.1 SCN815

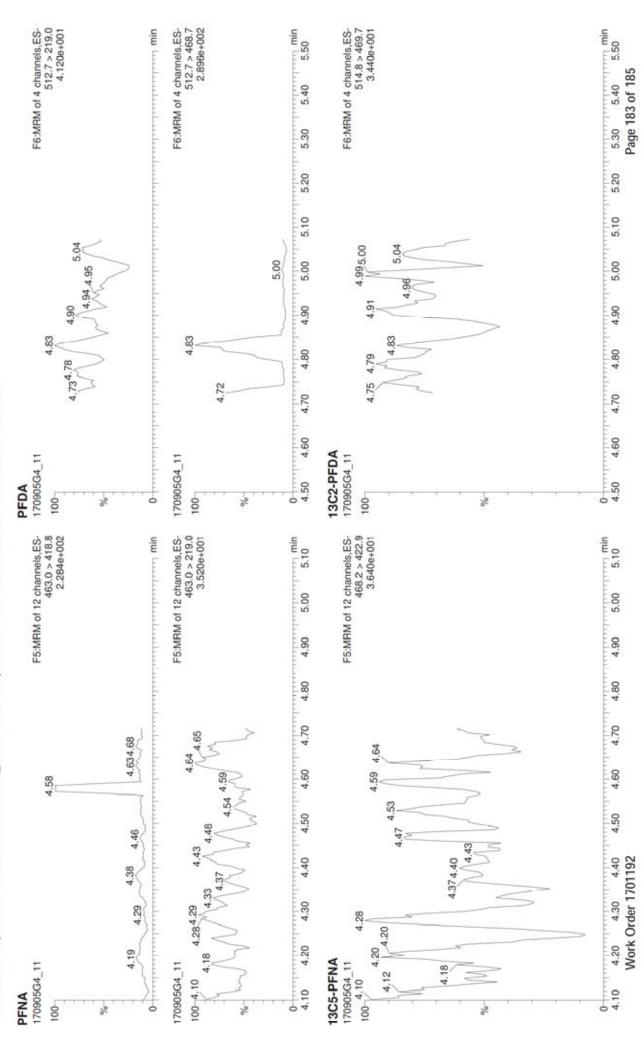
Vista Analytical Laboratory Q1 Quantify Sample Report

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Dataset:

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MassLynx 4.1 SCN815

Vista Analytical Laboratory Q1 Quantify Sample Report

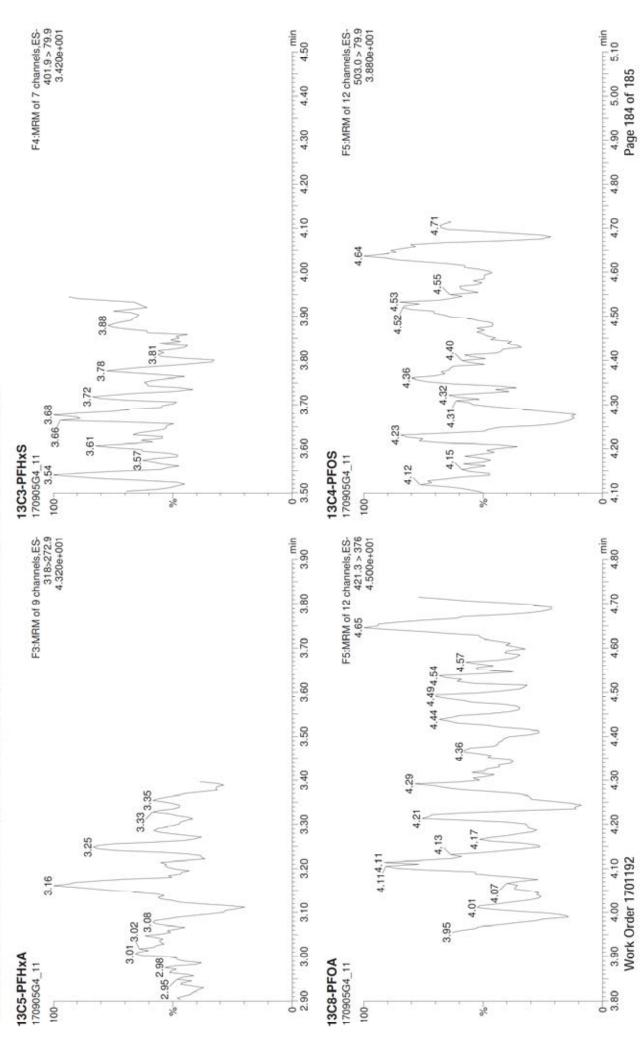
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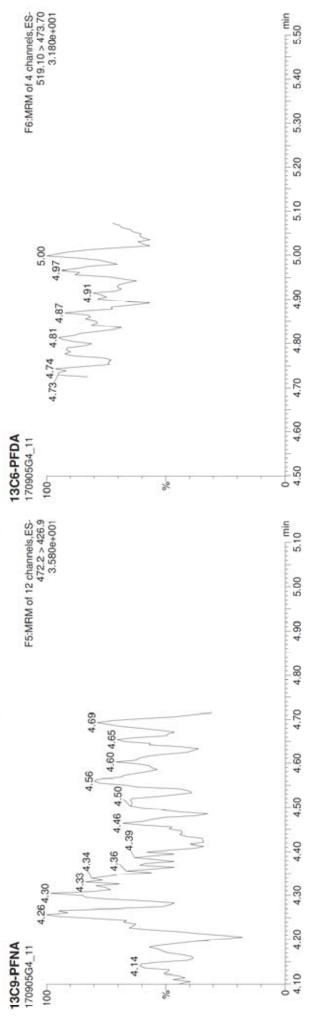
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MassLynx 4.1 SCN815

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Printed:

ID: IPA, Description: IPA, Name: 170905G4_11, Date: 05-Sep-2017, Time: 18:42:52, Instrument: , Lab: , User:





October 16, 2017

Vista Work Order No. 1701312

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 September 23, 2017. This sample set was analyzed on a standard turn-around time, under your Project Name 'Peoria ANGB / 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; 516-673-1520 fx; 916-673-0106 www.vista-analytical.com

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Vista Work Order No. 1701312 Case Narrative

Sample Condition on Receipt:

Twelve 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. It was noted that the Sample IDs on some of the bottles did not exactly match those of the Chain-of-Custody (CoC). The client requested that all Sample IDs from the CoC be used for sample reporting.

Analytical Notes:

VAL-PFAS

The 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 of the samples listed in the following table were re-injected because one or more Injection Internal Standard Analyte response areas were outside of criteria.

Laboratory ID	Sample Name
1701312-01	GPEOR-05-SB01-0.5-1
1701312-02	GPEOR-05-SB01-12.5-13
1701312-03	GPEOR-05-SB02-0.5-1
1701312-04	GPEOR-05-SB02-4.5-5
1701312-05	GPEOR-05-SB03-0.5-1
1701312-07	GPEOR-07-SB03-1-1.5
1701312-08	GPEOR-07-SB03-14.5-15
1701312-09	GPEOR-07-SB01-1-1.5
1701312-10	GPEOR-07-SB01-11.5-12
1701312-11	GPEOR-07-SB02-1.5-2
B7I0162-BLK1	B7I0162-BLK1

For sample GPEOR-05-SB02-4.5-5, area criteria passed for the second injection; therefore, the results from the re-injection have been reported. For the other samples, the results were similar in the second injection. The results from the original injections have been reported.

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The labeled standard recoveries outside the acceptance criteria are listed in the table below.

QC Anomalies

LabNumber	SampleName	Analysis	Analyte	Flag	%Rec
1701312-01	GPEOR-05-SB01-0.5-1	VAL - PFAS	13C3-PFBS	Н	160
1701312-02	GPEOR-05-SB01-12.5-13	VAL - PFAS	13C3-PFBS	Н	156
1701312-04	GPEOR-05-SB02-4.5-5	VAL - PFAS	13C3-PFBS	Н	166
1701312-06	GPEOR-05-SB03-3.5-4	VAL - PFAS	13C3-PFBS	Н	162
1701312-07	GPEOR-07-SB03-1-1.5	VAL - PFAS	13C3-PFBS	Н	164
1701312-08	GPEOR-07-SB03-14.5-15	VAL - PFAS	13C3-PFBS	Н	157
1701312-11	GPEOR-07-SB02-1.5-2	VAL - PFAS	13C3-PFBS	Н	169

H = Recovery was outside laboratory acceptance criteria.

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Sample Inventory	5
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Qualifiers	21
Certifications	22
Sample Receipt	25
Extraction Information	29
Sample Data - VAL - PFAS	36
IIS Areas, IBs and CCVs	124
ICAL with ICV and IB	287

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Sample Inventory Report

Vista Sample ID	Client Sample ID	Sampled	Received	Components/Containers
1701312-01	GPEOR-05-SB01-0.5-1	19-Sep-17 08:16	23-Sep-17 09:14	HDPE Jar, 6 oz
1701312-02	GPEOR-05-SB01-12.5-13	19-Sep-17 08:50	23-Sep-17 09:14	HDPE Jar, 6 oz
1701312-03	GPEOR-05-SB02-0.5-1	19-Sep-17 09:25	23-Sep-17 09:14	HDPE Jar, 6 oz
1701312-04	GPEOR-05-SB02-4.5-5	19-Sep-17 09:40	23-Sep-17 09:14	HDPE Jar, 6 oz
1701312-05	GPEOR-05-SB03-0.5-1	19-Sep-17 10:05	23-Sep-17 09:14	HDPE Jar, 6 oz
1701312-06	GPEOR-05-SB03-3.5-4	19-Sep-17 10:10	23-Sep-17 09:14	HDPE Jar, 6 oz
1701312-07	GPEOR-07-SB03-1-1.5	19-Sep-17 11:20	23-Sep-17 09:14	HDPE Jar, 6 oz
1701312-08	GPEOR-07-SB03-14.5-15	19-Sep-17 11:40	23-Sep-17 09:14	HDPE Jar, 6 oz
1701312-09	GPEOR-07-SB01-1-1.5	19-Sep-17 12:05	23-Sep-17 09:14	HDPE Jar, 6 oz
1701312-10	GPEOR-07-SB01-11.5-12	19-Sep-17 12:30	23-Sep-17 09:14	HDPE Jar, 6 oz
1701312-11	GPEOR-07-SB02-1.5-2	19-Sep-17 12:55	23-Sep-17 09:14	HDPE Jar, 6 oz
1701312-12	GPEOR-07-SB02-14.5-15	19-Sep-17 13:05	23-Sep-17 09:14	HDPE Jar, 6 oz

Vista Project: 1701312 Client Project: Peoria ANGB / 291330006

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ANALYTICAL RESULTS

Work Order 1701312 Page 6 of 483



Sample ID: Method Blank	ank									VAL	VAL - PFAS
Client Data Name: AMEC F Project: Peoria Al	AMEC Foster Wheeler Peoria ANGB / 291330006	Matrix:	Solid		Labor Lab S	Laboratory Data Lab Sample:	B710162-BLK1	SLKI	Column:	BEH C18	
Analyte		Conc. (ug/kg)	DF	TOD	700	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS		QN	0.285	1.00	2.00		B710162	29-Sep-17	1.00 g	02-Oct-17 23:32	-
PFHpA		QN	0.285	1.00	2.00		B710162	29-Sep-17	1.00 g	02-Oct-17 23:32	-
PFHxS		QN	0.285	1.00	2.00		B710162	29-Sep-17	1.00 g	02-Oct-17 23:32	-
PFOA		ON	0.285	1.00	2.00		B710162	29-Sep-17	1.00 g	02-Oct-17 23:32	-
PFOS		QN	0.285	1.00	2.00		B7I0162	29-Sep-17	1.00 g	02-Oct-17 23:32	-
PFNA		ND	0.285	1.00	2.00		B7I0162	29-Sep-17	1.00 g	02-Oct-17 23:32	-
Labeled Standards	Type	% Recovery		Limits		Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	SI	145		50 - 150			B710162	29-Sep-17	1.00 g	02-Oct-17 23:32	-
13C4-PFHpA	IS	85.8		50 - 150			B710162	29-Sep-17	1.00 g	02-Oct-17 23:32	_
18O2-PFHxS	IS	94.0		50 - 150			B710162	29-Sep-17	1.00 g	02-Oct-17 23:32	_
I3C2-PFOA	IS	9.86		50 - 150			B710162	29-Sep-17	1.00 g	02-Oct-17 23:32	-
13C8-PFOS	IS	92.8		50 - 150			B710162	29-Sep-17	1.00 g	02-Oct-17 23:32	_
13C5-PFNA	IS	92.7		50 - 150			B710162	29-Sep-17	1.00 g	02-Oct-17 23:32	-
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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	PR									VAI	VAL - PFAS
Client Data Name:	AMEC Foster Wheeler	Matrix:	Solid		Lab Lab	Laboratory Data Lab Sample:	B710162-BS1	BSI	Column:	BEH C18	
Analyte	Feoria Ain GB / 291550000	Amt Found (ug/kg Spike Amt	Spike Amt	% Rec	Limits	Qualifiers	Batch	Extracted	Extracted Samp Size	Analyzed	Dilution
PFBS		8.76	10.0	9.78	70-130		B710162	29-Sep-17	1.00 g	0	_
PFHpA		8.31	10.0	83.1	70-130		B710162	29-Sep-17	1.00 g	02-Oct-17 23:00	_
PFHxS		7.99	10.0	6.67	70-130		B710162	29-Sep-17	1.00 g	02-Oct-17 23:00	_
PFOA		9.40	10.0	94.0	70-130		B710162	29-Sep-17	1.00 g	02-Oct-17 23:00	_
PFOS		7.98	10.0	8.67	70-130		B710162	29-Sep-17	1.00 g	02-Oct-17 23:00	_
PFNA		9.13	10.0	91.3	70-130		B710162	29-Sep-17	1.00 g	02-Oct-17 23:00	_
Labeled Standards	ds	Type		% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS		SI		146	50- 150		B710162	29-Sep-17	1.00 g	02-Oct-17 23:00	1
13C4-PFHpA		IS		0.62	50-150		B710162	29-Sep-17	1.00 g	02-Oct-17 23:00	_
18O2-PFHxS		SI		98.1	50-150		B710162	29-Sep-17	1.00 g	02-Oct-17 23:00	_
13C2-PFOA		IS		95.3	50-150		B710162	29-Sep-17	1.00 g	02-Oct-17 23:00	_
13C8-PFOS		SI		92.3	50-150		B710162	29-Sep-17	1.00 g	02-Oct-17 23:00	_
13C5-PFNA		IS		76.5	50-150		B710162	B710162 29-Sep-17	1.00 g	02-Oct-17 23:00	1



Sample ID: (Sample ID: GPEOR-05-SB01-0.5-1									VAL	VAL - PFAS
Client Data	AMEC Foctor Whooler	Mostrix	lioS		Labor	Laboratory Data	1701312-01				
Project:	Peoria ANGB / 291330006	Date Collected:		19-Sep-17 08:16	Date F	Date Received:	23-Sep-17 09:14	09:14	Column:	BEHCIS	
					% Solids:	ids:	83.3				
Analyte		Conc. (ug/kg)	DF	TOD	007	Qualifiers	Batch	Extracted	Extracted Samp Size	Analyzed	Dilution
PFBS		0.777	0.281	0.984	1.97	1	B710162	29-Sep-17	1.22 g	03-Oct-17 00:59	_
PFHpA		1.20	0.281	0.984	1.97	-	B710162	29-Sep-17	1.22 g	03-Oct-17 00:59	_
PFHxS		30.5	0.281	0.984	1.97		B710162	29-Sep-17	1.22 g	03-Oct-17 00:59	_
PFOA		2.23	0.281	0.984	1.97		B710162	29-Sep-17	1.22 g	03-Oct-17 00:59	_
PFOS		286	1,40	4.92	9.84	D	B710162	29-Sep-17	1.22 g	08-Oct-17 01:19	2
PFNA		ND	0.281	0.984	1.97		B710162	29-Sep-17	1.22 g	03-Oct-17 00:59	-
Labeled Standards	ards Type	% Recovery		Limits		Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	SI	160		50 - 150		Н	B710162	29-Sep-17	1.22 g	03-Oct-17 00:59	-
13C4-PFHpA	SI	80.8		50 - 150			B710162	29-Sep-17	1.22 g	03-Oct-17 00:59	_
18O2-PFHxS	IS	7.76		50 - 150			B710162	29-Sep-17	1.22 g	03-Oct-17 00:59	_
13C2-PFOA	SI	9.68		50 - 150			B710162	29-Sep-17	1.22 g	03-Oct-17 00:59	-
13C8-PFOS	IS	106		50 - 150		D	B710162	29-Sep-17	1.22 g	08-Oct-17 01:19	S
13C5-PFNA	SI	82.7		50 - 150			B710162	29-Sep-17	1.22 g	03-Oct-17 00:59	-
11 11 11 11		*****									

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: G	Sample ID: GPEOR-05-SB01-12.5-13									VAL	VAL - PFAS
Client Data Name: Project:	AMEC Foster Wheeler Peoria ANGB / 291330006	Matrix: Date Collected:	Soil ted: 19-Sep-17 0Rv0	0Rv0	Laborato Lab Samp Date 4 ece % Solids:	Laboratory Data Lab Sample: Date 4 eceiJ ed: % Solids:	1701312-02 23-Sep-17 09:1. 778	2 09:1.	Column:	BEHCIR	
Analyte		Conc. (ug/kg)	DL	TOD	гоб	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS		QN	082RR	1801	2802	î	B730162	29-Sep-17	182R.I	03-Oct-17 01:10	1
PFHpA		ND	082 RR	1801	2802		B730162	29-Sep-17	182R.I	03-Oct-17 01:10	-
PFHxS		08866	02RR	1801	2802	50	B730162	29-Sep-17	182R.I	03-Oct-17 01:10	_
PFOA		ND	082 RR	1801	2802		B730162	29-Sep-17	182R1	03-Oct-17 01:10	-
PFOS		181	02RR	1801	2802	50	B750162	29-Sep-17	182R.I	03-Oct-17 01:10	_
PFNA		ND	02RR	1801	2802		B730162	29-Sep-17	182R.I	03-Oct-17 01:10	-
Labeled Standards	rds Type	% Recovery		Limits		Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	88	lv6		v0 - 1v0		Η	B730162	29-Sep-17	ISKI	03-Oct-17 01:10	_
13CPFHpA	83	6889		v0 - 1v0			B730162	29-Sep-17	182R1	03-Oct-17 01:10	-
IRO2-PFHxS	88	B26		v0 - 1v0			B730162	29-Sep-17	182R.I	03-Oct-17 01:10	-
13C2-PFOA	88	6806		v0 - 1v0			B730162	29-Sep-17	182R.I	03-Oct-17 01:10	-
13CR-PFOS	83	R 8		v0 - 1v0			B730162	29-Sep-17	182R.I	03-Oct-17 01:10	_
13Cv-PFNA	88	798v		v0 - 1v0			B730162	29-Sep-17	182R1	03-Oct-17 01:10	-

LCL-UCL- Lower control limit - upper control limit. The results are reported in dry weil ht8. The sample size is reported in wet weil ht8 4 esults reported to the DL8.

When reported, PFHxS, PFOA and PFOS include both linear and branched isomers8 Only the linear isomer is reported for all other analytes8



Sample ID: (Sample ID: GPEOR-05-SB02-0.5-1									VAL	VAL - PFAS
Client Data					Labor	Laboratory Data					
Name:	AMEC Foster Wheeler	Matrix:	Soil		Lab S	Lab Sample:	1701312-03	3	Col. mu:	BEn CIH	
Project:	Peoria ANGB / 291330006	Date Collected:		19-Sep-17 09:2R	Date	Date v ecei4ed:	23-Sep-17 09:1J	09:13			
					% Solids:	ids:	9387				
Analyte		Conc. (ug/kg)	DF	TOD	roo	Qualifiers	Batch	Extracted	Extracted Samp Size	Analyzed	Dilution
PFBS		QN	#K\$0	2680	1899		B750162	29-Sep-17	1 202 1	03-Oct-17 01:20	-
PFn pA		ND	0&H	26680	1809		B750162	29-Sep-17	18071	03-Oct-17 01:20	-
PFn xS		1839	087H	26680	180	5.0	B730162	29-Sep-17	1 207 1	03-Oct-17 01:20	-
PFOA		ND	082H	16080	1809		B750162	29-Sep-17	18071	03-Oct-17 01:20	-
PFOS		0861	0&H	76680	180		B750162	29-Sep-17	1 207 1	03-Oct-17 01:20	-
PFNA		ND	0&H	08097	1809		B730162	29-Sep-17	18071	03-Oct-17 01:20	-
Labeled Standards	ards Type	% Recovery		Limits		Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	88	137		RO - 1RO			B730162	29-Sep-17	1 2021	03-Oct-17 01:20	1
13CJ-PFn pA	83	HS		RO - 1RO			B730162	29-Sep-17	18071	03-Oct-17 01:20	-
1HD2-PFn xS	88	H88		RO - 1RO			B730162	29-Sep-17	18071	03-Oct-17 01:20	-
13C2-PFOA	88	H/82		RO - 1RO			B730162	29-Sep-17	18071	03-Oct-17 01:20	-
13CHPF0S	88	9388		RO - 1RO			B730162	29-Sep-17	18071	03-Oct-17 01:20	_
13CR-PFNA	88	H586		RO - 1RO			B730162	29-Sep-17	18071	03-Oct-17 01:20	-

LCL-UCL- Lower courrol limit -, pper courrol limit. The res. Its are reported in dry weil ht8. The sample size is reported in wet weil ht8 v es. Its reported to the DL8.

When reported, PFn xS, PFOA and PFOS inel. de both linear and brauched isomers8 Ouly the linear isomer is reported for all other analytes8



Sample ID: G	Sample ID: GPEOR-05-SB02-4.5-5									VAL	VAL - PFAS
Client Data Name:	AMFC Weller h Seeler	Matrix:	Soil		Labor Lab S	Laboratory Data Lab Sample:	1701312-0%	%	Collini	BFv C1.	
Project:	Peoria ANGB / 291330006	Date Collected:	ted: 19-Sep-17 09:90	06:60 4	Date 4	Date 4 eceiJed:	23-Sep-17 09:1%	%1:60			
					s SolidE	idE	. 0un				
Analyte		Conc. (ug/kg)	DF	TOD	гоб	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PWBS		QN	0£	1001	2:02	i	B730162	29-Sep-17	1423.1	03-Oct-17 19:n0	1
PW pA		ND	Ou£	101	2002		B730162	29-Sep-17	1423.1	03-Oct-17 19:n0	-
P.W. xS		%#J00	002.	101	2002	50	B730162	29-Sep-17	1423.1	03-Oct-17 19:n0	-
PWOA		ND	Ou£	1001	2002		B730162	29-Sep-17	10231	03-Oct-17 19:n0	_
PWOS		2029		101	2002		B750162	29-Sep-17	10231	03-Oct-17 19:n0	_
PWNA		ND	002.	1:01	2002		B730162	29-Sep-17	10231	03-Oct-17 19:n0	-
Labeled Standards	rds Type	% Recovery		Limits		Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PWBS	88	991		n0 - 1n0		^	B730162	29-Sep-17	1423.1	03-Oct-17 19:n0	_
13C%PW pA	83	. Zul		n0 - 1n0			B730162	29-Sep-17	10231	03-Oct-17 19:n0	_
1. O2-PW xS	88	9706		n0 - 1n0			B730162	29-Sep-17	10231	03-Oct-17 19:n0	-
I3C2-PWOA	83	. 300		n0 - 1n0			B730162	29-Sep-17	10231	03-Oct-17 19:n0	-
13CPWOS	88	9%.		n0 - 1n0			B730162	29-Sep-17	10231	03-Oct-17 19:n0	_
13Cn-PWNA	38	n6.		n0 - 1n0			B730162	29-Sep-17	10231	03-Oct-17 19:n0	_

DL - DetectioRLimit LOD - Limit of DetectioR LOQ - Limit of qFBRitatioR

LCL-UCL- Lower coRerol limit - Hpper coRerol limit
The reBHEare reported iR dry weil Ru
The Emple Exe Ereported iR wet weil Ru
4 eHHEreported to 18c DLu
h SeR reported, PW xS, PWOA aRd PWOS iRelHe both liRear aRd braResed iEnmerFu
ORly 18e liRear iEneported for all other are alwested.



Sample ID: (Sample ID: GPEOR-05-SB03-0.5-1									VAL	VAL - PFAS
Client Data Name:	AMFC WBer h 8eeler	Matrix:			Labor Lab St	Laboratory Data Lab Sample:	1701312-0%	%	Column:	BFHCIR	
Project:	Peoria ANGB / 291330006	Date Collected:		19-Sep-17 10:0%	Date v eco	Date v ecei4ed: s SolidE	23-Sep-17 09:1J 96.9	09:13			
Analyte		Conc. (ng/kg)	DF	TOD	T00	Qualifiers	Batch	Extracted	Extracted Samp Size	Analyzed	Dilution
PWBS		QN	0.2R0	0.983	1.97		B730162	29-Sep-17	1.0%I	03-Oct-17 02:1J	-
PWHpA		QN	0.2R0	0.9R3	1.97		B730162	29-Sep-17	1.0%	03-Oct-17 02:1J	-
PWHxS		1.20	0.2R0	0.9R3	1.97	50	B730162	29-Sep-17	1.0%	03-Oct-17 02:1J	-
PWOA		ND	0.2R0	0.9R3	1.97		B730162	29-Sep-17	1.0%1	03-Oct-17 02:1J	-
PWOS		7.22.7	0.2R0	0.973	1.97		B750162	29-Sep-17	1.0%1	03-Oct-17 02:1J	_
PWWA		ND	0.2R0	0.9R3	1.97		B730162	29-Sep-17	1.0%	03-Oct-17 02:1J	-
Labeled Standards	ards Type	% Recovery		Limits		Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PWBS	88	119		061 - 0%			B730162	29-Sep-17	1.0%	03-Oct-17 02:1J	_
13CJ-PWHpA	83	R2.0		90 - 190			B730162	29-Sep-17	1.0%1	03-Oct-17 02:1J	_
1RO2-PWHxS	89	Ξ		061 - 0%			B730162	29-Sep-17	1.0%1	03-Oct-17 02:1J	-
13C2-PWOA	88	101		061 - 06			B730162	29-Sep-17	1.0%	03-Oct-17 02:1J	-
13CR-PWOS	89	102		0%1 - 0%			B750162	29-Sep-17	1.0%	03-Oct-17 02:1J	-
13C%PWNA	88	RI.6		0%1 - 0%			B750162	29-Sep-17	1.0%	03-Oct-17 02:1J	_
1											

h 8en reported, PWFxS, PWOA and PWOS include bot8 linear and branc8ed iEnmerE. Only 18e linear iEneported for all ot8er analyteE. LCL-UCL- Lower control limit - upper control limit T8e relialtEare reported in dry weil 8t. T8e fample Eze Ereported in wet weil 8t. v effaltEreported to 18e DL.



Sample ID: GP	Sample ID: GPEOR-05-SB03-3.5-4									VAL	VAL - PFAS
Client Data Name: Project:	AMEC Foster Wheeler Peoria ANGB / 291330006	Matrix: Date Collected:	Soil sted: 19-Sep-17 10:10	7 10:10	Laboratory Lab Sample: Date Receive	Laboratory Data Lab Sample: Date Received:	1701312-06 23-Sep-17 09:14	6 09:14	Col. mu:	BEn CIH	
Analyte		Conc. (ug/kg)	DF	TOD	% Solids:	ds: Qualifiers	7980 Batch	Extracted	Extracted Samp Size	Analyzed	Dilution
PFBS		6630	08279	H2680	1896	٦	B730162	29-Sep-17	I&HI	03-Oct-17 02:24	-
PFn pA		QN	0879	H2080	1806		B730162	29-Sep-17	18HI	03-Oct-17 02:24	-
PFnxS		48/2	62.30	HZ-080	1806		B750162	29-Sep-17	18HI	03-Oct-17 02:24	-
PFOA		ND	08279	HZ680	1806		B730162	29-Sep-17	1&HI	03-Oct-17 02:24	_
PFOS		124	62.20	HZ-080	1896	ſ	B750162	29-Sep-17	18HI	03-Oct-17 02:24	-
PFNA		ND	08.79	0807H	1806		B730162	29-Sep-17	1&HI	03-Oct-17 02:24	-
Labeled Standards	s Type	% Recovery		Limits		Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	88	162		0g1 - 0g		u	B730162	29-Sep-17	IW31	03-Oct-17 02:24	-
13C4-PFn pA	83	0862		g0 - 1g0			B730162	29-Sep-17	182HI	03-Oct-17 02:24	-
1HD2-PFn xS	8	948		g0 - 1g0			B730162	29-Sep-17	182HI	03-Oct-17 02:24	-
13C2-PFOA	88	H783		g0 - 1g0			B730162	29-Sep-17	182HI	03-Oct-17 02:24	-
13CHPF0S	89	86H		g0 - 1g0			B730162	29-Sep-17	I&HI	03-Oct-17 02:24	_
13Cg-PFNA	38	HI&		g0 - 1g0			B730162	29-Sep-17	182HI	03-Oct-17 02:24	-
Di Committee Committee		****									

LCL-UCL- Lower courtol limit -, pper courtol limit. The res. Its are reported in dry weil ht8. The sample size is reported in wet weil ht8. Res. Its reported to the DL8.

When reported, PFn xS, PFOA and PFOS inel. de both linear and brauched isomers8 Ouly the linear isomer is reported for all other analytes8



Sample ID: C	Sample ID: GPEOR-07-SB03-1-1.5									VAL	VAL - PFAS
Client Data Name: Project:	AMEC Foster Wheeler Peoria ANGB / 291330006	Matrix: Date Collec	Matrix: Soil Date Collected: 19-Sep-17 11:20	p-17 11:20	Laborato Lab Samp Date Rece % Solids:	Laboratory Data Lab Sample: Date Received: % Solids:	1701312-07 23-Sep-17 09:14 88.5	09:14	Column:	BEH C18	
Analyte		Conc. (ug/kg)	DF	TOD	T00	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS		QN	0.266	0.933	1.87		B710162	29-Sep-17	1.21 g	03-Oct-17 02:35	-
PFHpA		QN	0.266	0.933	1.87		B710162	29-Sep-17	1.21 g	03-Oct-17 02:35	_
PFHxS		QN	0.266	0.933	1.87		B710162	29-Sep-17	1.21 g	03-Oct-17 02:35	_
PFOA		ND	0.266	0.933	1.87		B710162	29-Sep-17	1.21 g	03-Oct-17 02:35	_
PFOS		QN	0.266	0.933	1.87		B710162	29-Sep-17	1.21 g	03-Oct-17 02:35	_
PFNA		ND	0.266	0.933	1.87		B710162	29-Sep-17	1.21 g	03-Oct-17 02:35	-
Labeled Standards	ards Type	% Recovery		Limits		Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	SI	164		50 - 150		Η	B710162	29-Sep-17	1.21 g	03-Oct-17 02:35	-
13C4-PFHpA	IS	82.0		50 - 150			B710162	29-Sep-17	1.21 g	03-Oct-17 02:35	_
1802-PFHxS	IS	676		50 - 150			B710162	29-Sep-17	1.21 g	03-Oct-17 02:35	_
13C2-PFOA	IS	89.5		50 - 150			B710162	29-Sep-17	1.21 g	03-Oct-17 02:35	-
13C8-PFOS	IS	98.3		50 - 150			B710162	29-Sep-17	1.21 g	03-Oct-17 02:35	_
13C5-PFNA	IS	66.4		50 - 150			B710162	29-Sep-17	1.21 g	03-Oct-17 02:35	-
-											

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: G	Sample ID: GPEOR-07-SB03-14.5-15									VAL	VAL - PFAS
Client Data Name: Project:	AMFC WBer h 8eeler Peoria ANGB / 291330006	Matrix: Date Collected:		Soil 19-Sep-17 11:HD	Laborato Lab Samp Date Rece s SolidE	Laboratory Data Lab Sample: Date Received: s SolidE	1701312-0% 23-Sep-17 09:1H %2.3	% 09:1H	Col5mu:	BFn C1%	
Analyte		Conc. (ug/kg)	DF	TOD	гоб	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PWBS		QN	0.2%	1.00	2.01	i,	B7@162	29-Sep-17	1.211	03-4 ct-17 02:H5	1
PWi pA		QN	0.2%	1.00	2.01		B7@162	29-Sep-17	1.211	03-4 ct-17 02:H5	-
P.Wi xS		QV	0.2%	1.00	2.01		B7@162	29-Sep-17	1.21.1	03-4 ct-17 02:H5	_
PW4 A		QN	0.2%	1.00	2.01		B7@162	29-Sep-17	1.211	03-4 ct-17 02:H5	-
PW4 S		QV	0.2%	1.00	2.01		B7@162	29-Sep-17	1.211	03-4 ct-17 02:H5	-
PWNA		ND	0.2%	1.00	2.01		B7@162	29-Sep-17	1.211	03-4 ct-17 02:H5	-
Labeled Standards	rds Type	% Recovery		Limits		Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PWBS	89	187		g0 - 1g0		u	B7@162	29-Sep-17	1.211	03-4 ct-17 02:H5	-
13CHPWn pA	8	%3.H		g0 - 1g0			B7@162	29-Sep-17	1.211	03-4 ct-17 02:H5	_
1% 2-PW xS	8	%9.2		g0 - 1g0			B7@162	29-Sep-17	1.211	03-4 ct-17 02:H5	-
13C2-PW A	8	%9.3		g0 - 1g0			B7@162	29-Sep-17	1.211	03-4 ct-17 02:HS	-
13C%PW S	8	99.2		go - 1go			B7@162	29-Sep-17	1.211	03-4 ct-17 02:HS	_
13Cg-PWNA	8	66.%		go - 1g0			B7@162	29-Sep-17	1.211	03-4 ct-17 02:H5	_

DL - Detectiou Limit L4 D - Limit of Detectiou L4 Q - Limit of q5autitatiou

LCL-UCL-Lower courrol limit - Spper courrol limit
The relSitEare reported in dry weil 8t.
The fample fize iEreported in wet weil 8t.
RefSitEreported to the DL.
It was reported, PW xS, PW A and PW S inel5de both linear and branched iEmerican iEmerican linear linear iEmerican linear linear iEmerican linear iEmerican linear iEmerican linear iEmeri



Client Data Laboratory Data Laboratory Data Laboratory Data Column: Name: AMEC Foster Wheeler Matrix: Soil Lab Sample: 1701312-09 Column: Project: Peoria ANGB / 291330006 Date Collected: 19-Sep-17 12:0R Matrix: Soilds: 38-37 Amp Sample: Column: Project: Project: Project: LAD LAD LAD LAD Column:	Sample ID: 0	Sample ID: GPEOR-07-SB01-1-1.5									VAL	VAL - PFAS
Pecria ANGB / 29133006 Date Collected: 19-Sep-17 12:0R Date vecei+ded: 23-Sep-17 09:1J Pecria ANGB / 29133006 Date Collected: 19-Sep-17 12:0R Pacei+ded: 23-Sep-17 09:1J	Client Data		:	:		Labor	atory Data	0.000				
te Conc. (ug/kg) DL LOP Qualifiers Barch Extracted Samp Size A ND 0.268 0.939 1.88 B750162 29-Sep-17 1.201 A ND 0.268 0.939 1.88 B750162 29-Sep-17 1.201 FBS ND 0.268 0.939 1.88 B750162 29-Sep-17 1.201 FBS ND 0.268 0.939 1.88 B750162 29-Sep-17 1.201 FBS ND 0.268 0.939 1.88 B750162 29-Sep-17 1.201 FBBS S 118 R0 - 1R0 R0 - 1R0 R750162 29-Sep-17 1.201 FHpA S 8	Name: Project:	AMEC Foster Wheeler Peoria ANGB / 291330006	Matrix: Date Collec		7 12:0R	Lab Sa Date v	imple: ecei4ed:	23-Sep-17	9 09:1J	Column:	BEH C18	
te Conc. (ag/kg) DL LOD LOQ Qualifiers Barch Extracted Samp Size A ND 0.268 0.939 1.88 B750162 29-Sep-17 1.201 A ND 0.268 0.939 1.88 B750162 29-Sep-17 1.201 ND 0.268 0.939 1.88 B750162 29-Sep-17 1.201 ND 0.268 0.939 1.88 B750162 29-Sep-17 1.201 AS Anderovery ND 0.268 0.939 1.88 B750162 29-Sep-17 1.201 PFBS S 118 R0 - 1R0 B750162 29-Sep-17 1.201 AS BOR B0.268 0.939 1.88 B750162 29-Sep-17 1.201 ABS B18 R0 - 1R0 B750162 29-Sep-17 1.201 ABS B175016 B750162 29-Sep-17 1.201 ABS B1R B0 - 1R0 B750162 29-Sep-17 1.201 <						% Soli	ds:	88.7	Y CONTRACTOR OF THE PARTY OF TH			
ND 0.268 0.939 1.88 B750162 29-Sep-17 1.201 ND 0.268 0.939 1.88 B750162 29-Sep-17 1.201 ND 0.268 0.939 1.88 B750162 29-Sep-17 1.201 ND 0.268 0.939 1.88 B750162 29-Sep-17 1.201 AS Standards ND 0.268 0.939 1.88 B750162 29-Sep-17 1.201 PFBS ND 0.268 0.939 1.88 B750162 29-Sep-17 1.201 FFBS SS 118 RO-1RO B750162 29-Sep-17 1.201 FFHAS SS 80.R RO-1RO B750162 29-Sep-17 1.201 FFHAS SS 87.6 RO-1RO B750162 29-Sep-17 1.201 FFOA SS 87.6 RO-1RO B750162 29-Sep-17 1.201 FFOA SS 88.0 RO-1RO B750162 29-Sep-17 1.201	Analyte		Conc. (ug/kg)	DF	TOD	roo	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
ND 0.268 0.939 1.88 B730162 29-Sep-17 1.201 ND 0.268 0.939 1.88 B730162 29-Sep-17 1.201 ND 0.268 0.939 1.88 B730162 29-Sep-17 1.201 ND 0.268 0.939 1.88 B730162 29-Sep-17 1.201 ND 0.268 0.939 1.88 B730162 29-Sep-17 1.201 PBS SS 1.18 R0 - 1R0 B730162 29-Sep-17 1.201 PFHAS SS 80.R R0 - 1R0 B730162 29-Sep-17 1.201 PFOA SS 87.6 R0 - 1R0 B730162 29-Sep-17 1.201 PFOA SS 87.6 R0 - 1R0 B730162 29-Sep-17 1.201 PFOA SS 88.0 R0 - 1R0 B730162 29-Sep-17 1.201 PFOA SS 88.0 R0 - 1R0 B730162 29-Sep-17 1.201 PFOA SS 88.0 R0 - 1R0 B730162 29-Sep-17 1.201 PFOA SS 88.0 R0 - 1R0 B730162 29-Sep-17 1.201 PFOA SS 88.0 R0 - 1R0 B730162 29-Sep-17 1.201 PFOA SS 88.0 R0 - 1R0 B730162 29-Sep-17 1.201 PFOA SS 89.1 R0 - 1R0 B730162 29-Sep-17 1.201 PFOA SS 89.1 R0 - 1R0 B730162 29-Sep-17 1.201 PFOA SS 89.1 R0 - 1R0 B730162 29-Sep-17 1.201 PFOA SS 89.1 R0 - 1R0 B730162 29-Sep-17 1.201 PFOA SS 89.1 R0 - 1R0 B730162 29-Sep-17 1.201 PFOA SS 89.1 R0 - 1R0 B730162 29-Sep-17 1.201 PFOA SS 89.1 R0 - 1R0 B730162 29-Sep-17 1.201 PFOA SS 89.1 R0 - 1R0 B730162 29-Sep-17 1.201 PFOA SS 89.1 R0 - 1R0 B730162 29-Sep-17 1.201 PFOA SS 89.1 R0 - 1R0 PFBS		QN	0.268	0.939	1.88	i	B730162	29-Sep-17	1.201	03-Oct-17 02:P6	-	
ND 0.268 0.939 1.88 B750162 29-Sep-17 1.201 ND 0.268 0.939 1.88 B750162 29-Sep-17 1.201 ND 0.268 0.939 1.88 B750162 29-Sep-17 1.201 ND 0.268 0.939 1.88 B750162 29-Sep-17 1.201 PBS SS 118 R0 - 1R0 B750162 29-Sep-17 1.201 PFHAA SS 80.R R0 - 1R0 B750162 29-Sep-17 1.201 PFHAS SS 72.1 R0 - 1R0 B750162 29-Sep-17 1.201 PFOA SS 87.6 R0 - 1R0 B750162 29-Sep-17 1.201 PFOA SS 87.6 R0 - 1R0 B750162 29-Sep-17 1.201 PFOA SS 88.0 R0 - 1R0 B750162 29-Sep-17 1.201 PFOA SS 88.0 R0 - 1R0 B750162 29-Sep-17 1.201 PFOA SS 88.0 R0 - 1R0 B750162 29-Sep-17 1.201 PFOA SS 88.0 R0 - 1R0 B750162 29-Sep-17 1.201 PFOA SS 80.J R0 - 1R0 B750162 29-Sep-17 1.201 PFOA SS 80.J R0 - 1R0 B750162 29-Sep-17 1.201 PFOA SS 80.J R0 - 1R0 B750162 29-Sep-17 1.201 PFOA SS 80.J R0 - 1R0 B750162 29-Sep-17 1.201 PFOA SS 80.J R0 - 1R0 B750162 29-Sep-17 1.201 PFOA SS 80.J R0 - 1R0 B750162 29-Sep-17 1.201 PFOA SS 80.J R0 - 1R0 B750162 29-Sep-17 1.201 PFOA SS 80.J R0 - 1R0 B750162 29-Sep-17 1.201 PFOA SS 80.J R0 - 1R0 B750162 29-Sep-17 1.201 PFOA SS 80.J R0 - 1R0 B750162 29-Sep-17 1.201 PFOA SS 80.J R0 - 1R0 B750162 29-Sep-17 1.201 PFOA SS 80.J R0 - 1R0 B750162 29-Sep-17 1.201 PFOA SS 80.J R0 - 1R0 B750162 29-Sep-17 1.201 PFOA SS 80.J R0 - 1R0 B750162 29-Sep-17 1.201 PFOA SS 80.J R0 - 1R0 B750162 29-Sep-17 1.201 PFOA SS 80.J R0 - 1R0 B750162 29-Sep-17 1.201 PFOA SS 80.J R0 - 1R0 R0 - 1R0 R0 - 1R0 R0 - 1R0 PFOA SS SS SS SS SS SS SS	PFHpA		QN	0.268	0.939	1.88		B730162	29-Sep-17	1.201	03-Oct-17 02:P6	-
ASTAIL CARREST ND 0.268 0.939 1.88 B 750162 29-Sep-17 1.201 ASTAIL CARRES ND 0.268 0.939 1.88 B 750162 29-Sep-17 1.201 FBS SS Recovery Limits Qualifiers Batch Extracted Samp Size FBS SS 118 RO - 1RO B750162 29-Sep-17 1.201 FHpA SS 80.R RO - 1RO B750162 29-Sep-17 1.201 FFAXS SS 72.1 RO - 1RO B750162 29-Sep-17 1.201 FOA SS 87.6 RO - 1RO B750162 29-Sep-17 1.201 FOA SS 87.6 RO - 1RO B750162 29-Sep-17 1.201 FOA SS 87.6 RO - 1RO B750162 29-Sep-17 1.201 FOA SS 87.6 RO - 1RO B750162 29-Sep-17 1.201 FOA SS 80.J RO - 1RO B750162	PFHxS		QN	0.268	0.939	1.88		B730162	29-Sep-17	1.201	03-Oct-17 02:R6	_
ed Standards Type % Recovery Limits Qualifiers B 750162 29-Sep-17 1.201 PFBS S 118 RO - 1R0 B 750162 29-Sep-17 1.201 PFHAS S 118 RO - 1R0 B 750162 29-Sep-17 1.201 PFHAS S 80.R RO - 1R0 B 750162 29-Sep-17 1.201 PFOA S 72.1 RO - 1R0 B 750162 29-Sep-17 1.201 PFOA S 87.6 RO - 1R0 B 750162 29-Sep-17 1.201 PFOA S 87.6 RO - 1R0 B 750162 29-Sep-17 1.201 PFOA S 87.6 RO - 1R0 B 750162 29-Sep-17 1.201 PFOA S 87.6 RO - 1R0 B 750162 29-Sep-17 1.201 PFOA S 80.J RO - 1R0 B 750162 29-Sep-17 1.201 PFOA S 80.J RO - 1R0 B 750162 29-Sep-17 <t< td=""><td>PFOA</td><td></td><td>ON</td><td>0.268</td><td>0.939</td><td>1.88</td><td></td><td>B730162</td><td>29-Sep-17</td><td>1.20.1</td><td>03-Oct-17 02:R6</td><td>-</td></t<>	PFOA		ON	0.268	0.939	1.88		B730162	29-Sep-17	1.20.1	03-Oct-17 02:R6	-
ndards Type % Recovery Limits Qualifiers Batch Extracted Samp Size A \$S 118 RO - 1RO B750162 29-Sep-17 1.201 A \$S 80.R RO - 1RO B750162 29-Sep-17 1.201 S 72.1 RO - 1RO B750162 29-Sep-17 1.201 S 87.6 RO - 1RO B750162 29-Sep-17 1.201 S 80.J RO - 1RO B750162 29-Sep-17 1.201	PFOS		0.371	0.268	0.939	1.88	50	B750162	29-Sep-17	1.201	03-Oct-17 02:P6	_
ndards Type % Recovery Limits Qualifiers Batch Extracted Samp Size A \$S 118 RO - 1RO B750162 29-Sep-17 1.201 A \$S 72.1 RO - 1RO B750162 29-Sep-17 1.201 S 72.1 RO - 1RO B750162 29-Sep-17 1.201 S 87.6 RO - 1RO B750162 29-Sep-17 1.201 S 8RO RO - 1RO B750162 29-Sep-17 1.201 S 8RO RO - 1RO B750162 29-Sep-17 1.201 S 80.J RO - 1RO B750162 29-Sep-17 1.201	PFNA		ND	0.268	0.939	1.88		B730162	29-Sep-17	1.201	03-Oct-17 02:R6	-
A SS 1J8 R0 - 1R0 B730162 29-Sep-17 1.201 S SS 72.1 R0 - 1R0 B730162 29-Sep-17 1.201 SS 72.1 R0 - 1R0 B730162 29-Sep-17 1.201 SS 87.6 R0 - 1R0 B730162 29-Sep-17 1.201 SS 8R0 R0 - 1R0 B730162 29-Sep-17 1.201 SS 80.J R0 - 1R0 B730162 29-Sep-17 1.201	Labeled Stands		% Recovery		Limits		Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
A SS 80.R R0 - 180 B730162 29-Sep-17 1.201 S 72.1 R0 - 180 B730162 29-Sep-17 1.201 SS 87.6 R0 - 180 B730162 29-Sep-17 1.201 SS 8R.0 R0 - 180 B730162 29-Sep-17 1.201 SS 80.J R0 - 180 B730162 29-Sep-17 1.201	13C3-PFBS	88	118		RO - 1RO			B730162	29-Sep-17	1.201	03-Oct-17 02:R6	_
S 72.1 R0 - 180 B750162 29-Sep-17 1.201 SS 87.6 R0 - 180 B750162 29-Sep-17 1.201 SS 8R.0 R0 - 180 B750162 29-Sep-17 1.201 SS 80.J R0 - 180 B750162 29-Sep-17 1.201	13CJ-PFHpA	88	80.R		RO - 1RO			B730162	29-Sep-17	1.201	03-Oct-17 02:R6	-
SS 87.6 R0 - 1R0 B730162 29-Sep-17 1.201 SS 8R.0 R0 - 1R0 B730162 29-Sep-17 1.201 SS 80.J R0 - 1R0 B730162 29-Sep-17 1.201	18O2-PFHxS	83	72.1		RO - 1RO			B730162	29-Sep-17	1.201	03-Oct-17 02:R6	-
SS 8R.0 R0 - 1R0 B750162 29-Sep-17 1.201 SS 80.J R0 - 1R0 B750162 29-Sep-17 1.201	13C2-PFOA	88	9.78		RO - 1RO			B730162	29-Sep-17	1.201	03-Oct-17 02:R6	-
SS 80.J RO - 1RO B750162 29-Sep-17 1.201	13C8-PFOS	83	8R0		RO - 1RO			B730162	29-Sep-17	1.201	03-Oct-17 02:R6	_
	13CR-PFNA	82	F0.9		RO - 1RO			B730162	29-Sep-17	1.201	03-Oct-17 02:R6	_

LCL-UCL- Lower control limit - upper control limit.
The results are reported in dry weil ht.
The sample size is reported in wet weil ht.
v esults 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: G	Sample ID: GPEOR-07-SB01-11.5-12									VAL	VAL - PFAS
Client Data Name: Project:	AMEC Foster Wheeler Peoria ANGB / 291330006	Matrix: Date Collected:		Soil 19-Sep-17 12:30	Laborato Lab Samp Date Hec	Laboratory Data Lab Sample: Date HeceiRed: % Solids:	1701312-10 23-Sep-17 09:1v 80.0	0 v1:60	Col5mu:	BEn C18	
Analyte		Conc. (ug/kg)	DF	TOD	007	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS		QN	0.284	1.00	2.00		B710162	29-Sep-17	1.24 g	03-Oct-17 03:07	-
PFn pA		QN	0.284	1.00	2.00		B710162	29-Sep-17	1.24 g	03-Oct-17 03:07	-
PFn xS		QN	0.284	1.00	2.00		B710162	29-Sep-17	1.24 g	03-Oct-17 03:07	_
PFOA		ND	0.284	1.00	2.00		B710162	29-Sep-17	1.24 g	03-Oct-17 03:07	-
PFOS		QN	0.284	1.00	2.00		B7I0162	29-Sep-17	1.24 g	03-Oct-17 03:07	_
PFNA		ND	0.284	1.00	2.00		B710162	29-Sep-17	1.24 g	03-Oct-17 03:07	_
Labeled Standards	rds Type	% Recovery		Limits		Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	SI	Iv0		40 - 140			B710162	29-Sep-17	1.24 g	03-Oct-17 03:07	-
13Cv-PFn pA	IS	73.2		40 - 140			B710162	29-Sep-17	1.24 g	03-Oct-17 03:07	_
18O2-PFn xS	IS	98.3		40 - 140			B710162	29-Sep-17	1.24 g	03-Oct-17 03:07	-
13C2-PFOA	IS	868		40 - 140			B710162	29-Sep-17	1.24 g	03-Oct-17 03:07	-
13C8-PFOS	IS	89.3		40 - 140			B710162	29-Sep-17	1.24 g	03-Oct-17 03:07	-
13C4-PFNA	IS	81.9		40 - 140			B710162	29-Sep-17	1.24 g	03-Oct-17 03:07	-
DL - Detectiou Limit LOD - Limit of Detectiou LOQ - Limit of q5autitatiou	uit sectiou utitatiou	LCL-UCI The resSi The samp	LCL-UCL- Lower courtol limit - 3pper courtol limit. The res5lts are reported in dry weight. The sample size is reported in wet weight.	ih - Spper courrol II weight. wet weight.	Ť						

LCL-UCL-Lower courrol limit - 3pper courrol limit
The resShs are reported in dry weight.
The sample size is reported in wet weight.
HesShs reported to the DL.
Wheu reported, PFn xS, PFOA and PFOS itel5de both linear and brauched isomers.
Ouly the linear isomer is reported for all other analytes.



Sample ID: (Sample ID: GPEOR-07-SB01 3-1									VAL	VAL - PFAS
Client Data	0.0000	500	7700000		Labor	Laboratory Data		6			
Name:	AMEC Foster Wheeler	Matrix:	Soil		Lab S	Lab Sample:	1701312-11	_	Column:	BEH C18	
Project:	Peoria ANGB / 291330006	Date Collec	Date Collected: 19-Sep-17 12:RR	p-17 12:RR	Date	Date v ecei4ed:	23-Sep-17 09:1J	09:13			
					% Solids:	ids:	9.98				
Analyte		Conc5(ug/kg)	DF	TOD	roo	Qualifiers	Batch	Extracted	Extracted Samp Size	Analyzed	Dilution
PFBS		QN	0.281	0.987	1.97		B730162	29-Sep-17	1.171	03-Oct-17 03:18	-
PFHpA		QN	0.281	0.987	1.97		B730162	29-Sep-17	1.171	03-Oct-17 03:18	-
PFHxS		QN	0.281	0.987	1.97		B730162	29-Sep-17	1.171	03-Oct-17 03:18	-
PFOA		ND	0.281	0.987	1.97		B730162	29-Sep-17	1.171	03-Oct-17 03:18	-
PFOS		0.372	0.281	0.987	1.97	50	B750162	29-Sep-17	1.171	03-Oct-17 03:18	_
PFNA		ND	0.281	0.987	1.97		B730162	29-Sep-17	1.171	03-Oct-17 03:18	-
Labeled Standards	ards Type	% Recovery		Limits		Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	88	691		RO - 1RO		Ξ	B730162	29-Sep-17	1.171	03-Oct-17 03:18	_
13CJ-PFHpA	83	81.0		RO - 1RO			B730162	29-Sep-17	1.171	03-Oct-17 03:18	_
18O2-PFHxS	83	8.86		RO - 1RO			B730162	29-Sep-17	1.171	03-Oct-17 03:18	-
13C2-PFOA	88	9.86		RO - 1RO			B730162	29-Sep-17	1.171	03-Oct-17 03:18	-
13C8-PFOS	84	93.7		RO - 1RO			B730162	29-Sep-17	1.171	03-Oct-17 03:18	_
13CR-PFNA	83	92.3		RO - 1RO			B730162	29-Sep-17	1.171	03-Oct-17 03:18	-

LCL-UCL- Lower control limit - upper control limit.
The results are reported in dry weil ht.
The sample size is reported in wet weil ht.
v esults 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: G	Sample ID: GPEOR-07-SB02-14.5-15									VAL	VAL - PFAS
Client Data Name:	AMEC Foster Wheeler	Matrix:	Soil		Laboratory Lab Sample:	Laboratory Data Lab Sample:	1701312-12	2	Col5mu:	RFn C18	
Project:	Peoria ANGB / 291330006	Date Collected:	:ted: 19-Sep-17 13:0H	7 13:0H	Date F	Date Received:	23-Sep-17 09:14	09:14			
					% Solids:	ds:	80.9				
Analyte		Conc. (ug/kg)	DF	COD	L00	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS		QN	0.284	766.0	1.99		B710162	29-Sep-17	1.24 g	03-Oct-17 03:28	1
PFn pA		ND	0.284	0.997	1.99		B710162	29-Sep-17	1.24 g	03-Oct-17 03:28	-
PFn xS		ND	0.284	766.0	1.99		B710162	29-Sep-17	1.24 g	03-Oct-17 03:28	_
PFOA		ND	0.284	0.997	1.99		B710162	29-Sep-17	1.24 g	03-Oct-17 03:28	-
PFOS		QN	0.284	0.997	1.99		B7I0162	29-Sep-17	1.24 g	03-Oct-17 03:28	_
PFNA		ND	0.284	0.997	1.99		B710162	29-Sep-17	1.24 g	03-Oct-17 03:28	-
Labeled Standards	rrds Type	% Recovery		Limits		Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	14		HD - 1HD			B710162	29-Sep-17	1.24 g	03-Oct-17 03:28	_
13C4-PFn pA	IS	76.8		HD - 1HD			B710162	29-Sep-17	1.24 g	03-Oct-17 03:28	<u></u>
18O2-PFn xS	IS	97.6		HD - 1HD			B710162	29-Sep-17	1.24 g	03-Oct-17 03:28	-
13C2-PFOA	IS	88.2		HD - 1HD			B710162	29-Sep-17	1.24 g	03-Oct-17 03:28	-
13C8-PFOS	IS	91.3		HD - 1HD			B710162	29-Sep-17	1.24 g	03-Oct-17 03:28	_
13CHPFNA	IS	82.3		HD - 1HD			B710162	29-Sep-17	1.24 g	03-Oct-17 03:28	_

LCL-UCL-Lower courrol limit - 3 pper courrol limit
The resShs are reported in dry weight.
The sample size is reported in wet weight.
ResShs reported to the DL.
Wheu reported, PFn xS, PFOA and PFOS ine15de both linear and brauched isomers.
Ouly the linear isomer is reported for all other analytes.

DATA QUALIFIERS & ABBREVIATIONS

В	This compound was also detected in the method blank.
D	Dilution
E	The associated compound concentration exceeded the calibration range of the instrument.
Н	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.

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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.

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NELAP Accredited Test Methods

MATRIX: Air	
Description of Test	Method
Determination of Polychlorinated p-Dioxins & Polychlorinated	EPA 23
Dibenzofurans	

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

Work Order 1701312 Page 23 of 483

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

Work Order 1701312 Page 24 of 483

Work Order 1701312

CHAIN OF CUSTODY 1.7% COC#.

SHIP TO:

Amec Foster Wheeler Environment & Infrastructure

DATE:

PAGE:

7 50 Bill Tc. Amec Foster Wheeler Environment & Infrastructure Disposal Instructions: LAB 9210 Sky Park Court #200 Shorent Method: FEDEX San Dispo, CA 92123 Thomas Kaugher 016 Project Contact Phone Number Project Phase 4021 Stirrup Creek Dr #100 Durham, NC 27703 (919) 381-9900 Peoria ANGB 291330006 Melissa Helton Project Number: amec foster wheeler Project Name:

Samola Information					-		Matho	of a for Analysis		-	HSHC	-
Sample information Sample ID	Date Sampled	Time	Магтх	Sample Type	MS/MSD EPA 537 Modified			Metrods 10. Artaysis		24 Hour		5 Days TOTAL BOTTLES
1 GPEOR-05-SB01-0.5-1	9/19/2017	8:16	Soil				1					-
2 GPEOR-05-SB01-12.5-13	9/19/2017	8:50	Soil		×							-
3 GPEOR-05-SB02-0.5-1	9/19/2017	9:25	Soil		×							-
4 GPEOR-05-SB02-4.5-5	9/19/2017	9:40	Soil		×							-
s GPEOR-05-SB03-0.5-1	9/19/2017	10:05	Soil		×							-
6 GPEOR-05-SB03-3.5-4	9/19/2017	10:10	Soil		*							-
7 GPEOR-07-SB03-1-1.5	9/19/2017	11:20	Soil		×							-
8 GPEOR-07-SB03-14.5-15	9/19/2017	11:40	Soil		×							-
9 GPEOR-07-SB01-1-1.5	9/19/2017	12:05	Soil		×							-
10 GPEOR-07-SB01-11,5-12	9/19/2017	12:30	Soil		×							-
11 GPEOR-07-SB02-1.5-2	9/19/2017	12:55	Soil		×							-
12 GPEOR-07-SB02-14.5-15	9/19/2017	13:05	Soil		×							-
Sampler's Signature:				ime:	Γ	For Lab Use						
ReliAquished By/Affiliation:			9/22/1	17 /300 Time:		Does COC match samples: Broken Container: COC seal intact:	Z Z Z 5 5 5	Comments: X=/	ents: X=Analyze H=Hold Analysis Request	Analysis Red	dnest	
Roceived By J. J. H. M. W. Columbia	*	9	C1/52/17	Time: 0939		Other problems: WSDOT confacted:	8 8					
Relinquished By/Affiliation:			Date:	Time:	Ó	Date contacted:						
Received By:			Date:	Time:	ō	Cooler Temperature at receipt	٥.	NUMBI	NUMBER OF COOLERS SENT:			
Relinquished By/Affiliation:			Date:	Time:	ď	Analyte List: UC	UCMR 3 (PFH	4pA, PFOA, PF	(PEHDA, PFOA, PFNA, PFBS, PFHXS, PFOS)			
Received By (LAB):			Date:	Time:								



Sample Log-in Checklist

	1701312	TAT Stal
Vista Work Order #:	1701312	TAT_NA

Samples Arrival:	Date/Tim	1	1914 Mass			nelf/Rack:/	JA	
Logged In:	Date/Time 09/20/17 1507		507	Initials:		Shelf/Rack: 56		
Delivered By:	FedEx	UPS	On Tra	c GSO	DH	Hand Delivered		Other
Preservation:	Preservation: (Ice		Blu	ue Ice		Dry Ice		None
Temp °C: ∅./	(uncorre			9 42 ed: YesE	No□	Thermometer ID: IR-1		

				YES	NO	NA
Adequate Sample Volume Re	ceived?			V		
Holding Time Acceptable?				V		
Shipping Container(s) Intact?						
Shipping Custody Seals Intac	1?					V
Shipping Documentation Pres				1		
Airbill 1 of 2 Trk#	7878 73	391 42	66	1		
Sample Container Intact?			1			
Sample Custody Seals Intact	?					V
Chain of Custody / Sample Do	ocumentation Pres	sent?		1		
COC Anomaly/Sample Acceptance Form completed?						
If Chlorinated or Drinking Wat	er Samples, Acce	ptable Prese	rvation?			V
Preservation Documented:	Na ₂ S ₂ O ₃	Trizma	None	Yes	No	NA
Shipping Container	Vista	Client	Retain	Return	Disp	oose

Comments: Sample ID: GPEOR-07-5802-1.5-2

GPEOR-07-5802-14.5-15

49EOR-07-5803-1.0-1.5

GPEOR-07-5803-14.5-15

does not match completely

ID .: LR - SLC

Rev No.: 0

Rev Date: 05/18/2017

Page: 1 of 1



Sample Log-in Checklist

Samples Arrival:	Date/Time 09/23/17	8914	30	nitials:	B		ition: W	R-2 15
Logged In:	Date/Time 09/26/17	1507	li (nitials:		Location: WR-2 Shelf/Rack: E6		
Delivered By:	PedEx UF	S On	Trac	GSO	DHL	-	Hand Delivered	Other
Preservation:	(Ice		Blue Ice			Dry Ice None		
Temp °C: /, ((uncorrected)	Time.		9 : Yes□ I	Note	Ther	mometer ID:	IR-1

						YES	S NO	NA
Adequate Sample Vol	lume Re	ceived?				V		
Holding Time Accepta	able?					V		
Shipping Container(s)	Intact?					~	1	
Shipping Custody Sea	als Intact	?				50		V
Shipping Documentat	ion Pres	ent?				V		
Airbill 20f2	Trk#	7878	2391	42	77	-		
Sample Container Intact?								
Sample Custody Seals Intact?								V
Chain of Custody / Sample Documentation Present?								
COC Anomaly/Sample Acceptance Form completed?								
If Chlorinated or Drink	ing Wate	er Samples, A	Acceptable	Pres	ervation?			V
Preservation Docume	nted:	Na ₂ S ₂ O ₃	Triz	zma	None	Yes	No	NA
Shipping Container		Vista	Clie	ent	Retain	Return	Dis	pose

comments: Sample ID: GPEOR-05-S BOZ-4.5-5 GPEOR-07-5801-14

9/20/17 IA

#GPEOR-05-5B02-0.5-1.0 GPEOR-07-5B01-11.5-1 *GPEOR-07-5801-1.0-1

SPEOR - 05 - 5801 - 12.5 - 13 # GPEOR - 65 - 5801 - 0.5 - 1.0 # GPEOR - 65 - 5803 - 0.5 - 1.6

GPEOR -05 - SB 03 - 3.5 - 4

Page: 1 of 1

Chain of Custody Anomaly/Sample Acceptance Form



AMEC Foster Wheeler Denise King Denise.king@amecfw.com (978) 392-5339 Workorder Number: 1701312 Date Received: 23-Sep-17 09:14

Documented by/date: S.Roughton 9/27/17

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

X

Sample IDs on Chain of Custody do not match Sample Container Labels

Chain of Custody ID	Container Label ID
GPEOR-05-SB01-0.5-1	GPEOR-05-SB01-0.5-1.0
GPEOR-05-SB01-12.5-13	
GPEOR-05-SB02-0.5-1	GPEOR-05-SB02-0.5-1.0
GPEOR-05-SB02-4.5-5	
GPEOR-05-SB03-0.5-1	GPEOR-05-SB03-0.5-1.0
GPEOR-05-SB03-3.5-4	
GPEOR-07-SB03-1-1.5	GPEOR-07-SB03-1.0-1.5
GPEOR-07-SB03-14.5-15	
GPEOR-07-SB01-1-1.5	GPEOR-07-SB01-1.0-1.5
GPEOR-07-SB01-11.5-12	
GPEOR-07-SB02-1.5-2	
GPEOR-07-SB02-14.5-15	

Proceed with Analysis: (YES) NO Signature and Date Harry With 9-28-17

Client Comments/Instructions Per Client em all an 9-28-17, report sample IDs

per the COC.

Work Order 1701312

EXTRACTION INFORMATION

Work Order 1701312 Page 29 of 483

Process Sheet

Workorder: 1701312

Prep Expiration: 2017-Nov-18

Client: AMEC Foster Wheeler

Workorder Due: 16-Oct-17 00:00

TAT: 23

Method: VAL - PFAS DoD (LOQ as RL)

Matrix: Solid

Prep Batch:

3710162

Also run: Percent Solids Version: UCMR 3 (6 Analyte)

Proprietable Dop: UCMR 3 (6 Analyte Dop: Dop QSM 5.1 Prep Data Entered:

KC 10-3-17

Initial Sequence:

			The state of the s		
LabSampID	A/B Rec	ClientCompleID	Comments	Location	Container
1701312-01	AV	GPEOR-05-SB01-0.5-1		WR-2 E-6	HDPE Jar, 6 oz
1701312-02	□ □	GPEOR-05-SB01-12.5-13		WR-2 E-6	HDPE Jar, 6 oz
1701312-03	4	GPEOR-05-SB02-0.5-1		WR-2 E-6	HDPE Jar, 6 oz
1701312-04	X	☑ GPEOR-05-SB02-4,5-5		WR-2 E-6	HDPE Jar, 6 oz
1701312-05	1	GPEOR-05-SB03-0.5-1		WR-2 E-6	HDPE Jar, 6 oz
1701312-06		GPEOR-05-SB03-3.5-4		WR-2 E-6	HDPE Jar, 6 oz
1701312-07	P	GPEOR-07-SB03-1-1.5		WR-2 E-6	HDPE Jar, 6 oz
1701312-08		GPEOR-07-SB03-14.5-15		WR-2 E-6	HDPE Jar, 6 oz
701312-09		GPEOR-07-SB01-1-1.5		WR-2 E-6	HDPE Jar, 6 oz
701312-10	1 2	GPEOR-07-SB01-11.5-12		WR-2 E-6	HDPE Jar, 6 oz
1701312-11	Ø	GPEOR-07-SB02-1.5-2		WR-2 E-6	HDPE Jar, 6 oz
1701312-12		GPEOR 07-8802-14.5-15		WR-2 E-6	HDPE Jar, 6 oz
	1	GPEOR-67-SBOZ-			

Pre-Prep Check Out: # 9.78.17 Pre-Prep Check In: # 9.78.17 Prep Check Out: HB 9/29/17
Prep Check In: HB.9/29/17

Prep Reconciled Initals/Date: 1/2 9-28-17
Spike Reconciled Initals/Date: 43 9129117
VialBoxID: BBQ

Matrix: Solid

Method: VAL - PFAS DoD (LOQ as RL)

B710162

Prepared using: LCMS - Sonication/SPE Extraction

Prep Date/Time: 29-Sep-17 12:44

1.20 1.22 1.28 1.1 1.28 1.1 1.28 1.1 1.28 1.1 1.28 1.1 1.29 1.1 1.20 1.20 1.20 1.20 1.20 1.20 1.20 1	BalancelD: HKWI	Sample		151	No							RS	
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1.20 1.21 1.22 H8 91291.1 1.04 1.05 1.05 1.05 1.20 1.20 1.20 1.20 1.20 1.20 1.20 1.20)	(00)	44	X	9.79.17	K	U 9.29.17	H	9.30-13	H	7.30.17	_	10
1.20 1.22 1.28 1.22 1.29 H8 9 24 17 1.05 1.05 1.25 1.26 1.20 1.20 1.20 1.20 1.20 1.20 1.20 1.20		7		1			1	١	1-	1	+	L.,	1
1.22 1.28 H8 91291.7 1.07 1.05 1.05 1.23 1.05 1.25 1.21 1.22 1.23 1.24 1.25 1.26 1.27 1.27 1.26 1.27 1.27 1.26 1.27 1.27 1.27 1.27 1.28 1.26 1.27 1							1						
1.72 HB 9129117													1.1
HB 9129117	1281	17	A			i ini							
1.03 1.05 1.05 1.21 1.21 1.20 1.20 1.13	1.28 HB	4116716		17									
1.23 1.05 1.28 1.21 1.20 1.20 1.25 1.13	1.07		Ł.										
1.05 1.28 1.21 1.20 1.25 1.15 1.17	1701312-04 [.23			T									
1.28 1.21 1.20 1.25 1.15 1.17	1701312-05												
1.21 1.20 1.20 1.15 1.17	1701312-06 -28												
1.21 1.20 1.15 1.17	[.21							-					
1.15	1701312-08												
1.13	1701312-09												
7	1701312-10 1-25												
	1.17			Î								,	
	1701312-12			0	1				P	8		>	

7

Final Volume(s)

17 HI 718, (VB) 194

PREPARATION BENCH SHEET

B710162

Prepared using: LCMS - Sonication/SPE Extraction

Prep Date/Time: 29-Sep-17 12:44 Chemist

Method: VAL - PFAS DoD (LOQ as RL)

Watrix: Solid

SPE Chem: Strak XAN 33 HW ZOOME EXISOLV: 1:1 MEDH /ACN Final Volume(s) | MAL WINDS 10MIN क्रिश्रमासर। THISO, 10 ML (VI)

IS SUP. NR

NS:















Updated:

Spill Prevention Control and Countermeasure Plan

AASF #3 Peoria Airport 2323 South Airport Road Peoria, Illinois 61607-1498

Presented to:

Illinois Department of Military Affairs



Camp Lincoln 1301 N. MacArthur Blvd. Springfield, Illinois 62702-2399 (217) 761-3973

Presented by:



201 N. 6th Street
Rockford, IL 61107
815.962.9000 | fax 815.962.7978
andenv.com

Updated: November 2019 File No. 917.01

UPDATED: Spill Prevention Control and Countermeasure Plan

AASF #3 2323 South Airport Road Peoria, Illinois 61607-1498

Presented to:

Illinois Department of Military Affairs

Camp Lincoln 1301 N. MacArthur Blvd. Springfield, Illinois 62702-2399 (217) 761-3973

Presented by:

Anderson Environmental Co.

201 N. 6th Street Rockford, Illinois 61107 (815) 962-9000

> November 2019 Job No. 917.01



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- 1 Site Location Map
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Attachments

- A Monthly Inspection Checklist
- B Annual Inspection Checklist
- C Fuel Transfer Checklist
- D Cross-Reference with the SPCC Rule
- E Engineer's SPCC Plan Review and Recertification Log
- F Engineer's SPCC Plan Amendment Certification
- G Spill Incident Report
- H Release Reporting Compliance Documentation Log
- Notice to Petroleum Product Vendors/Personnel
- J Semiannual SPCC Plan Review for AASF #3



DEPARTMENTS OF THE ARMY AND AIR FORCE Illinois Army and Air National Guard 1301 North MacArthur Boulevard, Springfield, Illinois 62702-2317

NGIL-CFM-EV

16 April 2014

MEMORANDUM FOR ILARNG FACILITIES WITH SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC) REQUIREMENTS

SUBJECT: Commitment of Resources, Spill Prevention, Control and Countermeasure (SPCC) Plans

- 1. Illinois Army National Guard (ILARNG) facilities with oil product storage in containers of 55 gallons or greater and with a total storage capacity in excess of 1,320 gallons must have a SPCC Plan, in accordance with the Code of Federal Regulations (CFR) and AR 200-1, Chapter 11.
- 2. The ILARNG management supports the plan and will implement it as described. Facility Managers and/or personnel designated in the plan as the Facility Spill Coordinator (FSC) or Assistant Facility Spill Coordinator (AFSC) shall implement the policies set forth in these plans.
- 3. By this signature, the ILARNG accepts the engineer's Substantial Harm Determination Certification made on behalf of the owner, and has adopted a statement of commitment as required in Title 40 of the CFR, Part 112.7 (d) (2) to provide "A written commitment of manpower, equipment and materials required to expeditiously control and remove any harmful quantity of oil discharged."
- 4. Point of contact for this issue is Mr. Jonathan L. Casebeer, Chief, Environmental Branch at (217) 761-3794 or jonathan.l.casebeer.nfg@mail.mil.
- 5. "I attest that to the best of my knowledge, the information contained in this plan is true, complete, and accurate. I testify that this SPCC Plan has my full approval and that I have the authority to commit the necessary resources to implement the plan."

FOR THE ADJUTANT GENERAL:

RANDALL J. SCOTT

COL, EN, ILARNG

Construction & Facilities

Management Officer

ERICK. LITTLE COL, GS, ILARNG

Chief of Staff

(Data)

(D

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SPCC PLAN CERTIFICATION BY A PROFESSIONAL ENGINEER

By means of this certification, I hereby certify and attest that I am familiar with the requirements of the Oil Pollution Act SPCC regulations (Code of Federal Regulations, Title 40, Part 112 [40 CFR 112]), that I or my designated agent has visited and examined the facility, that this SPCC Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards, and with the requirements of this Part, that procedures for required inspections and testing have been established, and that the plan is adequate for the facility.

This certification in no way relieves the owner or operator of the facility of his/her duty to prepare and fully implement this SPCC Plan in accordance with the requirements of 40 CFR Part 112. This SPCC Plan is valid only to the extent that the facility owner or operator maintains, tests, and inspects equipment, containment, and other devices as prescribed in this CHRISTOR TIF 062 SPCC Plan.

Printed Name of Registered Professional Engineer

062,060044

Registration Number



CERTIFICATION OF SUBSTANTIAL HARM DETERMINATION FORM

Fa	cility Name: cility Address: cility Location:	AASF #3 Peoria Airp 2323 South Airport I Peoria, Illinois 61607	Road		
1.	Does the facility h 42,000 gallons an from vessels?	nave a maximum storaged do the operations inc	e capacity greater than or equal to lude over water transfers of oil to or	Yes	No X
2.	1,000,000 gallons	and does the facility late contain the capacity of	e capacity greater than or equal to ack secondary containment that is of the largest aboveground storage		<u>X</u>
3.	1,000,000 gallons	and is the facility locat	e capacity greater than or equal to ted at a distance such that a jury to an environmentally		<u>X</u>
4.	1,000,000 gallons	and is the facility locat	e capacity greater than or equal to ted at a distance such that a wn a public drinking water intake?		<u>X</u>
5.	Does the facility had 1,000,000 gallons	ave a maximum storage and within the past five	e capacity greater than or equal to e years, has the facility experienced in or equal to 10,000 gallons?		X
the	questions above ar	Plan is required for the	tion is required within the SPCC Plan facility under 40 CFR 112.20. Since ot required to prepare a facility respond and on site.	all angre	ana ta
CEI	RTIFICATION				
resp	rmation submitted	in this document, and to the information, I be	onally examined and am familiar with that based on my inquiry of those indicates that the submitted information The Signature	widnala	
Title	rerat Shops S	pupercisor	Date R		
Note	: If an alternative form	ula is used in questions 3 ar	nd 4, documentation of the reliability and ana	lytical	

soundness of the alternative formula must be attached to this form.



1.0 KEY ELEMENTS

Task: This document is the Spill Prevention Control and Countermeasure (SPCC) Plan

for AASF #3 Peoria Airport (AASF #3).

Condition: The SPCC Plan aims to prevent the discharge of oil in harmful quantities into or

upon the navigable waters or adjoining shorelines of the United States.

Standard: The Oil Pollution Act SPCC regulations (Code of Federal Regulations, Title 40,

Part 112 [40 CFR 112]), as issued by the U.S. Environmental Protection Agency

(USEPA).

The SPCC program addresses all oil products, including, but not limited to: fats, oils, or greases of animal, fish, or marine mammal origin; vegetable oils, including oils from seeds, nuts, fruits, or kernels; and other oils and greases including petroleum, fuel oil, sludge, synthetic oils, mineral oils, oil refuge, or oil mixed with wastes other than dredged spoil. A facility is subject to SPCC regulation if the facility could be reasonably expected to discharge oil into navigable waters or adjoining shorelines of the United States and the aggregate:

- Aboveground oil storage capacity exceeds 1,320 gallons in containers with volumes of 55 gallons or greater, **or**
- Underground capacity of the facility exceeds 42,000 gallons—excluding sources that are currently subject to all technical requirements of 40 CFR 280 or all technical requirements of state programs approved under 40 CFR 281.

Because AASF #3 has more than 1,320 gallons (see <u>Table 1</u>) in containers with a capacity of 55 gallons or greater (sources), this SPCC Plan was prepared and shall be implemented consistent with the most recently finalized amendments to 40 CFR 112 (April 2011). This plan is compliant with applicable state regulations.

This SPCC Plan will be used as a reference for proper oil storage, as a tool for spill prevention, as a guide for facility oil source inspections and integrity testing, as well as a resource during emergency response to control, contain, and clean up an oil release.

Please note that this facility contains non-transportation related Mobile Fuel Tankers (MFTs) that are included in the total aboveground aggregate oil storage for this facility.



1.1 FACILITY DESCRIPTION

1. A cross-reference checklist identifying how this plan addresses SPCC requirements is provided in **Attachment D**.

2. Name of the Facility: AASF #3 Peoria Airport

Facility Address: 2323 South Airport Road

Peoria, Illinois 61607 (Peoria County)

Name, direction, and distance to the nearest body of water:

hangars, a building with connected offices and dry parts storage, a small expanse of tarmac south of the hangars, an MFT parking pad (providing containment), POL storage sheds, and a parking lot for employee's personal vehicles. There are no permitted process discharges to surface waters at this site. The Site Location Map on Figure 1 shows the location of the facility relative to these nearby waterways. The closest navigable water body to this facility is a tributary to Lemarsh Creek, which is approximately one-half mile south of the buildings for this facility or 1,500 feet south of the south end of the tarmac to the south of this facility.

AASF #3 consists of approximately 5 acres, including two

3. Managing Authority: Illinois Department of Military Affairs

NGIL-CFM-EV Camp Lincoln

1301 N. MacArthur Blvd. Springfield, Illinois

4. Emergency Coordinator: CPT Bryce R. Greenwood, Facility Spill Coordinator (FSC)

5. Location of SPCC Plan: The regulation does not require that an SPCC Plan be filed with

the USEPA; however, a copy must be available for on-site review by the Regional Administrator at all facilities manned for at least

4 hours per day. A complete copy of this SPCC Plan is

maintained by CW3 Johnson at AASF #3 and is available for on-

site review by the USEPA Regional Administrator.

6. Next Review Due: November 2024

7. Last Review Completed: November 2019

8. Facility Oil Sources: See <u>Table 1</u> on the next page.



Storage Symbol	Oil Source Volume (gal) and Storage	Location	Container Construction	Contents	Container Compatible with Contents?	Transfer Activities	Distance and Direction to Nearest Receptor (2)	Potential Release Flow Rate (1)	Spill Prevention and Leak Detection	112.7(c) Secondary Containment	Spill Countermeasures and Response Materials	Security	Inspection and Integrity Testing Schedule
AST1		Located south of Building 13	Double-walled steel	Diesel fuel	Yes	Direct filling at fill port by an outside vendor	Southeast approximately 90 feet towards a storm drain	nil-50 gpm	Spill Prevention: Level gauge, 90% overfill alarm, overfill box on fill port, and prudent practices of oil transfer Leak Detection: Impervious surface, interstitial monitoring, and routine inspections	Double-walled	Spill kits stored at various locations at the AASF #3 Peoria Airport (see Figure 2)	with a guard at	Monthly and annual inspections (see Attachments A and B); no required integrity testing by an external third-party inspector
AST2		Located in the Hazardous Waste/POL storage shed west of Building 6	Double-walled steel	Used oil	Yes	Transferred manually using a funnel; removed by an outside vendor	Northwest approximately 75 feet towards a storm drain	nil-24 gpm	Spill Prevention: Level gauge and prudent practices of oil transfer Leak Detection: Interstitial monitoring, POL storage shed containment, and routine inspections	Double-walled with Hazardous waste/POL storage shed as tertiary containment	Spill response materials kept in the Hazardous waste/POL storage shed adjacent to this tank	Facility fenced with a guard at the gate and located within a locked POL storage shed	Monthly and annual inspections (see Attachments A and B); no required integrity testing by an external third-party inspector
AST3	375	Located outdoors, northwest of Building 16	Double-walled steel	Diesel fuel	Yes	Direct filling at fill port by an outside vendor	Southwest approximately 100 feet towards a storm drain	nil-37.5 gpm	Spill Prevention: Level gauge and prudent practices of oil transfer Leak Detection: Impervious surface, interstitial monitoring, and routine inspections	Double-walled	Spill kits stored at various locations at the AASF #3 Peoria Airport (see Figure 2)	with a guard at	Monthly and annual inspections (see Attachments A and B); no required integrity testing by an external third-party inspector
AST4	256	Located outdoors near the guard shack at the north entrance	Double-walled steel	Diesel Fuel	Yes	Direct filling at fill port by an outside vendor	Northeast approximately 50 feet towards a detention pond	nil-25.6 gpm	Spill Prevention: Level gauge and prudent practices of oil transfer Leak Detection: Impervious surface, interstitial monitoring, and routine inspections	Double-walled	Spill kits stored at various locations at the AASF #3 Peoria Airport (see Figure 2)	with a guard at	Monthly and annual inspections (see Attachments A and B); no required integrity testing by an external third-party inspector
AST5		Located in a POL storage shed located south of Building 15	Double-walled steel	Used oil	Yes	Transferred manually using a funnel; removed by an outside vendor	West towards a drain which leads to an oil/water separator	nil-24 gpm	Spill Prevention: Level gauge and prudent practices of oil transfer Leak Detection: Impervious surface, interstitial monitoring, and routine inspections	Double-walled with POL storage shed as tertiary containment	kept in the POL storage shed adjacent to this tank	Facility fenced with a guard at the gate and located within a locked POL storage shed	Monthly and annual inspections (see Attachments A and B); no required integrity testing by an external third-party inspector



Storage Symbol Mobile Fue	Oil Source Volume (gal)	Location	Container Construction	Contents	Container Compatible with Contents?	Transfer Activities	Distance and Direction to Nearest Receptor (2)	Potential Release Flow Rate (1)	Spill Prevention and Leak Detection	: 112.7(c) Secondary Containment	Spill Countermeasures and Response Materials	Security	Inspection and Integrity Testing Schedule
MFT1 - MFT16		One 6,000-gallon GSA civilian style and fifteen 2,500-gallon HEMTT style Mobile Fuel Tankers (MFTs) for fueling aircraft and ground vehicles at the facility. MFTs containing fuel are stored on the bermed concrete pad; empty MFTs are stored in the MFT parking area.	Single-walled steel	F-24 fuel	Yes		Concrete pad to storm drains (SD1 or SD2)		Spill Prevention: Prudent practices of oil transfer; bermed concrete pad with valve systems Leak Detection: Bermed concrete pad and routine inspections	Bermed concrete pad with greater than 6,000 gallons containment capacity	Spill kits located at the bermed concrete pad (adjacent to POL1)	Facility fenced with a guard at the gate, located inside a locked gated area	Monthly and annual inspections (see Attachments A and B); no required integrity testing by an external third-party inspector
Helicopters	(not SPCC r	egulated)											
B1 - B4		Helicopters in the hangars and on the concrete pad outside of the hangar	Single-walled steel	F-24 fuel	Yes		East towards a drainage ditch located adjacent to South Airport Road (Outfall #1)		Preventative maintenance and routine inspections	N/A	Spill kit located adjacent to POL1	Facility fenced with a guard at the gate	Routine inspections for leak detection
C1 - C8		Helicopters in the hangars and on the concrete pad outside of the hangar buildings	Single-walled steel	F-24 fuel	Yes	Fueled from MFTs	East towards a drainage ditch located adjacent to South Airport Road (Outfall #1)	nil-105 gpm	Preventative maintenance and routine inspections	N/A	Spill kit located adjacent to POL1	Facility fenced with a guard at the gate	Routine inspections for leak detection
Miscellane	ous Drum Sto	rage										•	
POL1			Two 55-gallon steel drums	Used fuel	Yes	Transferred manually	Southwest approximately 125 feet towards a storm drain, which leads to a grassy area to the southeast of the MFT containment area	nil-5.5 gpm	Spill Prevention: Prudent practices of oil transfer Leak Detection: Secondary containment unit and routine inspections	Two-drum secondary containment unit with greater than 66 gallons containment capacity	Spill kit located adjacent to POL1	with a guard at	Monthly inspections (see Attachment A); remove from service after 12 years



Storage Symbol POL2	Oil Source Volume (gal) 110 total	Location Located outside to the south of Building 2	_ ~	Contents Waste Gas Path cleaner	Container Compatible with Contents? Yes	Transfer Activities Transferred manually	Distance and Direction to Nearest Receptor (2) West approximately 60 feet towards a storm drain, which leads to an oil/water separator associated with the wash rack	(1)	Spill Prevention and Leak Detection Spill Prevention: Prudent practices of oil transfer Leak Detection: Secondary containment unit and routine inspections	Containment Two-drum secondary containment unit with greater than 66 gallons containment capacity	Spill Countermeasures and Response Materials Spill kits stored at various locations at the AASF #3 Peoria Airport (see Figure 2)	with a guard at	Inspection and Integrity Testing Schedule Monthly inspections (see Attachment A); remove from service after 12 years
POL3	165 total	Located outside to the west of Building 13	•	Engine oil and hydraulic oil	Yes	No transfer occurs at this location; temporary storage of new drums	South approximately 60 feet towards a storm drain	nil-5.5 gpm	Spill Prevention: Prudent practices of oil transfer Leak Detection: Impervious surface and routine inspections	Active secondary containment measures ⁽³⁾ (oil absorbent materials)	Spill kits stored at various locations at the AASF #3 Peoria Airport (see Figure 2)	with a guard at	Monthly inspections (see Attachment A); remove from service after 12 years
POL4	220 total	Located inside Building 13	Approximately four 55-gallon steel drums	Miscellaneous oil	Yes	Transferred manually	East approximately 10 feet towards a floor drain	nil-5.5 gpm	Spill Prevention: Prudent practices of oil transfer Leak Detection: Concrete floor and routine inspections	Active secondary containment measures ⁽³⁾ (oil absorbent materials)	Spill kits stored at various locations at the AASF #3 Peoria Airport (see Figure 2)	with a guard at	Monthly inspections (see Attachment A); remove from service after 12 years
POL5		Located in a POL storage shed located south of Building 15	Approximately two 55-gallon steel drums	Miscellaneous oil	Yes	Transferred manually	West approximately 25 feet towards a drain, which leads to an oil/water separator	nil-5.5 gpm	Spill Prevention: Prudent practices of oil transfer Leak Detection: Storage shed containment and routine inspections	POL storage shed with greater than 66 gallons containment capacity	Spill response materials kept in the POL storage shed	Facility fenced with a guard at the gate and located within a locked shed	Monthly inspections (see Attachment A); remove from service after 12 years
POL6		Located inside near the north end of Building 19	One 55-gallon steel drum	Miscellaneous oil	Yes	Transferred manually	South approximately 50 feet towards a trench drain	nil-5.5 gpm	Spill Prevention: Prudent practices of oil transfer Leak Detection: Concrete floor and routine inspections	Active secondary containment measures ⁽³⁾ (oil absorbent materials)	Spill kits stored at various locations at the AASF #3 Peoria Airport (see Figure 2)	with a guard at	Monthly inspections (see Attachment A); remove from service after 12 years
POL7		Located inside near the south end of Building 19	drum	Miscellaneous oil	Yes	Transferred manually	North approximately 50 feet towards a trench drain	;	practices of oil transfer Leak Detection: Concrete floor and routine inspections	Active secondary containment measures ⁽³⁾ (oil absorbent materials)		with a guard at the gate and located within a locked building	Monthly inspections (see Attachment A); remove from service after 12 years
POL8			Approximately two 55-gallon steel drums	Miscellaneous oil	Yes	Transferred manually	West approximately 25 feet towards a drain, which leads to an oil/water separator	nil-5.5 gpm	Spill Prevention: Prudent practices of oil transfer Leak Detection: Storage shed containment and routine inspections	POL storage shed with greater than 66 gallons containment capacity		Facility fenced with a guard at the gate and located within a locked building	Monthly inspections (see Attachment A); remove from service after 12 years



Storage Symbol	Oil Source Volume (aal)	Location	Container Construction	Contents	Container Compatible with Contents?	Transfer Activities	Distance and Direction to Nearest Receptor (2)	Potential Release Flow Rate (1)	Spill Prevention and Leak Detection	112.7(c) Secondary Containment	Spill Countermeasures and Response Materials	Security	Inspection and Integrity Testing Schedule
Transforme	ers						, , ,					,	
TI	At least 55	Located northwest of Building 2	Oil-filled electrical equipment-steel oil reservoir	Mineral oil	Yes	Transferred manually	East approximately 60 feet towards a storm drain	nil-5.5 gpm	Spill Prevention: Prudent oil transfer practices Leak Detection: Impervious surface and routine inspections	Active secondary containment measures ⁽³⁾ (oil absorbent materials)	Contact Ameren Illinois ⁽⁴⁾ at 1-800-755-5000 to respond to any discharge observed from this transformer	Outside and locked	Transformer inspected and maintained by Ameren Illinois ⁽⁴⁾
Т3	At least 55	Located north of Building 18	Oil-filled electrical equipment-steel oil reservoir	Mineral oil	Yes	Transferred manually	East approximately 275 feet towards a drainage ditch, which then flows south	nil-5.5 gpm	Spill Prevention: Prudent oil transfer practices Leak Detection: Impervious surface and routine inspections	Active secondary containment measures ⁽³⁾ (oil absorbent materials)	Contact Ameren Illinois ⁽⁴⁾ at 1-800-755-5000 to respond to any discharge observed from this transformer	Outside and locked	Transformer inspected and maintained by Ameren Illinois ⁽⁴⁾
T4	At least 55	Located northwest of Building 15	Oil-filled electrical equipment-steel oil reservoir	Mineral oil	Yes	Transferred manually	East approximately 100 feet towards a drainage ditch, which then flows south	nil-5.5 gpm	Spill Prevention: Prudent oil transfer practices Leak Detection: Impervious surface and routine inspections	Active secondary containment measures ⁽³⁾ (oil absorbent materials)	Contact Ameren Illinois ⁽⁴⁾ at 1-800-755-5000 to respond to any discharge observed from this transformer	Outside and locked	Transformer inspected and maintained by Ameren Illinois ⁽⁴⁾
T <i>5</i>	At least 55	Located west of the Main Hangar	Oil-filled electrical equipment-steel oil reservoir	Mineral oil	Yes	Transferred manually	Northwest approximately 50 feet towards a storm drain	nil-5.5 gpm	Spill Prevention: Prudent oil transfer practices Leak Detection: Impervious surface and routine inspections	Active secondary containment measures ⁽³⁾ (oil absorbent materials)	Contact Ameren Illinois ⁽⁴⁾ at 1-800-755-5000 to respond to any discharge observed from this transformer	Outside and locked	Transformer inspected and maintained by Ameren Illinois ⁽⁴⁾
T6	At least 55	Located northwest of the Main Hangar	Oil-filled electrical equipment-steel oil reservoir	Mineral oil	Yes	Transferred manually	North approximately 10 feet towards a storm drain	nil-5.5 gpm	Spill Prevention: Prudent oil transfer practices Leak Detection: Impervious surface and routine inspections	Active secondary containment measures ⁽³⁾ (oil absorbent materials)	Contact Ameren Illinois ⁽⁴⁾ at 1-800-755-5000 to respond to any discharge observed from this transformer	Outside and locked	Transformer inspected and maintained by Ameren Illinois ⁽⁴⁾
17	At least 55	Located north of Building 22	Oil-filled electrical equipment-steel oil reservoir	Mineral oil	Yes	Transferred manually	Southeast approximately 150 feet towards a storm drain	nil-5.5 gpm	Spill Prevention: Prudent oil transfer practices Leak Detection: Impervious surface and routine inspections	Active secondary containment measures ⁽³⁾ (oil absorbent materials)	Contact Ameren Illinois ⁽⁴⁾ at 1-800-755-5000 to respond to any discharge observed from this transformer	Outside and locked	Transformer inspected and maintained by Ameren Illinois ⁽⁴⁾



Storage Symbol T8	Location Located southwest of	Container Construction Oil-filled electrical equipment-steel oil reservoir	Contents Mineral oil	Container Compatible with Contents? Yes	Transfer Activities Transferred manually	Receptor (2)	(1) nil-5.5 gpm	7	112.7(c) Secondary Containment Active secondary containment measures ⁽³⁾ (oil absorbent materials)	Security Outside and	Inspection and Integrity Testing Schedule Transformer inspected and maintained by Ameren Illinois ⁽⁴⁾
т10	,··	Oil-filled electrical equipment-steel oil reservoir	Mineral oil	Yes		Adjacent to a drainage ditch, which flows south Nearest Receptor to the Facility: Approximately 3.5 miles southeast towards the Illinois River	•	-	(0)	 Outside and locked	Transformer inspected and maintained by Ameren Illinois ⁽⁴⁾

Total Aboveground Capacity (excluding helicopters and transformers):

45,790 GALLONS

Notes.

- (1) Estimated by assuming small leaks will have very little flow and worst-case release is the contents of the tank released over 10 minutes (consistent with EPA's RMP Program).
- (2) From site observations.
- (3) Active Secondary Containment measures involve a certain action by facility personnel before or after the discharge occurs. These actions are also called spill countermeasures.
- (4) Transformers are inspected and maintained by Ameren Illinois; thus, they are not included in this facility's total oil storage capacity. If facility personnel observe a spill from a transformer, Ameren Illinois will be contacted immediately at 1-800-755-5000.



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1.2 SPILL RESPONSE

All oil spills, regardless of size, must be contained and cleaned up in a safe and effective manner. Spills that affect or threaten public health, welfare, or the environment will be attended to immediately by protecting human safety and containing and cleaning up the spilled substance.

The Hazardous Waste Operations and Emergency Response (HAZWOPER) regulations, 29 CFR 1910.120, defines an incidental release of hazardous substances as a release where the substance can be absorbed, neutralized, or otherwise controlled at the time of release by personnel in the immediate release area, or by other designated responders (i.e., SPCC-trained maintenance personnel). Incidental releases are not considered to be emergency responses within the scope of the HAZWOPER standard.

When facility personnel are unable to control or contain an oil release, the Bartonville Village Fire Department is available for emergency response.

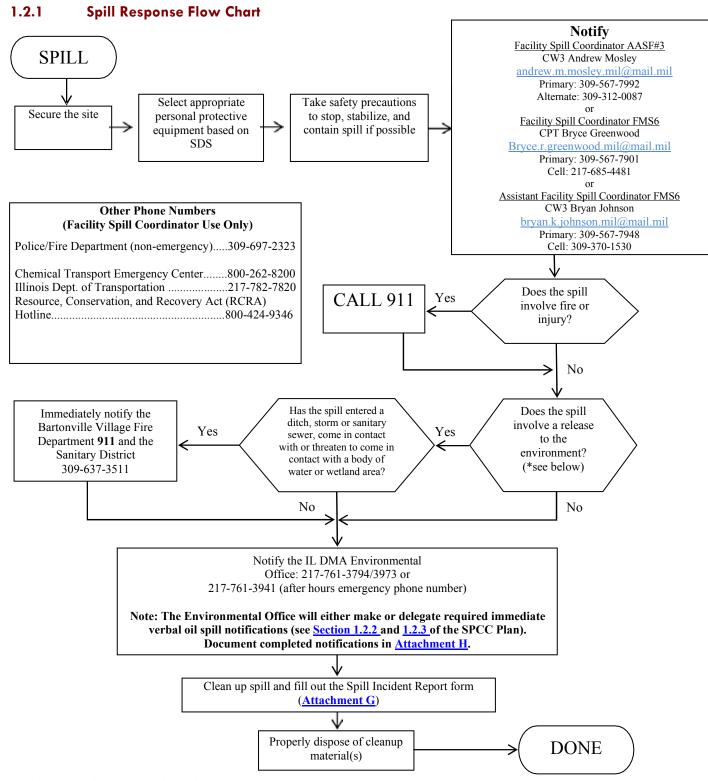
To determine the proper response procedures, this plan classifies discharges as either "incidental" or "non-incidental," depending on the following characteristics:

Oil Spill Response Criteria

<u>Incidental</u> discharges are generally those where:	Non-Incidental discharges are generally those where:
 The discharge is small (e.g., less than 25 gallons). 	The discharge is large enough to spread beyond the immediate area.
The discharge can be easily contained.	The discharge cannot be contained.
The discharge is unlikely to reach a navigable waterway, storm sewer, or	The discharge may reach a navigable waterway, storm sewer, or sanitary drain.
 Sanitary drain. Cleanup procedures do not pose a health or safety hazard. 	The discharge requires special equipment or training to clean up.
 Proper response equipment is available for a safe cleanup. 	The discharge poses a hazard to human health or the environment. The discharge poses a hazard to human health or the environment.
Response by facility personnel may be possible for the above types of discharges.	 There is a danger of fire or explosion. The above discharges require response by the Bartonville Village Fire Department—<u>call</u> 911.

If the discharge cannot be contained, then notify the Facility Spill Coordinator immediately. See the flowchart in <u>Section 1.2.1</u> on the next page for spill response steps. Details regarding the predicted direction, rate of flow, and quantity of potential spills for individual tanks and containers at the facility are listed in <u>Table 1</u>.





The following conditions are considered releases to the environment:

- •Any amount of petroleum, oil or lubricant (POL) or other Hazardous Materials that comes into contact with a surface water or wetland, including storm sewers or drainage ditches.
- Any release of oil that produces a sheen on water and/or threatens navigable waters, including drainage ditches.
- •Twenty-five gallons or more of oil onto unpaved ground.
- An amount into an indoor floor or trench drain that exceeds the holding capacity of a down-line catch basin or oil/water separator.



1.2 2 Required State Notification and Reporting

The Facility Spill Coordinator will make all immediate verbal notifications as required by 29 Illinois Administrative Code (IAC) 430.30, unless instructed otherwise by the IL DMA Environmental Office:

Immediately notify BOTH the	Phone Number	Scenario
Illinois Emergency Management Agency (IEMA)/State Emergency Response Commission (SERC)	1-800-782-7860 (in state) (217) 782-7860	Discharge that causes a film or sheen upon or discoloration of the surface of the water or adjoining shorelines, or
AND Peoria County Local Emergency Planning Committee (LEPC)	(309) 691-3111	Discharge that causes a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.

29 IAC 430.40 requires that telephone notifications include each of the following to the extent possible at the time of notice, provided that it causes no delay in responding to the emergency:

- Substance released
- If the substance is on the list of extremely hazardous substances (*Note: Extremely hazardous substances are specified in 40 CFR 355, Appendix A. Oil, diesel fuel, F-24, and gasoline are not extremely hazardous substances.*)
- An estimated quantity that was released into the environment
- Time and duration of release
- Specific location of release
- Media into which the release occurred (i.e., water)
- Proper precautions to take as a result of the release
- Known or anticipated health or public safety risks
- Name of the reporter and phone number where the reporter may be contacted
- Name and telephone numbers of persons to be contacted for further information

The Facility Spill Coordinator will work through the Environmental Office to submit a written follow-up emergency notice to the IEMA and the LEPC as soon as practicable after a reportable release (**within 30 days**). The written emergency notice is intended to update the information provided in the immediate notification, and shall include the following information:

- Actions taken to respond to and contain the release
- Any known or anticipated acute or chronic health risks associated with the release
- Advice regarding medical attention necessary for exposed individuals (where appropriate)



1.2.3 Required Federal Notification and Reporting

The Facility Spill Coordinator will make all required notifications to the USEPA, unless instructed otherwise by the IL DMA Environmental Office:

Immediately notify the	Phone Number	Scenario
National Response Center (NRC)	1-800-424-8802 OR (202) 426-2675	Discharge of oil to navigable waters or adjoining shorelines OR if discharged substance is a CERCLA Hazardous Substance

The NRC will ask the caller to provide as much information about the incident as possible including:

- Exact address or location and phone number of the facility
- The date and time of the discharge
- Type of material discharged
- Estimates of the quantity discharged
- Source and cause of the discharge
- Description of all affected media
- Any damages or injuries caused by the discharge
- Actions being used to stop, remove, and mitigate the effects of the discharge
- Whether an evacuation may be needed
- The names of individuals and/or organizations who have also been contacted

The Facility Spill Coordinator will work through the Environmental Office to submit a written notification to the USEPA Regional Administrator for any single discharge of oil to a navigable waterway or adjoining shoreline waterway, for any discharge greater than 1,000 gallons, or for two discharges of 42 gallons or more of oil to navigable waters in any 12-month period. This report must be made **within 60 days** of the discharge, and shall include the following information:

- 1. Name of the facility
- 2. Name of the individual submitting the information
- 3. Location of the facility
- 4. Maximum storage or handling capacity of the facility and normal daily throughput
- 5. The corrective actions and/or countermeasures taken, including adequate description of equipment repairs and/or replacements
- 6. An adequate description of the facility, including maps, flow diagrams, and topographical maps
- 7. A complete copy of the SPCC Plan with any amendments
- 8. The cause(s) of such discharge(s), including a failure analysis of the system or subsystem in which the failure(s) occurred
- 9. Additional preventative measures taken or contemplated to minimize the possibility of recurrence



1.2.4 Spill Kits and Waste Disposal

Spill response materials, such as granular absorbents, booms, and/or socks, will be used to control, contain, and clean up an oil release. Spill response kits and granular absorbents will be placed at locations central to the tank and container storage areas and any loading/unloading areas to allow for a timely and effective response. Kits will contain absorbent materials capable of containing and absorbing incidental spills (25 gallons of oil/fuel). Spill kit storage locations for the facility are listed in Table 1 and shown on Figure 2 for individual tanks and containers. Periodically inspecting the spill kits to assure the necessary spill response materials are present is part of the monthly visual inspection process (Section 3.4).

The disposal of used sorbents and contaminated soil will occur in a manner consistent with local, state, and federal regulations, as well as in accordance with the Illinois Army National Guard Waste Management and Hazardous Materials Management Standard Operating Procedures. Oil-contaminated absorbent pillows, socks, and/or sheets will be contained separately from contaminated soil or granular clay. If assistance is required for the cleanup of larger spills, contact the IL DMA Environmental Office (see flow chart) for the names of spill response contractors. AASF #3 will keep a disposal record of any oil or used spill response material recovered as a result of a spill.

2.0 ROLES AND TRAINING

2.1 ROLES AND RESPONSIBILITIES

The Facility Spill Coordinator and the Assistant Facility Spill Coordinator are identified in the Spill Response Flowchart located **Section 1.2.1** for AASF #3. The facility operates and maintains specific oil storage containers as part of this SPCC Plan (specified in <u>Table 1</u> of this plan).

For purposes of getting this plan properly implemented, the IL DMA Environmental Office will be responsible for the following items:

- Obtaining all applicable signatures for the SPCC Plan
- Assisting with support (if necessary) for spill training
- Performing spill reporting, as necessary, following the procedures provided in this SPCC Plan
- Coordinating any SPCC amendments or required 5-year reviews for the SPCC Plan

For purposes of getting this plan properly implemented, the Facility Spill Coordinator (CSM) will be responsible for the following items:

- Coordinating and conducting annual training
- Distributing, posting, and collecting (upon completion) the applicable forms from the SPCC Plan (e.g., Monthly and Annual Inspection Checklists, Notice to Petroleum Product Vendors/Personnel, and the Fuel Transfer Checklist)
- Maintaining SPCC records (e.g., inspection forms, training attendance records) for a minimum of 3 years



- Implementing the appropriate spill response operations and requiring the use of appropriate personal protective equipment
- Conducting Semiannual SPCC Plan Review (every 6 months) (<u>Attachment J</u>)
- Leading/coordinating emergency oil/fuel spill response team efforts
- Coordinating or providing loading/unloading oil transfer oversight for transfers completed by outside tank vendors
- Properly disposing of contaminated material

The Assistant Facility Spill Coordinator will fill in for the Facility Spill Coordinator as needed.

Oil-handling personnel at AASF #3 will each be responsible for operating and maintaining the oil storage containers at the facility. In relation to the SPCC regulation, these responsibilities will include the following:

- Attending annual SPCC training (all oil-handling personnel)
- Executing routine monthly and annual inspections on the respective oil storage containers as assigned by the Facility Spill Coordinator
- Notifying the Facility Spill Coordinator of any observed oil spills in order to start the emergency spill response procedure
- Placing initial spill countermeasure materials (from a facility spill kit(s))

2.2 PERSONNEL TRAINING

All oil-handling personnel shall receive at least annual training to properly respond to spills in their work areas. The Facility Spill Coordinator will determine who will be trained, and the content and training method (e.g., hands-on, classroom, computer-based). Training will include the following:

- The contents of the facility SPCC Plan, including the specific locations of oil tanks and containers
- The frequency and procedures of inspections and recordkeeping
- The operation and maintenance of equipment to prevent discharges
- Discharge procedure protocols
- Applicable pollution control laws, rules, and regulations
- General facility operations

On an annual basis, the IL DMA will provide SPCC training documentation to this facility for inclusion with the SPCC Plan as part of the required recordkeeping.



3.0 DISCHARGE INTERVENTION BY PREVENTIONS

3.1 DISCHARGE PREVENTION MEASURES

For the oil sources present at this facility, specific discharge volumes, direction of flow, and potential spill receptors for individual tanks and containers are listed in <u>Table 1</u>. All visible discharges of oil that occur shall be promptly corrected. To prevent oil releases from occurring:

- Train personnel at least annually in proper oil-handling procedures (Section 2.2).
- Practice proper unloading/loading procedures during all oil transfer activities (Section 3.3/Attachment C/Attachment I). Personnel must remain attentive during loading/unloading activities to prevent spills during tank or container filling, emptying, or transfer.
- Store sufficient response materials near oil sources (Section 1.2.4).
- Provide appropriate secondary containment (Section 3.2).
- Conduct as-used, monthly, and annual inspections on all tanks and containers (Section 3.4.1).
- Require leaking equipment and vehicles to be fixed as soon as possible. Drip pans/pads can be used to prevent site contamination from leaking vehicles and equipment. Drip pans must be emptied on a regular basis.
- Require that bulk storage tank(s) on tanker vehicles are kept as empty as possible when parked at the facility.
- Place water-tight drain covers over the drains located in the outdoor wash area prior to use.
- Provide a functioning liquid level sensing device for all bulk storage containers, such as a visual gauge, an electronic high-level alarm or automatic pump cutoff.
- Practice good housekeeping to keep oil storage areas clear of debris.

3.2 SECONDARY CONTAINMENT

All oil source areas listed in <u>Table 1</u> at this facility are required to be designed with appropriate containment and/or diversionary structures. Common examples of secondary containment include double-wall tank construction, concrete containment pads/structures, spill pallets for portable drums, nearby sorbent materials, oil/water separators, and self-contained concrete-floored rooms. Specific information regarding secondary containment measures provided for each tank and container is included in <u>Table 1</u>. Each of the oil sources at this facility has sufficient secondary containment. Plans are currently underway to remove and replace the existing MFT storage pad area with a larger system to increase the overall holding capacity.



3.3 OIL TRANSFER ACTIVITES

3.3.1 Transfer Procedures

Oil transfer at AASF #3 may include the filling and emptying of tanks by a tanker truck, the dispensing of oil from tanks into smaller containers or vehicles, the transfer of oil into tanks, containers, or drums. Tanker truck drivers are responsible for proper loading and unloading procedures as outlined in the Department of Transportation (DOT) 49 CFR 177.837 requirements. Specific oil transfer activities related to individual oil sources for this facility are included in Table 1. All petroleum product vendors and AASF #3 personnel who deliver, load, unload, or pick up petroleum products will review and comply with the transfer requirements set forth in Attachment I. During all oil transfer activities, the following control measures will be followed to prevent a discharge:

- Temporarily cover any nearby storm or sanitary sewer drains with water-tight covers.
- Use wheel chocks or other similar barriers to prevent premature movement of transfer vehicles.
- Request that tanker trucks be equipped with overflow shut-off valves.
- Inspect around and below oil transfer vehicles for leaks before and after loading or unloading.
- Require direct audible communication between the person dispensing from the tanker truck and the person filling the receiving tank or container.
- For transfers not involving filling and emptying of tanks by a tanker truck, use a funnel or pump when adding or removing smaller quantities of oil to tanks, containers, or filling oil-filled electrical equipment reservoirs.
- The Fuel Transfer Checklist (<u>Attachment C</u>) is recommended for completion for each oil transfer conducted by an outside vendor for tanks listed within this SPCC Plan. The completion of the Fuel Transfer Checklist is not mandatory. The Notice to Petroleum Product Vendors/Personnel (<u>Attachment I</u>) should be posted prominently in key fuel transfer areas, so these practices can be followed by vendors and AASF#3 personnel.

3.3.2 Overfill Protection

AST1 – AST5 at AASF #3 have sufficient overfill protection in the form of direct vision gauges (level gauges) under 40 CFR 112.8(c)(8)(iv). To use the alternative of "direct vision gauges," a person must be present to monitor the gauges and the overall filling of bulk storage containers (ASTs).



MFT1 – MFT16 at AASF #3 do not have sufficient overfill protection in the form of either high liquid level alarms (40 CFR 112.8(c)(8)(i)) or direct vision gauges (level gauges) under 40 CFR 112.8(c)(8)(iv). To use the alternative of "direct vision gauges," a person must be present to monitor gauges and the overall filling of bulk storage containers (ASTs).

• Therefore, AASF #3 is pursuing an environmentally equivalent approach to provide sufficient overfill prevention in lieu of complying with the requirements of 40 CFR 112.8(c)(8). The approach for satisfying environmental equivalence protection is that active containment measures will be employed when MFT1 – MFT16 are filled. MFT filling occurs off site. MFT1 – MFT16 will be equipped with spill response materials and filling operations will be directly overseen by trained personnel.

3.4 INSPECTIONS AND INTEGRITY TESTING

3.4.1 Routine Visual Inspections

The purpose of visual inspections is to determine if an oil release has occurred, the general condition of tanks, containers, and piping, and the suitability for continued oil storage until the next inspection. The inspection program for the facility includes informal observations for leakage from equipment as it is used as well as monthly and annual scheduled inspections. Checklists used to document the inspections are included as <u>Attachments A</u> and <u>B</u> and must be kept on file at the facility for a minimum of 3 years. <u>Table 1</u> lists the recommended inspection frequency for individual tanks and containers. Inspection criteria and schedules outlined in this plan are based upon the following accepted industry standards:

Industry Standard	Title	General Applicability
American Petroleum Institute (API) 653	Tank Inspection, Repair, Alteration and Reconstruction (2014, 5th ed.)	Large, field-fabricated tanks built to API Standard 650
Steel Tank Institute (STI) SP001-11	Standard for the Inspection of Aboveground Storage Tanks (2011, 5 th ed.)	Smaller shop-fabricated tanks and portable containers

Monthly inspections will be conducted by facility personnel and include checking:

- Storage areas for signs of debris that may block access
- Storage areas for unlabeled or outdated containers
- Tanks, containers, and associated piping for evidence of leakage or spillage
- Tanks and containers for water or oil in the tank, interstice, or secondary containment
- Outdoor secondary containment structures that may require drainage
- Spill kits for replacement or replenishment of spill response materials



Annual inspections include checking:

- Secondary containment structures for evidence of damage
- Tank foundation and support structures for signs of settlement, corrosion, or damage
- Tank or container exterior coatings for needed cleaning or maintenance
- Tank normal and emergency vents for needed cleaning or maintenance
- Tank or container liquid level and overfill prevention sensing devices

At AASF #3, the following visual inspection schedule will be followed for different tank and container types (Table 1). Because severe weather can potentially affect the operational integrity of exterior tanks or outside storage containers, these containers will be inspected immediately after a major storm or other weather event (e.g., thunderstorm with observed lightening damage, wind storm causing limbs to fall off trees, blizzard, or a high intensity rain event that causes flash flooding) using the Annual Inspection Checklist provided in Attachment B.

Tank or Container Type	Guidance	Visual Inspection Frequency
Aboveground storage tanks	STI SP001-11	Monthly and Annually
Portable drums	STI SP001-11	Monthly
Transformers	STI SP001-11	Monthly and Annually

The AASF #3 personnel performing monthly and annual inspections are knowledgeable of storage facility operations, characteristics of the liquid stored, the type of AST, and its associated components. Facility personnel perform periodic inspections as described in this section. The scope of inspections and procedures is covered in the training provided to personnel involved in handling oil at the facility. The routine inspections focus specifically on detecting any change in conditions or evidence of product leakage from the tank, piping system, and attached equipment.

In accordance with inspection procedures outlined in this plan, if evidence of leakage from the tank or deterioration of the tank system is observed by facility personnel, the tank is to be replaced or inspected by a tank inspector certified by the API or STI to assess its suitability for continued service, according to SP001-11.

Copies of any tank permits, licenses, records of inspections, tank repairs, and integrity tests are suggested to be maintained with a copy of this SPCC Plan.

3.4.2 Integrity Testing

The purpose of integrity testing is to measure the tank's or container's structural imperviousness and its soundness in containing oil, ensuring its suitability for continued use under current and anticipated operating conditions. Integrity testing may also help a facility determine whether corrosion has reached a point where repairs or replacement of the container is needed, and thus avoid unplanned interruptions in facility operations.



Compliance recommendations for the SPCC rule's integrity testing requirements are based on the STI *Standard for the Inspection of Aboveground Storage Tanks* (SP001-11). The following table summarizes general integrity testing requirements.

Tank Type	Tank Volume (gallons)	Secondary Containment	Guidance	Integrity Testing Frequency
Shop-built aboveground storage tanks	0 – 1,100	Spill control without a continuous release detection method ¹	STI SP001-11	Not required

¹ Spill control with a continuous release detection method refers to any measure that prevents the release of oil into the environment and allows for the visual detection of a leak prior to a release (e.g., a double-walled tank with interstitial monitoring).

At AASF #3, AST1 – AST5 are shop-fabricated AST that are less than 1,100 gallons in capacity. AST1 – AST5 are double-walled with interstitial monitoring, providing intact spill control. Therefore, AST1 – AST5 do not require formal integrity testing by a certified third-party inspector.

MFT1 – MFT16 are considered to be portable containers. Since MFT1 – MFT16 are constructed of steel, every 12 years either integrity testing per Department of Transportation (DOT) protocol, or removal from service is required.

Per SP001-11, the steel drums located in drum storage areas POL1 – POL8 need to be removed from service after 12 years.

3.5 SECURITY

In order to promote the safety of the facility personnel and to minimize the potential for releases of oil, various security measures are in place. The facility is fenced, and a guard is stationed at the gate to restrict access to the facility. Buildings are also locked when not occupied. Specific security information related to individual tanks and containers is listed in **Table 1**.

4.0 CERTIFICATION REQUIREMENTS

AASF #3 has approximately 45,790 gallons of aboveground storage capacity in containers 55 gallons or greater. The oil products at AASF #3 include jet fuel, used oil, hydraulic oil, diesel fuel, and petroleum-based solvent. Details regarding individual tank and container contents as well as volumes are summarized in Table 1.

Since the AASF #3 has greater than 10,000 gallons in aggregate aboveground oil storage, it is not considered to be a "qualified facility." Therefore, the AASF #3 will need to have a Professional Engineer certify the mandatory 5-year review or any future amendments to this SPCC Plan.



If AASF #3 needs to amend the SPCC Plan, the Facility Spill Coordinator will follow the steps below to complete an SPCC Plan Amendment:

- 1. Contact the IL DMA Environmental Office to notify them of the condition requiring an SPCC Plan Amendment.
- 2. The IL DMA will ensure the SPCC Plan Amendment will be conducted by a Professional Engineer.

5.0 UNDERGROUND OIL STORAGE

AASF #3 has two oil/water separators which capture oil and is used exclusively for wastewater treatment. Therefore, they are exempted from the facility's overall oil capacity under 40 CFR 112.1 (d)(6), and, therefore, are not SPCC regulated. When the oil product is emptied from this oil/water separator by an outside vendor, the transfer will follow procedures provided in Section 3.3 of this SPCC Plan. As required, the location of this oil/water separator is included on the Facility Site Plan, Figure 2.

6.0 RECORDS

Attachments A through **J** are forms which will be completed (as directed by this plan) and maintained by the CSM for a period of no less than 3 years.

Attachment A	Monthly Inspection Checklist – Require to keep records for a minimum of 3 years
Attachment B	Annual Inspection Checklist – Required to keep records for a minimum of 3 years
Attachment C	Fuel Transfer Checklist – Steps that are recommended to be performed during fuel delivery or used oil pickup by an outside vendor
Attachment D	Cross-Reference with the SPCC Rule – Summary of how this SPCC Plan meets the applicable SPCC requirements (40 CFR 112)
Attachment E	Engineer's SPCC Plan Review and Recertification Log – Complete when there is a change in the facility design, construction, operation, or maintenance affecting oil discharge
Attachment F	Engineer's SPCC Plan Amendment Certification – Use a Professional Engineer when there is a change in the facility design, construction, operation, or maintenance affecting oil discharge
Attachment G	Spill Incident Report – Internal report to be completed for all spills, regardless of size or whether it reaches a navigable waterway



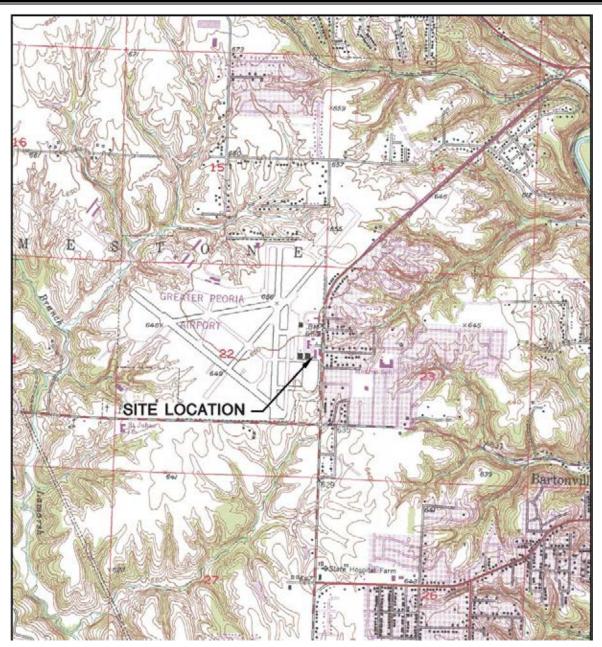
Attachment H	$\begin{tabular}{ll} \textbf{Release Reporting Compliance Documentation Log}-A \ record \ of \ contacts \\ made \ with \ various \ reporting \ agencies \ after \ a \ release \ occurs \\ \end{tabular}$
Attachment I	Notice to Petroleum Product Vendors/Personnel – Notice to provide to petroleum vendors delivering fuel products to AASF#3
Attachment J	Semiannual SPCC Plan Review for AASF #3 – Tool for determining if the facility is maintaining compliance with the SPCC regulations



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FIGURES

- Site Location Map Facility Site Plan 1
- 2



PEORIA WEST QUADRANGLE ILLINOIS
7.5 MINUTE SERIES (TOPOGRAPHIC)
1979



Site Location Map

Νt

AASF #3 Peoria Airport 2323 South Airport Road Peoria, Illinois

Project	#
917 01	

Figure 1



LEGEND

-x-x- FENCE

+++++++++ TRENCH DRAIN

STORM SEWER DRAIN INLET (SD)

1, 2 DRAINAGE BASIN

- ☐ ABOVEGROUND STORAGE TANK (AST)
- X PETROLEUM, OIL AND LUBRICANT Storage area (POL)
- SPILL KIT

OOO OIL/WATER SEPARATOR

Notes:

- SIZE AND CONTENTS FOR ALL SPCC REGULATED OIL STORAGE CONTAINERS IS PROVIDED IN TABLE 1.
- IF FACILITY PERSONNEL OBSERVE A SPILL FROM A TRANSFORMER, AMEREN ILLINOIS WILL BE CONTACTED IMMEDIATELY AT (800) 755-5000.
- 3. MFT'S CONTAINING FÚEL ARE STORED ON AN IMPERVIOUS SURFACE.
- 4. FACILITY IS:
 - 90% IMPERVIOUS
 - 10% PERVIOUS

FIGURE 2- FACILITY SITE PLAN AND DRAINAGE MAP



201 N. 6TH STREET ROCKFORD, ILLINOIS 61107 (815) 962-9000 AASF#3 PEORIA AIRPORT 2323 SOUTH AIRPORT ROAD PEORIA, ILLINOIS

Project #: 917.01 Date: October 2019

ATTACHMENTS

Α	Monthly Inspection Checklist
В	Annual Inspection Checklist
C	Fuel Transfer Checklist
D	Cross-Reference with the SPCC Rule
E	Engineer's SPCC Plan Review and Recertification Log
F	Engineer's SPCC Plan Amendment Certification
G	Spill Incident Report
Н	Release Reporting Compliance Documentation Log
l	Notice to Petroleum Product Vendors/Personnel
J	Semiannual SPCC Plan Review for AASF #3

J

ATTACHMENT A – MONTHLY INSPECTION CHECKLIST AASF #3 Year: _____

Complete this inspection checklist each month for all tanks and containers indicated. When the annual inspection is conducted, only complete the container portion of this form. Check off each item for each source if the statement is true. Provide further description and comments as appropriate on the next page. Any item that is not checked as true shall be described and addressed immediately.

	Mon											
AST1 - AST5, Tank Areas, and Piping	1	2	3	4	5	6	7	8	9	10	11	12
Tank surfaces show no signs of leakage												
Tank shows no signs of damage, rust, or deterioration												
There is no damage to bolts, rivets, or seams												
Level gauge is working properly												
There is no water/oil in interstice of double-walled tank												
Tank area is not obstructed												
There is no oil present in the secondary containment												
There are no signs of damage or staining to the containment structure												
Containment structure egress pathways are not blocked, and doors are functional												

							Month							
MFT1 - MFT16	1	2	3	4	5	6	7	8	9	10	11	12		
There is no evidence that the MFTs parked on the pad are leaking														
The MFTs are parked on the pad when it is filled														
Boom in the MFT containment pad drain system completely blocks the drain entrance														
Boom in the MFT containment pad drain system does not show signs of oil residue														

	Month											
POL1 – POL8	1	2	3	4	5	6	7	8	9	10	11	12
Drums show no signs of leakage, deterioration, or distortion												
Drums show no signs of spillage on their tops, sides, or surrounding ground												
No excess materials or waste debris are stacked on drums												
Drum lids are tightly closed												
Drums are labeled and are not outdated												
Drum area is not obstructed by equipment, vegetation, or waste debris												
Drums are within designated storage area												

	Month											
Spill Kits	1	2	3	4	5	6	7	8	9	10	11	12
Spill kits are fully stocked and do not require replenishment of response materials												

ATTACHMENT A – MONTHLY INSPECTION CHECKLIST (CONTINUED) AASF #3 Year: _____

Month	Source/Area	Notes

Check off under each source name after it has been inspected for the current month. After you complete your inspection of the oil sources, sign and date the table below.

		ASTs			MFTs				POLs						
1	2	3	4	5	1-16	1	2	3	4	5	6	7	8	Signature	Date

ATTACHMENT B - ANNUAL INSPECTION CHECKLIST

This inspection record will be completed each year for all tanks indicated. Check off each item for each source if the statement is true. Provide further description and comments as appropriate. Any item that is not checked as true will be described and addressed immediately.

ACTI ACTE T	I A I D' ' O'I W · C ·	1	
	ak Areas, and Piping; Oil/Water Separator	7	Notes
	no signs of leakage		
	s of damage, rust, or deterioration		
	e to bolts, rivets, or seams		
	arms are working properly		
	oil in interstice of double-walled tank		
	ency tank vents do not require cleaning or maintenance		
	xterior do not require maintenance, cleaning, or painting		
	ructed and are operating properly		
•	of leakage or deterioration to pipelines and connections		
	ostructed by equipment or debris		
-	ent in the secondary containment		
	damage or staining to containment structure		
Oil/water separate	ors do not require emptying		
	N		
Source/Area	Note		

ATTACHMENT C Fuel Transfer Checklist

The completion of this form is not an SPCC requirement, but rather a best management practice recommended by the IL DMA.

Steps included in this checklist should be taken during delivery at all tanks at the facility. This information will be shared with all fuel delivery companies making deliveries to the facility.

Date:	Locati	on:
Tank operator present during fueling?	Yes 🗌	No 🗌
Tank filling is monitored constantly?	Yes 🗌	No 🗌
Tank level before loading (1)	(inches)	(gallons)
Tank level after loading (2)	(inches)	(gallons)
Total loaded $(3 = 2 - 1)$ (3)	(inches)	(gallons)
Storage tank and related piping inspected?	Yes 🗌	No 🗌
5-gallon drip bucket under discharge hose? (Where needed to prevent spills.)	Yes	No 🗌
Storm drains covered?	Yes 🗌	No 🗌
Absorbent materials available?	Yes 🗌	No 🗌
Any leaks or spills?	Yes 🗌	No 🗌
Wheels chocked?	Yes 🗌	No 🗌
Acknowledgment of Receipt of Materials:		
Facility Personnel Signature	Printed	d Name/Date
Acknowledgment of Transfer of Materials:		
Fuel Delivery Driver Signature	Printed	d Name/Date

ATTACHMENT D Cross-Reference with the SPCC Rule

Provision	Rule Coverage	Plan Section
112.3(d)	Professional Engineer Review & Certification	<u>Page v</u>
112.3(e)	Plan location and availability	Section 1.1
112.5	Plan review and amendments	Attachment E and
		Attachment F
112.7	Management approval	<u>Page iii</u>
112.7(a)(2)	Environmental Equivalence Protection	Section 3.3.2
112.7(a)(3)	Specific oil source information and facility diagram	Table 1 and Figure 2
112.7(a)(4)	Discharge discovery and reporting	Section 1.2
112.7(a)(5)	Discharge mitigation procedures	Section 3.0
112.7(b)	Spill direction for oil sources	Table 1 and Figure 2
112.7(c)	Secondary containment systems	Section 3.2 and Table 1
112.7(d)(1)	Secondary containment impracticability determination	N/A
112.7(d)(2)	Written commitment of manpower, equipment, and materials	<u>Page iii</u>
112.7(e)	Inspections, tests, and records	Sections 3.4 and 6.0
112.7(f)	Personnel, training, and discharge prevention procedures	Sections 2.2 and 3.0
112.7(g)	Security measures	Section 3.5 and Table 1
112.7(h)	Tank truck loading/unloading	Section 3.3, and
		Attachments C and I
112.7(i)	Field-constructed aboveground storage tanks	N/A
112.7(j)	Conformance with applicable state and local requirements	Section 1.0
112.7(k)	Qualified oil-fill operational equipment	N/A
112.8(b)	Drainage of diked containment areas	N/A
112.8(c)(1)	Tank or container material compatibility	<u>Table 1</u>
112.8(c)(2)	Sufficient secondary containment	Section 3.2
112.8(c)(3)	Discharge mitigation procedures	Section 3.1
112.8(c)(4),(5)	Cathodic protection for underground/partially buried tanks	N/A
112.8(c)(6)	Integrity testing	Section 3.4.2
112.8(c)(7)	Internal heating coils	N/A
112.8(c)(8)	Liquid level sensing device	<u>Table 1</u>
112.8(c)(10)	Correcting visible discharges and removal of accumulations	Section 1.2
112.8(c)(11)	Secondary containment for portable oil containers	<u>Table 1</u>
112.8(d)	Facility transfer operations, pumping, and facility process for	Section 3.3
	all oils except cooking oil and grease	
112.12(b)	Facility drainage for cooking oil and grease containers	N/A
112.12(c)	Bulk storage containers for cooking oil and grease containers	N/A
112.12(d)	Facility transfer operations for cooking oil and grease	N/A
	containers	
112.20	Substantial harm determination	N/A

^{*} Only relevant rule provisions are indicated. For a complete list of SPCC requirements, refer to the full text of 40 CFR 112.

ATTACHMENT E Engineer's SPCC Plan Review and Recertification Log (Future Changes)

In accordance with 40 CFR 112.5(b), a review and evaluation of the SPCC Plan is required at least once every 5 years from the date the facility became subject to the SPCC regulations. In addition, a facility's SPCC Plan must be amended by the owner or operator when there is a change in the facility design, construction, operation, or maintenance that materially affects its potential for discharge as described in Section 112.1(b). Examples of changes that may require amendment of the SPCC Plan include, but are not limited to: commissioning or decommissioning containers; replacement, reconstruction, or movement of containers; reconstruction, replacement, or installation of piping systems; construction or demolition that might alter secondary containment structures; changes of product or service; or revision of standard operation or maintenance procedures at a facility.

SPCC PLAN RECERTIFICATION

I have completed a review and evaluation of this SPCC Plan. Information on my review and decision on amending this SPCC Plan is given below. I understand that if significant changes have occurred to this facility since the last review, the SPCC Plan must be updated and recertified by a Professional Engineer. Any technical amendments made to the original SPCC Plan must also be certified by a Professional Engineer. If necessary, the Professional Engineer's amendment certification can be found as Attachment F.

SPCC PLAN REVIEW FIVE YEAR SUMMARY

	Does Plan R		N 15		
Review	Amendments?		Name and Signature of Person		
Date	Yes	No	Authorized to Review the Plan		
January 2002	×		Jan C. Kucher, PE, BT ² , Inc.		
June 2003	X		Jan C. Kucher, PE, BT ² , Inc.		
February 2009	х		Christopher J. Jimieson, PE, BT ² , Inc.		
December 2013	X		Christopher J. Jimieson, PE, SCS Engineers		
November 2019	Х		Christopher E. Tiedt, PE, Anderson Environmental Co.		

ATTACHMENT F Engineer's SPCC Plan Amendment Certification

If major changes to the facility have occurred since the last review, the SPCC Plan is to be updated and amended. Examples of changes that may require amendment of the SPCC Plan include, but are not limited to: commissioning or decommissioning containers; replacement, reconstruction, or movement of containers; reconstruction, replacement, or installation of piping systems; construction or demolition that might alter secondary containment structures; changes of product or service; or revision of standard operation or maintenance procedures at a facility.

For this facility, the plan amendment will be completed by one of the following:

• Professional Engineer for non-"qualified facilities" (see Section 4.0)

"I hereby certify that I have examined the facility and, being familiar with the facility and its existing SPCC Plan requirements, attest that this SPCC Plan Amendment conforms to the elements of 40 CFR 112 and that no deviations were employed in the preparation of this document."

Review Date	Description of Technical Amendment	Name and Signature of Person Certifying this Amendment	PE Registration Stamp (if applicable)
Campletod 11/18/19	Review L Update	Christopher E. Tied+, PE Chtyl E. Trost	CHRISTOPHER E. N. C. CHRISTOPHER E. N. C. CHRISTOPHER E. N. C.

MANAGEMENT APPROVAL

"This SPCC Plan amendment is fully approved by	v the director and has been implemented as
described herein."	A serial map of the ma
Name (please type or print)	1212
Name (please type or print)	Signature
(FMO)	12/6/19
Title	Date

ATTACHMENT G Spill Incident Report

Discharge/Discovery Date:	Time:					
Facility Name: AASF #3 Peoria Airport						
Facility Location (Address/Lat-Long/Section Township Range):						
Name of Reporting Individual:		Telephone #:				
Type of Material Discharged:	Estimated total quantity discharged:	Gallons/Barrels				
Source of the Discharge:	Media Affected:	,				
	Soil					
	☐ Water (specify)					
	Other (specify)					
Actions Taken:						
Damage or Injuries?	Evacuation Needed?					
□ No □ Yes (specify)	☐ No ☐ Yes (specify)				
Organizations and Individuals Contacted:						
☐ National Response Center 800-424-8802	Time:					
Cleanup contractor (specify)	Time:					
State Agency (specify)	Ti	me:				
Other (specify)	Ti	me:				

ATTACHMENT H Release Reporting Compliance Documentation Log

Immediate (Oral) Notification

Agency	Phone Number	Time/Date Contacted	Incident No.	Person Contacted/Title	FSC Initials
Illinois Emergency Management Agency (IEMA)	1-800-782-7860 (in state) Or 217-782-7860			,	
Peoria County Local Emergency Planning Committee (LEPC)	309-691-3111				
National Response Center	1-800-424-8802 Or 202-426-2675				

Follow-up (Written) Notification

Agency	Date Report Mailed	Incident No.	FSC Initials	Notes
IEMA and LEPC				
US Environmental Protection Agency Regional Administrator				
National Response Center (as needed)				

NOTICE TO PETROLEUM PRODUCT VENDORS/PERSONNEL

May 2014

To: All Bulk Petroleum Product Vendors

From: Illinois Department of Military Affairs, AASF #3 Peoria Airport

Phone: (309) 697-7948

In accordance with the Code of Federal Regulations 40 CFR 112, all petroleum product vendors who deliver, load, unload, or pick up petroleum products or waste oil to or from our facility are required to comply with the following requirements:

- 1. Exercise caution when maneuvering vehicles to avoid damage to secondary containment structures. [112.7(a)(3)(ii)]
- 2. Drivers are to be present and alert monitoring the transfer of petroleum product full time while product is being transferred to or from on-site storage containers. [112.7(a)(3)(ii)]
- 3. Chock the tank truck wheels while loading or unloading tanks and do not remove the wheel chocks until after the transfer is complete and the transfer hose is disconnected to prevent an accidental drive-off without removing the transfer hose. [112.7(h)(2)]
- 4. Prior to filling and departure, closely inspect for discharges at the lowermost drain and all outlets of the tank truck, and if necessary, ensure that they are tightened, adjusted, or replaced to prevent liquid discharge while in transit. [112.7(h)(3)]
- 5. Continuously monitor for potential tank overfills while loading or unloading storage containers. Check the freeboard capacity of containers prior to filling to estimate the volume to fill the tank and visually monitor the filling process to ensure the tank does not overfill. For tanks with audible air vent alarms, continuously listen for the audible air vent overfill warning whistle. [112.8(c)(8)(i)]
- 6. Promptly stop and clean up any petroleum product leaks or spills that occur while loading or unloading containers. [112.8(c)(10)]
- 7. Immediately report leakage or spillage requiring assistance of site personnel to clean up to AASF #3 Peoria Airport site management. [112.7(a)(3)(ii)]
- 8. Prior to loading/unloading, place an empty container under the hose end to be disconnected first with enough capacity to catch the remaining liquid in the transfer hose. Verify that appropriate valves are closed before disconnecting loading/unloading lines. Prior to disconnecting the transfer hose, gravity drain remaining product in the hose to the lowest container. [112.7(a)(3)(ii)]

This notice is provided for your information to make you aware of these requirements so you can maintain regulatory compliance. This notice is also made as an integral part of our Spill Prevention Control and Countermeasures (SPCC) Plan maintained on site and available for your inspection in our office.

ATTACHMENT J Semiannual SPCC Plan Review for AASF #3

It is suggested that this plan review be completed every 6 months, as a way of determining if an SPCC Plan amendment is necessary. Provide further description and comments, if necessary, on a separate sheet of paper and attach to this sheet. Any item receiving a "no" will be described and addressed immediately.

Review the following:	Yes	No	If no, describe the action to be taken and note the date that the issue was corrected.
The plan has been certified either by a Professional Engineer within the past 5 years			
Sources of oil (55 gallons or greater) at the facility are identical to those listed in Table 1 in quantity, description, and contents			
All source locations on the plan figures are still accurate compared to what is at the facility (no sources have been added, moved or removed) ²			
Inspection forms have been completed at the appropriate interval for all sources as required by the plan, and completed inspection forms are kept with the plan going back a minimum of 3 years			
All oil-handling personnel have received annual SPCC training, and there is documentation of the training kept with the plan			

- 1. AASF #3 is not a qualified facility; therefore, the IL DMA does not have the option to self-certify the SPCC Plan.
- 2. The facility's SPCC Plan must be amended when there is a change in the facility design, construction, operation, or maintenance that materially affects its potential for discharge as described in 40 CFR 112.1(b). Examples of changes that may require amendment of the SPCC Plan include, but are not limited to: commissioning or decommissioning containers; replacement, reconstruction, or movement of containers; reconstruction, replacement, or installation of piping systems; construction or demolition that might alter secondary containment structures; changes of product or service; or revision of standard operation or maintenance procedures at a facility. To amend the plan, update the applicable plan information (including Table 1, Figure 2, etc.), and complete Attachments E and F.

This SPCC Plan has the full approval of Illinois Department of Military Affairs management. I attest that to the best of my knowledge, the information contained in this plan is true, complete, and accurate.

•	.	•		
Reviewer Name:			Date Reviewed:	















UPDATED Storm Water Pollution Prevention Plan

AASF # 3 2323 South Airport Road Peoria, Illinois 61607 -1498

Presented to: Illinois Department of Military Affairs



Camp Lincoln 1301 N. MacArthur Blvd. Springfield, Illinois 62702-2399 (217) 761-3973

Presented by:



201 N. 6th Street
Rockford, IL 61107
815.962.9000 | fax 815.962.7978
andenv.com

Updated: November 2019 File No. 917.01



UPDATED:

Storm Water Pollution Prevention Plan

AASF #3

2323 South Airport Road
Peoria, Illinois 61607-1498

Presented to:

Illinois Department of Military Affairs

Camp Lincoln 1301 N. MacArthur Blvd. Springfield, Illinois 62702-2399 (217) 761-3973

Presented by:

Anderson Environmental Co.

201 N. 6th Street Rockford, Illinois 61107 (815) 962-9000

Updated: November 2019 File No. 917.01



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- F Annual Facility Inspection Report
- G SWPPP Training Record
- H Notice of Intent Form
- I SWPPP Annual Checklist



STORM WATER POLLUTION PREVENTION

PLAN CERTIFICATION PAGE

Department of Military Affairs
Peoria Facility
Army Aviation Support Facility #3 (AASF #3)
2323 South Airport Road
Peoria, Illinois 61607-1498

November 2019

Anderson Environmental Co. updated this Storm Water Pollution Prevention Plan (SWPPP) for the Department of Military Affairs in accordance with the provisions of the Illinois Environmental Protection Act, the Illinois Pollution Control Board Rules and Regulations (Title 35, Part III, Subtitle C, Chapter 1 of the Illinois Administrative Code), and the Clean Water Act.

The following certification is required under the Illinois National Pollutant Discharge Elimination System (NPDES) General Permit for Industrial Storm Water Discharge and contains the following statement in accordance with Attachment H (Standard Conditions) Section 11(d).

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure 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 submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

MAJ Shawn Robertson

Chief, Environmental Branch

Illinois Department of Military Affairs



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1 INTRODUCTION

1.1 PURPOSE AND APPLICABILITY

This Storm Water Pollution Prevention Plan (SWPPP) is required for the Illinois Army National Guard (ILARNG) Army Aviation Support Facility #3 (AASF #3) at the Peoria Airport in Peoria, Illinois. It is prepared to support the Illinois National Pollutant Discharge Elimination System (NPDES) General Permit for Industrial Storm Water Discharge No. ILR00 (General Permit) issued to the facility (see <u>Appendix C</u> for a copy of the General Permit). The permit was issued pursuant to the authority of Section 402(b) of the Clean Water Act (33 USC 1342(b)), and Title 35, Part III, Subtitle C, Chapter 1 of the Illinois Administrative Code.

The goal of this SWPPP is to identify potential sources of pollution that exist at this industrial site, which may reasonably be expected to affect the quality of storm water discharges associated with industrial activity from the facility. The SWPPP also describes the implementation of practices that are to be used to reduce those pollutants in storm water discharges. This SWPPP is prepared in accordance with good engineering practices. The objectives of the SWPPP are to:

- Summarize major activities conducted at the facility (Section 1.0)
- Inventory exposed materials and summarize storm water sampling requirements for the facility (Section 2.0)
- Identify potential source areas of storm water contamination and significant polluting materials (Section 3.0)
- Identify Best Management Practices (BMPs) for facility activities (Section 4.0)
- Identify impacts of BMPs (Section 5.0)
- Identify the individuals who will implement this SWPPP (Section 6.0)
- Provide information on required storm water inspections (<u>Section 7.0</u> and <u>Appendix D</u>)
- Discuss training requirements (Section 8.0)
- Provide a means of record keeping for storm water-related documents at the facility (Section 9.0)
- Provide a non-storm water discharge assessment (Appendix A)
- Summarize storm water discharge regulatory applicability and implementation schedule (Appendix B)
- Fulfill the requirements of the General Permit issued to the facility (<u>Appendix C</u>)

This plan is organized consistent with requested information in the General Permit. The facility shall maintain a copy of this plan. An electronic copy of the plan shall be submitted to the Illinois Environmental Protection Agency (IEPA) at the following email address: epa.indilr00swppp@illinois.gov. The permittee shall submit any modified plan to the IEPA, when such modification includes substantive changes to the plan or modification is made to the plan for compliance with the General Permit. Amendments to the plan shall be made within 30 days of any proposed construction or operational changes at the facility and shall be submitted to the IEPA.



1.2 FACILITY DESCRIPTION AND SUMMARY OF MAJOR ACTIVITIES

AASF #3 (Standard Industrial Classification Code [SIC Code] 4500) provides aviation intermediate-level (AVIM) and aviation unit-level (AVUM) aircraft maintenance support. The facility is also an aircraft flight base for the Blackhawk and Chinook helicopters. The entire site is approximately 44 acres in size and is located at 2323 Airport Road within the city limits of Peoria in Peoria County, Illinois. The site location is depicted on Figure 1. The facility is covered under the Illinois NPDES General Permit for Industrial Storm Water Discharge No. ILR00. The facility consists of an aircraft storage and maintenance hangar, a fuel farm, concrete runway, and parking areas. The site layout is illustrated on Figure 2.

Approximately 90 percent of the 16 acres where industrial activity occurs at AASF #3 is covered by impervious surfaces (runways, taxiways, parking lots, and buildings) (Figure 2). Pervious surfaces comprise the remainder of the site. The surrounding area consists of the Peoria Airport to the west, south and north, and commercial and residential properties along Airport Road to the south, east, and north.

Certain activities and significant materials have been identified at the facility as potential sources of storm water pollution. These activities and significant materials are described below and in **Table 1**, and are shown on **Figure 2**.

The following activities have the potential to impact storm water at AASF #3:

- Vehicle, Aircraft, and Equipment Maintenance
- Vehicle and Aircraft Fueling
- Washing Operations
- Aircraft Engine Flushing
- Parking and Storage
- Pesticide/Herbicide Use
- Waste Material Storage

Each of the activities is described in more detail in <u>Sections 1.2.1</u> through <u>1.2.7</u>. The facility site plan and drainage map (<u>Figure 2</u>) shows the outfalls at the facility (see <u>Table 2</u> for more information).

A review of the Draft version of *Appendix A-2 Illinois' 303(d) List dated 11/14/2018 (sorted by water name)* as listed on the IEPA website, shows the Kickapoo Creek as being impaired with respect to polychlorinated biphenyls (PCBs) and mercury. The facility will implement the BMPs which are described within this plan to prevent a contribution to the above- listed impairments. It should also be noted that the facility has and maintains a Spill Prevention Control and Countermeasure (SPCC) Plan, as required under Section 311 of the Clean Water Act (CWA) and 40 Code of Federal Regulations (CFR) 112.



1.2.1 VEHICLE, AIRCRAFT, AND EQUIPMENT MAINTENANCE

Vehicles and equipment are maintained and repaired in the maintenance garage (see <u>Figure 2</u>). Maintenance activities include the following materials:

- Raw Materials Small quantities of lubrication oils, antifreeze, paint products, fuels, and parts washing solvents, together with any number of other supplies used for routine maintenance are stored and utilized in the hangar bays. See <u>Table 1</u> for a detailed description of materials used and stored at the facility.
- **Used Materials** Used oil, waste solvents, and other materials awaiting turn-in are stored in the Hazardous Waste Storage Shed (HWSS). See <u>Table 1</u> and <u>Figure 2</u> for more information about material storage at the facility.

1.2.2 VEHICLE AND AIRCRAFT FUELING

There is one 6,000-gallon (GSA-civilian style fuel truck) and three 2,500-gallon (HEMTT style fuel truck) mobile fuel tankers (MFTs) containing F-24 in use at the Peoria facility that are used to fuel helicopters and ground vehicles at the facility. In addition to these MFT's that are kept full of fuel, there are also numerous empty MFT's that are stored on-site as well. These empty MFT's are stored empty and are only utilized during employment of the unit. It should be noted that a planning is currently underway to replace the fueling storage pads. Upon completion of this project, all MFT's will be stored full of fuel.

1.2.3 WASHING OPERATIONS

Vehicles and aircraft are washed at the outdoor wash rack (WR). See <u>Section 3.2</u> for more information on washing operations.

The hangar floors are periodically washed with water only. The washwater is collected and discharged to an operational oil/water separator before being discharged to the sanitary sewer.

1.2. 4 AIRCRAFT ENGINE FLUSHING

Aircraft engines are flushed at the outdoor WR. A plug is inserted into the drain prior to flushing activities to prevent flushing solvents from entering the sanitary sewer. See <u>Section 3.2</u> for more information on engine flushing.

1.2.5 PARKING AND STORAGE

Vehicles, aircraft, and other heavy equipment are parked or stored overnight in the hangar (see <u>Figure 2</u>). Empty MFT's are also stored outside in the MFT parking area. Civilian vehicles are parked outside on the asphalt parking lot north of the hangar.

1.2.6 PESTICIDE / HERBICIDE USA

Pest management activities at the facility are contracted to outside vendors and managed under the ILARNG's Integrated Pest Management Plan.



1.2.7 WASTE MATERIAL STORAGE

Waste materials stored outdoors are to be minimized and storage areas are to be kept clean of debris. Dumpsters are to be kept covered or stored under a roofed area.

2 DESCRIPTION OF POLLUTION SOURCES

2.1 INVENTORY OF MATERIALS

Materials handled and used at the facility that may be exposed to precipitation include various petroleum tanks and handling areas. Multiple buildings house supplies for maintenance activities. One 6,000-gallon (GSA-civilian style fuel truck) and three 2,500-gallon (HEMTT style fuel truck) mobile fuel tankers (MFTs) for fueling aircraft and equipment and an outdoor material storage shed for petroleum and waste products are on site as well. It should be noted that a planning is currently underway to replace the fueling storage pads. Upon completion of this project, all MFT's will be stored full of fuel. Significant chemicals stored at the facility are detailed in Table
1. The locations of these chemicals and drainage patterns for the facility are depicted on Figure 2. The facility has an SPCC Plan in place to address the management of on-site oil storage.

2.2 BENCHMARK MONITORING / SAMPLING DATA

For benchmark monitoring, the facility will collect four quarterly rounds of benchmark samples during the quarterly site inspections. Since the two outfalls are believed to discharge substantially identical effluents, based on similarities of the industrial activities within each outfall and storm water management practices occurring within each of the drainage areas for each outfall, two of the four quarterly samples will be collected from Outfall #1, and the other two samples can be collected from Outfall #2. For this facility's industrial sector, the following parameters will be analyzed by a certified laboratory consistent with 40 CFR Part 136 analytical methods for: Biological Oxygen Demand (BOD₅), Chemical Oxygen Demand (COD), Naphthalene, Ammonia, and pH.

The parameters above will be compared to the following benchmark concentrations:

Parameter	Benchmark Monitoring Concentration
Biological Oxygen Demand (BOD ₅)	30 mg/L
Chemical Oxygen Demand (COD)	120 mg/L
Ammonia	2.14 mg/L
рН	6.0 – 9.0 s.u.

mg/L = milligrams per liter

s.u. = standard units



If the average of the four monitoring values for any parameter does not exceed the benchmark defined above (or within the range defined above for pH), then the monitoring requirements for that parameter for the permit term will be fulfilled.

If the average of the four monitoring values for any parameter exceeds the benchmark defined above (or outside the range defined above for pH), then the facility, in accordance with Part H of the permit, review the selection, design, installation and implementation of the control measures to determine if modifications are necessary to meet the discharge limitations and implement any/all additional control measures needed to meet the permit conditions of this permit.

In conjunction with the baseline monitoring for the first year and for subsequent years this facility remains under permit coverage, this facility is required to conduct Quarterly Visual Observations of Discharges (Appendix D) at Outfalls #1 and #2 (see Table 2 and Figure 2):

- Each visual observation must be made during daylight hours. If no storm event resulted in runoff during daylight hours from the facility during a monitoring quarter, the facility is excused from the visual observation requirement for that quarter, provided it documents that no runoff occurred. The documentation must be signed and certified by the Facility SWPPP Coordinator.
- Visual observation must be made on samples collected within 1 hour of an actual discharge from a storm event equal to or greater than 0.25 inch in 24 hours. If it is not possible to take a sample within the first hour of the discharge, the sample must be collected as soon as practicable after the first hour and the Permittee must explain why it was not possible to take samples within the first hour. In the case of snowmelt, the samples must be taken from an actual discharge from the site. For storm events, samples must be collected from a storm event discharge at least 72 hours from the previous discharge. The 72 hour interval does not apply if the Permittee documents that a less than 72 hour event is representative for local storm events during the sampling period.
- The observation must document:
 - Color;
 - Odor;
 - Clarity;
 - Floating solids, settled solids, suspended solids;
 - Foam:
 - Oil sheen; and
 - Other obvious indicators of storm water pollution.
- If visible observations indicate any unnatural color, odor, turbidity, floatable material, oil sheen or other indicators of storm water pollution, the permittee shall obtain a sample and monitor for the pollutants in Part E.5.d and E.5.f of the permit (Appendix C).





The facility must maintain visual observation reports on site with this plan. A Quarterly Facility SWPPP Inspection and Visual Observation of Discharge Form is included in **Appendix D**. The reports must include the following information:

- Observation date and time;
- Inspection personnel;
- Nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution); and
- Probable sources of any observed storm water contamination.

If the facility has two or more outfalls that it believes discharge substantially identical effluents, based on similarities of the industrial activities, significant materials, size of drainage areas, and storm water management practices occurring within the drainage areas of the outfalls, the facility may conduct a visual observation of the discharge at just one of the outfalls and report that the results also apply to the substantially identical outfall(s). Visual observation documentation shall be made available to the IEPA and general public upon written request.

3 POTENTIAL SOURCE AREAS OF STORM WATER CONTAMINATION AND IDENTIFICATION OF SIGNIFICANT POLLUTING MATERIALS

3.1 HANGAR

The AASF #3 main hangar is used for aircraft, vehicle, and equipment maintenance and storage. Figure 2 shows the location of the hangar. Products stored in the hangar include lubricating oils, hydraulic oils, degreasers, and other cleaning products. Waste oils, lubricants, transmission fluids, and used absorbent materials are accumulated in containers and stored in the HWSS awaiting disposal. The possibility exists for rupture or leakage of in-use containers located on the floor of the hangar and for small spills to occur during oil changes, solvent bath changes, and other routine maintenance procedures. Such spills will be promptly cleaned up using spill kit absorbent materials. Only under extreme circumstances would spills flow outside of the building. The hangar does not have any floor drains.

If storm water was to come into contact with this potential pollution source area, the pollutants that may be present include petroleum-based products and solvent-based cleaners. However, because all maintenance activities are conducted indoors and all areas of material storage are located inside the hangar or in enclosed outbuildings, the potential for impact to storm water is minimal.



3.2 WASHING AND ENGINE FLUSHING

Vehicles are washed outside the hangar at the WR. This washwater is discharged to the facility's oil/water separator to remove contaminants before being discharged to the sanitary sewer.

In addition, aircraft engines are flushed outside the hangar at the WR. The engine flushing will be performed per I/A/W: TM 1-1520-240-23&P (Clean Engine Compressor No. 1 or No. 2). Engine flushing uses an environmentally friendly degreasing solvent that has been tested and approved by the Greater Peoria Sanitary District so that it can be discharged into the sanitary sewer. (See Approval Letter in Appendix E)

The hangar floors are periodically washed down with water only. Floor washdown utilizes a machine that removes grit, deploys a water spray, and recovers the washwater in a holding tank. These waters are run through the operational oil/water separator prior to discharging to the sewer.

3.3 MOBILE FUEL TANKERS

There currently are one 6,000-gallon (GSA-civilian style fuel truck) and five 2,500-gallon (HEMTT style fuel truck) mobile fuel tankers (MFTs) containing F-24 in use at the Peoria facility that are used to fuel helicopters and ground vehicles at the facility. It should be noted that planning is currently underway to replace the fueling storage pads. Upon completion of this project, all a total of 16 MFT's will be stored full of fuel.

The current MFT parking area consists of concrete and asphalt paving and is located southwest of the hangar (see Figure 2). Although the parking area is paved, there are a series of four storm drains running under the pavement that discharge to LeMarsh Creek located approximately 800 feet south of the hangar. In order to prevent storm water contamination from the MFTs, the southern part of the parking pad is curbed to help contain a petroleum release. In addition, each of the storm drains is equipped with an imbiber bead valve system that allows water to pass through, but reacts with petroleum products to seal off the drain and prevent a release from reaching the creek. The imbiber bead valve systems allow the free discharge of clean storm water, so an inspection of this diked area is not required after each rainfall. Figure 2 shows the location of the MFT parking area. Empty MFTs are also parked in an asphalt parking lot to the west of the main hangar.

If storm water was to come into contact with this potential pollution source area, the pollutants that may be present include F-24 fuel.

Planning is currently underway to remove and replace the existing MFT parking areas with a new parking area that will not utilize the imbiber bead valve system.



4 BEST MANAGEMENT PRACTICES

Storm water pollution prevention is achieved through implementing certain procedures, practices, and preventative maintenance that will reduce or eliminate potential storm water pollution sources (identified in <u>Section 2.0</u> and detailed further in <u>Section 3.0</u>). These procedures and practices are defined as Best Management Practices (BMPs). BMPs may take the form of a process, activity, or physical structure. There are two types of BMPs implemented at AASF #3:

- **Baseline BMPs** These are general activities including good housekeeping and record keeping.
- **Activity-Specific BMPs** Practices associated with specific activities at aviation support facilities.

4.1 BASELINE BMPs

4.1.1 Spill Prevention and Response

BMP Objective: To reduce or eliminate the potential for significant material spills at the facility.		
Practice	Implementation Schedule/Frequency	
In the event of a spill incident of any quantity, notify:		
FACILITY ON-SCENE COORDINATOR (FOSC): CW3 Andrew Mosley: (309) 562-7992		
 Maintaining Containers – Containers that store significant materials should be in good condition. Dents and/or rust are weak points on containers that could rupture and release materials. Containers in poor condition should be replaced. 		
 Handling Containers – Proper care should be taken during container handling. Containers that are moved too fast could spill material by hitting objects that could puncture the container and/or tip over. 	As required	
• Storing Containers – Containers in storage should be stored upright with the lids and/or bung covers sealed completely. Store containers in specified locations (e.g., the Hazardous Waste Storage Shed), when applicable.		
 Dispensing Materials – Proper care should be taken while dispensing liquids. Use funnels when transferring liquids. Dispense liquids slowly to prevent overfilling and spillage. If available, use auto-shutoff nozzles while fueling equipment. 		
 Maintaining Equipment – Frequent inspections and maintenance of equipment will identify potential leakage points. 		



4.1.2 **Pollution Prevention Training**

General Activity: Pollution Prevention Training

BMP Objective: To familiarize the pollution prevention team, responsible employees, and contractors with the requirements of this SWPPP and methods for its implementation. Training is further discussed in Section 8.0.

Training	Attendees	Implementation Schedule/Frequency
Storm Water Pollution Prevention Plan Training	Pollution Prevention Team	Training meeting will be held on an annual basis

4.1.3 Good Housekeeping

Facility Activity: Good Housekeeping

	BMP Objective: To reduce exposure of all potentially significant polluting materials at the facility to precipitation/storm water runoff during everyday activities.			
	Practice	Implementation Schedule/Frequency		
•	Ensure that waste debris is picked up on a regular basis			
•	Train employees in site inspection and basic cleanup procedures			
•	Clean up spills promptly			
•	Provide proper and orderly storage of chemicals and petroleum. Maintain adequate aisle space in work areas.			
•	Maintain records and internal reporting procedures in the event of a release to the environment	As needed during activity		
•	Clearly indicate proper disposal locations for various waste types at the facility	denviry		
•	Cover dumpsters or store under roofed area, whenever possible			
•	Minimize waste generated at the facility			
•	Order only what is needed and use what is ordered			
•	Inspect trash disposal areas for signs that volume of disposal space is inadequate, and for cleanliness	D. San and CAA/DDD		
•	Inspect facility for signs that good housekeeping procedures are not being followed	During each SWPPP inspection		
•	Inspect and inventory each Spill Kit and replace used or expired materials as needed.			

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4.1.4 Preventative Maintenance

Facility Activity: Preventative Maintenance

BMP Objective: To reduce exposure of all potentially significant polluting materials at the facility to precipitation/storm water runoff due to failure or leakage of storm water management equipment.

mar	nagement equipment.	
	Practice	Implementation Schedule/Frequency
•	Inspections of storm water management equipment on an as-used basis	
•	Inspections of all fuel dispensing equipment and chemical storage containers on an as-used basis	As needed during activity
•	Proper maintenance of equipment at the facility	
•	Inspect storm water management equipment (e.g., oil/water separators) for maintenance needs	
•	Inspections of source areas and BMPs. See inspection form in Appendix D .	
•	Inspection and testing of facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface water and ground water (including pipes, pumps, storage tanks and bins, pressure vessels, pressure release valves, and process and material handling equipment)	During each SWPPP inspection



4.1.5 Inspection and Record Keeping

Facility Activity: Inspections and Record Keeping

BMP Objective: To ensure that all environmental and storm water records are properly kept, and that quarterly and annual inspections of potential source areas of storm water pollution are conducted.

ure	conducted.	
	Practice	Implementation Schedule/Frequency
•	Inspections of storm water management equipment on an as- used basis	As needed during activity
•	Inspections of all source areas of potential storm water contamination on an as-used basis	,
•	Submittal of Annual Report to the IEPA	
•	Ensure that all inspection and repair records are kept on file with this plan for a minimum of 3 years	
•	Inspect storm water management equipment (e.g., oil/water separators) for maintenance needs	
•	Inspect all source areas of potential storm water contamination	
•	Visually identify potential pollutants and record any changes from this plan	As required by SWPPP
•	Observe structural BMPs and assess if they are operating correctly	inspection schedule
•	Inspect BMP implementation as outlined in this plan, determine the effectiveness of the BMPs, identify any potential new BMPs	



4.2 ACTIVITY SPECIFIC BMPs

4.2.1 Vehicle, Aircraft and Equipment Maintenance

Facility Activity: Vehicle, Turbine Engine, Aircraft, and Equipment Maintenance

BMP Objective: To prevent or reduce the discharge of pollutants to storm water from aircraft, vehicle, and equipment maintenance and repair, including ground vehicle and equipment painting/stripping and floor washdowns.

Practice	Implementation Schedule/Frequency
 Conduct maintenance activities indoors or in covered areas Prevent washwater discharges from entering storm drains Clean out oil/water separators regularly and properly dispose of petroleum-based waste products Collect and properly dispose of all waste fluids Ensure drums storing waste fluids are in good working condition prior to use Follow manufacturer's recommendations for boom and pump maintenance Inspect concrete floors for signs of cracks and repair if noted Ship containers for disposal when full 	As needed during activity
 Ensure proper use of materials during maintenance activities Ensure that oil/water separators and other storm water management equipment are in good working order 	During each SWPPP inspection



4.2.2 Vehicle and Equipment Fueling

Facility Activity: V	ehicle and	Equipment	Fuelina
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BMP Objective: To reduce exposure of fuel to precipitation/storm water runoff that may result from spills or leaks from fueling activities.

	Practice	Implementation Schedule/Frequency
•	Equipment or vehicle operator must be present at all times during fueling	
•	If drip pans are not available to collect drips, use dry cleanup methods (i.e., absorbent wipes, granular floor dry) for fueling area spills	As needed during activity
•	Replace faulty fueling equipment	·
•	Properly dispose of any fuel spills or leaks	
•	Inspect fuel-handling vehicles for leaks/failures Inspect MFT parking area for evidence of spills/leaks	During each SWPPP inspection

4.2.3 Chemical Product Storage

Facility Activity: Chemical Product Storage

BMP Objective: To reduce exposure of chemical products (e.g., motor oil) to precipitation/storm water runoff. See **Table 1** for a list of product storage containers at the facility.

	Practice	Implementation Schedule/Frequency
•	Cover and/or enclose materials stored in containers	
•	Repair or replace damaged (e.g., holes, nonfunctioning seals, etc.) containers	As needed during activity
•	Store materials indoors or in containment shed	Genvin,
•	Inspect condition of containers	During each SWPPP
•	Ensure covers are used on containers	inspection



4.2.4 Waste Material Storage

Facility Activity: Waste Material Storage									
BMP Objective: To reduce exposure of waste materials to precipitation/storm water runoff.									
Practice	Implementation Schedule/Frequency								
Minimize waste generated at the facility									
 Order only what is needed and use what is ordered 									
 Cover and/or enclose materials, and store materials indoors whenever possible 									
 Repair or replace damaged (e.g., holes, nonfunctioning seals, etc.) containers 	As needed during activity								
Ship containers for disposal when full									
 Keep areas surrounding waste storage areas clean and free of waste 									
 Inspect condition of containers Ensure covers are used on containers 	During each SWPPP inspection								



4.2.5 Aircraft, Turbine Engine, Vehicle and Equipment Washing

Facility Activity: Aircraft, Turbine Engine, Vehicle, and Equipment Washing

BMP Objective: To prevent or reduce the discharge of pollutants to storm water from aircraft, vehicle and equipment washing, and cleaning and degreasing activities including engine flushina.

flushir	ng.	
	Practice	Implementation Schedule/ Frequency
•	Washing is only to be conducted in designated areas by trained personnel. Ensure that the 3-way valve is in the proper position before starting washing. Washwater is routed through the oil/water separator prior to discharge to the sanitary sewer. Properly dispose of cleaning/degreasing waste. Keep the wash area clean and free of waste. Keep the WR clean and free of waste. Plug drains that are not connected to operational oil/water separators.	As needed during activity
•	Review all SDSs applicable to wash procedures. Position aircraft on facility WR. Insure Approved environmentally friendly solvent is being utilized. Ensure that the 3-way valve is in the proper position before starting washing. Washwater is routed through the oil/water separator prior to discharge to the sanitary sewer. Properly dispose of any cleaning/degreasing waste. Keep the wash area clean and free of waste. Keep the WR clean and free of waste. Plug drains that are not connected to operational oil/water separators.	Turbine Engine Washing
•	Inspect condition of oil/water separator	During each SWPPP inspection



4.2.6 MFT Product Storage

Facility Activity: MFT Product Storage

BMP Objective: To reduce exposure of F-24 fuel in MFTs to precipitation/storm water runoff that may result from spills, leaks, or damaged storage tanks. See <u>Table 1</u> for a listing of all product storage containers at the facility.

	Practice	Implementation Schedule/Frequency		
•	Provide secondary containment and release protection	As required		
•	Use dry cleanup methods (i.e., absorbent wipes, granular floor dry) for spills at dispensing areas			
•	Replace damaged/defective MFTs and dispensing equipment	As needed during		
•	Repair damage to curb and signs of erosion	activity		
•	Replace imbiber beads in storm drains			
•	Inspect condition of secondary containment systems and imbiber beads in storm drains	During each SWPPP		
•	Inspect MFTs and dispensing equipment for leaks/failures	inspection		

4.2.7 Fuel Delivery and Storage

Facility Activity: Fuel Delivery and Unloading

BMP Objective: To reduce exposure of fuel to precipitation/storm water runoff that may result from spills, leaks, etc.

Troi	n spins, leaks, etc.	
	Practice	Implementation Schedule/Frequency
•	Fuel Delivery Operator must be present at all times during unloading	
•	Use dry clean-up methods (i.e., absorbent wipes, granular floor dry) for spills at dispensing areas	As needed during
•	Place drip collection containers under unloading equipment and promptly place recovered liquids in covered container	activity
•	Evaluate effectiveness of dry clean-up methods and drip collection containers	During each SWPPP inspection



5 SUMMARY OF POTENTIAL POLLUTANTS AFTER IMPLEMENTING BMPs

The NPDES permit (A.9) authorizes certain non-storm water discharges provided they are identified in this plan. Potential and authorized non-storm water discharges at this facility include the following:

- a. Discharges from fire-fighting activities
- b. Fire hydrant flushing
- c. Water used to wash vehicles without the use of detergents or hazardous cleaning products
- d. Waters (without added chemicals) used to control dust
- e. Potable water including waterline flushing
- f. Uncontaminated condensate from air conditioners, coolers, and other compressors and from the outside storage of refrigerated gases or liquids
- g. Landscape watering provided all pesticides, herbicides, and fertilizers have been applied in accordance with manufacturer's instructions
- h. Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents or hazardous cleaning products are not used



- i. Routine external building wash down that does not use detergents or hazardous cleaning products
- j. Uncontaminated groundwater or spring water
- k. Foundation or footing drains where flows are not contaminated with process materials
- 1. Incidental windblown mist from cooling towers, but not intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown or drains)

On an annual basis during dry weather conditions, the SWPPP coordinator will also inspect the site for evidence of non-storm water discharges. Any unauthorized non-storm water discharges must be eliminated or covered under another permit.

These discharges are also subject to the facility's BMPs (see <u>Section 4.0</u>). A worksheet and a certification form are included in <u>Appendix A</u>.

6 STORM WATER POLLUTION PREVENTION TEAM

The storm water pollution prevention team is a designated group of people that are responsible for ensuring the proper development and implementation of the SWPPP. Members of the team include representatives of AASF #3 and the ILARNG who are familiar with the facility and manage its operation.

The team is responsible for defining an appropriate set of goals for the facility storm water management program. In addition, the team must be aware of any changes to the facility and implement necessary changes to the SWPPP. The following table summarizes the team member roster including each member's position, phone number, location, and responsibilities.

SWPPP Team Position	Phone Number	Location	Responsibilities
Overall SWPPP Coordinator: Dave Miller, Military Environmental Specialist	217-761-3973 david.b.miller32.nfg @mail.mil	Camp Lincoln, Springfield, IL	 Coordinate the development, evaluation, maintenance, and amendment of the SWPPP Monitor preventive and BMP maintenance activities Complete inspections or appoint and train an inspector Track annual storm water reports and submit to the IEPA
Facility SWPPP Coordinator: CW3 Andrew Mosley	309-567-7992 or 309-312-0087 Andrew.m.mosley. mil@mail.mil	Facility	Assist the Overall SWPPP Coordinator Manage inspections and records Serve as facility contact Complete annual storm water reports (to be kept on file at the facility)
Alternate Facility SWPPP Coordinator: CW3 Bryan Johnson	309-567-7948 or 309-370-1530 bryan.k.johnson.mil @mail.mil	Facility	Assist the Overall SWPPP Coordinator Serve as facility contact



7 FACILITY MONITORING PLAN AND IMPLEMENTATION SCHEDULE

Facility monitoring consists of quarterly facility inspections, and completion and submittal of an Annual Facility Inspection Report. This report must be completed each year, submitted to the Illinois Environmental Protection Agency (IEPA), and kept on file with the SWPPP. The facility SWPPP coordinator is to complete, sign, and send the original Annual Facility Inspection Report form to the Environmental Office P2 Manager no later than the last working day of the second quarter of each fiscal year (the end of March).

As part of a preventative maintenance plan for the facility, the quarterly inspection schedule has been developed consisting of a visual evaluation of many different aspects of material storage and potential storm water pollution sources at the facility. A Quarterly Facility SWPPP Inspection and Visual Observation of Discharge Form is included in Appendix D. In conjunction with the quarterly inspections for the first year, the benchmark monitoring will be conducted as described in Section 2.2.

Quarterly visual observation of discharges at the site are required, as described in <u>Section 2.2</u>. A Quarterly Facility SWPPP Inspection and Visual Observation of Discharge Form is provided in <u>Appendix D</u>.

The Annual Facility Inspection Report consists of a review of the SWPPP and the quarterly inspections, verification of site drainage and BMPs, making recommendations, and modifying the SWPPP, as necessary. An Annual Facility Inspection Report Form is included in Appendix F. An annual checklist has also been developed to help facility personnel determine if changes are needed to the SWPPP and if required reporting, inspections, training, and record keeping is being performed. The checklist is included in Appendix I.

The SWPPP implementation schedule is detailed in **Appendix B**.

8 PERSONNEL TRAINING

Appropriate training and instruction is necessary to carry out the pollution prevention activities presented in this plan. The initial training is currently made available through the Illinois National Guard Environmental Section. This training consists of a training CD outlining and referencing pertinent spill containment and prevention information specific to the site. This training CD will be used for training of weekend personnel as well. Annual refresher training is available during the Annual Training cycle and on request to the ILARNG Environmental Section.

Training shall be conducted in the areas of:

- a. BMPs
- b. Environmental Health and Safety Incidents
- c. Spill Prevention and Response
- d. Familiarity with SWPPP



Once each calendar year, a formal training session will be held for all full-time, on-site personnel and weekend or M-day personnel covering the above items. The FOSC and Assistant FOSC will be responsible for training the facility personnel and documenting (signed by the FOSC and the employee being trained) that training has been accomplished. All new personnel will be trained as they enter positions where they would have pollution prevention responsibilities. A training record form can be found in **Appendix G**.

9 RECORD KEEPING

A record of all quarterly facility inspections and annual facility inspection reports will be maintained. Example forms are included in <u>Appendices D</u>, <u>E</u>, and <u>F</u>.

A record of training activities and personnel involved will be maintained. This record is included in **Appendix G**.

A record of the original Notice of Intent (NOI) form for the facility's initial request for general storm water permit coverage is included in **Appendix H**.

These records will be maintained for a minimum of 3 years. It is recommended that copies of the record keeping forms be made from originals in this report and maintained in a central file.

This plan and all inspection reports are considered a public document that shall be available to the public and IEPA at any reasonable time upon request.

10 PLAN REVIEW

All engineering changes made to the facility will be maintained as a matter of record. It is the facility's responsibility to initiate changes to this plan as changes are made to the facility. At a minimum, it should be updated when permits are renewed. In addition, the SWPPP will be amended if the facility expands, experiences any operations modifications, or changes any significant material handling or storage practices that will result in significant increases in the exposure of pollutants to storm water. The amended SWPPP will have a description of the new activities that contribute to the increased pollutant loading, planned source control activities, and an estimate of the new or increased discharge of pollutants following treatment and a description of the new or increased discharge on storm water treatment facilities, if applicable.

The SWPPP will also be amended if the IEPA determines that the SWPPP is ineffective in controlling storm water pollutants discharged to the waters of the state. The ILARNG must notify the IEPA in the event of any facility operational changes that could result in additional significant storm water contamination.

Amendments to this plan shall be made 30 days of any proposed construction or operational changes at the facility, and shall be submitted to the IEPA at epa.indilr00swppp@illinois.gov.



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TABLES

- Petroleum Storage Capacity and Plan Details Storm Water Outfalls 1
- 2



Storage Symbol	Oil Source Volume (gal)	Location	Container Construction	Contents	Container Compatible with Contents?	Transfer Activities	Distance and Direction to Nearest Receptor (2)	Potential Release Flow Rate (1)	Spill Prevention and Leak Detection	112.7(c) Secondary Containment	Spill Countermeasures and Response Materials	Security	Inspection and Integrity Testing Schedule
AST1	500	Located south of Building 13	Double-walled steel	Diesel fuel	Yes	Direct filling at fill port by an outside vendor	Southeast approximately 90 feet towards a storm drain	nil-50 gpm	Spill Prevention: Level gauge, 90% overfill alarm, overfill box on fill port, and prudent practices of oil transfer Leak Detection: Impervious surface, interstitial monitoring, and routine inspections	Double-walled	Spill kits stored at various locations at the AASF #3 Peoria Airport (see Figure 2)	with a guard at	Monthly and annual inspections (see Attachments A and B); no required integrity testing by an external third-party inspector
AST2	240	Located in the Hazardous Waste/POL storage shed west of Building 6	Double-walled steel	Used oil	Yes	Transferred manually using a funnel; removed by an outside vendor	Northwest approximately 75 feet towards a storm drain	nil-24 gpm	Spill Prevention: Level gauge and prudent practices of oil transfer Leak Detection: Interstitial monitoring, POL storage shed containment, and routine inspections	Double-walled with Hazardous waste/POL storage shed as tertiary containment	Spill response materials kept in the Hazardous waste/POL storage shed adjacent to this tank	Facility fenced with a guard at the gate and located within a locked POL storage shed	Monthly and annual inspections (see Attachments A and B); no required integrity testing by an external third-party inspector
AST3		Located outdoors, northwest of Building 16	Double-walled steel	Diesel fuel	Yes	Direct filling at fill port by an outside vendor	Southwest approximately 100 feet towards a storm drain	nil-37.5 gpm	Spill Prevention: Level gauge and prudent practices of oil transfer Leak Detection: Impervious surface, interstitial monitoring, and routine inspections	Double-walled	Spill kits stored at various locations at the AASF #3 Peoria Airport (see Figure 2)	with a guard at	Monthly and annual inspections (see Attachments A and B); no required integrity testing by an external third-party inspector
AST4	256	Located outdoors near the guard shack at the north entrance	Double-walled steel	Diesel Fuel	Yes	Direct filling at fill port by an outside vendor	Northeast approximately 50 feet towards a detention pond	nil-25.6 gpm	Spill Prevention: Level gauge and prudent practices of oil transfer Leak Detection: Impervious surface, interstitial monitoring, and routine inspections	Double-walled	Spill kits stored at various locations at the AASF #3 Peoria Airport (see Figure 2)	with a guard at	Monthly and annual inspections (see Attachments A and B); no required integrity testing by an external third-party inspector
AST5		Located in a POL storage shed located south of Building 15	Double-walled steel	Used oil	Yes	Transferred manually using a funnel; removed by an outside vendor	West towards a drain which leads to an oil/water separator	nil-24 gpm	Spill Prevention: Level gauge and prudent practices of oil transfer Leak Detection: Impervious surface, interstitial monitoring, and routine inspections	Double-walled with POL storage shed as tertiary containment	Spill response materials kept in the POL storage shed adjacent to this tank	Facility fenced with a guard at the gate and located within a locked POL storage shed	Monthly and annual inspections (see Attachments A and B); no required integrity testing by an external third-party inspector



Storage Symbol Mobile Fue	Oil Source Volume (gal) I Tankers	Location	Container Construction	Contents	Container Compatible with Contents?	Transfer Activities	Distance and Direction to Nearest Receptor (2)	Potential Release Flow Rate (1)	Spill Prevention and Leak Detection	112.7(c) Secondary Containment	Spill Countermeasures and Response Materials	Security	Inspection and Integrity Testing Schedule
MFT1 - MFT16		One 6,000-gallon GSA civilian style and fifteen 2,500-gallon HEMTT style Mobile Fuel Tankers (MFTs) for fueling aircraft and ground vehicles at the facility. MFTs containing fuel are stored on the bermed concrete pad; empty MFTs are stored in the MFT parking area.	Single-walled steel	F-24 fuel	Yes	Fueling of aircraft and ground vehicles from MFTs	Concrete pad to storm drains (SD1 or SD2)		Spill Prevention: Prudent practices of oil transfer; bermed concrete pad with valve systems Leak Detection: Bermed concrete pad and routine inspections	Bermed concrete pad with greater than 6,000 gallons containment capacity	Spill kits located at the bermed concrete pad (adjacent to POL1)	Facility fenced with a guard at the gate, located inside a locked gated area	Monthly and annual inspections (see Attachments A and B); no required integrity testing by an external third-party inspector
Helicopters	(not SPCC r	egulated)											
B1 - B4		Helicopters in the hangars and on the concrete pad outside of the hangar	Single-walled steel	F-24 fuel	Yes	Fueled from MFTs	East towards a drainage ditch located adjacent to South Airport Road (Outfall #1)	0.	Preventative maintenance and routine inspections	N/A	Spill kit located adjacent to POL1	Facility fenced with a guard at the gate	Routine inspections for leak detection
C1 - C8		Helicopters in the hangars and on the concrete pad outside of the hangar buildings	Single-walled steel	F-24 fuel	Yes	Fueled from MFTs	East towards a drainage ditch located adjacent to South Airport Road (Outfall #1)	nil-105 gpm	Preventative maintenance and routine inspections	N/A	Spill kit located adjacent to POL1	Facility fenced with a guard at the gate	Routine inspections for leak detection
Miscellaneo	ous Drum Sto	rage											
POL1			drums	Used fuel	Yes	Transferred manually	Southwest approximately 125 feet towards a storm drain, which leads to a grassy area to the southeast of the MFT containment area		Spill Prevention: Prudent practices of oil transfer Leak Detection: Secondary containment unit and routine inspections	Two-drum secondary containment unit with greater than 66 gallons containment capacity	to POL1	Facility fenced with a guard at the gate	Monthly inspections (see Attachment A); remove from service after 12 years



Storage Symbol POL2	Oil Source Volume (gal) 110 total	Location Located outside to the south of Building 2	Container Construction Two 55-gallon steel drums	Contents Waste Gas Path cleaner	Container Compatible with Contents? Yes	Transfer Activities Transferred manually	Distance and Direction to Nearest Receptor (2) West approximately 60 feet towards a storm drain, which leads to an oil/water separator associated with the wash rack	(1)	Spill Prevention and Leak Detection Spill Prevention: Prudent practices of oil transfer Leak Detection: Secondary containment unit and routine inspections	Containment Two-drum secondary containment unit with greater than 66 gallons containment capacity	Spill Countermeasures and Response Materials Spill kits stored at various locations at the AASF #3 Peoria Airport (see Figure 2)	with a guard at	Inspection and Integrity Testing Schedule Monthly inspections (see Attachment A); remove from service after 12 years
POL3		Located outside to the west of Building 13	Up to three 55- gallon steel drums	Engine oil and hydraulic oil	Yes	No transfer occurs at this location; temporary storage of new drums	South approximately 60 feet towards a storm drain	nil-5.5 gpm	Spill Prevention: Prudent practices of oil transfer Leak Detection: Impervious surface and routine inspections	Active secondary containment measures ⁽³⁾ (oil absorbent materials)	Spill kits stored at various locations at the AASF #3 Peoria Airport (see Figure 2)	with a guard at	Monthly inspections (see Attachment A); remove from service after 12 years
POL4	220 total	Located inside Building 13	Approximately four 55-gallon steel drums	Miscellaneous oil	Yes	Transferred manually	East approximately 10 feet towards a floor drain	nil-5.5 gpm	Spill Prevention: Prudent practices of oil transfer Leak Detection: Concrete floor and routine inspections	Active secondary containment measures ⁽³⁾ (oil absorbent materials)	Spill kits stored at various locations at the AASF #3 Peoria Airport (see Figure 2)	with a guard at	Monthly inspections (see Attachment A); remove from service after 12 years
POL5		Located in a POL storage shed located south of Building 15	Approximately two 55-gallon steel drums	Miscellaneous oil	Yes	Transferred manually	West approximately 25 feet towards a drain, which leads to an oil/water separator	nil-5.5 gpm	Spill Prevention: Prudent practices of oil transfer Leak Detection: Storage shed containment and routine inspections	POL storage shed with greater than 66 gallons containment capacity	Spill response materials kept in the POL storage shed	Facility fenced with a guard at the gate and located within a locked shed	Monthly inspections (see Attachment A); remove from service after 12 years
POL6		Located inside near the north end of Building 19	One 55-gallon steel drum	Miscellaneous oil	Yes	Transferred manually	South approximately 50 feet towards a trench drain	nil-5.5 gpm	Spill Prevention: Prudent practices of oil transfer Leak Detection: Concrete floor and routine inspections	Active secondary containment measures ⁽³⁾ (oil absorbent materials)	Spill kits stored at various locations at the AASF #3 Peoria Airport (see Figure 2)	with a guard at	Monthly inspections (see Attachment A); remove from service after 12 years
POL7		Located inside near the south end of Building 19	One 55-gallon steel drum	Miscellaneous oil	Yes	Transferred manually	North approximately 50 feet towards a trench drain		practices of oil transfer Leak Detection: Concrete floor and routine inspections	Active secondary containment measures ⁽³⁾ (oil absorbent materials)	Peoria Airport (see Figure 2)	with a guard at	Monthly inspections (see Attachment A); remove from service after 12 years
POL8		•	Approximately two 55-gallon steel drums	Miscellaneous oil	Yes	Transferred manually	West approximately 25 feet towards a drain, which leads to an oil/water separator		Spill Prevention: Prudent practices of oil transfer Leak Detection: Storage shed containment and routine inspections	POL storage shed with greater than 66 gallons containment capacity		Facility fenced with a guard at the gate and located within a locked building	Monthly inspections (see Attachment A); remove from service after 12 years



Storage Symbol Transforme	Oil Source Volume (gal)	Location	Container Construction	Contents	Container Compatible with Contents?	Transfer Activities	Distance and Direction to Nearest Receptor (2)	Potential Release Flow Rate (1)	Spill Prevention and Leak Detection	c 112.7(c) Secondary Containment	Spill Countermeasures and Response Materials	Security	Inspection and Integrity Testing Schedule
T1	At least 55	Located northwest of Building 2	Oil-filled electrical equipment-steel oil reservoir	Mineral oil	Yes	Transferred manually	East approximately 60 feet towards a storm drain	nil-5.5 gpm	Spill Prevention: Prudent oil transfer practices Leak Detection: Impervious surface and routine inspections	Active secondary containment measures ⁽³⁾ (oil absorbent materials)	Contact Ameren Illinois ⁽⁴⁾ at 1-800-755-5000 to respond to any discharge observed from this transformer	Outside and locked	Transformer inspected and maintained by Ameren Illinois ⁽⁴⁾
Т3	At least 55	Located north of Building 18	Oil-filled electrical equipment-steel oil reservoir	Mineral oil	Yes	Transferred manually	East approximately 275 feet towards a drainage ditch, which then flows south	nil-5.5 gpm	Spill Prevention: Prudent oil transfer practices Leak Detection: Impervious surface and routine inspections	Active secondary containment measures ⁽³⁾ (oil absorbent materials)	Contact Ameren Illinois ⁽⁴⁾ at 1-800-755-5000 to respond to any discharge observed from this transformer	Outside and locked	Transformer inspected and maintained by Ameren Illinois ⁽⁴⁾
T4		Located northwest of Building 15	Oil-filled electrical equipment-steel oil reservoir	Mineral oil	Yes	Transferred manually	East approximately 100 feet towards a drainage ditch, which then flows south	nil-5.5 gpm	Spill Prevention: Prudent oil transfer practices Leak Detection: Impervious surface and routine inspections	Active secondary containment measures ⁽³⁾ (oil absorbent materials)	Contact Ameren Illinois ⁽⁴⁾ at 1-800-755-5000 to respond to any discharge observed from this transformer	Outside and locked	Transformer inspected and maintained by Ameren Illinois ⁽⁴⁾
T5		Located west of the Main Hangar	Oil-filled electrical equipment-steel oil reservoir	Mineral oil	Yes	Transferred manually	Northwest approximately 50 feet towards a storm drain	nil-5.5 gpm	Spill Prevention: Prudent oil transfer practices Leak Detection: Impervious surface and routine inspections	Active secondary containment measures ⁽³⁾ (oil absorbent materials)	Contact Ameren Illinois ⁽⁴⁾ at 1-800-755-5000 to respond to any discharge observed from this transformer	Outside and locked	Transformer inspected and maintained by Ameren Illinois ⁽⁴⁾
T6		Located northwest of the Main Hangar	Oil-filled electrical equipment-steel oil reservoir	Mineral oil	Yes	Transferred manually	North approximately 10 feet towards a storm drain	nil-5.5 gpm	Spill Prevention: Prudent oil transfer practices Leak Detection: Impervious surface and routine inspections	Active secondary containment measures ⁽³⁾ (oil absorbent materials)	Contact Ameren Illinois ⁽⁴⁾ at 1-800-755-5000 to respond to any discharge observed from this transformer	Outside and locked	Transformer inspected and maintained by Ameren Illinois ⁽⁴⁾
17		Located north of Building 22	Oil-filled electrical equipment-steel oil reservoir	Mineral oil	Yes	Transferred manually	Southeast approximately 150 feet towards a storm drain	nil-5.5 gpm	Spill Prevention: Prudent oil transfer practices Leak Detection: Impervious surface and routine inspections	Active secondary containment measures ⁽³⁾ (oil absorbent materials)	Contact Ameren Illinois ⁽⁴⁾ at 1-800-755-5000 to respond to any discharge observed from this transformer	Outside and locked	Transformer inspected and maintained by Ameren Illinois ⁽⁴⁾



Storage Symbol T8	Location Located southwest of	Container Construction Oil-filled electrical equipment-steel oil reservoir	Contents Mineral oil	Container Compatible with Contents? Yes	Transfer Activities Transferred manually	Receptor (2)	(1) nil-5.5 gpm	7	112.7(c) Secondary Containment Active secondary containment measures ⁽³⁾ (oil absorbent materials)	Security Outside and	Inspection and Integrity Testing Schedule Transformer inspected and maintained by Ameren Illinois ⁽⁴⁾
т10	,··	Oil-filled electrical equipment-steel oil reservoir	Mineral oil	Yes		Adjacent to a drainage ditch, which flows south Nearest Receptor to the Facility: Approximately 3.5 miles southeast towards the Illinois River	•	-	(0)	 Outside and locked	Transformer inspected and maintained by Ameren Illinois ⁽⁴⁾

Total Aboveground Capacity (excluding helicopters and transformers):

45,790 GALLONS

Notes:

- (1) Estimated by assuming small leaks will have very little flow and worst-case release is the contents of the tank released over 10 minutes (consistent with EPA's RMP Program).
- (2) From site observations.
- (3) Active Secondary Containment measures involve a certain action by facility personnel before or after the discharge occurs. These actions are also called spill countermeasures.
- (4) Transformers are inspected and maintained by Ameren Illinois; thus they are not included in this facility's total oil storage capacity. If facility personnel observe a spill from a transformer, Ameren Illinois will be contacted immediately at 1-800-755-5000.

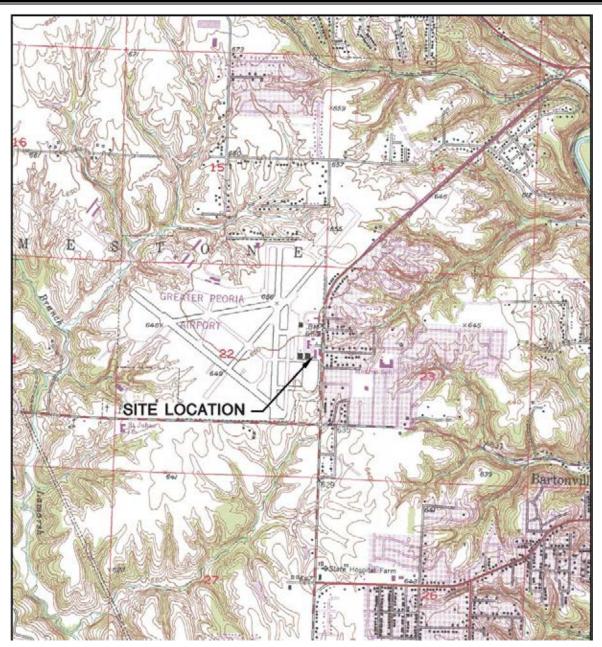


Table 2. StormWaterOutfalls Illinois Army National Guard Army Aviation Support Facility #3 (AASF #3), Peoria, Illinois

Outfall	Area Description	Outfall Description
1	Facility parking area and paved areas north of the main hangar building	Drainage off site to the city drainage ditch along Airport Road (Figure 2)
2	Tanker truck parking area	Drainage through storm drains SD1(Figure 2)

FIGURES

- Site Location Map Facility Site Plan 1
- 2



PEORIA WEST QUADRANGLE ILLINOIS
7.5 MINUTE SERIES (TOPOGRAPHIC)
1979



Site Location Map

Νt

AASF #3 Peoria Airport 2323 South Airport Road Peoria, Illinois

Project	#
917 01	

Figure 1



LEGEND

-x-x- FENCE

+++++++++ TRENCH DRAIN

STORM SEWER DRAIN INLET (SD)

1, 2 DRAINAGE BASIN

- ☐ ABOVEGROUND STORAGE TANK (AST)
- X PETROLEUM, OIL AND LUBRICANT Storage area (POL)
- SPILL KIT

OOO OIL/WATER SEPARATOR

Notes:

- SIZE AND CONTENTS FOR ALL SPCC REGULATED OIL STORAGE CONTAINERS IS PROVIDED IN TABLE 1.
- IF FACILITY PERSONNEL OBSERVE A SPILL FROM A TRANSFORMER, AMEREN ILLINOIS WILL BE CONTACTED IMMEDIATELY AT (800) 755-5000.
- 3. MFT'S CONTAINING FÚEL ARE STORED ON AN IMPERVIOUS SURFACE.
- 4. FACILITY IS:
 - 90% IMPERVIOUS
 - 10% PERVIOUS

FIGURE 2- FACILITY SITE PLAN AND DRAINAGE MAP



201 N. 6TH STREET ROCKFORD, ILLINOIS 61107 (815) 962-9000 AASF#3 PEORIA AIRPORT 2323 SOUTH AIRPORT ROAD PEORIA, ILLINOIS

Project #: 917.01 Date: October 2019

APPENDIX A SWPPP Non-Storm Water Discharge Assessment and Certification

Appendix A

SWPPP Non-Storm Water Discharge Certification

The General Permit requires evaluation and certification of all discharge conveyances from the facility to determine if liquids other than storm water are being discharged from these conveyances. The following summarizes this evaluation and certification:

Date of Evaluation

9/26/19

Location of Evaluation:

Peoria Army Aviation Support Facility #3

Evaluation Method:

Visual Observations

Evaluation Results:

No non-storm water discharges observed that were not discussed in **Section 5.0** of this document. All non-storm water discharges are considered special condition exemptions in C.1.b.ii of the General Permit and are permissible under Illinois law.

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 of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Certification:

Printed Name

Title

Signature

APPENDIX A SWPPP Non-Storm Water Discharge Assessment and Certification

	AASF #3 Peorio	Airport Facility Non-Storm V	Vater Discharge Inspection Form (Annually)
Date of Inspection	Name of Person Who Conducted the Inspection	Signature of Person Who Conducted the Inspection	Drainage Points Directly Observed During the Inspection and Comments

By my signature above, I hereby certify that I have evaluated the storm water discharge of the AASF #3 as documented above. The methods used for evaluating the discharge included a visual inspection of discharge patterns and inspection of drainage maps and schematics. The on-site drainage points observed during this inspection include those noted above

Appendix A

SWPPP Non-Storm Water Discharge Certification

The General Permit requires evaluation and certification of all discharge conveyances from the facility to determine if liquids other than storm water are being discharged from these conveyances. The following summarizes this evaluation and certification:

Date of Evaluation	
Location of Evaluation:	Peoria Army Aviation Support Facility #3
Evaluation Method:	Visual Observations
Evaluation Results:	No non-storm water discharges observed that were not discussed in Section 5.0 of this document. All non-storm water discharges are considered special condition exemptions in C.1.b.ii of the General Permit and are permissible under Illinois law.
submitted in this document, and that b	eve personally examined and am familiar with the information based on my inquiry of those individuals responsible for obtaining smitted information is true, accurate, and complete.
Certification:	
Printed Name	
Title	
Signature	

APPENDIX B

Regulatory Applicability and Implementation Schedule

APPENDIX B Regulatory Applicability and Implementation Schedule

In response to the finalization of federal storm water regulations found in Title 40 of the Code of Federal Regulations (40 CFR) Parts 122, 123, and 124, the Illinois Environmental Protection Agency (IEPA) developed a program to implement these storm water discharge regulations. Provisions that implement the federally mandated storm water program are contained in Title 35, Part III, Subtitle C, Chapter 1 of the Illinois Administrative Code. These state regulations outline the Storm Water Permit Program, which is administered by the Division of Water Pollution Control of the IEPA.

The Facility maintains an Illinois National Pollutant Discharge Elimination System (NPDES) General Storm Water Discharge Permit No. ILR00 (General Permit). The General Permit is provided in <u>Appendix C</u>. The General Permit authorizes the discharge of storm water associated with industrial activity. The facility requires a General Permit for the following reasons:

- The facility is an aircraft maintenance and transportation facility (SIC code 4500) where fueling, chemical handling, and hazardous material storage occur.
- Storm water at the facility could come in contact with significant materials.

The General Permit requires that an SWPPP be developed for each permitted facility. Therefore, the ILARNG has developed this SWPPP for the Peoria AASF #3. This SWPPP satisfies the requirements as outlined in the General Permit. The following table cross-references the requirements of the General Permit to the SWPPP.

	General	SWPPP Cross
General Permit Reference	Permit	Reference
Complete Drainage Map	E(5)(b)	Figure 2
Complete Inventory of Significant Polluting Materials	E(5)(c)(ii)	Sections 1.0 and
		2.0
Summary of major activities conducted at the facility	E(5)(c)(i)	Sections 1.0, 2.0,
		and 3.0
Describe Appropriate Best Management Practices	E(9)(a-e)	Section 4.0
Evaluate Discharge Sources for Non-Storm Water	E8	Section 5.0 and
Discharges		Appendix A
Identify Potential Source Areas of Storm Water	E(5)(c)(ii).	Sections 1.0, 2.0,
Contamination	E(5)(d)	and 3.0
Identify Potential Areas of Storm Water Pollutants	E(8)	Section 5.0
Following the Implementation of BMPs		
Develop an Implementation Schedule for the SWPPP	E(10), E(11)	Section 7.0 and
		Appendix B
Identify Personnel Responsible for Implementing the	E(7)	Section 6.0
SWPPP		
Signature of Principal Executive Officer	E(14)	Page iii
Provide information on required storm water	E(10)	Section 7.0 and
inspections		Appendices D, E,
		and F

APPENDIX B SWPPP Implementation Schedule

	2018		2018 2019					2020			2021			2022						
		Qua	arte	r	Quarter				Quarter				Quarter				Quarter			
ltem	1 2 3		4	1 1 2 3 4		4	1 2		3 4		1	2 3		3 4	1	2	3	4		
Annual Facility Inspection Report		$\sqrt{2}$				$\sqrt{2}$				$\sqrt{2}$				$\sqrt{2}$				√2		
Facility Activity and Drainage Area Inspection and Quarterly Visual Observation of Discharges and Facility ³		1	1	1	1	1	1	1	1	1	7	7	7	V	7	7	7	V	7	V
Review Spill Files, Inspection Forms, and Update SWPPP if Necessary				1				1				1				√				
Required Benchmark Monitoring		1	1	1																
Non-Storm Water Discharge Assessment and Certification				1				1				1				V				

Notes:

- 1. Permit Issue date is April 5, 2017.
- 2. Annual facility inspection reports must be submitted to IEPA and kept on file at the facility. The first report shall contain information related to the quarterly benchmark sampling and any other inspections performed. Each subsequent report shall contain the previous year's information, along with any/all other inspection and sampling reports and shall be submitted no later than 1 year after the previous year's report was due. See Appendix F for an Annual Facility Inspection Report form. The facility is to complete, sign, and send the original Annual Facility Inspection Report form to the Environmental Office P2 Manager no later than the last working day of the second quarter of each fiscal year (the end of March).
- 3. Inspection to be conducted once every quarter.

Permit end date is March 31, 2022

APPENDIX C

General National Pollutant Discharge Elimination System Permit for Storm Water Discharges from Industrial Activities

Permit No. ILR00

Illinois Environmental Protection Agency
Division of Water Pollution Control
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276
www.epa.illinois.gov

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

General NPDES Permit
For
Storm Water Discharges from Industrial Activities

Expiration Date: March 31, 2022 Issue Date: April 5, 2017

Effective Date: April 5, 2017

Discharges authorized by this General Permit: In compliance with the provisions of the Illinois Environmental Protection Act, the Illinois Pollution Control Board Rules and Regulations (35 Ill. Adm. Code, Subtitle C, Chapter 1) and the Clean Water Act, the following discharges may be authorized by this permit in accordance with the conditions herein:

Discharges of storm water associated with industrial activities, as defined and limited herein. Storm water means storm water runoff, snow melt runoff, and surface runoff and drainage.

This general permit regulates only storm water discharges from a facility. Other discharges such as process wastewater or cooling water shall be regulated by other NPDES permits.

Receiving waters: Discharges may be authorized to any surface water of the State.

To receive authorization to discharge under this general permit, a facility operator must submit a Notice of Intent form and additional documentation as required in Part D of this permit. Authorization, if granted, will be by letter and include a copy of this permit.

Alan Keller, P.E.

Manager, Permit Section

Division of Water Pollution Control

CONTE	NTS OF GENERAL PERMIT ILROO	<u>Page</u>
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		_
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D.	Application Requirements	6
E.	Storm Water Pollution Prevention Plan (SWPPP or Plan)	8
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H.	Corrective Actions	17
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A. APPLICABILITY OF THIS GENERAL PERMIT

This permit is applicable to storm water discharges associated with any primary industrial activity and any associated industrial activity from areas (except offsite access roads and rail lines not on property owned or controlled by the permittee) where material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water in the State of Illinois from the facilities listed below.

- 1. Discharges of storm water from facilities with discharges that are subject to new source performance standards or toxic pollutant effluent standards under 40 CFR Chapter 1, Subchapter N, except:
 - a. Discharges subject to new source performance standards or toxic pollutant effluent standards and described in paragraph Part A.2 which do not have materials or activities exposed to storm water. Facilities with these discharges shall submit a No Exposure Certification form to the Illinois Environmental Protection Agency (Illinois EPA or Agency).
 - b. Discharges subject to storm water effluent limitations guidelines listed in B.1 of this permit.
- 2. Discharges of storm water from facilities in the following SIC codes:

SIC 20	(Food and kindred products manufacturing or processing)
SIC 21	(Tobacco products)
SIC 22	(Textile mill products)
SIC 23	(Apparel and other finished products made from fabrics and similar materials)
SIC 24	(Lumber and wood products except furniture)
SIC 2434	(Wood kitchen cabinets)
SIC 25	(Furniture and fixtures)
SIC 26	(Paper and allied products)
SIC 265	(Paperboard containers and boxes)
SIC 267	(Converted paper and paperboard products)
SIC 27	(Printing, publishing, and allied industries)
	,

SIC 28 SIC 283	(Chemicals and allied products) (Drugs)
SIC 285	(Paints, varnishes, lacquers, enamels, and allied products)
SIC 29	(Petroleum refining and related industries), except discharges subject to 40 CFR 419
SIC 30	(Rubber and miscellaneous plastics products)
SIC 31	(Leather and leather products)
SIC 311	(Leather tanning and finishing)
SIC 32	(Stone, clay, glass, and concrete products)
SIC 323	(Glass products, made of purchased glass)
SIC 33	(Primary metal industries)
SIC 34	(Fabricated metal products, except machinery and transportation equipment)
SIC 3441	(Fabricated structural metal)
SIC 35	(Industrial and commercial machinery and computer equipment)
SIC 36	(Electronic and other electrical equipment and components, except computer equipment)
SIC 37	(Transportation equipment)
SIC 373	(Ship and boat building and repairing)
SIC 38	(Measuring, analyzing, and controlling instruments; photographic, medical, and optical
	goods; watches and clocks)
SIC 39	(Miscellaneous manufacturing industries)
SIC 4221-25	(Farm products warehousing and storage, refrigerated warehousing and storage, general warehousing and storage)

This permit is also applicable to any additional storm water discharges that are not otherwise required to obtain an NPDES permit but are comingled or mixed with discharges authorized by this permit.

- 3. Facilities classified as SIC 10-14 (Mineral Industry) including active or inactive mining operations and oil and gas exploration, production, processing, treatment operations, or transmission facilities, except discharges subject to 40 CFR 434, 436, or 440 or any discharges subject to general permit number ILG84. This permit does not authorize any discharge associated with the hydraulic fracturing process if additional chemicals are utilized in the process.
- Landfills, land application sites (excluding land application sites which utilize agricultural land), and open dumps
 that receive or have received any industrial wastes (waste that is received from any of the facilities described in
 40 CFR 122.26(b) (14)).
- Facilities involved in the recycling of materials including metal scrapyards, battery reclaimers, salvage yards, automobile junkyards and concrete recycling facilities including but not limited to SIC 5015 (Used motor vehicle parts) and SIC 5093 (Scrap and waste materials)
- Transportation facilities listed below with areas involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, or airport deicing operations (unless individual permit required by 40 CFR 449):

SIC 40	(Railroad transportation)
SIC 41	(Local and suburban transit and inter-urban highway passenger transportation)
SIC 42	(Motor freight transportation and warehousing) except SIC 4221-4225 (Farm product
	warehousing and storage, refrigerated warehousing and storage, general warehousing and
	storage)
SIC 43	(United States Postal Service)
SIC 44	(Water transportation)
SIC 45	(Transportation by air)
SIC 5171	(Petroleum bulk stations and terminals-wholesale)

- 7. Treatment Works treating domestic sewage with a design flow of 1.0 mgd or more including sludge or wastewater treatment devices or systems used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, and land dedicated to sludge disposal located within the confines of the facility. This requirement excludes off-site sludge management lands, farm lands, and gardens.
- 8. Discharge of storm water from non-classified facilities designated by the Agency as requiring a permit. See Sector AD of Attachment 1 and 2.

- 9. Allowable non-storm water discharges:
 - a. The following are the only non-storm water discharges authorized under this permit, provided that all discharges comply with the discharge limitations set forth in Part F:
 - i. from fire-fighting activities.
 - ii. Fire hydrant flushings.
 - iii. Waters used to wash vehicles without the use of detergents or hazardous cleaning products.
 - iv. Waters (without added chemicals) used to control dust.
 - v. Potable water sources including waterline flushings and fire sprinkler flushing.
 - vi. Irrigation drainage.
 - vii. Landscape watering, provided all pesticides, herbicides, and fertilizers have been applied in accordance with the approved labeling.
 - viii. Routine external building wash down, including power washing, which does not use detergents or hazardous cleaning products.
 - ix. Discharges Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents or hazardous cleaning products are not used.
 - Uncontaminated condensate from air conditioners, coolers, other compressors, and from the outside storage of refrigerated gases or liquids.
 - xi. Uncontaminated ground water or spring water.
 - xii. Foundation or footing drains where flows are not contaminated with process materials.
 - xiii. Incidental windblown mist from cooling towers but not intentional discharges from the cooling tower.
 - xiv. Discharges from the spray down of lumber and wood product storage where no chemical additives are used and no chemicals are applied to the wood during storage. Such discharges are applicable only to Sector A facilities, listed in Attachment 1, provided the non-storm water component of the discharge is in compliance with Part F.2 of this permit.
 - b. Except as provided in Part A.9.a above, all discharges covered by this permit shall be composed entirely of storm water. Discharges of material other than storm water must be in compliance with an NPDES permit (other than this permit) issued for the discharge.

B. TYPES OF DISCHARGES NOT COVERED BY THIS PERMIT

This permit is not applicable to storm water discharges from the facilities listed below. Storm water discharges from these facilities must be authorized by an individual NPDES permit or alternative general NPDES permit.

1. Discharges subject to storm water effluent limitations guidelines in the following categories;

Cement Manufacturing (40 CFR 411)
Feedlots (40 CFR 412)
Fertilizer Manufacturing (40 CFR 418)
Petroleum Refining (40 CFR 419)
Phosphate Manufacturing (40 CFR 422)
Steam Electric (40 CFR 423)
Coal Mining (40 CFR 434)
Mineral Mining and Processing (40 CFR 436)
Ore Mining and Dressing (40 CFR 440)
Asphalt Emulsion (40 CFR 443).
Airport De-icing (40 CFR 449)

- 2. Hazardous waste treatment, storage, or disposal facilities.
- 3. Steam electric power generating facilities, including coal handling sites.
- 4. Construction site activity including clearing, grading, and excavation activities.
- 5. Storm water discharges associated with industrial activity from facilities with an existing NPDES individual or general permit for the storm water discharges.
- 6. Storm water discharges associated with industrial activity which are identified by the Agency as possibly causing or contributing to a violation of water quality standards.

- 7. Storm water discharges associated with inactive mining or inactive oil and gas operations occurring on Federal lands where an operator cannot be identified.
- Storm water discharges to any receiving water identified under 35 III. Adm. Code 302.105(d) (6).
- 9. Storm water discharges that the Agency determines are not appropriately covered by this general permit.
- 10. Storm water or other discharges of hazardous substances or oil resulting from an on-site spill.
- 11. Discharges of storm water collected in containment areas at bulk storage and hazardous waste facilities where the storm water becomes contaminated by direct contact with a spill or release of stored materials into the containment area.

C. SPECIAL CONDITIONS

- 1. Discharging pollutants for which a water body is impaired with an approved TMDL:
 - a. The Permittee must determine whether the facility discharges storm water, either directly or indirectly, to the immediate stream segment which is an impaired water body, i.e., a water body included on the most recent U.S. EPA-approved Clean Water Act Section 303(d) list of impaired water bodies. This determination must be made within 6 months of the effective date of this permit, and must be documented in the facility's SWPPP or storm water records. Information on impaired waters is contained in the Agency website below:

http://www.epa.illinois.gov/topics/water-quality/watershed-management/tmdls/303d-list/

b. If the Permittee determines that it discharges storm water to the immediate stream segment which is an impaired water body, the Permittee must identify if there is a U.S. EPA-approved TMDL that establishes waste load allocations for discharges of pollutant(s) of concern to the impaired water body. This determination must be made within 6 months of the effective date of this permit, and must be documented in the facility's SWPPP or storm water records. Information on TMDLs is contained in the Agency website below:

http://www.epa.illinois.gov/topics/water-quality/watershed-management/tmdls/index

- c. If the Permittee determines that there is a U.S. EPA-approved Total Maximum Daily Load (TMDL) for a water body to which the facility discharges storm water, the permittee must determine if there is a Waste Load Allocation (WLA) applicable to the facility's storm water discharges in the approved TMDL.
- d. If the Permittee determines that it is subject to an applicable (WLA), the following requirements apply:
 - The Permittee must calculate/quantify the facility's estimated current loading(s) of the pollutant(s) of concern to the impaired water body. This may be done using monitoring data and/or through modeling.
 - ii. The Permittee must determine if, based on the estimated current loading(s), it is meeting the applicable WLA with current storm water controls and practices. If loading reductions are needed in order to achieve the applicable WLA, the permittee must update its SWPPP to incorporate Best Management Practices (BMPs) or other storm water control measures that will be implemented to reduce loadings of the pollutant(s) of concern and achieve the applicable WLA.
 - The SWPPP must specifically identify the additional or enhanced BMPs or control measures necessary to reduce loadings of the pollutant(s) of concern, and must also document/summarize modeling and/or other calculations used to estimate that the practices and control measures will reduce loadings to achieve the applicable WLA.
 - iii. The SWPPP must define a schedule for implementing the control measures identified necessary to meet the WLA. The schedule for implementing the planned BMPs and/or control measures above must be set out so that the management practices and control measures are in place and operational as quickly as possible. Interim milestones should be established to facilitate assessment of progress in implementing the control measures and gauging progress toward meeting the applicable WLA.

- iv. The Permittee must incorporate into the SWPPP a monitoring/assessment component to evaluate if loading reductions are being achieved as planned in the SWPPP.
- The SWPPP may incorporate an adaptive management component, under which the SWPPP can be updated or improved as circumstances allow.
- 2. Discharges to impaired waters without an approved TMDL:

The Permittee shall monitor all pollutants for which the waterbody is impaired and are associated with the industrial site activity for which a standard analytical method exists (see 40 CFR Part 136) once per year at each outfall (except substantially identical outfalls) discharging storm water to impaired waters without an approved TMDL

3. Additional Monitoring required by Illinois EPA:

The Agency may require additional monitoring. Any such notice will briefly state the reasons for monitoring, locations, and parameters to be monitored, frequency and period of monitoring, sample types, and reporting requirements.

D. APPLICATION REQUIREMENTS

- 1. Any discharger of storm water associated with industrial activities seeking coverage under this general permit shall provide the Agency with the following information:
 - a. i. A completed electronic submission of the Agency Notice of Intent form, see Part D.6; or
 - ii. A completed electronic submission of the U.S. EPA Form 1, including form 2F and quantitative sampling data when required by Part D.2. See Part D.6.
 - b. An electronic copy of the Storm Water Pollution Prevention Plan (SWPPP or plan) that has been prepared for the industrial site in accordance with Part E of this permit. The electronic copy shall be submitted to the Agency at the following email address: epa.indilr00swppp@illinois.gov.
 - c. For a proposed industrial site, or a proposed modification of an industrial site, an electronic copy of the consultation letters from the Illinois Historic Preservation Agency (IHPA) and the Illinois Department of Natural Resources (IDNR) concerning historic preservation and endangered species compliance. See Part D.6.
- Quantitative sampling data as required by U.S. EPA Form 2F for storm water discharges from the following existing or new facilities is required to be submitted:
 - a. Facilities subject to reporting requirements under Section 313 of EPCRA for chemicals classified as "Section 313 water priority chemicals": Storm water discharges that come into contact with any equipment, tank, container, or other vessel or area used for storage of a Section 313 water priority chemical, or located at a truck or rail car unloading area where a Section 313 water priority chemical is handled.
 - b. Facilities classified as SIC 33 (Primary Metal Industries).
 - Active or inactive landfills, land application sites, or open dumps without a stabilized final cover which have received any industrial wastes.
 - d. Wood treatment facilities: Storm water discharges from areas that are used for wood treatment, wood surface application, or storage of treated or surface protected wood.
 - e. Coal pile runoff at industrial facilities other than coal mines or steam electric power generating facilities.
 - f. Battery reclaiming facilities: Storm water discharges from areas used for storage of lead acid batteries, reclamation products or waste products, and areas used for lead acid battery reclamation.
 - g. Airports not subject to the requirements of 40 CFR 449 (less than 1,000 aircraft departures per year) storm water discharges from aircraft or airport deicing areas.
 - h. Meat packing plants, poultry packing plants, and facilities that manufacture animal and marine fats and oils.

- Facilities classified as SIC 28 (Chemicals and Allied Products) and SIC 30 (Rubber and Miscellaneous Plastics Products): Storm water discharges that come into contact with solid chemical storage piles.
- j. Automobile junkyards: Storm water discharges exposed to over 250 auto/truck bodies with drivelines, over 250 drivelines, or any combination thereof (in whole or in parts); over 500 auto/truck units (bodies with or without drivelines in whole or in parts); or over 100 units per year are dismantled and drainage or storage of automotive fluids occurs in areas exposed to storm water.
- k. Lime manufacturing facilities: Storm water discharges that have come into contact with lime storage piles.
- Cement manufacturing facilities and cement kilns: Storm water discharges other than those subject to 40 CFR 411.
- m. Ready-mixed concrete facilities: Sampling data is not required for new ready-mixed concrete facilities or for relocated ready-mixed concrete facilities. Schedule 2-F is not required for existing or previously permitted facilities.
- n. Ship building and repairing facilities.
- o. Other industrial activities when requested by the Agency.
- 3. When a facility has two or more outfalls that, based on consideration of features and activities within the area drained by the outfall, the Permittee reasonably believes discharge substantially identical effluents, the Permittee may sample the effluent of one such outfall and report that quantitative data also applied to the substantially identical outfalls. If the applicant is requesting approval to sample a representative outfall, identification of all storm water outfalls considered to be substantially identical along with the outfall being used to represent such outfalls and appropriate justification must be provided with the application.
- 4. Existing facilities application/Notice of Intent requirements:
 - a. For existing facilities with an individual NPDES permit covering storm water associated with industrial activity, or those facilities that have previously submitted an application for an individual permit and not yet received a permit, the Permittee/Applicant may elect to seek coverage under this general permit in place of obtaining an individual permit. To be considered for coverage the Permittee/Applicant is required to submit the information, in Part D.1.
 - b. For existing facilities that have submitted a NOI for coverage of any discharge of storm water associated with industrial activities under this general permit a new or revised NOI will not be required unless the industrial activity at the site has substantially changed.
- 5. For new facilities, the NOI and required information shall be submitted 180 days prior to the date on which the discharge is to commence unless permission for a later date has been granted by the Agency. Mobile facilities (such as concrete or asphalt batch plants) shall apply at least 30 days prior to discharge.
- 6. The required information from Part D.1.a.i and ii and D.1.c shall be submitted to one of the following addresses:
 - a. Electronic submission shall be submitted to:

epa.indilr00swppp@illinois.gov

b. If electronic submittal is unavailable the required information should be submitted to the following address:

Illinois Environmental Protection Agency Division of Water Pollution Control Permit Section #15 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276

7. Authorization: Owners or operators must submit either an NOI in accordance with the requirements of this permit or an application for an individual NPDES Permit to be authorized to discharge under this General Permit. Authorization, if granted, will be by letter from the Agency and include a copy of this Permit. Upon review of an NOI, the Illinois EPA may deny coverage under this Permit and require submittal of an application for an individual NPDES Permit.

- a. Automatic Continuation of Expired General Permit: Except as provided in D.7.b below, when this General Permit expires the conditions of this permit shall be administratively continued until the earliest of the following:
 - i. 150 days after the new General Permit is issued;
 - ii. The Permittee submits a Notice of Termination (NOT) and that notice is approved by Illinois EPA;
 - iii. The Permittee is authorized for coverage under an individual permit or the renewed or reissued General Permit:
 - iv. The Permittee's application for an individual permit for a discharge or NOI for coverage under the renewed or reissued General Permit, is denied by the Illinois EPA;
 - v. Illinois EPA issues a formal permit decision not to renew or reissue this General Permit. If not renewed this expired General Permit shall be automatically administratively continued after such formal permit decision.

b. Duty to Reapply:

- If the Permittee wishes to continue a discharge activity regulated by this General Permit, the Permittee must apply for new permit coverage before the expiration of the administratively continued period specified in D.7.a above.
- ii. If the Permittee reapplies in accordance with the provisions of D.7.a above, the conditions of this General Permit shall continue in full force and effect under the provisions of 5 ILCS 100/10-65 until the Illinois EPA makes a final determination on the application or NOI.
- iii. If the Agency makes a formal decision not to renew this General Permit, the Permittee will have 150 days to supplement any previously submitted application or NOI after the date of the formal decision by Illinois EPA.
- iv. Standard Condition 2 of Attachment H is not applicable to this General Permit.
- 8. Facilities which discharge storm water associated with industrial activity to a municipal separate storm sewer system (MS4) shall notify the MS4 owner at the time of application to the Agency, and shall provide the MS4 owner with a copy of their application if requested.

E. STORM WATER POLLUTION PREVENTION PLAN (SWPPP or Plan)

- 1. A SWPPP shall be developed by the Permittee and submitted to the Agency for each facility covered by this permit. The Plan shall identify potential sources of pollution which may be expected to affect the quality of storm water discharges associated with the industrial activity at the facility. The Plan shall describe the selection, design, and installation of control measures which are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility to comply with the requirements of this permit. An electronic copy of the Plan shall be submitted to the Agency at the following email address: epa.indilr00swppp@illinois.gov. The Permittee shall submit any modified plans to the Agency, when such modification includes substantive changes to the Plan, or modification is made to the Plan to ensure compliance with this permit. The SWPPP shall be implemented by the Permittee on an on-going basis.
 - a. Waters not classified as impaired pursuant to Section 303(d) of the Clean Water Act:
 - The SWPPP shall be designed for a storm event equal to or greater than a 25-year 24-hour rainfall event unless federal regulations allow for a less restrictive rainfall event.
 - b. Waters classified as impaired pursuant to Section 303(d) of the Clean Water Act:
 - For any site which has a current NPDES permit and discharges directly or indirectly to an impaired water identified in the Agency's 303(d) listing, and if any parameter in the subject discharge has been identified as the cause of impairment, the SWPPP shall be designed for a storm event equal to or greater than a 25-year 24-hour rainfall event. If required by federal regulations, the SWPPP shall adhere to a more restrictive design criteria.

- c. If the Permittee discharges to an impaired water with an established U.S. EPA approved or established TMDL and the SWPPP has been modified in accordance with Part E.1.b above, Illinois EPA will review the SWPPP and inform the Permittee in writing if additional pollutant control measures for rainfall events are necessary for the discharge to be consistent with the assumptions of any available waste load allocations in the TMDL or if coverage under an individual permit is necessary.
- 2. Plans for new facilities shall be completed prior to submitting an NOI to be covered under this permit. An electronic copy of the SWPPP shall be submitted to the Agency at the following email address: epa.indilr00swppp@illinois.gov. Plans shall provide for compliance with the effluent limitations in Part F of this permit prior to operation of any industrial activity to be covered under this permit. [Note: If the plan has already been required to be developed under a previous permit it shall be updated and maintained in accordance with all requirements of this Special Condition within 180 days of the effective date of this permit.]. The owner or operator of an existing facility with storm water discharges covered by this permit shall submit a copy of the Plan to the Agency and shall make a copy of the Plan available to the Agency during any inspection of the site.

Facilities which discharge to MS4 shall also make a copy available to the operator of the municipal system at any reasonable time upon request.

- 3. The Permittee may be notified in writing by the Agency at any time that the Plan does not meet the requirements of this permit. After such written notification, the Permittee shall modify the Plan and shall submit a revised plan to the Agency with the requested changes that have been made. Unless otherwise provided, the Permittee shall have 30 days after such notification to make the changes.
- 4. The Permittee shall modify the SWPPP based on the corrective actions and deadlines required in Part H.2 and that the Permittee documented in Part H.2, such that the triggering conditions for corrective action in Part H.1 do not reoccur. The Permittee shall also modify the SWPPP whenever there is a change in construction, operation, or maintenance which may affect the discharge of concentrations or quantities of pollutants to the waters of the United States. SWPPP modifications must be signed in accordance with Attachment H.
- 5. The Plan shall provide a description of potential sources which may be expected to affect concentration or quantities of pollutants to storm water discharges, or which may result in non-storm water discharges from the facility. The Plan shall include, at a minimum, the following items:
 - a. A topographic map extending one-quarter mile beyond the property boundaries of the facility, showing: the facility, surface water bodies, wells (including injection wells), seepage pits, infiltration ponds, and the discharge points where the facility's storm water discharges to a municipal storm drain system or other water body. The requirements of this paragraph may be included on the site map if appropriate. Any map or portion of map may be withheld for security reasons.
 - b. A site map showing:
 - i. The storm water conveyance and discharge structures;
 - ii. An outline of the storm water drainage areas for each storm water discharge point, location, and identification of any MS4 to which the industrial site discharges storm water;
 - iii. Paved areas and buildings;
 - iv. Areas used for outdoor manufacturing, storage trash dumpsters and compactors or disposal of significant materials, including activities that generate significant quantities of dust or particulates;
 - Location of existing or planned storm water structural control measures/practices (dikes, coverings, detention facilities, etc.);
 - vi. Surface water locations and/or municipal storm drain locations;
 - vii. Areas of existing and potential soil erosion;
 - viii. Vehicle service areas;
 - ix. Material loading, unloading, transfer, and access areas;
 - x. Direction of storm water flow (use arrows);

- xi. Locations of storm water monitoring points;
- xii. Location of any potable water supply wells;
- xiii. Fueling stations;
- xiv. Immediate access roads and rail lines;
- xv. Vehicle or product machinery related to industrial activity;
- xvi. Locations and sources of run-on to the site from adjacent properties that contains significant quantities of pollutants; and
- xvii. Location of any material storage areas (i.e. deicing material, fertilizers, soil stockpiles, etc.).

Areas under Items iv. and ix. above may be withheld from the site map for security reasons.

- c. A narrative description of the following potential pollutant sources:
 - The nature of the industrial activities conducted at the site and a list of the activities exposed to storm water;
 - ii. A list of pollutant(s) or pollutant constituents associated with each identified activity above, which could be exposed to storm water or snowmelt and could be discharged from the facility. The Permittee must document all significant material that have been handled, treated, stored or disposed of, and that have been exposed to storm water in the three years prior to the date the Permittee prepares or amends its SWPPP. Materials, equipment, and vehicle management practices employed to minimize contact of significant materials with storm water discharges (include on site map);
 - iii. Existing or future structural and non-structural control measures/practices to reduce pollutants in storm water discharges;
 - iv. Industrial storm water discharge treatment facilities (include on site map) and;
 - v. Methods of onsite storage and disposal of significant materials.
- d. Permittees discharging storm water to impaired water bodies as determined pursuant to Part C.1.a. shall provide a list of any pollutant that is listed as a cause of impairment in the most recent 303(d) report and may be associated with the industrial site activity and may be discharged in storm water from the industrial site.
- e. An estimate of the size of the facility in acres or square feet, and the percent of the facility that has impervious areas such as pavement or buildings.
- f. A summary of existing sampling data describing pollutants in storm water discharges.
- 6. The Plan shall document the location and describe the storm water management controls which are or will be implemented by the facility to meet the requirements of this permit. The appropriate controls shall reflect identified existing and potential sources of pollutants at the facility. The Permittee shall properly maintain storm water BMPs and other control measures to ensure effectiveness and continuity of operation.
- 7. Storm Water Pollution Prevention Personnel: Identification by name, job titles, direct telephone numbers and email addresses (if available) of the individuals who are responsible for developing, implementing, and revising the Plan. All storm water pollution prevention personnel must have ready access to the most updated copy of the SWPPP and all associated documents and information as required by this permit.
- 8. Non-Storm Water Discharges:

The Permittee shall document that the discharge has been evaluated for the presence of unauthorized non-storm water discharges. The documentation shall include: the date of the evaluation, a description of the evaluation criteria used, a list of the outfalls or on-site drainage points that were directly observed during the evaluation, a description of the action(s) taken to prevent unauthorized discharge(s), or documentation that separate NPDES permit was obtained.

- 9. The following must be documented in the SWPPP:
 - Good Housekeeping (F.2.c) A requirement that waste materials be regularly picked up and disposed of, along with routine inspections for leaks and conditions of drums, tanks and containers;
 - b. Maintenance (F.2.b) Procedures and frequencies for inspection and maintenance of storm water conveyance system devices such as oil/water separators, catch basins, etc., and inspection and testing of plant equipment and systems that could fail and result in discharges of pollutants to storm water. The SWPPP shall include the schedule or frequency for maintaining all control measures;
 - c. Spill Prevention and Response (Part F.2.d) Procedures for responding to spills and leaks, including internal and third-party notification procedures. For preventing spills, include in the SWPPP the control measures for material handling and storage, and procedures for preventing spills that can contaminate storm water. Spill clean-up equipment and procedures should be identified, as appropriate;
 - d. Erosion and Sediment Control (Part F.2.f) If the Permittee uses polymers and/or other chemical treatments
 as part of a control measure, the Permittee must identify the polymer and/or chemicals used and the
 purpose; and
 - e. Employee Training (Part F.2.g) The elements of the employee training plan shall include all, but not be limited to, the requirements set forth in Part F.2.g and also include the following:
 - The content of the training;
 - The frequency/schedule of the training for employees who have duties in areas of industrial activity subject to this permit; and
 - iii. A log of the date on which specific employees receive training.

10. Inspections.

- a. The Permittee must document in the SWPPP its procedures for performing, as appropriate, the types of inspections specified in this permit, including:
 - i. Routine facility inspections (See Part G.1), and
 - ii. Quarterly visual assessment of storm water discharges (See Part J.1).
- b. If the Permittee is invoking the exception for inactive and unstaffed sites relating to routine facility inspections and quarterly visual assessments, the Permittee must include in the SWPPP the information to support this claim as required by Part G.5.

11. Monitoring.

- a. The Permittee must document in the SWPPP the procedures for conducting two types of analytical monitoring specified by the permit, where applicable to the facility:
 - Benchmark monitoring (See Part J.2)
 - Site-specific monitoring
- b. For each type of monitoring, the SWPPP must document:
 - Locations where samples are collected, including any determination that two or more outfalls are identical;
 - ii. Parameters for sampling and the frequency of sampling for each parameter;
 - iii. Schedules for monitoring at the facility;
 - iv. Any numeric control values (benchmarks, TMDL-related requirements) applicable to discharges from each outfall; and

- v. Procedures (e.g., responsible staff, logistics, laboratory to be used) for gathering data.
- c. If the Permittee is invoking the exception for inactive and unstaffed sites, the Permittee must include a certification in the SWPPP to support this claim as required by Part G.5.
- d. The Permittee must document the following in the SWPPP if the Permittee plans to use the substantially identical outfall exception for the quarterly visual assessment requirements in Part J.1.e or benchmark monitoring requirements in Part J.2.f:
 - Locations of each of the substantially identical outfalls;
 - ii. Description of the general industrial activities conducted in the drainage area of each outfall;
 - iii. Description of the control measures implemented in the drainage area of each outfall;
 - iv. Description of the exposed materials located in the drainage area of each outfall that are likely to be significant contributors of pollutants to storm water discharges;
 - An estimate of the runoff coefficient of the drainage areas (low= under 40%, medium= 40% to 65%, high= above 65%); and
 - vi. Why the outfalls are expected to discharge substantially identical effluents.
- 12. This Plan shall briefly describe the appropriate elements of other program requirements, including Spill Prevention Control and Countermeasures (SPCC) plans required under Section 311 of the CWA and the regulations promulgated thereunder, and Best Management Programs under 40 CFR 125.100. Other program requirements such as SPCC may be referenced in the Plan.
- 13. The Plan is considered a report that shall be available to the public at any reasonable time upon request.
- 14. The Plan shall include the signature and title of the person responsible for preparation of the Plan and include the date of initial preparation and each amendment thereto.
- 15. Facilities which discharge storm water associated with industrial activity to MS4 may also be subject to additional requirements imposed by the operator of the municipal separate storm sewer system.
- 16. Additional Documentation Requirements.

The Permittee is required to keep the following inspection, monitoring, and certification records with the SWPPP that keep the records complete and up-to-date, and demonstrate full compliance with the conditions of this permit:

- A copy of the NOI submitted to the Agency along with any correspondence exchanged between the Permittee and the Agency specific to coverage under this permit;
- b. A copy of this permit;
- c. Documentation of maintenance and repairs of control measures, including the date(s) of regular maintenance, date(s) of discovery of areas in need of repair/replacements, and for repairs, date(s) the control measures returned to full function, and the justification of any extended maintenance/repair schedules (See Part F.2.b);
- d. All inspection reports, including Routine Facility Inspection Reports (Part G.1) and Quarterly Visual Assessment Reports (J.1) and benchmark monitoring results;
- e. Description of any deviation from the schedule for visual assessments and/or monitoring, and the reasons for the deviations;
- f. Description of any corrective action triggering event/condition listed in Part H.1 and documented in Part H.2;
- g. Documentation of any benchmark exceedance and the type of response employed, including:
 - i. The corrective action taken;

- ii. A finding that the exceedance was due to natural background pollutant levels; or
- iii. A finding that no further pollutant reductions were technologically available and economically practicable in light of best industry practice consistent with Part J.2.;
- h. Documentation to support any determination that pollutants of concern are not expected to be present above natural background levels if the facility discharges directly to impaired waters, and such pollutants were not detected in the discharge or were solely attributable to natural background sources (See Part J.2);
- Documentation to support the claim that the facility has changed its status from active to inactive and unstaffed with respect to the requirements to conduct routine inspections (See Part G.5), quarterly visual assessments (see Part J.1) and/or benchmark monitoring (see Part J.2); and
- j. Electronic copies of all documents, including the SWPPP, are acceptable.
- 17. Modifications to the following requirements in the plan shall be submitted to the Agency pursuant to Part K.1, E.l.c, E.6, E.7, E.16.f, E.16.g, E.16.i.

F. Control Measures and Discharge Limitations

In the technology-based limits included below, the term "minimize" means reduce and/or eliminate to the extent achievable using control measures (including best management practices) that are technologically available and economically practicable and achievable.

1. Storm Water Controls

The Permittee must select, design, install, and implement control measures (including best management practices) to meet the discharge limitations in Part F.2 and meet the water quality-based effluent limitations in Part F.3. The selection, design, installation, and implementation of these control measures must be in accordance with good engineering practices and manufacturer's specifications. Note that the Permittee may deviate from such manufacturer's specifications where it provides justification for such deviation and include documentation of its rationale in the part of its SWPPP that describes its control measures, consistent with Part E.6. If the Permittee finds that its control measures are not achieving their intended effect of minimizing pollutant discharges, it must modify these control measures in accordance with the corrective action requirements set forth in Part H. Regulated storm water discharges from the Permittee's facility include storm water run-on that commingles with storm water discharges associated with industrial activity at its facility.

2. Discharge Limitations

- a. Minimize Exposure The Permittee must minimize the exposure of manufacturing, processing, and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations) to rain, snow, snowmelt, and runoff by either locating these industrial materials and activities inside or protecting them with storm resistant coverings. In order to minimize exposure, where feasible, the Permittee must include the following BMPs where applicable:
 - Use grading, berming, or curbing to prevent runoff of contaminated flows and divert run-on away from these areas:
 - ii. Containment Storage within berms or other secondary containment devices to prevent leaks and spills from entering storm water runoff. To the maximum extent practicable, storm water discharged from any area where pollutants from material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water should not enter vegetated areas or surface waters or infiltrate into the soil unless adequate treatment is provided;
 - iii. Clean up spills and leaks promptly using dry methods (e.g., absorbents) or other cleanup methods to prevent the discharge of pollutants;
 - iv. Store leaky vehicles and equipment indoors or, if stored outdoors, use drip pans and absorbents;
 - v. Use spill/overflow protection equipment;
 - vi. Perform all vehicle and/or equipment cleaning operations indoors, under cover, or in bermed areas

that prevent runoff and run-on and also that capture any overspray;

- vii. Drain fluids from equipment and vehicles that will be decommissioned or will remain unused for extended periods of time;
- viii. Ensure that all washwater, with the exception of discharges from pavement wash water and routine building washdown, drains to a sanitary sewer, sump, or other proper collection system (i.e., not the storm water drainage system); and
- ix. Oil & Grease Separation Oil/water separators, booms, skimmers, or other methods to minimize oil contaminated storm water discharges.
- x. Minimize dust and offsite tracking of raw, final, and waste materials. Trash disposal areas where dumpsters and rolloff boxes are located shall have the lids which shall remain closed when not in use. For dumpsters and roll off boxes that do not have lids BMPs shall be utilized to prevent any contaminate storm water runoff.
- b. Preventive Maintenance The Permittee must have procedures and frequencies for inspection and maintenance of storm water conveyance system devices such as oil/water separators, catch basins, etc., and inspection and testing of plant equipment and systems that could fail and result in discharges of pollutants to storm water.
- c. Good Housekeeping and Pollution Prevention Practices Good housekeeping requires the maintenance of clean, orderly facility areas that discharge storm water. Material handling areas shall be inspected and cleaned as necessary to reduce the potential for pollutants to enter the storm water conveyance system. The Permittee shall implement pollution prevention practices in areas that include, but are not limited to, trash containers, storage areas, loading docks, vehicle fueling, and maintenance. Exposed areas that may contribute pollutants to storm water shall be minimized to reduce or eliminate contaminated storm water runoff.
- d. Spill Prevention and Response Identification of areas where significant materials can spill into or otherwise enter the storm water conveyance systems and their accompanying drainage points. The Permittee must minimize the potential for leaks, spills, and other releases that may be exposed to storm water and develop plans for effective response to such spills if or when they occur. The Permittee must conduct spill prevention and response measures, including but not limited to, the following:
 - Plainly label containers (e.g., "Used Oil," "Spent Solvents," "Fertilizers and Pesticides") that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur;
 - ii. Implement procedures for material storage and handling, such as the use of secondary containment and barriers between material storage and traffic areas, or a similarly effective means designed to prevent the discharge of pollutants from these areas;
 - iii. Develop spill response training procedures for preventing, containing, and cleaning up leaks, spills, and other releases. Spills shall be cleaned and any contaminated water or solids shall be disposed of in accordance with applicable regulations. As appropriate, execute such procedures as soon as possible;
 - iv. Keep spill kits on-site, in easily accessible locations,
 - Notify appropriate facility personnel, and for significant spills, emergency response agencies and regulatory agencies, when a leak, spill, or other release occurs;
 - vi. Document all significant spills and leaks of oil or toxic or hazardous pollutants that actually occurred in the exposed areas, or that drained to a storm water conveyance, during the previous 5 years;
 - vii. Visually inspect retained storm water (e.g. storm water in a secondary containment structure) prior to discharge, to assure the storm water contains no unnatural turbidity, color, oil films, foams, settleable solids, or deposits before discharging any collected storm water.
- e. Storm Water Management Practices Storm water management practices are practices other than those which control the source of pollutants. They include measures such as installing oil and grit separators, diverting storm water into retention basins, etc. Based on assessment of the potential of various sources to

contribute pollutants, measures to remove pollutants from storm water discharge shall be implemented. The following management practices shall be considered and implemented as applicable:

- Debris & Sediment Control Screens, booms, sediment ponds, or other methods to reduce debris and sediment in storm water discharges;
- Covered Storage or Manufacturing Areas Covered fueling operations, materials, manufacturing, and storage areas to prevent contact with storm water. This includes any pesticide, herbicide, fertilizer, or any other chemical storage area;
- iii. Mercury Switch Removal and Recycling Mercury containing convenience lighting switches and anti-lock brake assemblies shall be removed from vehicles and recycled in an approved manner which prevents mercury from entering the storm water discharges; and
- iv. Storm Water Reduction To minimize storm water runoff, install vegetation on roofs of buildings within and adjacent to the exposure area to detain and evapotranspirate runoff where the precipitation falling on the roof is not exposed to contaminants. Capture storm water for use as appropriate based on quality where feasible and applicable.
- f. Sediment and Erosion Prevention where feasible and applicable, the Permittee must minimize erosion by stabilizing exposed soils at the facility and placing flow velocity dissipation devices at discharge locations. The Permittee must also use structural and non-structural control measures to prevent the discharge of sediment. If the Permittee uses polymers and/or other chemical treatments as part of its controls, it must identify the polymers and/or chemicals used and the purpose. Information on BMPs for erosion and sediment control is available at the following websites:

USEPA National Menu of Best Management Practices (BMPs) for Storm Water

https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater#edu

Illinois Urban Manual:

http://www.aiswcd.org/illinois-urban-manual/

- g. Employee Training The Permittee must train all employees who work in areas where industrial materials or activities are exposed to storm water, or who are responsible for implementing activities necessary to meet the conditions of this permit (e.g., inspectors, maintenance personnel), including all pollution prevention personnel. Employees shall be trained at a minimum of once per calendar year. The Permittee shall ensure the following personnel are trained on the requirements of this permit:
 - Personnel who are responsible for the design, installation, maintenance, and/or repair of controls (including pollution prevention measures);
 - Personnel responsible for the storage and handling of chemicals and materials that could become contaminants in storm water discharges;
 - iii. Personnel who are responsible for conducting and documenting monitoring and inspections as required in Parts G and J; and
 - iv. Personnel who are responsible for performing and documenting corrective actions as required in Part H.
- h. De-icing Material Storage Storage piles of deicing material used onsite or for other commercial or industrial purposes must be enclosed or covered to prevent exposure to precipitation (except for exposure resulting from adding or removing materials from the pile). The Permittee must document and implement appropriate pollution prevention measures that minimize exposure to storm water when adding to or removing material from the pile. Piles do not need to be enclosed or covered where storm water from the pile is not discharged to Waters of the United States or the discharges from the piles are authorized under another permit. The Permittee must document the location of any storage piles of deicing material to be used for deicing or for other commercial or industrial use in the SWPPP site map (Part E.5.b.xvii).

- i. Plastic Materials Requirements Facilities that handle pre-production plastic pellets are required to implement best management practices to eliminate discharges of plastic in storm water. Examples of plastic material required to be addressed as storm water pollutants include plastic resin pellets, powders, flakes, additives, regrind, scrap, waste and recycling.
- 3. Water Quality-Based Effluent Limitations.
 - Water Quality Standards Discharges covered by this permit, alone or in combination with other sources, shall not cause or contribute to a violation of any applicable water quality standard pursuant 35 III. Adm. Code 304.105;
 - The Permittee must implement all controls necessary to comply with a wasteload allocation in an EPA established or approved TMDL as required in Part C;
 - c. Except for discharges authorized in Part A.8 of this permit, the Permittee shall effectively prohibit nonstorm water discharges into the storm sewer system; and
 - d. The Permittee shall not allow any offensive discharges pursuant to 35 III. Admin. Code Section 304.106.

G. INSPECTIONS

The Permittee shall conduct facility inspections covering all the areas subject to the requirements of this permit
and identified in the SWPPP.

Inspections must be conducted at least quarterly or in some instances more frequently as appropriate. At least one of the Permittee's routine inspections must be conducted during a period when a storm water discharge is occurring within 72 hours of the beginning of a storm event equal to or greater than 0.25 inches in 24 hours.

Inspections must be performed by qualified personnel (as defined in Part M.12) with at least one member of the storm water pollution prevention personnel participating. The Permittee may prioritize facility outfalls to allow for adequate quarterly inspections during flooding conditions. Areas inaccessible during quarterly inspections due to flooding conditions shall be inspected within 72 hours of becoming accessible.

Inspectors must consider the results of any visual and analytical monitoring for the past year when planning and conducting inspections as well as where:

- a. Industrial materials, residue or trash may have or could come into contact with storm water.
- b. Leaks or spills from industrial equipment, drums, tanks and other containers.
- Offsite tracking of industrial or waste materials, or sediment may occur, such as where vehicles enter or exit the site.
- d. Tracking or blowing of raw, final or waste materials may occur from areas of no exposure to exposed areas.
- e. Control measures which may need replacement, maintenance or repair.

During an inspection occurring during a storm water discharge, control measures implemented to comply with benchmark monitoring requirements must be observed to ensure they are functioning correctly. Discharge points, as defined in Part M.3, must also be observed during this inspection. If such discharge locations are inaccessible, nearby downstream locations must be inspected.

- 2. The Permittee must document the findings of the facility inspections and maintain this report with its SWPPP. The Permittee must summarize all findings in the annual report per Part K. Document all findings, including but not limited to, the following information:
 - a. The inspection date and time;
 - b. The name(s) and signature(s) of the inspector(s);
 - c. Weather information including flooding events;

- d. All observations relating to the implementation of control measures at the facility, including:
 - A description of any discharges occurring at the time of the inspection;
 - ii. Any previously unidentified discharges and/or pollutants from the site;
 - iii. Any evidence of, or the potential for, pollutants entering the drainage system; Observations regarding the physical condition of and around all outfalls including any flow dissipation devices, and evidence of pollutants in discharges and/or the receiving water;
 - iv. Any control measures needing maintenance, repairs, or replacement;
- e. Any additional control measures needed to comply with the permit requirements; and
- f. Any incidents of noncompliance observed.
- g. Any outfall not inspected due to flooding conditions,
- 3 Any corrective action required as a result of a routine facility inspection must be performed consistent with Part H of this permit.
- 4. If the Permittee performed a visual observation required in Part J.1 during the facility inspection, the Permittee may include the results of the assessment with the report required in Part G.2, provided all components of both types of inspections are included in the report.
- 5. Exceptions to Routine Facility Inspections for Inactive and Unstaffed Sites.

The Permittee may exercise a waiver of the facility inspection requirement at a facility that is inactive and unstaffed, provided there are no industrial materials or activities exposed to storm water. If the Permittee exercises this waiver, the Permittee must maintain a certification with the SWPPP stating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to storm water.

H. CORRECTIVE ACTIONS

1. Conditions Requiring SWPPP Review and Revision.

The Permittee must review the SWPPP when any of the following conditions occur:

- a. An unauthorized release or discharge (e.g., spill, leak, or discharge of non-storm water not authorized by this or another NPDES permit) occurs at the facility;
- Control measures are not stringent enough for the discharge to meet applicable water quality standards or the conditions of this permit;
- A required control measure was never installed, was installed incorrectly, or not in accordance with this
 permit or is not being properly operated or maintained;
- d. Visual observations indicate signs of storm water pollution (e.g., unnatural color, odor, turbidity, floatable material, settled solids, suspended solids, foam, and oil sheen);
- e. The average of four quarterly sampling results exceeds any applicable benchmark monitoring concentration. If less than four samples have been taken, but the results are such that an exceedance of the four quarter average is mathematically certain (i.e., if the sum of quarterly sample results to date is more than four times the benchmark monitoring concentration) this is considered a benchmark exceedance, triggering this review;
- f. Construction or a change in design, operation, or maintenance at the facility that modifies the type or concentration of pollutants discharged in storm water from the facility, or increases the quantity of pollutants discharged;

- 2. Corrective Actions and Deadlines.
 - a. Immediate Actions. If any condition in Part H.1 occurs, the Permittee must immediately take all reasonable steps necessary to minimize or prevent the discharge of pollutants until a permanent solution is installed and made operational, including cleaning up any contaminated surfaces so that the material will not discharge in subsequent storm events.
 - b. Subsequent Actions. If the Permittee determines that additional changes are necessary beyond those implemented pursuant to this permit, it must install a new or modified control and make it operational, or complete the repair, before the next storm event if possible, and within 14 calendar days from the time of discovery. If it is infeasible to complete the installation or repair within 14 calendar days, the Permittee must document why it is infeasible to complete the installation or repair within the 14 day timeframe. The Permittee must also identify the schedule for completing the work, which must be done as soon as practicable after the 14-day timeframe but no longer than 45 days after discovery.

Where the Permittee's corrective actions result in changes to any of the controls or procedures documented in its SWPPP, the Permittee must modify its SWPPP accordingly within 14 calendar days of completing corrective action work.

- c. Corrective Action Documentation. The Permittee must document the existence of any of the conditions listed in Part H.1 within 24 hours of becoming aware of such condition. The Permittee is not required to submit its corrective action documentation to Illinois EPA. Include the following information in the documentation:
 - Identification and description of the condition triggering the need for corrective action review. For any spills or leaks, include the following information: a description of the incident including material, date/time, amount, location, and reason for spill, and any leaks, spills or other releases that resulted in discharges of pollutants to waters of the State, through storm water or otherwise;
 - ii. Date the condition was identified;
 - For any spills or leaks, include response actions, the date/time clean-up completed, notifications made, and staff involved. Also include any measures taken to prevent the reoccurrence of such releases;
 - iv. The Permittee must also document the corrective actions taken that occurred as a result of the conditions listed in Part H.1, within 14 days from the time of discovery of any of those conditions. Provide the dates when each corrective action was initiated and completed (or is expected to be completed). If applicable, document why it is infeasible to complete necessary installations or repairs within the 14-day timeframe and document the Permittee's schedule for installing the controls and making them operational as soon as practicable after the 14-day timeframe.
- d. Substantially Identical Outfalls. If the event triggering corrective action is similar to an outfall that represents other substantially identical outfalls, the Permittee's review must assess the need for corrective action for each outfall represented by the outfall that triggered the review. Any necessary changes to control measures that affect these other outfalls must also be made before the next storm event if possible, or as soon as practicable following that storm event. The SWPPP must be modified to include any additional control measures required pursuant to this paragraph.

I. CONSTRUCTION AUTHORIZATION

- 1. Authorization is hereby granted to construct treatment works and related equipment that collects, stores or treats storm water that may be required by the SWPPP developed pursuant to this permit.
- 2. This Authorization is issued subject to the following condition(s):
 - a. The issuance of this authorization:
 - does not release the Permittee from any liability for damage to persons or property caused by or resulting from the installation, maintenance, or operation of the proposed facilities;
 - ii. does not take into consideration the structural stability of any units or part of this project; and

- iii. does not release the Permittee from compliance with other applicable statutes of the State of Illinois or other applicable local law, regulations, or ordinances.
- b. If any statement or representation is found to be incorrect, this authorization may be revoked and the Permittee thereupon waives all rights thereunder.
- 3. Plans and specifications of all treatment equipment being included as a part of the Storm Water Management Practice shall be included in the SWPPP.
- Any modification of or deviation from the plans and specifications originally submitted with the initial SWPPP requires amendment of the SWPPP.
- 5. Construction activities which result from treatment equipment installation, including clearing, grading, and excavation activities which result in the disturbance of one acre or more of land area, are not covered by this authorization. The Permittee shall contact the Agency regarding any additional required permit(s).

J. MONITORING

- Quarterly Visual Observation of Discharges The requirements and procedures for quarterly visual observations are applicable to all facilities covered under this permit, regardless of the Permittee's sector of industrial activity.
 - a. The Permittee must perform and document a quarterly visual observation of a storm water discharge associated with industrial activity from each outfall. The visual observation must be made during daylight hours. If no storm event resulted in runoff during daylight hours on normal work days from the facility during a monitoring quarter, no visual observation is required for that quarter, provided the permittee documents that no observable runoff occurred. Normal work days do not include weekends or Federal holidays. The Permittee must sign and certify the documentation.
 - b. Visual observation must be made on samples collected within 1 hour of an actual discharge from a storm event equal to or greater than 0.25 inch in 24 hours. If it is not possible to take a sample within the first hour of the discharge, the sample must be collected as soon as practicable after the first hour and the Permittee must explain why it was not possible to take samples within the first hour. In the case of snowmelt, the samples must be taken from an actual discharge from the site. For storm events, samples must be collected from a storm event discharge at least 72 hours from the previous discharge. The 72 hour interval does not apply if the Permittee documents that a less than 72 hour event is representative for local storm events during the sampling period. The observation must document: unnatural color, odor, clarity, floatable solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution if present in the discharge. If visual observations indicate any unnatural color, odor, turbidity, floatable material, oil sheen or other indicators of storm water pollution, the Permittee shall obtain a sample and test for the parameter or the list of pollutants as provided pursuant to Part E.5.C.ii and E.5.d and initiate corrective action in Part H.
 - c. The Permittee must maintain visual observation reports onsite with the SWPPP. Each report must include the observation date and time, inspection personnel, outfall location, nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of unnatural color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.
 - d. The Permittee may exercise a waiver of the visual observation requirement at a facility that is inactive and unstaffed, as long as there are no industrial materials or activities exposed to storm water. If the Permittee exercises this waiver, the Permittee must maintain a certification with the SWPPP stating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to storm water.
 - e. Representative Outfalls If the Permittee's facility has two or more outfalls that are believed to discharge substantially identical effluents, based on similarities of the industrial activities, significant materials, size of drainage areas, and storm water management practices occurring within the drainage areas of the outfalls, the Permittee may conduct visual observation of the discharge at just one of the outfalls and report that the results also apply to the substantially identical outfall(s).
 - f. Visual observation documentation shall be made available to the Agency and general public upon written request.

2. Benchmark Monitoring.

This permit specifies pollutant benchmark concentrations that are applicable to certain sectors/subsectors as specified in Attachment 1. Benchmark monitoring data are primarily for the Permittee's use to determine the overall effectiveness of specific control measures and to assist Permittees in knowing when additional corrective action(s) may be necessary to comply with the discharge limitations in Part F.

- a. The benchmark concentrations are not discharge limitations. However, corrective action is required as the result of a benchmark exceedance pursuant to Part H.
- b. At the Permittee's discretion, more than four samples may be taken during separate runoff events and used to determine the average benchmark parameter concentration for facility discharges.
- c. Applicability of Benchmark Monitoring: The Permittee must monitor for any benchmark parameters specified for the industrial sector(s), both primary industrial activity and any co-located industrial activities, applicable to the discharge. Industry-specific benchmark concentrations are listed in the sector-specific sections of Attachment 1. If a facility is in one of the industrial sectors subject to benchmark concentrations that are hardness-dependent, the Permittee is required to submit representative hardness values of the receiving water. The hardness value shall be submitted with the initial benchmark report.
- d. Samples must be analyzed consistent with 40 CFR Part 136 analytical methods and using test procedures with quantitation limits at or below benchmark values for all benchmark parameters for which sampling is required.
- e. Benchmark Monitoring Schedule Benchmark monitoring must be conducted quarterly for first four full quarters of permit coverage commencing no later than 180 days after the effective date of this permit.
 - Data not exceeding benchmarks After collection of four quarterly samples, if the average of the four monitoring values for any parameter does not exceed the benchmark, monitoring requirements for that parameter for the permit term have been fulfilled;
 - ii. Data exceeding benchmarks After the collection of four quarterly samples, if the average of the four monitoring values for any parameter exceeds the benchmark, the Permittee must, in accordance with Part H, review the selection, design, installation and implementation of the control measures to determine if modifications are necessary to meet the discharge limitations in this permit, and either:
 - A. Make the necessary modifications and continue quarterly monitoring until the Permittee has completed four additional quarters of monitoring for which the average does not exceed the benchmark; or
 - B. Make a determination that no further pollutant reductions are technologically available and economically practicable and achievable in light of best industry practice to meet the technology discharge limitations or are necessary to meet the water-quality-based discharge limitations in Parts F.2 and F.3 of this permit, in which case the Permittee must continue monitoring once per year. The Permittee must also document the rationale for concluding that no further pollutant reductions are achievable, and retain all records related to this documentation with the SWPPP.
 - C. In accordance with Part H, the Permittee must review the control measures and perform any required corrective action immediately (or document why no corrective action is required), without waiting for the full four quarters of monitoring data, if an exceedance of the four quarter average is mathematically certain. If after modifying its control measures and conducting four additional quarters of monitoring, the average still exceeds the benchmark (or if an exceedance of the benchmark by the four quarter average is mathematically certain prior to conducting the full four additional quarters of monitoring), the Permittee must again review its control measures and take one of the two actions above.
 - iii. Natural background pollutant levels Following the first four quarters of benchmark monitoring (or sooner if the exceedance is triggered by less than four quarters of data, see above), if the average concentration of a pollutant exceeds a benchmark value, and the Permittee determines that exceedance of the benchmark is attributable solely to the presence of that pollutant in the natural background, the Permittee is not required to perform corrective action or additional benchmark monitoring provided that:

- The average concentration of the benchmark monitoring results is less than or equal to the concentration of that pollutant in the natural background;
- B. The Permittee document and maintain with the SWPPP, the supporting rationale for concluding that the benchmark exceedances are in fact attributable solely to natural background pollutant levels. The Permittee must include in the rationale any data previously collected by the Permittee or other sources (i.e., literature studies) that describe the level of natural background pollutants in the storm water discharge;
- C. Notify the Agency on the Permittee's final quarterly benchmark monitoring report that the benchmark exceedances are attributable solely to natural background pollutant levels.
- D. Permittees may discontinue monitoring natural background pollutants that occur solely from run-on sources provided the Permittee analyzes the pollutant in the run-on source during the benchmark monitoring period.
- f. Exception for Inactive and Unstaffed Sites The requirement for benchmark monitoring does not apply at a facility that is inactive and unstaffed, provided there are no industrial materials or activities exposed to storm water. To qualify for any monitoring exception, the Permittee must meet the following requirements:
 - i. Maintain a statement with the Permittee's SWPPP stating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to storm water in accordance with the substantive requirements in 40 CFR 122.26(g) and sign and certify the statement in accordance with Attachment H 11.
 - ii. If a Permittee is not qualified for this exception at the time of permit coverage but during the permit term the Permittee becomes qualified because the facility is inactive and unstaffed, and there are no industrial materials or activities that are exposed to storm water, then the Permittee must notify Illinois EPA of this change in the next benchmark monitoring report. A Permittee may discontinue benchmark monitoring once Illinois EPA has been notified, and prepared and signed a certification statement concerning the facility's qualification for this monitoring exception.
- g. Representative Outfalls If the Permittee's facility has two or more outfalls that are believed to discharge substantially identical effluents, based on similarities of the industrial activities, significant materials, size of drainage areas, and storm water management practices occurring within the drainage areas of the outfalls, the Permittee may conduct benchmark monitoring of the discharge at just one of the outfalls and report that the results also apply to the substantially identical outfall(s).

K. REPORTING

- 1. The Permittee shall submit an electronic copy of the annual inspection report to the Agency. The report shall include results of the quarterly benchmark monitoring as required by Part J.2 and the quarterly facility inspections which are required by Part G of this permit. The report shall include, at a minimum, a review and update of the SWPPP. The Permittee shall submit modifications of the requirements of the plan to the Agency with the Annual Report. Permittees have 180 days to update their SWPPP to comply with the new requirements and then submit with the following annual report. The report shall also include documentation of any event (spill, treatment unit malfunction, etc.) which would require an inspection, results of the inspection, and any subsequent corrective maintenance activity. The report shall be completed and signed by the authorized facility employee(s) who conducted the inspection(s). The annual inspection report is considered a public document that shall be available to the public at any reasonable time upon request.
- 2. For new Permittees, the first Annual Report shall contain information gathered during the one year time period beginning with the initial effective date of coverage under this permit and shall be submitted no later than 60 days after this one year period has elapsed. Each subsequent report shall contain the previous year's information and shall be submitted no later than one year after the previous year's report was due.
- 3. Existing Permittees renewing coverage under this permit shall continue to submit the Annual Report no later than 60 days after the original date of effective coverage under a general storm water permit.
- If the facility performs inspections more frequently than required by this permit, the results shall be included as additional information in the Annual Report.

- 5. The Permittee shall retain the annual inspection report on file for at least 3 years. This period may be extended by request of the Illinois EPA at any time.
- 6. Annual inspection reports shall be submitted to one of the following addresses:
 - a. Electronic Annual Reports should be submitted to:

epa.indannualinsp@illinois.gov

b. If electronic submittal is unavailable, reports should be mailed to:

Illinois Environmental Protection Agency Division of Water Pollution Control Compliance Assurance Section #19 1021 North Grand Avenue East Annual Inspection Report P.O. Box 19276 Springfield, Illinois 62794-9276

7. Any Permittee shall notify the owner of any regulated MS4 which receives storm water discharged from the facility that the industrial activity has received coverage of a general ILR00 permit. The Permittee shall submit any SWPPP or any annual inspection to the MS4 upon request by the MS4 owner.

L. TERMINATION OF COVERAGE UNDER THIS PERMIT

Where all storm water discharges associated with industrial activity that have been authorized by this permit are eliminated, the operator of the facility may submit a termination request to the Agency at the address indicated in Part L.5 of this permit. The termination request shall include the name, address, telephone number, location of the facility, permit number, and a description of actions taken to eliminate the storm water discharge or other justification for the request. Coverage under this permit is not terminated until the Agency responds in writing on the termination request. All monitoring, inspections, and reporting, as described in this permit is required until coverage is terminated by the Agency.

- 1. The Agency may require any person authorized by this permit to apply for and/or obtain either an individual NPDES permit or an alternative NPDES general permit. Any interested person may petition the Agency to take action under this paragraph. The Agency may require any owner or operator authorized to discharge under this permit to apply for an individual NPDES permit or alternative general permit only if the owner or operator has been notified in writing that a permit application is required. This notice shall include a brief statement of the reasons for this decision, an application form, a statement setting a deadline for the owner or operator to file the application, and a statement that on the effective date of the individual NPDES permit or the alternative general permit as it applies to the individual Permittee, coverage under this general permit shall automatically terminate. The Agency may grant additional time to submit the application upon request of the applicant. If an owner or operator fails to submit in a timely manner an individual NPDES permit or alternative general application required by the Agency under this paragraph then the applicability of this permit to the individual NPDES permitted is automatically terminated at the end of the day specified for application submittal. The Agency may require an individual NPDES or alternative general permit based on:
 - a. Information received which indicates the receiving water may be of particular biological significance pursuant to 35 III. Adm. Code 302.105(d)(6);
 - b. Whether the receiving waters are identified as impaired pursuant to the Agency's 303(d) listing and the site storm water is a potential contributing source of any parameter identified as a cause of that impairment; or
 - c. Size of industrial site, proximity of site to the receiving stream, inadequate discharge control, discharge characteristics, or applicable water quality standards, etc.
 - d. The Agency may also require monitoring of any storm water discharge from any site to determine whether an individual or alternative general permit is required.
- Any owner or operator authorized by this permit may request to be excluded from the coverage of this permit by applying for an individual or alternative general permit. The owner or operator shall submit an individual application with reasons supporting the request, in accordance with the requirements of 40 CFR 122.28, to the

Agency. The request shall be granted by issuance date of an individual permit or an alternative general permit if the reasons cited by the owner or operator are adequate to support the request.

- 3. When an individual NPDES permit is issued to an owner or operator otherwise subject to this permit, or the owner or operator is approved for coverage under an alternative NPDES general permit, the applicability of this permit to the individual NPDES Permittee is automatically terminated on the issuance date of the individual permit or the date of approval for coverage under the alternative general permit, whichever the case may be. When an individual NPDES permit is denied to an owner or operator otherwise subject to this permit, or the owner or operator is denied coverage under an alternative NPDES general permit, the applicability of this general permit to the individual NPDES Permittee is automatically terminated on the date of such denial, unless otherwise specified by the Agency.
- 4. The Permittee must submit a Notice of Termination (NOT) within 30 days after one or more of the following conditions have been met:
 - a. A change in ownership or operational control at the facility;
 - b. The Permittee has ceased operations at the facility, there are no discharges or no longer will be any discharges of storm water associated with industrial activity from the facility, and necessary sediment and erosion controls have been implemented; or
 - Coverage has been obtained under an individual or alternative general permit for all discharges required to be covered under an NPDES permit.
- 5. NOT submittals can be made to one of the following addresses:
 - a. Electronic NOTs should be submitted to:

epa.indannualinsp@illinois.gov

b. If electronic submittal is unavailable the NOT should be submitted to the follow address:

Illinois Environmental Protection Agency Division of Water Pollution Control Compliance Assurance Section #19 1021 North Grand Avenue East Annual Inspection Report P.O. Box 19276 Springfield, Illinois 62794-9276

6. Standard Condition 15 of Attachment H is not applicable to this General Permit.

M. DEFINITIONS

- 1. <u>Coal pile runoff</u> means the rainfall runoff from or through any coal storage pile.
- 2. <u>Control Measures</u> means any storm water control or other method (including narrative effluent limitations) used to prevent or reduce the discharge of pollutants to waters of the state.
- 3. <u>Discharge point or Outfall</u> means the location where collected and concentrated storm water flows are discharged from the facility.
- 4. <u>Green Infrastructure</u> means wet weather management approaches and technologies that utilize, enhance or mimic the natural hydrologic cycle processes of infiltration, evapotranspiration and reuse. Green infrastructure approaches currently in use include green roofs, trees and tree boxes, rain gardens, vegetated swales, pocket wetlands, infiltration planters, porous and permeable pavements, porous piping systems, dry wells, vegetated median strips, reforestation/revegetation, rain barrels and cisterns and protection and enhancement of riparian buffers and floodplains.
- Industrial activities means any of the 10 categories of industrial activities included in the definition of "storm water discharges associated with industrial activity" as defined in 40 CFR 122.26(b)(14)(i)-(ix) and (xi).
- 6. <u>Land application site</u> means an area where wastes are applied onto or incorporated into the soil surface for treatment or disposal.

- 7. <u>Landfill</u> means an area of land or an excavation in which wastes are placed for permanent disposal, and which is not a land application site, surface impoundment, injection well or waste pile.
- 8. MS4 or MS4 Owner means the owner or operator of a conveyance or system of conveyances for the movement of storm water as defined at 40 CFR § 122.26(b)(8).
- 9. Municipal Separate Storm Sewer is defined at 40 CFR 122.26(b)(8) and means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under Section 208 of the CWA that discharges to waters of the United States; (ii) Designed or used for collecting or conveying storm water; (iii) Which is not a combined sewer; and (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.
- 10. Natural Background Pollutants include those substances that are naturally occurring in soils or ground water. Natural background pollutants do not include legacy pollutants from previous activity of the facility's site, or pollutants in run-on from adjacent sources which are not naturally occurring, such as other industrial sites or roadways.
- 11. <u>Pollution Prevention</u> means any practice which reduces the amount of any hazardous substance, pollutant or contaminant entering any waste stream or otherwise entering the environment prior to recycling, treatment or disposal and reduces the hazards to public health and the environment associated with the release of such substances, pollutants or contaminants.
- 12. Qualified Personnel means those persons who possess the knowledge and skills to assess conditions and activities that could impact storm water quality at the Permittee's facility, and who can also evaluate the effectiveness of control measures.
- 13. Run-on means sources of storm water that drain from land located upslope or upstream from the regulated facility in question.
- 14. Section 313 water priority chemical means a chemical or chemical categories which: 1) Are listed at 40 CFR 372.65 pursuant to Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) (also known as Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986); 2) are present at or above threshold levels at a facility subject to EPCRA Section 313 reporting requirements; and 3) that meet at least one of the following criteria: (i) Are listed in Appendix D of 40 CFR 122 on either Table II (organic priority pollutants), Table III (certain metals, cyanides, and phenols) or Table V (certain toxic pollutants and hazardous substances); (ii) are listed as a hazardous substance pursuant to section 311(b)(2)(A) of the CWA at 40 CFR 116.4; or (iii) are pollutants for which EPA has published acute or chronic water quality criteria.
- 15. <u>Significant materials</u> includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical the facility is required to report pursuant to EPCRA Section 313; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.
- 16. Significant spills includes, but is not limited to: releases of oil or hazardous substances in excess of reportable quantities under section 311 of the Clean Water Act (see 40 CFR 110.6 and CFR 117.21) or section 102 of CERCLA (see 40 CFR 302.4).

Note that additional definitions are included in the permit Standard Conditions, Attachment H.

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Attachment H Standard Conditions

Definitions

Act means the Illinois Environmental Protection Act, 415 ILCS 5 as Amended.

Agency means the Illinois Environmental Protection Agency.

Board means the Illinois Pollution Control Board.

Clean Water Act (formerly referred to as the Federal Water Pollution Control Act) means Pub. L 92-500, as amended. 33 U.S.C. 1251 et seq.

NPDES (National Pollutant Discharge Elimination System) means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 402, 318 and 405 of the Clean Water Act.

USEPA means the United States Environmental Protection Agency.

Daily Discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurements, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

Maximum Daily Discharge Limitation (daily maximum) means the highest allowable daily discharge.

Average Monthly Discharge Limitation (30 day average) means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Discharge Limitation (7 day average) means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Aliquot means a sample of specified volume used to make up a total composite sample.

Grab Sample means an individual sample of at least 100 milliliters collected at a randomly-selected time over a period not exceeding 15 minutes.

24-Hour Composite Sample means a combination of at least 8 sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24-hour period.

8-Hour Composite Sample means a combination of at least 3 sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over an 8-hour period.

Flow Proportional Composite Sample means a combination of sample aliquots of at least 100 milliliters collected at periodic intervals such that either the time interval between each aliquot or the volume of each aliquot is proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot.

- (1) Duty to comply. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or for denial of a permit renewal application. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirements.
- (2) Duty to reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. If the permittee submits a proper application as required by the Agency no later than 180 days prior to the expiration date, this permit shall continue in full force and effect until the final Agency decision on the application has been made.
- (3) Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (4) Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
- (5) Proper operation and maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up, or auxiliary facilities, or similar systems only when necessary to achieve compliance with the conditions of the permit.
- (6) Permit actions. This permit may be modified, revoked and reissued, or terminated for cause by the Agency pursuant to 40 CFR 122.62 and 40 CFR 122.63. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- (7) **Property rights.** This permit does not convey any property rights of any sort, or any exclusive privilege.
- (8) Duty to provide information. The permittee shall furnish to the Agency within a reasonable time, any information which the Agency may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. The permittee shall also furnish to the Agency upon request, copies of records required to be kept by this permit.

- (9) Inspection and entry. The permittee shall allow an authorized representative of the Agency or USEPA (including an authorized contractor acting as a representative of the Agency or USEPA), upon the presentation of credentials and other documents as may be required by law, to:
 - (a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
 - (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit:
 - (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
 - (d) Sample or monitor at reasonable times, for the purpose of assuring permit compliance, or as otherwise authorized by the Act, any substances or parameters at any location.

(10) Monitoring and records.

- (a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- (b) The permittee shall retain records of all monitoring information, including all calibration and maintenance records, and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of this permit, measurement, report or application. Records related to the permittee's sewage sludge use and disposal activities shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503). This period may be extended by request of the Agency or USEPA at any time.
- (c) Records of monitoring information shall include:
 - (1) The date, exact place, and time of sampling or measurements:
 - (2) The individual(s) who performed the sampling or measurements:
 - (3) The date(s) analyses were performed;
 - (4) The individual(s) who performed the analyses:
 - (5) The analytical techniques or methods used; and
 - (6) The results of such analyses.
- (d) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit. Where no test procedure under 40 CFR Part 136 has been approved, the permittee must submit to the Agency a test method for approval. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals to ensure accuracy of measurements.
- (11) Signatory requirement. All applications, reports or information submitted to the Agency shall be signed and certified.
 - (a) Application. All permit applications shall be signed as follows:
 - (1) For a corporation: by a principal executive officer of at least the level of vice president or a person or position having overall responsibility for environmental matters for the corporation:
 - (2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
 - (3) For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official.
 - (b) Reports. All reports required by permits, or other

information requested by the Agency shall be signed by a person described in paragraph (a) or by a duly authorized representative of that person. A person is a duly authorized representative only if:

- The authorization is made in writing by a person described in paragraph (a); and
- (2) The authorization specifies either an individual or a position responsible for the overall operation of the facility, from which the discharge originates, such as a plant manager, superintendent or person of equivalent responsibility; and
- (3) The written authorization is submitted to the Agency.
- (c) Changes of Authorization. If an authorization under (b) is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of (b) must be submitted to the Agency prior to or together with any reports, information, or applications to be signed by an authorized representative.
- (d) Certification. Any person signing a document under paragraph (a) or (b) of this section shall make the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure 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 submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

(12) Reporting requirements.

- (a) Planned changes. The permittee shall give notice to the Agency as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required when:
 - The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source pursuant to 40 CFR 122.29 (b); or
 - (2) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements pursuant to 40 CFR 122.42 (a)(1).
 - (3) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
- (b) Anticipated noncompliance. The permittee shall give advance notice to the Agency of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- (c) **Transfers**. This permit is not transferable to any person except after notice to the Agency.
- (d) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance

- schedule of this permit shall be submitted no later than 14 days following each schedule date.
- (e) Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.
 - Monitoring results must be reported on a Discharge Monitoring Report (DMR).
 - (2) If the permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 CFR 136 or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.
 - (3) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Agency in the permit.
- (f) Twenty-four hour reporting. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24-hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and time; and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The following shall be included as information which must be reported within 24-hours:
 - Any unanticipated bypass which exceeds any effluent limitation in the permit.
 - (2) Any upset which exceeds any effluent limitation in the permit.
 - (3) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Agency in the permit or any pollutant which may endanger health or the environment.
 - The Agency may waive the written report on a caseby-case basis if the oral report has been received within 24-hours.
- (g) Other noncompliance. The permittee shall report all instances of noncompliance not reported under paragraphs (12) (d), (e), or (f), at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (12) (f).
- (h) Other information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, or in any report to the Agency, it shall promptly submit such facts or information.

(13) Bypass.

- (a) Definitions.
 - (1) Bypass means the intentional diversion of waste streams from any portion of a treatment facility.
 - (2) Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- (b) Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient

operation. These bypasses are not subject to the provisions of paragraphs (13)(c) and (13)(d).

- (c) Notice.
 - Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.
 - (2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph (12)(f) (24-hour notice).
- (d) Prohibition of bypass.
 - (1) Bypass is prohibited, and the Agency may take enforcement action against a permittee for bypass, unless:
 - Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (ii) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (iii) The permittee submitted notices as required under paragraph (13)(c).
 - (2) The Agency may approve an anticipated bypass, after considering its adverse effects, if the Agency determines that it will meet the three conditions listed above in paragraph (13)(d)(1).

(14) **Upset**.

- (a) Definition. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- (b) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (14)(c) are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- (c) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - (1) An upset occurred and that the permittee can identify the cause(s) of the upset:
 - (2) The permitted facility was at the time being properly operated; and
 - (3) The permittee submitted notice of the upset as required in paragraph (12)(f)(2) (24-hour notice).
 - (4) The permittee complied with any remedial measures required under paragraph (4).
- (d) Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

- (15) **Transfer of permits**. Permits may be transferred by modification or automatic transfer as described below:
 - (a) Transfers by modification. Except as provided in paragraph (b), a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued pursuant to 40 CFR 122.62 (b) (2), or a minor modification made pursuant to 40 CFR 122.63 (d), to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act.
 - (b) Automatic transfers. As an alternative to transfers under paragraph (a), any NPDES permit may be automatically transferred to a new permittee if:
 - (1) The current permittee notifies the Agency at least 30 days in advance of the proposed transfer date;
 - (2) The notice includes a written agreement between the existing and new permittees containing a specified date for transfer of permit responsibility, coverage and liability between the existing and new permittees; and
 - (3) The Agency does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement.
- (16) All manufacturing, commercial, mining, and silvicultural dischargers must notify the Agency as soon as they know or have reason to believe:
 - (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant identified under Section 307 of the Clean Water Act which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:
 - (1) One hundred micrograms per liter (100 ug/l);
 - (2) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2methyl-4,6 dinitrophenol; and one milligram per liter (1 mg/l) for antimony.
 - (3) Five (5) times the maximum concentration value reported for that pollutant in the NPDES permit application; or
 - (4) The level established by the Agency in this permit.
 - (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the NPDES permit application.
- (17) All Publicly Owned Treatment Works (POTWs) must provide adequate notice to the Agency of the following:
 - (a) Any new introduction of pollutants into that POTW from an indirect discharge which would be subject to Sections 301 or 306 of the Clean Water Act if it were directly discharging those pollutants; and
 - (b) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
 - (c) For purposes of this paragraph, adequate notice shall include information on (i) the quality and quantity of effluent introduced into the POTW, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.
- (18) If the permit is issued to a publicly owned or publicly regulated treatment works, the permittee shall require any industrial user of such treatment works to comply with federal requirements concerning:
 - (a) User charges pursuant to Section 204 (b) of the Clean Water Act, and applicable regulations appearing in 40 CFR 35:

- (b) Toxic pollutant effluent standards and pretreatment standards pursuant to Section 307 of the Clean Water Act; and
- (c) Inspection, monitoring and entry pursuant to Section 308 of the Clean Water Act.
- (19) If an applicable standard or limitation is promulgated under Section 301(b)(2)(C) and (D), 304(b)(2), or 307(a)(2) and that effluent standard or limitation is more stringent than any effluent limitation in the permit, or controls a pollutant not limited in the permit, the permit shall be promptly modified or revoked, and reissued to conform to that effluent standard or limitation.
- (20) Any authorization to construct issued to the permittee pursuant to 35 III. Adm. Code 309.154 is hereby incorporated by reference as a condition of this permit.
- (21) The permittee shall not make any false statement, representation or certification in any application, record, report, plan or other document submitted to the Agency or the USEPA, or required to be maintained under this permit.
- (22) The Clean Water Act provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Clean Water Act is subject to a civil penalty not to exceed \$25,000 per day of such violation. Any person who willfully or negligently violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318 or 405 of the Clean Water Act is subject to a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than one year, or both.
 - Additional penalties for violating these sections of the Clean Water Act are identified in 40 CFR 122.41 (a)(2) and (3).
- (23) The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both.
- (24) The Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.
- (25) Collected screening, slurries, sludges, and other solids shall be disposed of in such a manner as to prevent entry of those wastes (or runoff from the wastes) into waters of the State. The proper authorization for such disposal shall be obtained from the Agency and is incorporated as part hereof by reference.
- (26) In case of conflict between these standard conditions and any other condition(s) included in this permit, the other condition(s) shall govern.
- (27) The permittee shall comply with, in addition to the requirements of the permit, all applicable provisions of 35 Ill. Adm. Code, Subtitle C, Subtitle D, Subtitle E, and all applicable orders of the Board or any court with jurisdiction.
- (28) The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit is held invalid, the remaining provisions of this permit shall continue in full force and effect.

(Rev. 7-9-2010 bah)

APPENDIX D

Quarterly Facility SWPPP Inspection and Visual Observation of Discharge Form

APPENDIX D- Quarterly Facility SWPPP and Visual Inspection Form

Location: AASF	#3, Peoria Airport	Inspector (print name):	Inspection Being	g Performed:
Peoria, IL				
Date:		Signature:		SWPPP Inspection Visual Inspection
			U Quarterly	visual inspection
Time:		Weather:	Dry Weather	er
			☐ Wet Weath	ner
Objectives:	 To identify sources of 	storm water pollution	Key:	Y = Yes
	 To verify BMP implem 			N = No
	 To determine if signif 	icant facility changes require an update to the SWPPP		NA = Not Applicable

SWPPP INSPECTION CHECKLIST

Activity or Area	Sig M	oten gnifi Nater osur	cant	-		s ted and ned?		ew E equir		Ok (pe	serv ondi		Summary Notes
MFTs	Υ	N	NA	Υ	N	NA	Υ	N	NA	Y	N	NA	
Vehicle, Equipment and Aircraft Maintenance	Y	N	NA	Y	N	NA	Υ	N	NA	Y	N	NA	
Washing/Engine Flushing Boom	Y	N	NA	Y	N	NA	Y	N	NA	Y	N	NA	
Hazardous Waste Storage Shed	Y	N	NA	Y	N	NA	Y	N	NA	Y	N	NA	
Chemical Storage Areas	Υ	N	NA	Y	N	NA	Y	N	NA	Υ	N	NA	
Oil/Water Separators	Y	N	NA	Y	N	NA	Υ	N	NA	Y	N	NA	
General Good Housekeeping	Υ	N	NA	Y	N	NA	Y	N	NA	Y	N	NA	
Waste Storage Areas	Y	N	NA	Y	N	NA	Y	N	NA	Υ	N	NA	
Vehicle Fueling	Υ	N	NA	Υ	N	NA	Υ	N	NA	Y	N	NA	
Fuel Delivery and Unloading	Υ	N	NA	Y	N	NA	Y	N	NA	Y	N	NA	

APPENDIX D (Continued)- Quarterly Facility SWPPP and Visual Inspection Form VISUAL INSPECTION CHECKLIST

Date and Tim							Nati	ure of Dis	charge	e (i.e., r	unoff o	or snow	melt):			
Date and Tim	e Storn	n Event	Ende	d:												
							Outfall									
Outfall Number (See Figure 2)	FI	narge ow sent?		o, is th sheei liscolor	n		Turbidity		Floating Solids?			ttled lids?			Fo	oam?
Outfall 1	Y	N	Y	N	NA	Minimal	Moderate	High	Y	N	Y	N	Υ	N	Y	Ν
Outfall 2	Υ	N	Y	N	NA	Minimal	Moderate	High	Y	N	Y	N	Y	Ν	Y	N
The following o	outfalls	could i	not be	evalu	ated du	ring this qu	arter due to the	e followir	ng reas	on:	•	•			•	
Extended d	rought:	Outfo	ılls			N	o storm resultin	ıg in runo	ff durii	ng day	light ho	ours: O	utfalls			
Dangerous v	weathe	er: Out	falls _			0	ther: Outfalls/	Reasons								
Extended fr	eeze:	Outfall	s					_								
Comments:																
					Date of								Pors	onnol	Respo	neible
Potential S	ource/	Descrip	otion		Action			Actio	n				reis		Action	

APPENDIX E

Greater Peoria Sanitary District Approval Letter



GREATER PEORIA SANITARY DISTRICT

August 23, 2019

Aaron Nelson Illinois Army National Guard 1301 North MacArthur Blvd Springfield, IL 62702

Re: Illinois Army National Guard

2323 South Airport Rd Bartonville, IL 61607

CH-47 Helicopter Gas Path Cleaner Wastewater

Dear Mr. Nelson:

The District has reviewed the information you submitted regarding the above mentioned wastewater. It is understood the estimated volume is 12 gallons, 2 times per month.

Since the sample results are within GPSD discharge limits, this wastewater may be discharged to the sanitary sewer. Additionally, the volume of discharge is not considered significant and as such, a Wastewater Discharge Permit is not required.

Should you have any further questions or comments, please contact me at (309) 272-4878.

Sincerely,

Paul H. Keturi

Compliance Coordinator

Paul IX Istu

APPENDIX F

Annual Facility Inspection Report



Illinois Environmental Protection Agency

1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276 • (217) 782-3397

Division of Water Pollution Control ANNUAL FACILITY INSPECTION REPORT

for General Storm Water Discharges Associated with Industrial Site Activities

This fillable form may be completed online, a copy saved locally, printed and signed before it is submitted to the Compliance Assurance Section at the above address. Complete each section of this report. Place a NA in sections that do not apply to your operation.

Report Period:	From:	To:			Permit No, ILR00
		ORMATION: (As it appe	ars on the cu	rrent permit)	
Name:					
Mailing Address	s:				
City:			_		Telephone:
Contact Person	:			nail:	
	(Person respo	nsible for Annual Report)			
FACILITY/SIT	E INFORMA	ATION: (As it appears on	the current p	ermit)	
Facility Name:					Primary SIC Code:
Facility Location	n:				
City:			_ IL Zip: _		County:
RECEIVING W	VATER INFO	ORMATION:			
Storm Sev	wer	Owner of Storm Sewe	r Systems:		
	the State				
ADDITIONAL					
		tivity, such as leaks, spills ats being discharged in sto			rred at this facility during the report period and
					cility that resulted in significant changes to the
Attach informati J.2 of the Permi		g quarterly visual observa	tions of disch	arges and be	nchmark monitoring as found in Part G and Part
		akes a false, fictitious, or fi subsequent offense after (nt, orally or in writing, to the Illinois EPA commits ny. (415 ILCS 5/44(h))
	Owner	Signature			Date:
	Printe	d Name:	-		Title:
EMAIL COMPLI	ETED FORM	TO: epa.indannualinsp@	illinois.gov		
		MENTAL PROTECTION AGE			

WATER POLLUTION CONTROL

COMPLIANCE ASSURANCE SECTION #19 1021 NORTH GRAND AVENUE EAST

POST OFFICE BOX 19276

SPRINGFIELD, ILLINOIS 62794-9276

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in; a civil penalty of not to exceed \$50,000 for the violation and an additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/42) and may also prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center, IL 532 2585

ANNUAL FACILITY INSPECTION REPORT

WPC 691 Rev 2/2019

APPENDIX G

SWPPP Training Record

APPENDIX G SWPPP Training Record

	Type of Training Date of Name of Trainee Initial Refresher Signature of Trainee Signature of Trainer								
Date of Training	Name of Trainee (Please Print)	Initial	Refresher	Signature of Trainee	Signature of Trainer				
Trailing	(Ficase Frint)								

APPENDIX H

Notice of Intent Form



Illinois Environmental Protection Agency

Bureau of Water • 1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276

Division of Water Pollution Control NOTICE OF INTENT (NOI)

for General Permit to Discharge Storm Water Associated with Industrial Activity (Excluding Construction Activity)

This fillable form may be completed online, a copy saved locally, Section at the above address.	printed and signed before it is submitted to the Pern
OWNER/OPERATOR INFORMATION	Permit No. ILR00 5059
Company/Owner Name: Illinois Department of Military Affairs	
Owner Type: (select one) State	
Mailing Address: Camp Lincoln, NGIL-CFM-EV, 1301 N. MacArthur	Blvd., Phone: 217 761-3794
City: Springfield State: II Zip: 62702	2-2317 Fax: 217 761-3790
Contact Person: Jonathan Casebeer	E-mail: jonathan.l.casebeer.nfg@mail.mil
INDUSTRIAL SITE INFORMATION	
Select One: New Permit Renewal Change of	of Information for ILR00 no
Facility Name: AASF #3Peoria	Other NPDES Permit Numbers: no
Facility Address: 2323 South Airport Road City: P	eoria IL Zip: <u>61607-1464</u>
County Peoria Section: 22 Township: 8	Range: 07
Latitude: <u>40</u> <u>39</u> <u>42</u> Longitude: <u>89</u>	4053 4-Digit SIC Code: 9711
(Deg) (Min) (Sec) (Deg)	(Min) (Sec)
Estimated area of industrial activity at your site exposed to storm wat	er: 44 (Size in Acres)
RECEIVING WATER INFORMATION	
Does your storm water discharge directly to: Waters of the State	e or ✓ Storm Sewer
Owner of Storm Sewer System: City of Peoria	
Name of Closest Receiving Water: Kickapoo Creek	
Is receiving water impaired for any pollutant? Yes No	
If Yes Identify Pollutants: Polychlorinated Biphenyls, Mercury, Fecal	Coliform.
Does quantitive data currently exist which describes the concentration	n of pollutants in the storm water discharges?
☐ Yes ✓ No	If Yes provide data or
Will facility discharge any pollutants listed as impairment of the received	ving waters? ☐ Yes 🗸 No an attachment.
Storm Water Pollution Prevention Plan (SWPPP) INFORMA	ATION
Has Storm Water Pollution Prevention Plan been submitted to Agend	cy? ✓ Yes No
Submit SWPPP electronically to: epa.indilr00swppp@illinois.gov	
Provide the following information for the individual responsible for de	veloping, implementing and revising SWPPP:
SWPPP Contact Name: Jonathan Casebeer	
Location of SWPPP for viewing: IL DMA, NGIL-CFM-EV, Camp Line	coln, 1301 N. MacArthur Blvd., Spfld, II
E-mail Address: jonathan.l.casebeer.nfg@mail.mil	Phone: 217 761-3794

ADDITIONAL INFORMATION

ADDITIONAL INI OKNIATION	•		
Attach a list of material handling a products or industrial machinery			mediate products, final products, waste materials, by-
			at your facility not covered by the above SIC codes.
Form 2-F attached Yes	✓ No		
ACTIVITY INFORMATION			
Type a detailed description of inc	dustrial activities:		
Refueling Rotary Wing Aircraft			
Aviation Repair Operations			
Jet Path Engine Cleaning			
Routine Facility Maintenance Op	erations		
Aircraft assigned: 7-CH-47D, 1-9	Shadow UAV		
HISTORIC PRESERVATION	AND ENDANGER	RED SPE	CIES COMPLIANCE
Has industrial facility certified cor	npliance with the fo	llowing sta	ate agencies?
Historic Preservation Agency	✓ Yes	☐ No	Illinois Historic Preservation Agency Review
Endangered Species	✓ Yes	☐ No	Illinois DNR's Ecological Compliance Assessment Tool
A P S o	vivision of Water Pol ttn: Permit Section ost Office Box 1927 pringfield, Illinois 62 r call (217) 782-061 AX: (217) 782-9891	Ilution Coi 76 2794-9276 0	ntrol S
I certify under penalty of law that accordance with a system design submitted. Based on my inquiry of gathering the information, the infollowing lam aware that there are signific imprisonment. In addition, I certificate water pollution prevention plan as knowledge, the storm water whice wastewater, or cooling water. Any person who knowingly makes commits a Class 4 felony. A second	this document and ned to assure that quot the person or personmation submitted ant penalties for sully that the provisions and a monitoring proph is discharged from a false, fictitious, ond or subsequent of	all attachi ualified pe sons who is, to the l omitting fa s of the pe gram plan n this facil	ments were prepared under my direction and supervision in ersonnel properly gather and evaluate the information manage this system, or those persons directly responsible for best of my knowledge and belief, true, accurate, and complete alse information, including the possibility of fine and ermit, including the development and implementation of a storm, will be complied with. I also certify that, to the best of my lity/site does not contain process wastewater, domestic and material statement, orally or in writing, to the Illinois EPA or conviction is a Class 3 felony. (415 ILCS 5/44(h))
Owner Signa Randall Scott	iture:		Date: Facilities Management Officer
Printed Nam	 e:		Title:

Instructions for completing the Notice of Intent (NOI) for Industrial Activity Form

Submit original, electronic or facsimile copies. Facsimile and/or electronic copies should be followed-up with submission of an original signature copy as soon as possible. This fillable form may be completed online, a copy saved locally, printed and signed before it is submitted to:

Illinois Environmental Protection Agency Division of Water Pollution Control Attn: Permit Section Post Office Box 19276 Springfield, Illinois 62794-9276 or call (217) 782-0610 FAX: (217) 782-9891

Or submit electronically to: epa.indilr00swppp@illinois.gov

Reports must be typed or printed legibly and signed. Original signature must be submitted.

Any facility that is not presently covered by the ILR00 Industrial Activity Storm Water Discharge General Permit is considered a new facility.

If this is a modification of your facility information, renewal, etc., please fill in your permit number on the appropriate line.

NOTE: FACILITY LOCATION IS NOT NECESSARILY THE FACILITY MAILING ADDRESS, BUT SHOULD DESCRIBE WHERE THE FACILITY IS LOCATED.

Use the formats in the following examples for correct form completion.

	Example	Format
Section Township	12 12N	1 or 2 numerical digits 1 or 2 numerical digits followed by "N" or "S"
Range	12W	1 or 2 numerical digits followed by "E" or "W"

The Storm Water Pollution Prevention Plan (SWPPP) must be submitted electronically for new facilities prior to the Notice of Intent being considered complete for coverage by the ILR00 General Permit. Submit the SWPPP to: epa.indilr00swppp@illinois.gov

For the Name of Closest Receiving Waters, do not use terms such as ditch or channel. For unnamed tributaries, use terms which include at least a named main tributary such as "UnnamedTributary to Sugar Creek to Sangamon River."

Existing facilities (not new) listed in the general storm water industrial permit under part D Application Requirements, 2. a-n, seeking coverage under this permit must submit a one-time <u>2-F form</u> with the NOI application.

Submit a fee of \$500 prior to the Notice of Intent being considered complete for coverage by the ILR00 General Permit. Please submit check payable to: Illinois EPA at the above address.

APPENDIX I

SWPPP Annual Checklist

No
No

Illinois Army National Guard (ILANG) Storm Water Pollution Prevention Plan (SWPPP) Annual Checklist

If no denote change in SWPPP and appropriate training materials.

	Yes	No
Are all Best Management Practices (BMPs) being followed?		
	3 7	NT.
Do the current BMPs cover the operations that are currently being conducted?	Yes	No
If no, what BMPs need to be changed or updated?		
in no, what bivit's need to be changed of updated.		
BMP Needing Change BMP Needing Updating		
	Yes	No
Are Site-Specific BMPs being followed?		
	Yes	No
Do Site-Specific BMPs need to be changed/updated?		
If yes, which BMPs need changing or updating?		
BMP Needing Change BMP Needing Updating		
	Yes	No
Is the Facility On-Scene Coordinator Current?		

Illinois Army National Guard (ILANG) Storm Water Pollution Prevention Plan (SWPPP) Annual Checklist

	Yes	No
Are there any unauthorized non-storm water discharges to any outfalls?		
	Yes	No
Have any personnel changed on the Storm Water Pollution Prevention Team?		
If Yes, fill in the corresponding table:		
New Personnel New Phone Number		
	Yes	No
Have quarterly inspections been conducted and kept on file?		1,0
		-
Has an annual site inspection been conducted?	Yes	No
Has an annual site hispection been conducted?		
	Yes	No
Has the annual site inspection form been sent to the Illinois EPA and kept on file?		
	Yes	No
Has personnel training been conducted?	1 CS	NO
		•
	Yes	No
Have records been kept on personnel training?		
	Yes	No
Have any changes occurred at the facility that have increased the exposure of pollutants to storm water?		
If yes, the SWPPP needs to be amended		

Illinois Army National Guard (ILANG) Storm Water Pollution Prevention Plan (SWPPP) Annual Checklist

			Yes	No	
Do any of the sources or	other information need	to be changed on Table 1?			
Are the outfalls in Table 2 still current?					
If no, where is the new or					
		1			
New Outfall	Location				
D C.1 '. C'	1, 1 1 10		Yes	No	
Do any of the site figure	es need to be changed?				

Peoria AASF

2323 South Airport Road Peoria, IL 61607

Inquiry Number: 5872123.61

November 15, 2019

The EDR Aerial Photo Decade Package



EDR Aerial Photo Decade Package

11/15/19

Site Name: Client Name:

Peoria AASF AECOM

2323 South Airport Road 12120 Shamrock Plaza Peoria, IL 61607 Omaha, NE 68154 EDR Inquiry # 5872123.61 Contact: Hans Sund



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:

<u>Year</u>	<u>Scale</u>	<u>Details</u>	Source
2017	1"=500'	Flight Year: 2017	USDA/NAIP
2014	1"=500'	Flight Year: 2014	USDA/NAIP
2011	1"=500'	Flight Year: 2011	USDA/NAIP
2007	1"=500'	Flight Year: 2007	USDA/NAIP
2005	1"=500'	Acquisition Date: April 02, 2005	USGS/DOQQ
1998	1"=500'	Flight Date: April 17, 1998	USGS
1995	1"=500'	Flight Date: April 02, 1995	USGS
1986	1"=500'	Flight Date: March 21, 1986	NHAP
1977	1"=500'	Flight Date: May 01, 1977	USGS
1970	1"=500'	Flight Date: June 07, 1970	USGS
1969	1"=500'	Flight Date: April 24, 1969	USGS
1967	1"=500'	Flight Date: August 28, 1967	USGS
1956	1"=500'	Flight Date: April 01, 1956	USGS
1946	1"=500'	Flight Date: June 24, 1946	USGS
1939	1"=500'	Flight Date: July 11, 1939	USDA

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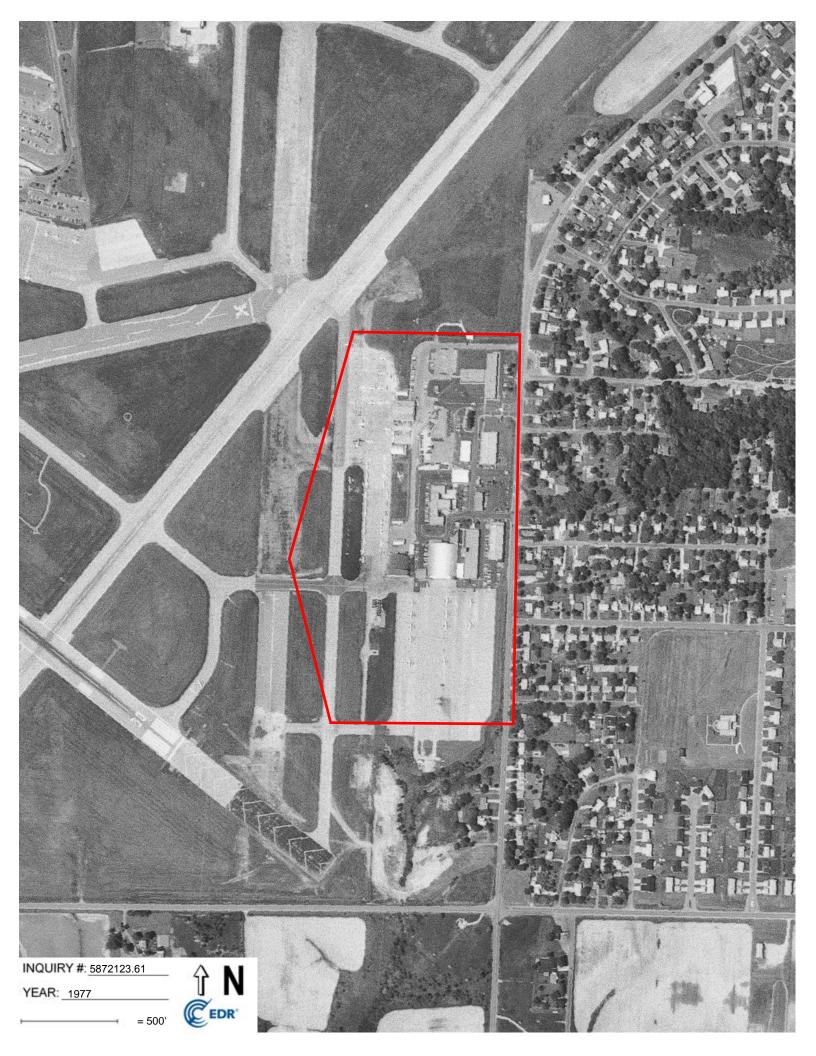






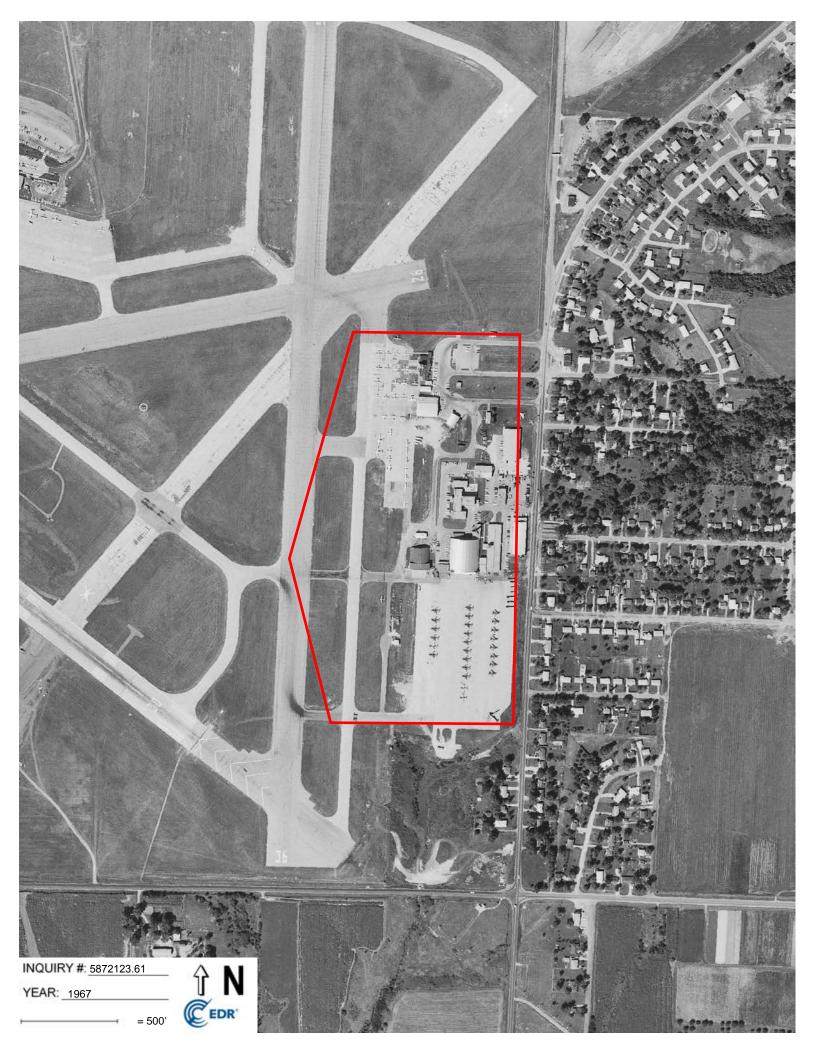


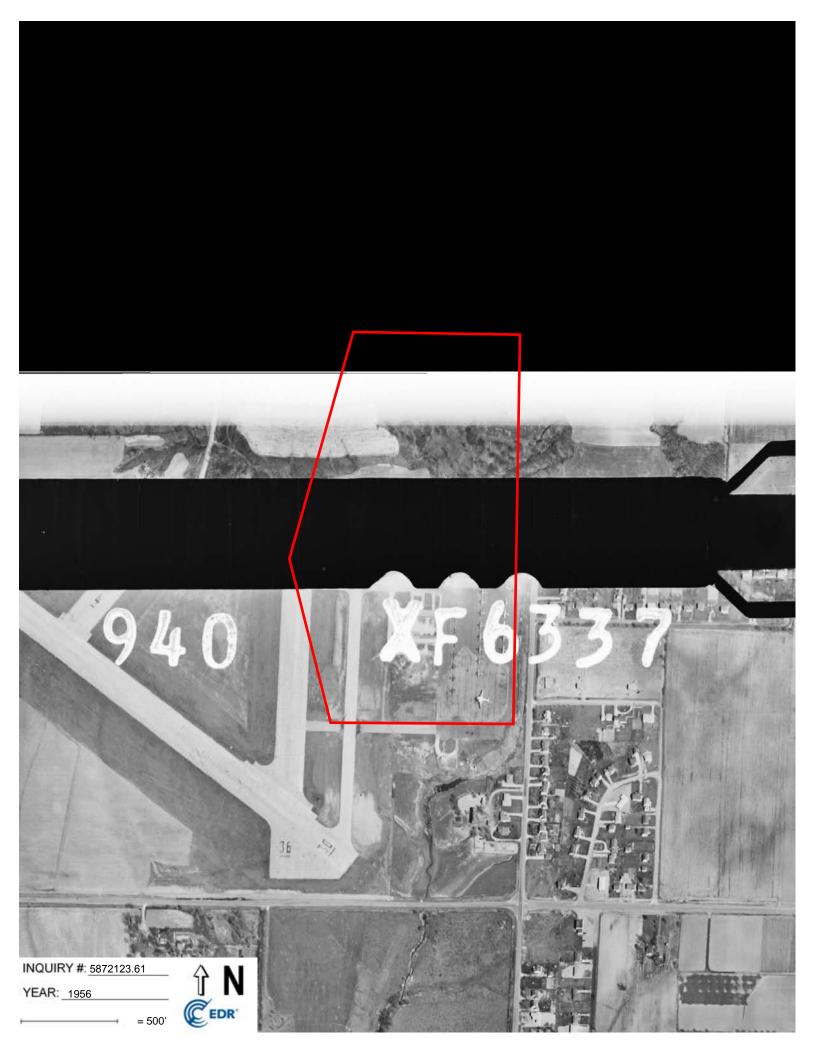
















Peoria AASF 2323 South Airport Road Peoria, IL 61607

Inquiry Number: 5872123.58s

November 18, 2019

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.Please contact EDR at 1-800-352-0050 with any questions or comments.

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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

2323 SOUTH AIRPORT ROAD PEORIA, IL 61607

COORDINATES

Latitude (North): 40.6605020 - 40° 39' 37.80" Longitude (West): 89.6814340 - 89° 40' 53.16"

Universal Tranverse Mercator: Zone 16 UTM X (Meters): 273315.4 UTM Y (Meters): 4504317.0

Elevation: 644 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5681195 PEORIA WEST, IL

Version Date: 2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20150821 Source: USDA

MAPPED SITES SUMMARY

Target Property Address: 2323 SOUTH AIRPORT ROAD PEORIA, IL 61607

Click on Map ID to see full detail.

Click O	ii wap ib to see iuli detali.				
MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	OTTE TO WILL	2323 SOUTH AIRPORT R	SPILLS	ELLVATION	TP
A2	IL ARMY NTL GUARD FM	2323 S AIRPORT RD	BOL		TP
A3		2323 SOUTH AIRPORT R	SPILLS		TP
A4		2323 SOUTH AIRPORT R	SPILLS		TP
A5	182 TACTICAL AIR SUP	2323 S AIRPORT RD	UST		TP
A6	IL ARMY NTL GUARD FM	2323 S AIRPORT RD	BOL		TP
A7		2323 SOUTH AIRPORT R	SPILLS		TP
A8	IL ARMY NTL GUARD FM	2323 S AIRPORT RD	BOL		TP
A9		2323 S. AIRPORT ROAD	SPILLS		TP
A10		BLDG. 103, 2323 S. A	SPILLS		TP
A11		BLDG. 19, 2323 S. Al	SPILLS		TP
A12		2323 SOUTH AIRPORT R	SPILLS		TP
A13	IL ARMY NATIONAL GUA	2323 S. AIRPORT ROAD	TIER 2		TP
A14	IDOMA-ARMY AV. SUP.	2323 S. AIRPORT RD.	SPILLS, BOL, NPDES		TP
A15		2323 SO AIRPORT RD.	SPILLS		TP
A16		2323 SOUTH AIRPORT R	SPILLS		TP
A17		BLDG. 4, 2323 S. AIR	SPILLS		TP
A18		BLDG. 125, 2323 S. A	SPILLS		TP
A19	ILLINOIS AIR NATIONA	2323 SOUTH AIRPORT R	RGA LUST		TP
A20	IDOMA-ARMY AV. SUP.	2323 S. AIRPORT RD.	FINDS, ECHO		TP
A21	ILLINOIS AIR NATIONA	BLDG. 103, 2323 SOUT	LUST		TP
A22	ILLINOIS AIR NATIONA	BLDG. 4, 2323 SOUTH	LUST		TP
A23	IL ARMY NATIONAL GUA	2323 S AIRPORT RD	RCRA-SQG, FINDS, ECHO		TP
A24	DEPARTMENT OF MILITA	2323 SOUTH AIRPORT R	AST		TP
A25	BUILDING #20 & 21	2323 S AIRPORT RD	FINDS		TP
A26	IL ARMY NTL GUARD FM	2323 S AIRPORT RD	FINDS		TP
A27	ILLINOIS AIR NATIONA	BLDG. 2323 SOUTH AIR	LUST		TP
A28	ILLINOIS AIR NATIONA	BLDG. 19, 2323 SOUTH	LUST		TP
A29		2323 S AIRPORT ROAD	SPILLS		TP
A30	ILLINOIS AIR NATIONA	BLDG. 4, 2323 SOUTH	RGA LUST		TP
A31		2323 SOUTH AIRPORT R	SPILLS		TP
A32		2323 SOUTH AIRPORT R	SPILLS		TP
A33	ILLINOIS NATIONAL GU	2323 SOUTH AIRPORT R	RGA LUST		TP
A34	ILLINOIS AIR NATIONA	BLDG. 19, 2323 SOUTH	RGA LUST		TP
A35	ILLINOIS NATIONAL GU	2323 SOUTH AIRPORT R	LUST, SRP, UIC		TP
A36	ILLINOIS AIR NATIONA	BLDG. 2323 SOUTH AIR	RGA LUST		TP
A37	ILLINOIS AIR NATIONA	BLDG. 103, 2323 SOUT	RGA LUST		TP
B38	SPECK, IDA	2176 SOUTH AIRPORT R	LUST	Higher	97, 0.018, NNE
B39	MINIT MART PEORIA #6	2136 S. AIRPORT RD.	UST	Higher	97, 0.018, NNE

MAPPED SITES SUMMARY

Target Property Address: 2323 SOUTH AIRPORT ROAD PEORIA, IL 61607

Click on Map ID to see full detail.

MΑ	AP.			RELATIVE	DIST (ft. & mi.)
ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	ELEVATION	DIRECTION
B40	AIRPORT 66	2136 S AIRPORT RD	UST	Higher	97, 0.018, NNE
B4′	ILLICO INCORPORATED	2136 AIRPORT RD	EDR Hist Auto	Higher	97, 0.018, NNE
B42	ILLICO INDEPENDENT O	2126 SOUTH AIRPORT R	RCRA-SQG, FINDS, ECHO	Higher	114, 0.022, NNE
43	CATERPILLAR INC.	5904 WEST SUTLIFF RD	LUST, BOL	Lower	2077, 0.393, NNW
44	GREATER PEORIA AIRPO	5100 DIRKSEN PKWY.	LUST	Higher	2575, 0.488, WNW

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID		
2323 SOUTH AIRPORT R 2323 SOUTH AIRPORT R PEORIA, IL	SPILLS Database: IEMA SPILLS, Date of Government	N/A ent Version: 07/29/2019		
IL ARMY NTL GUARD FM 2323 S AIRPORT RD PEORIA, IL 61607	BOL Site Id: 170000401054 Inv Num: W1430650145	N/A		
2323 SOUTH AIRPORT R 2323 SOUTH AIRPORT R PEORIA, IL	SPILLS Database: IEMA SPILLS, Date of Government	N/A ent Version: 07/29/2019		
2323 SOUTH AIRPORT R 2323 SOUTH AIRPORT R PEORIA CITY, IL	SPILLS Database: IEMA SPILLS, Date of Government	N/A ent Version: 07/29/2019		
182 TACTICAL AIR SUP 2323 S AIRPORT RD PEORIA, IL 61607	UST Tank Status: Removed Tank Status: Currently in use Tank Status: Moved Status: CLOSED Facility Id: 3001552	N/A		
IL ARMY NTL GUARD FM 2323 S AIRPORT RD PEORIA, IL 61607	BOL Site Id: 170000401054 Inv Num: 143065AZT	N/A		
2323 SOUTH AIRPORT R 2323 SOUTH AIRPORT R PEORIA, IL	SPILLS Database: SPILLS, Date of Government Ve Incident ID: 20011806	N/A rsion: 05/23/2019		
IL ARMY NTL GUARD FM 2323 S AIRPORT RD PEORIA, IL 61607	BOL Site Id: 170000401054 Inv Num: ILR005059	N/A		

2323 S. AIRPORT ROAD **SPILLS** N/A 2323 S. AIRPORT ROAD Database: IEMA SPILLS, Date of Government Version: 07/29/2019 PEORIA, IL BLDG. 103, 2323 S. A **SPILLS** N/A BLDG. 103, 2323 S. A Database: SPILLS, Date of Government Version: 05/23/2019 PEORIA, IL Incident ID: 19961725 BLDG. 19, 2323 S. Al **SPILLS** N/A BLDG. 19, 2323 S. AI Database: SPILLS, Date of Government Version: 05/23/2019 PEORIA, IL Incident ID: 19961722 2323 SOUTH AIRPORT R **SPILLS** N/A 2323 SOUTH AIRPORT R Database: SPILLS, Date of Government Version: 05/23/2019 PEORIA, IL Incident ID: 19961649 TIER 2 IL ARMY NATIONAL GUA N/A 2323 S. AIRPORT ROAD PEORIA, IL 61607 IDOMA-ARMY AV. SUP. **SPILLS** N/A 2323 S. AIRPORT RD. Database: SPILLS, Date of Government Version: 05/23/2019 PEORIA, IL 61607 Incident ID: 19950755 BOL Site Id: 170000401054 Inv Num: 1438080005 **NPDES** Permit Id No: ILR005059 2323 SO AIRPORT RD. N/A 2323 SO AIRPORT RD. Database: IEMA SPILLS, Date of Government Version: 07/29/2019 PEORIA, IL **SPILLS** 2323 SOUTH AIRPORT R N/A 2323 SOUTH AIRPORT R Database: IEMA SPILLS, Date of Government Version: 07/29/2019 PEORIA, IL **SPILLS** BLDG. 4, 2323 S. AIR N/A BLDG. 4, 2323 S. AIR Database: SPILLS, Date of Government Version: 05/23/2019 PEORIA, IL Incident ID: 19961724

BLDG. 125, 2323 S. A **SPILLS** N/A BLDG. 125, 2323 S. A Database: SPILLS, Date of Government Version: 05/23/2019 PEORIA, IL Incident ID: 19961723 ILLINOIS AIR NATIONA **RGA LUST** N/A 2323 SOUTH AIRPORT R Facility ID: 962108 PEORIA, IL Facility ID: 961649 Facility ID: 961804 IDOMA-ARMY AV. SUP. **FINDS** N/A 2323 S. AIRPORT RD. Registry ID:: 110010002102 PEORIA, IL 61607 **ECHO** Registry ID: 110010002102 LUST ILLINOIS AIR NATIONA N/A BLDG. 103, 2323 SOUT NFA/NFR Letter: 2016-02-16 PEORIA, IL 61607 Incident Num: 961725 IL EPA Id: 1438080005 LUST **ILLINOIS AIR NATIONA** N/A BLDG. 4, 2323 SOUTH NFA/NFR Letter: 2010-08-04 PEORIA, IL 61607 Incident Num: 961724 IL EPA Id: 1438080005 IL ARMY NATIONAL GUA RCRA-SQG IL2572825907 2323 S AIRPORT RD EPA ID:: IL2572825907 PEORIA, IL 61607 Registry ID:: 110005808698 Registry ID: 110005808698 **AST** DEPARTMENT OF MILITA N/A 2323 SOUTH AIRPORT R Occupancy Number: 1431722598658 PEORIA, IL 61607 Occupancy Number: PA-059-1486396484139 Occupancy Number: PA-059-1486396635965 **FINDS** N/A **BUILDING #20 & 21** 2323 S AIRPORT RD Registry ID:: 110037154744 PEORIA, IL 61607 IL ARMY NTL GUARD FM **FINDS** N/A 2323 S AIRPORT RD PEORIA, IL 61607

Registry ID:: 110018326373

ILLINOIS AIR NATIONA BLDG. 2323 SOUTH AIR PEORIA, IL 61607	LUST NFA/NFR Letter: 2010-08-04 Incident Num: 961723 IL EPA Id: 1438080005	N/A
ILLINOIS AIR NATIONA BLDG. 19, 2323 SOUTH PEORIA, IL 61607	LUST NFA/NFR Letter: 2010-08-04 Incident Num: 961722 IL EPA Id: 1438080005	N/A
2323 S AIRPORT ROAD 2323 S AIRPORT ROAD PEORIA, IL	SPILLS Database: SPILLS, Date of Government Version: 05/23/2019 Incident ID: 19961945	N/A
ILLINOIS AIR NATIONA BLDG. 4, 2323 SOUTH PEORIA, IL	RGA LUST Facility ID: 961724	N/A
2323 SOUTH AIRPORT R 2323 SOUTH AIRPORT R PEORIA, IL	SPILLS Database: SPILLS, Date of Government Version: 05/23/2019 Incident ID: 19962108	N/A
2323 SOUTH AIRPORT R 2323 SOUTH AIRPORT R PEORIA, IL	SPILLS Database: SPILLS, Date of Government Version: 05/23/2019 Incident ID: 19961804	N/A
ILLINOIS NATIONAL GU 2323 SOUTH AIRPORT R PEORIA, IL	RGA LUST Facility ID: 961945	N/A
ILLINOIS AIR NATIONA BLDG. 19, 2323 SOUTH PEORIA, IL	RGA LUST Facility ID: 961722	N/A
ILLINOIS NATIONAL GU 2323 SOUTH AIRPORT R	LUST	N/A

PEORIA, IL 61607

NFA/NFR Letter: 2010-08-04 Incident Num: 961649 Incident Num: 961804 Incident Num: 961945 Incident Num: 962108 IL EPA Id: 1438080005

IL EPA Id: 1438080005

Facility Id: ILEA555

ILLINOIS AIR NATIONA **RGA LUST** BLDG. 2323 SOUTH AIR Facility ID: 961723

PEORIA, IL

ILLINOIS AIR NATIONA **RGA LUST** BLDG. 103, 2323 SOUT

PEORIA, IL

Facility ID: 961725

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 CERCLIS NFRAP site list

SEMS-ARCHIVE...... Superfund Enterprise Management System Archive

N/A

N/A

Federal RCRA CORRACTS	facilities list
CORRACTS	Corrective Action Report
Federal RCRA non-CORRA	CTS TSD facilities list
RCRA-TSDF	RCRA - Treatment, Storage and Disposal
Federal RCRA generators	list .
	 RCRA - Large Quantity Generators RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)
Federal institutional control	ols / engineering controls registries
US ENG CONTROLS	Land Use Control Information System Engineering Controls Sites List Sites with Institutional Controls
Federal ERNS list	
ERNS	Emergency Response Notification System
State- and tribal - equivale	nt CERCLIS
SSU	State Sites Unit Listing
State and tribal landfill and	l/or solid waste disposal site lists
CCDDLF SPECIAL WASTE	
IL NIPC	Solid Waste Landfill Inventory
State and tribal leaking sto	_
INDIAN LUSTLUST TRUST	Leaking Underground Storage Tanks on Indian Land Underground Storage Tank Fund Payment Priority List
State and tribal registered	storage tank lists

State and tribal institutional control / engineering control registries

FEMA UST...... Underground Storage Tank Listing INDIAN UST...... Underground Storage Tanks on Indian Land

ENG CONTROLS...... Sites with Engineering Controls INST CONTROL...... Institutional Controls

State and tribal voluntary cleanup sites

INDIAN VCP..... Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS...... Municipal Brownfields Redevelopment Grant Program Project Descriptions

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

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

CDL Meth Drug Lab Site Listing
US CDL National Clandestine Laboratory Register

Local Lists of Registered Storage Tanks

TANKS...... CDPH Storage Tanks Listing

Local Land Records

LIENS 2..... CERCLA Lien Information

Records of Emergency Release Reports

HMIRS..... Hazardous Materials Information Reporting System

SPILLS 90...... SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR......... RCRA - Non Generators / No Longer Regulated

FUDS..... Formerly Used Defense Sites 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

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

ICIS...... Integrated Compliance Information System

FTTS......FIFŘA/ TSCA Tracking System - FIFŘA (Federal Insecticide, Fungicide, & Rodenticide

Act)/TSCA (Toxic Substances Control Act)

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 AIRS...... Aerometric Information Retrieval System Facility Subsystem

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

AIRS..... Air Inventory Listing

ASBESTOS..... ASBESTOS

CHICAGO ENV..... Environmental Records Dataset

COAL ASH...... Coal Ash Site Listing DRYCLEANERS...... Illinois Licensed Drycleaners

Financial Assurance Information Listing

HWAR...... Hazard Waste Annual Report
IMPDMENT..... Surface Impoundment Inventory
PIMW...... Potentially Infectious Medical Waste
MINES MRDS..... Mineral Resources Data System

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

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 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 06/24/2019 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ILLICO INDEPENDENT O	2126 SOUTH AIRPORT R	NNE 0 - 1/8 (0.022 mi.)	B42	63
EPA ID:: ILD984828301				

State and tribal leaking storage tank lists

IL EPA Id: 1430655011

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Illinois Environmental Protection Agency's LUST Incident Report.

A review of the LUST list, as provided by EDR, and dated 07/22/2019 has revealed that there are 3 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SPECK, IDA NFA/NFR Letter: 1991-11-08 Incident Num: 900912 IL EPA Id: 1430655219	2176 SOUTH AIRPORT R	NNE 0 - 1/8 (0.018 mi.)	B38	58
GREATER PEORIA AIRPO NFA/NFR Letter: 2004-01-27 Incident Num: 990522 IL EPA Id: 1430655531	5100 DIRKSEN PKWY.	WNW 1/4 - 1/2 (0.488 mi.)	44	67
Lower Elevation	Address	Direction / Distance	Map ID	Page
CATERPILLAR INC. NFA/NFR Letter: 2008-05-08 Incident Num: 950063 Incident Num: 970704	5904 WEST SUTLIFF RD	NNW 1/4 - 1/2 (0.393 mi.)	43	65

State and tribal registered storage tank lists

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 Illinois State Fire Marshal's STC Facility List.

A review of the UST list, as provided by EDR, and dated 07/22/2019 has revealed that there are 2 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page	
MINIT MART PEORIA #6 Tank Status: Currently in use Status: ACTIVE Facility Id: 3034373	2136 S. AIRPORT RD.	NNE 0 - 1/8 (0.018 mi.)	B39	59	
AIRPORT 66 Tank Status: Removed Status: CLOSED Facility Id: 3014469	2136 S AIRPORT RD	NNE 0 - 1/8 (0.018 mi.)	B40	61	

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
ILLICO INCORPORATED	2136 AIRPORT RD	NNE 0 - 1/8 (0.018 mi.)	B41	63

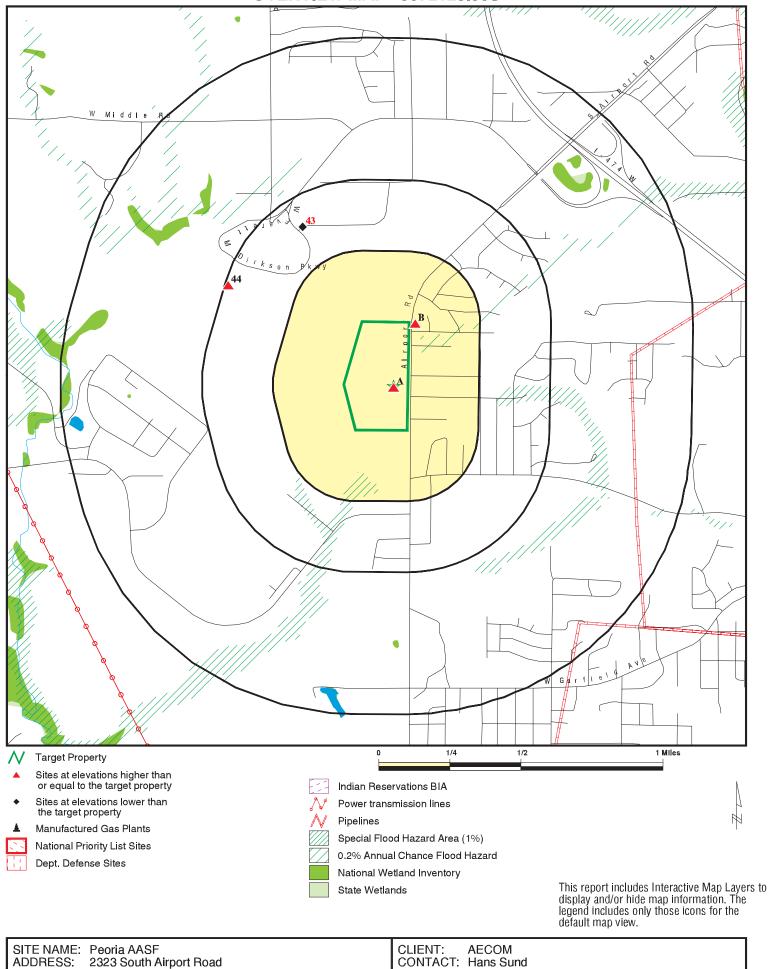
Due to poor or inadequate address information, the following sites were not mapped. Count: 2 records.

 Site Name
 Database(s)

 HERTZ RENT A CAR
 LUST

 PEORIA COUNTY HWY DEPT 89265-AIRPO
 FINDS

OVERVIEW MAP - 5872123.58S



Peoria IL 61607

40.660502 / 89.681434

LAT/LONG:

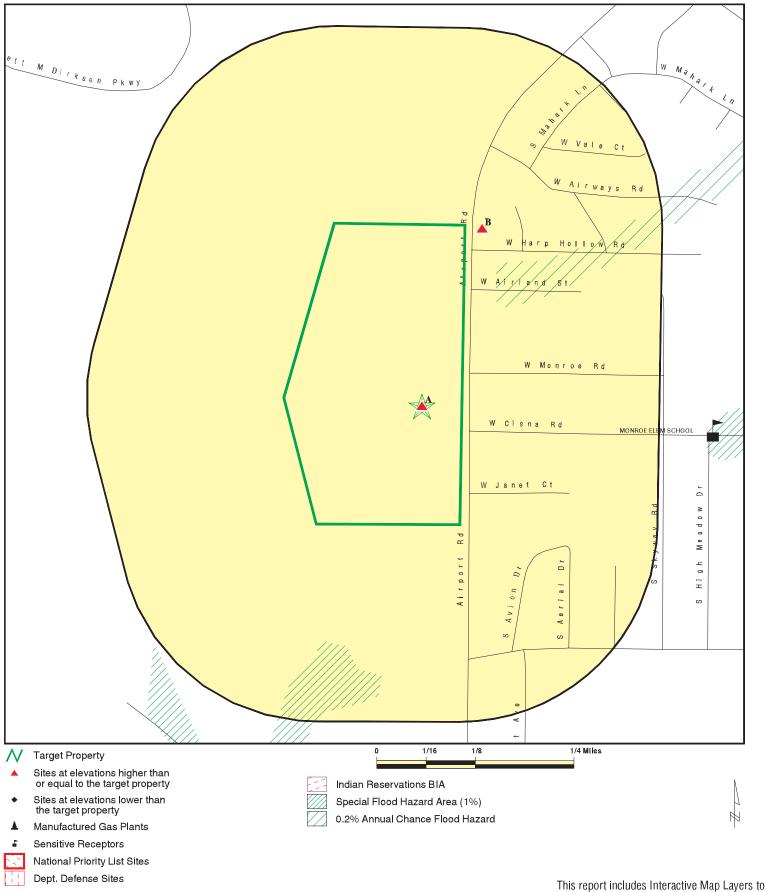
November 18, 2019 9:15 am

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INQUIRY #: 5872123.58s

DATE:

DETAIL MAP - 5872123.58S



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: Peoria AASF ADDRESS: 2323 South Airport Road

LAT/LONG:

Peoria IL 61607

40.660502 / 89.681434

CLIENT: AECOM CONTACT: Hans Sund

INQUIRY #: 5872123.58s DATE: November 18, 2019 9:15 am

Copyright © 2019 EDR, Inc. © 2015 TomTom Rel. 2015.

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 Proposed NPL NPL LIENS	1.000 1.000 1.000		0 0 0	0 0 0	0 0 0	0 0 0	NR NR NR	0 0 0	
Federal Delisted NPL sit	e list								
Delisted NPL	1.000		0	0	0	0	NR	0	
Federal CERCLIS list									
FEDERAL FACILITY SEMS	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0	
Federal CERCLIS NFRA	P site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0	
Federal RCRA CORRAC	TS facilities li	st							
CORRACTS	1.000		0	0	0	0	NR	0	
Federal RCRA non-COR	RACTS TSD fa	acilities list							
RCRA-TSDF	0.500		0	0	0	NR	NR	0	
Federal RCRA generator	rs list								
RCRA-LQG RCRA-SQG RCRA-VSQG	0.250 0.250 0.250	1	0 1 0	0 0 0	NR NR NR	NR NR NR	NR NR NR	0 2 0	
Federal institutional con engineering controls reg									
LUCIS US ENG CONTROLS US INST CONTROL	0.500 0.500 0.500		0 0 0	0 0 0	0 0 0	NR NR NR	NR NR NR	0 0 0	
Federal ERNS list									
ERNS	TP		NR	NR	NR	NR	NR	0	
State- and tribal - equiva	alent CERCLIS	;							
SSU	1.000		0	0	0	0	NR	0	
State and tribal landfill a solid waste disposal site									
SWF/LF CCDD LF SPECIAL WASTE IL NIPC	0.500 0.500 0.500 0.500		0 0 0	0 0 0 0	0 0 0 0	NR NR NR NR	NR NR NR NR	0 0 0	
State and tribal leaking	storage tank li	ists							
LUST	0.500	5	1	0	2	NR	NR	8	

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	<u>> 1</u>	Total Plotted
INDIAN LUST LUST TRUST	0.500 0.500		0	0 0	0 0	NR NR	NR NR	0 0
State and tribal registere	ed storage tal	nk lists						
FEMA UST UST AST INDIAN UST	0.250 0.250 0.250 0.250	1 1	0 2 0 0	0 0 0 0	NR NR NR NR	NR NR NR NR	NR NR NR NR	0 3 1 0
State and tribal institution control / engineering control		es						
ENG CONTROLS INST CONTROL	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0
State and tribal voluntar	y cleanup site	es						
INDIAN VCP SRP	0.500 0.500	1	0	0 0	0	NR NR	NR NR	0 1
State and tribal Brownfie	elds sites							
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMEN	ITAL RECORD	<u>s</u>						
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / S Waste Disposal Sites	Solid							
INDIAN ODI DEBRIS REGION 9 ODI IHS OPEN DUMPS	0.500 0.500 0.500 0.500		0 0 0 0	0 0 0 0	0 0 0 0	NR NR NR NR	NR NR NR NR	0 0 0 0
Local Lists of Hazardous Contaminated Sites	s waste /							
US HIST CDL CDL US CDL	TP TP TP		NR NR NR	NR NR NR	NR NR NR	NR NR NR	NR NR NR	0 0 0
Local Lists of Registered	d Storage Tai	nks						
TANKS	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency I	Release Repo	orts						
HMIRS SPILLS SPILLS 90	TP TP TP	16	NR NR NR	NR NR NR	NR NR NR	NR NR NR	NR NR NR	0 16 0
Other Ascertainable Rec	ords							
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted	
FUDS	1.000		0	0	0	0	NR	0	
DOD	1.000		Ö	Ō	Ō	Ō	NR	Ö	
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0	
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0	
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0	
2020 COR ACTION	0.250		0	0	NR	NR	NR	0	
TSCA TRIS	TP TP		NR	NR	NR NR	NR	NR	0	
SSTS	TP		NR NR	NR NR	NR NR	NR NR	NR NR	0 0	
ROD	1.000		0	0	0	0	NR	0	
RMP	TP		NR	NŘ	NR	NR	NR	ő	
RAATS	TP		NR	NR	NR	NR	NR	Ö	
PRP	TP		NR	NR	NR	NR	NR	0	
PADS	TP		NR	NR	NR	NR	NR	0	
ICIS	TP		NR	NR	NR	NR	NR	0	
FTTS	TP		NR	NR	NR	NR	NR	0	
MLTS COAL ASH DOE	TP TP		NR NR	NR NR	NR NR	NR NR	NR NR	0	
COAL ASH EPA	0.500		0	0	0	NR	NR	0 0	
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0	
RADINFO	TP		NR	NR	NR	NR	NR	Ö	
HIST FTTS	TP		NR	NR	NR	NR	NR	0	
DOT OPS	TP		NR	NR	NR	NR	NR	0	
CONSENT	1.000		0	0	0	0	NR	0	
INDIAN RESERV	1.000		0	0	0	0	NR	0	
FUSRAP UMTRA	1.000		0	0	0	0 NR	NR	0	
LEAD SMELTERS	0.500 TP		0 NR	0 NR	0 NR	NR NR	NR NR	0 0	
US AIRS	TP		NR	NR	NR	NR	NR	0	
US MINES	0.250		0	0	NR	NR	NR	Ö	
ABANDONED MINES	0.250		Ö	Ö	NR	NR	NR	Ō	
FINDS	TP	4	NR	NR	NR	NR	NR	4	
ECHO	TP	2	NR	NR	NR	NR	NR	2	
UXO	1.000		0	0	0	0	NR	0	
DOCKET HWC	TP		NR	NR	NR	NR	NR	0	
FUELS PROGRAM AIRS	0.250 TP		0 NR	0 NR	NR NR	NR NR	NR NR	0 0	
ASBESTOS	TP		NR	NR	NR	NR	NR	0	
BOL	TP	4	NR	NR	NR	NR	NR	4	
CHICAGO ENV	TP		NR	NR	NR	NR	NR	0	
COAL ASH	0.500		0	0	0	NR	NR	0	
DRYCLEANERS	0.250		0	0	NR	NR	NR	0	
Financial Assurance	TP TD		NR	NR	NR	NR	NR	0	
HWAR IMPDMENT	TP 0.500		NR 0	NR 0	NR 0	NR NR	NR NR	0 0	
NPDES	TP	1	NR	NR	NR	NR	NR	1	
PIMW	0.250		0	0	NR	NR	NR	Ö	
TIER 2	TP	1	NR	NR	NR	NR	NR	1	
UIC	TP	1	NR	NR	NR	NR	NR	1	
MINES MRDS	TP		NR	NR	NR	NR	NR	0	
EDR HIGH RISK HISTORICAL RECORDS									
EDR Exclusive Records									
	1 000		0	0	0	^	NID	0	
EDR MGP	1.000		0	0	0	0	NR	0	

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 EDR Hist Cleaner	0.125 0.125		1 0	NR NR	NR NR	NR NR	NR NR	1 0			
EDR RECOVERED GOVERNMENT ARCHIVES Exclusive Recovered Govt. Archives											
RGA HWS RGA LF RGA LUST	TP TP TP	6	NR NR NR	NR NR NR	NR NR NR	NR NR NR	NR NR NR	0 0 6			
- Totals		44	5	0	2	0	0	51			

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Direction Distance

Elevation Site Database(s) EPA ID Number

A1 SPILLS S115745457
Target 2323 SOUTH AIRPORT RD. N/A

Target 2323 SOUTH AIRPORT I Property PEORIA, IL

Site 1 of 37 in cluster A

Actual: IEMA SPILLS: 644 ft. Name:

Name: Not reported

Address: 2323 SOUTH AIRPORT RD.

City,State,Zip: PEORIA, IL
Incident Number: 961649
Incident Report Date: 09/07/1996

Street Address Of Incident Location: 2323 SOUTH AIRPORT RD.

Incident Location City:
Incident Location County:
Incident Location County:
Entered By:
Date Entered:
Data Input Status:
Leaking Underground Storage Tank (Lust)?:

PEORIA
PEORIA
Not reported
CLOSED
Not reported
Not reported

Caller: ROXANNE LASTORIA

Caller Represents: IL ANG Hazmat Incident Type: **LEAK** Date/Time Occurred: Not reported Mile Post: Not reported Section: Not reported Township: Not reported Range: Not reported FIXED FACILITY Area Involved: Media/Medium Into Which Release Occurred: Not reported Temp: Not reported Wind: Not reported

Material Name: FUEL OIL/DIESEL FUEL/JP4 JET FUEL

Type: UNKNOWN
Chris Code: Not reported
CAS#: Not reported
UN/NA #: Not reported
302(A) Extremely Hazardous Substance?: Not reported
Is This A RCRA Hazardous Waste?: Not reported
Is This A RCRA Regulated Facility?: Not reported

Container Type: UNDERGROUND TANK
Container Size: UNDERGROUND TANK

Amount Released: UNKNOWN Rate Of Release/Min: Not reported **Duration Of Release:** Not reported Cause Of Release: UNKNOWN Estimated Spill Extent: Not reported Spill Extent Units: Not reported Date/Time Incident Occurred: Not reported Check If Unknown (Occurrence): Not reported Date/Time Discovered: Not reported Check If Unknown (Discovered): Not reported Where Taken: -0-

On Scene Contact: Not reported

Public Health Risks/Precautions Taken: -0-Number Of People Evacuated: -0-

Assistance Needed From State Agencies:
Containment/Cleanup Actions And Plans:
Responsible Name:
Facility Manager:

Not reported
Not reported
Not reported
Not reported

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

(Continued) S115745457

Facility Manager Phone #: Not reported

2416 SOUTH FALCON BLVD, PEORIA, IL 61607-5023 Street1:

Contacted ESDA?: Not reported ESDA On Scene?: Not reported Specific ESDA Agency Contacted: Not reported Contacted Fire Department?: Not reported Not reported Fire Department On Scene?: Name Of Fire Department Contacted: Not reported Contacted Police Department?: Not reported Police Department On Scene?: Not reported Name Of Police Department Contacted: Not reported Sheriff Police Department?: Not reported Sheriff Department On Scene?: Not reported Name Of Sheriff Department Contacted: Not reported Was An Agency Other Than ESDA: Not reported Fire Police Or Sheriff Contacted?: Not reported Was This Other Agency On Scene?: Not reported Name Of Other Agency Contacted: Not reported Agency Notified Name: Not reported Date/Time Agency Notified: Not reported Narrative: Not reported Follow Up: Not reported

A2 IL ARMY NTL GUARD FMS6 AASF3 BOL S125291310 N/A

Target 2323 S AIRPORT RD **Property PEORIA, IL 61607**

Site 2 of 37 in cluster A

Actual: BOL:

644 ft. Name: IL ARMY NTL GUARD FMS6 AASF3

> Address: 2323 S AIRPORT RD **PEORIA, IL 61607** City, State, Zip: 170000401054 Site Id: Inv Num: W1430650145

Interest Name: Millitary affairs AASF3 Peoria

Interest Type: **BOW** Media Code: WATER Latitude: 40.661180 Longitude: -89.682010

А3 SPILLS S115745612 2323 SOUTH AIRPORT ROAD N/A

Target

Property PEORIA, IL

Actual:

Site 3 of 37 in cluster A

IEMA SPILLS:

644 ft. Name: Not reported

> 2323 SOUTH AIRPORT ROAD Address:

City, State, Zip: PEORIA, IL Incident Number: 961804 Incident Report Date: 10/01/1996

Street Address Of Incident Location: 2323 SOUTH AIRPORT ROAD

Incident Location City: **PEORIA** Incident Location County: **PEORIA**

Distance

Elevation Site Database(s) EPA ID Number

(Continued) S115745612

Entered By: Not reported Date Entered: Not reported Data Input Status: CLOSED Leaking Underground Storage Tank (Lust)?: Not reported

Caller: ROXANNE LASTORIA
Caller Represents: ILLINOIS AIR NATL GUARD

Hazmat Incident Type: **LEAK** Date/Time Occurred: Not reported Mile Post: Not reported Section: Not reported Township: Not reported Not reported Range: FIXED FACILITY Area Involved: Media/Medium Into Which Release Occurred: Not reported Temp: Not reported Not reported Wind: Material Name: **HEATING OIL** Type: **UNKNOWN** Chris Code: Not reported CAS#: Not reported UN/NA #: Not reported Not reported 302(A) Extremely Hazardous Substance?: Not reported Is This A RCRA Hazardous Waste?: Is This A RCRA Regulated Facility?: Not reported

Container Type: UNDERGROUND TANK
Container Size: UNDERGROUND TANK

Amount Released: **UNKNOWN** Rate Of Release/Min: Not reported **Duration Of Release:** Not reported Cause Of Release: HOLE IN TANK Estimated Spill Extent: Not reported Spill Extent Units: Not reported Date/Time Incident Occurred: Not reported Check If Unknown (Occurrence): Not reported Date/Time Discovered: Not reported Not reported Check If Unknown (Discovered): NONE Where Taken: On Scene Contact: Not reported Public Health Risks/Precautions Taken: NONE Number Of People Evacuated: NONE Assistance Needed From State Agencies: Not reported Containment/Cleanup Actions And Plans: Not reported

Responsible Name: ILLINOIS AIR NATIONAL GUARD

Facility Manager: Not reported Facility Manager Phone #: Not reported

Street1: 2416 SOUTH FALCON BLVD, PEORIA,IL 61607 5023

Contacted ESDA?: Not reported ESDA On Scene?: Not reported Specific ESDA Agency Contacted: Not reported Contacted Fire Department?: Not reported Fire Department On Scene?: Not reported Name Of Fire Department Contacted: Not reported Not reported Contacted Police Department?: Police Department On Scene?: Not reported Name Of Police Department Contacted: Not reported Sheriff Police Department?: Not reported Sheriff Department On Scene?: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

(Continued) S115745612

Name Of Sheriff Department Contacted: Not reported Was An Agency Other Than ESDA: Not reported Fire Police Or Sheriff Contacted?: Not reported Was This Other Agency On Scene?: Not reported Name Of Other Agency Contacted: Not reported Agency Notified Name: Not reported Date/Time Agency Notified: Not reported Not reported Narrative: Follow Up: Not reported

A4 SPILLS S115741966
Target 2323 SOUTH AIRPORT ROAD N/A

Target 2323 SOUTH AIRPORT ROAD Property PEORIA CITY, IL

Site 4 of 37 in cluster A

Actual: IEMA SPILLS:

644 ft.

Name: Not reported

Address: 2323 SOUTH AIRPORT ROAD

City,State,Zip: PEORIA CITY, IL

Incident Number: 950755 Incident Report Date: 04/13/1995

Street Address Of Incident Location: 2323 SOUTH AIRPORT ROAD

Incident Location City: PEORIA CITY
Incident Location County: PEORIA
Entered By: Not reported
Date Entered: Not reported
Data Input Status: CLOSED
Leaking Underground Storage Tank (Lust)?: Not reported

Caller: CAPT. ROXANNE LASTORIA
Caller Represents: IL. AIR NATIONAL GUARD

Hazmat Incident Type: SPILL
Date/Time Occurred: Not reported
Mile Post: Not reported
Section: Not reported
Township: Not reported
Range: Not reported

Area Involved: OTHER/PARKING LOT

Media/Medium Into Which Release Occurred: Not reported Temp: Not reported Wind: Not reported

Material Name: DIESEL FUEL & D.P.#4 JET A. FUEL

Not reported

UNKNOWN Type: Chris Code: Not reported CAS#: Not reported UN/NA #: Not reported 302(A) Extremely Hazardous Substance?: Not reported Is This A RCRA Hazardous Waste?: Not reported Is This A RCRA Regulated Facility?: Not reported Container Type: OTHER: UNK Container Size: OTHER: UNK Amount Released: UNK Rate Of Release/Min: Not reported Not reported **Duration Of Release:** Cause Of Release: UNK Not reported Estimated Spill Extent: Spill Extent Units: Not reported

Date/Time Incident Occurred:

Distance

Elevation Site Database(s) EPA ID Number

(Continued) S115741966

Check If Unknown (Occurrence): Not reported Not reported Date/Time Discovered: Check If Unknown (Discovered): Not reported NONE Where Taken: On Scene Contact: Not reported Public Health Risks/Precautions Taken: NONE NONE Number Of People Evacuated: Assistance Needed From State Agencies: Not reported Containment/Cleanup Actions And Plans: Not reported

Responsible Name: IL. AIR NATIONAL GUARD

Facility Manager: Not reported Facility Manager Phone #: Not reported

Street1: 2416 SOUTH FALCOM BLVD., PEORIA, IL 61607/5023 182 AIRLIFT

Contacted ESDA?: Not reported ESDA On Scene?: Not reported Specific ESDA Agency Contacted: Not reported Contacted Fire Department?: Not reported Fire Department On Scene?: Not reported Name Of Fire Department Contacted: Not reported Contacted Police Department?: Not reported Police Department On Scene?: Not reported Not reported Name Of Police Department Contacted: Sheriff Police Department?: Not reported Sheriff Department On Scene?: Not reported

Not reported
Sheriff Police Department?:
Sheriff Police Department?:
Sheriff Department On Scene?:
Not reported
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Not reported
Not reported

Narrative: GROUP ENVIRONMENTAL MANAGEMENT ATTENTION, CAPT. LASTORIA

Follow Up: Not reported

A5 182 TACTICAL AIR SUPPORT GROUP
Target 2323 S AIRPORT RD
Property PEORIA, IL 61607

Site 5 of 37 in cluster A

Actual: UST: 644 ft. Na

Name: 182 TACTICAL AIR SUPPORT GROUP

Address: 2323 S AIRPORT RD

 City:
 PEORIA

 Zip:
 61607

 Facility ID:
 3001552

 Facility Status:
 CLOSED

Facility Type: FEDERAL (MILITARY)

Owner Id: U0000010

Owner Name: 182 Airlift Wing III Air Natl Guard

Owner Address: 2416 S Falcon Blvd Owner City,St,Zip: Peoria, IL 616075023

Tank Number: 1

Tank Status:RemovedTank Capacity:500Tank Substance:Used OilLast Used Date:Not reported

U001145882

N/A

Direction Distance Elevation

Site Database(s) EPA ID Number

182 TACTICAL AIR SUPPORT GROUP (Continued)

U001145882

EDR ID Number

OSFM First Notify Date: 2/25/1986 Red Tag Issue Date: Not reported Install Date: Not reported **Green Tag Decal:** Not reported **Green Tag Issue Date:** Not reported **Green Tag Expire Date:** Not reported Not reported Fee Due: Motor Fuel Permit Inspection Date: Not reported Motor Fuel Permit Expiration Date: Not reported MOTOR FUEL TYPE: Not reported

Pending Nov: N

IEMA: Not reported Equipment Type: Not reported Equipment: Not reported Last Passing Date: Not reported Test Expire Date: Not reported Removed Date: 9/11/1996 Abandoned Date: Not reported Not reported

Tank Number: 10 **Tank Status:** Removed Tank Capacity: 10000 Tank Substance: Heating Oil Last Used Date: 8/31/1994 1/20/1994 OSFM First Notify Date: Red Tag Issue Date: Not reported Install Date: 3/1/1980 Green Tag Decal: Not reported **Green Tag Issue Date:** Not reported Not reported **Green Tag Expire Date:** Fee Due: Not reported Motor Fuel Permit Inspection Date: Not reported Motor Fuel Permit Expiration Date: Not reported MOTOR FUEL TYPE: Not reported

Pending Nov: N

IEMA: Not reported Equipment Type: Not reported Equipment: Not reported Last Passing Date: Not reported Test Expire Date: Not reported Removed Date: 9/6/1996 Abandoned Date: Not reported Not reported

Tank Number: 11 **Tank Status:** Removed Tank Capacity: 2000 Tank Substance: Diesel Fuel 12/1/1994 Last Used Date: **OSFM First Notify Date:** 2/25/1986 Red Tag Issue Date: Not reported Install Date: Not reported **Green Tag Decal:** Not reported **Green Tag Issue Date:** Not reported **Green Tag Expire Date:** Not reported Fee Due: Not reported

Distance Elevation Site

Site Database(s) EPA ID Number

182 TACTICAL AIR SUPPORT GROUP (Continued)

U001145882

EDR ID Number

Motor Fuel Permit Inspection Date:

Motor Fuel Permit Expiration Date:

MOTOR FUEL TYPE:

Not reported

Not reported

Pending Nov:

IEMA:

Rot reported
Equipment Type:

Rot reported
Equipment:

Last Passing Date:

Test Expire Date:

Removed Date:

Abandoned Date:

Not reported
9/6/1996

Not reported
Not reported
Not reported
Not reported

Tank Number: 12

Tank Status: Currently in use

Tank Capacity: Used Oil Tank Substance: Last Used Date: Not reported **OSFM First Notify Date:** 2/25/1986 Red Tag Issue Date: Not reported Install Date: Not reported **Green Tag Decal:** Not reported **Green Tag Issue Date:** Not reported **Green Tag Expire Date:** Not reported Fee Due: Not reported Motor Fuel Permit Inspection Date: Not reported Motor Fuel Permit Expiration Date: Not reported MOTOR FUEL TYPE: Not reported

Pending Nov: N

IEMA: Not reported Equipment Type: Not reported Equipment: Not reported Equipment: Not reported Last Passing Date: Not reported Test Expire Date: Not reported Removed Date: Not reported Abandoned Date: Not reported

Tank Number: 13 Removed Tank Status: Tank Capacity: 4000 Tank Substance: Heating Oil Last Used Date: 9/5/1996 OSFM First Notify Date: 1/20/1994 Red Tag Issue Date: Not reported Install Date: 6/1/1982 **Green Tag Decal:** Not reported **Green Tag Issue Date:** Not reported **Green Tag Expire Date:** Not reported Not reported Fee Due: Motor Fuel Permit Inspection Date: Not reported Motor Fuel Permit Expiration Date: Not reported Not reported MOTOR FUEL TYPE:

Pending Nov: N

IEMA: Not reported Equipment Type: Not reported Equipment: Not reported Not reported

MAP FINDINGS Map ID

Direction Distance Elevation

EDR ID Number Site Database(s) **EPA ID Number**

182 TACTICAL AIR SUPPORT GROUP (Continued)

U001145882

Last Passing Date: Not reported Not reported Test Expire Date: Removed Date: 9/6/1996 Abandoned Date: Not reported

14 Tank Number: **Tank Status:** Removed Tank Capacity: 4000 Tank Substance: Heating Oil 11/14/1996 Last Used Date: 1/20/1994 OSFM First Notify Date: Red Tag Issue Date: Not reported Install Date: 1/1/1979 **Green Tag Decal:** Not reported **Green Tag Issue Date:** Not reported **Green Tag Expire Date:** Not reported Fee Due: Not reported Motor Fuel Permit Inspection Date: Not reported Motor Fuel Permit Expiration Date: Not reported MOTOR FUEL TYPE: Not reported Pending Nov: Ν

Not reported IEMA: **Equipment Type:** Not reported

Equipment: Not reported Last Passing Date: Not reported Test Expire Date: Not reported Removed Date: 11/15/1996 Abandoned Date: Not reported

Tank Number: 15 **Tank Status:** Removed Tank Capacity: 2000 Heating Oil Tank Substance: 1/1/1979 Last Used Date: OSFM First Notify Date: 1/20/1994 Red Tag Issue Date: Not reported Install Date: 1/1/1954 **Green Tag Decal:** Not reported Green Tag Issue Date: Not reported **Green Tag Expire Date:** Not reported Fee Due: Not reported

Motor Fuel Permit Inspection Date: Not reported Motor Fuel Permit Expiration Date: Not reported MOTOR FUEL TYPE: Not reported Pending Nov:

IEMA: Not reported **Equipment Type:** Not reported Not reported Equipment: Last Passing Date: Not reported Test Expire Date: Not reported 11/15/1996 Removed Date: Abandoned Date: Not reported

Tank Number: 16

Direction Distance Elevation

nce EDR ID Number ation Site Database(s) EPA ID Number

182 TACTICAL AIR SUPPORT GROUP (Continued)

U001145882

Tank Status: Removed 3000 Tank Capacity: Tank Substance: Gasoline Last Used Date: 11/1/1995 OSFM First Notify Date: 2/25/1986 Red Tag Issue Date: Not reported Install Date: Not reported **Green Tag Decal:** Not reported Green Tag Issue Date: Not reported **Green Tag Expire Date:** Not reported Fee Due: \$0.00

Motor Fuel Permit Inspection Date:

Motor Fuel Permit Expiration Date:

MOTOR FUEL TYPE:

Not reported

Not reported

Not reported

Pending Nov: N

IEMA: Not reported Equipment Type: Not reported Equipment: Not reported Last Passing Date: Not reported Test Expire Date: Not reported Removed Date: 9/11/1996 Abandoned Date: Not reported Not reported

Tank Number: 17

Tank Status: Currently in use

Tank Capacity: 500
Tank Substance: Oil/\

Tank Substance:

Last Used Date:

OSFM First Notify Date:

Red Tag Issue Date:

Install Date:

Not reported

Not reported

Not reported

Not reported

Green Tag Decal:

Green Tag Issue Date:

Green Tag Expire Date:

Fee Due:

Motor Fuel Permit Inspection Date:

Motor Fuel Permit Expiration Date:

MOTOR FUEL TYPE:

Not reported

Not reported

Not reported

Not reported

Not reported

Pending Nov: N IEMA: No

IEMA: Not reported Equipment Type: Not reported Equipment: Not reported Equipment: Not reported Last Passing Date: Not reported Test Expire Date: Not reported Removed Date: Not reported Abandoned Date: Not reported

Tank Number: 18 **Tank Status:** Moved Tank Capacity: 4000 Heating Oil Tank Substance: Last Used Date: Not reported **OSFM First Notify Date:** 5/6/1994 Red Tag Issue Date: Not reported Install Date: 11/6/1989

MAP FINDINGS Map ID

Direction Distance Elevation

Site Database(s) **EPA ID Number**

182 TACTICAL AIR SUPPORT GROUP (Continued)

U001145882

EDR ID Number

Green Tag Decal: Not reported **Green Tag Issue Date:** Not reported Not reported **Green Tag Expire Date:** Not reported Fee Due: Motor Fuel Permit Inspection Date: Not reported Motor Fuel Permit Expiration Date: Not reported Not reported MOTOR FUEL TYPE:

Pending Nov:

IEMA: Not reported **Equipment Type:** Not reported Not reported Equipment: Last Passing Date: Not reported Test Expire Date: Not reported Removed Date: Not reported Abandoned Date: Not reported

Tank Number: 19 Tank Status: Moved Tank Capacity: 2500 Tank Substance: Heating Oil Last Used Date: Not reported 8/31/1994 OSFM First Notify Date: Red Tag Issue Date: Not reported 7/24/1991 Install Date: **Green Tag Decal:** Not reported **Green Tag Issue Date:** Not reported **Green Tag Expire Date:** Not reported

Fee Due: \$0.00

Motor Fuel Permit Inspection Date: Not reported Motor Fuel Permit Expiration Date: Not reported MOTOR FUEL TYPE: Not reported

Pending Nov:

IEMA: Not reported **Equipment Type:** Not reported Equipment: Not reported Last Passing Date: Not reported Test Expire Date: Not reported Removed Date: Not reported Abandoned Date: Not reported

Tank Number:

Tank Status: Removed Tank Capacity: 25000 Tank Substance: Not reported Last Used Date: 9/22/1992 **OSFM First Notify Date:** 2/25/1986 Red Tag Issue Date: Not reported Install Date: Not reported **Green Tag Decal:** Not reported **Green Tag Issue Date:** Not reported **Green Tag Expire Date:** Not reported Not reported Fee Due: Motor Fuel Permit Inspection Date: Not reported Motor Fuel Permit Expiration Date: Not reported MOTOR FUEL TYPE: Not reported

Direction Distance Elevation

tion Site Database(s) EPA ID Number

182 TACTICAL AIR SUPPORT GROUP (Continued)

U001145882

EDR ID Number

Pending Nov:

IEMA: Not reported Equipment Type: Not reported Equipment: Not reported Equipment: Not reported Last Passing Date: Not reported Test Expire Date: Not reported Removed Date: 10/9/1996 Abandoned Date: Not reported

Tank Number: 20 Tank Status: Moved Tank Capacity: 4000 Tank Substance: Heating Oil Last Used Date: Not reported 8/30/1994 OSFM First Notify Date: Red Tag Issue Date: Not reported Install Date: 11/1/1989 **Green Tag Decal:** Not reported Green Tag Issue Date: Not reported **Green Tag Expire Date:** Not reported Fee Due: Not reported Motor Fuel Permit Inspection Date: Not reported Motor Fuel Permit Expiration Date: Not reported MOTOR FUEL TYPE: Not reported Pending Nov: Ν IEMA: Not reported **Equipment Type:** Not reported Equipment: Not reported Last Passing Date: Not reported Test Expire Date: Not reported Removed Date: Not reported Abandoned Date: Not reported

Tank Number: 21 Tank Status: Moved Tank Capacity: 15000 Tank Substance: Heating Oil Last Used Date: Not reported OSFM First Notify Date: 9/1/1994 Red Tag Issue Date: Not reported Install Date: 5/21/1990 Not reported **Green Tag Decal:** Not reported **Green Tag Issue Date:** Not reported **Green Tag Expire Date:** Fee Due: Not reported Motor Fuel Permit Inspection Date: Not reported Motor Fuel Permit Expiration Date: Not reported MOTOR FUEL TYPE: Not reported Pending Nov: IEMA: Not reported Equipment Type: Not reported Equipment: Not reported Last Passing Date: Not reported Test Expire Date: Not reported Removed Date: Not reported

Direction Distance Elevation

Site Database(s) EPA ID Number

182 TACTICAL AIR SUPPORT GROUP (Continued)

U001145882

EDR ID Number

Abandoned Date: Not reported

Tank Number: 22 Tank Status: Moved Tank Capacity: 4000 Heating Oil Tank Substance: Last Used Date: Not reported OSFM First Notify Date: 8/30/1994 Red Tag Issue Date: Not reported 11/9/1989 Install Date: **Green Tag Decal:** Not reported Green Tag Issue Date: Not reported **Green Tag Expire Date:** Not reported Fee Due: Not reported Motor Fuel Permit Inspection Date: Not reported Motor Fuel Permit Expiration Date: Not reported MOTOR FUEL TYPE: Not reported

Pending Nov: N

IEMA: Not reported Equipment Type: Not reported Equipment: Not reported Equipment: Not reported Last Passing Date: Not reported Test Expire Date: Not reported Removed Date: Not reported Abandoned Date: Not reported

Tank Number: 23 Tank Status: Moved 2500 Tank Capacity: Tank Substance: Heating Oil Last Used Date: Not reported **OSFM First Notify Date:** 9/1/1994 Red Tag Issue Date: Not reported Install Date: 6/1/1992 **Green Tag Decal:** Not reported **Green Tag Issue Date:** Not reported **Green Tag Expire Date:** Not reported Fee Due: Not reported Motor Fuel Permit Inspection Date: Not reported Motor Fuel Permit Expiration Date: Not reported

Pending Nov: N

MOTOR FUEL TYPE:

IEMA:

Requipment Type:

Requipment:

Last Passing Date:

Test Expire Date:

Removed Date:

Abandoned Date:

Not reported

Tank Number: 3
Tank Status: Removed
Tank Capacity: 25000
Tank Substance: Not reported

Direction Distance Elevation

Site Database(s) EPA ID Number

182 TACTICAL AIR SUPPORT GROUP (Continued)

U001145882

EDR ID Number

Last Used Date: 9/22/1992 OSFM First Notify Date: 2/25/1986 Red Tag Issue Date: Not reported Install Date: Not reported Green Tag Decal: Not reported **Green Tag Issue Date:** Not reported Not reported **Green Tag Expire Date:** Fee Due: Not reported Motor Fuel Permit Inspection Date: Not reported Motor Fuel Permit Expiration Date: Not reported MOTOR FUEL TYPE: Not reported

Pending Nov: N

IEMA: Not reported Equipment Type: Not reported Equipment: Not reported Equipment: Not reported Last Passing Date: Not reported Test Expire Date: Not reported Removed Date: 10/9/1996 Abandoned Date: Not reported

Tank Number: 4

Tank Status: Removed Tank Capacity: 25000 Tank Substance: Not reported 9/22/1992 Last Used Date: OSFM First Notify Date: 2/25/1986 Red Tag Issue Date: Not reported Install Date: Not reported **Green Tag Decal:** Not reported Not reported Green Tag Issue Date: **Green Tag Expire Date:** Not reported Fee Due: Not reported Motor Fuel Permit Inspection Date: Not reported Motor Fuel Permit Expiration Date: Not reported Not reported MOTOR FUEL TYPE:

Pending Nov: N

IEMA: Not reported Equipment Type: Not reported Equipment: Not reported Last Passing Date: Not reported Test Expire Date: Not reported Removed Date: Not reported Not reported Not reported Not reported Not reported Not reported Not reported Not reported

Tank Number: Tank Status: Removed Tank Capacity: 12000 Not reported Tank Substance: 9/22/1992 Last Used Date: **OSFM First Notify Date:** 2/25/1986 Not reported Red Tag Issue Date: Install Date: Not reported **Green Tag Decal:** Not reported Green Tag Issue Date: Not reported **Green Tag Expire Date:** Not reported

Direction
Distance
Elevation

on Site Database(s) EPA ID Number

182 TACTICAL AIR SUPPORT GROUP (Continued)

U001145882

EDR ID Number

Fee Due:

Motor Fuel Permit Inspection Date:

Motor Fuel Permit Expiration Date:

MOTOR FUEL TYPE:

Pending Nov:

Not reported

Not reported

Not reported

Not reported

Not reported

Not reported

IEMA: Not reported Equipment Type: Not reported Equipment: Not reported Last Passing Date: Not reported Test Expire Date: Not reported Removed Date: 10/8/1996 Abandoned Date: Not reported Not reported Not reported Not reported Not reported Not reported Not reported

Tank Number: Tank Status: Removed Tank Capacity: 12000 Tank Substance: Not reported Last Used Date: 9/22/1992 OSFM First Notify Date: 2/25/1986 Red Tag Issue Date: Not reported Install Date: Not reported **Green Tag Decal:** Not reported **Green Tag Issue Date:** Not reported Not reported **Green Tag Expire Date:** Fee Due: Not reported Motor Fuel Permit Inspection Date: Not reported Motor Fuel Permit Expiration Date: Not reported MOTOR FUEL TYPE: Not reported

Pending Nov: N

Tank Number:

IEMA: Not reported Equipment Type: Not reported Equipment: Not reported Equipment: Not reported Last Passing Date: Not reported Test Expire Date: Not reported Removed Date: 10/7/1996 Abandoned Date: Not reported

Tank Status: Removed 12000 Tank Capacity: Tank Substance: Not reported 9/22/1992 Last Used Date: **OSFM First Notify Date:** 2/25/1986 Red Tag Issue Date: Not reported Install Date: Not reported **Green Tag Decal:** Not reported Green Tag Issue Date: Not reported Not reported **Green Tag Expire Date:** Fee Due: Not reported Motor Fuel Permit Inspection Date: Not reported

Motor Fuel Permit Expiration Date: Not reported MOTOR FUEL TYPE: Not reported

Pending Nov: N
IEMA: Not reported
Equipment Type: Not reported

Direction Distance Elevation

tion Site Database(s) EPA ID Number

182 TACTICAL AIR SUPPORT GROUP (Continued)

U001145882

EDR ID Number

Equipment: Not reported Last Passing Date: Not reported Test Expire Date: Not reported Removed Date: 10/7/1996 Abandoned Date: Not reported

Tank Number: 8 **Tank Status:** Removed Tank Capacity: 500 Tank Substance: Used Oil Last Used Date: 4/1/1992 2/25/1986 **OSFM First Notify Date:** Red Tag Issue Date: Not reported Install Date: Not reported **Green Tag Decal:** Not reported **Green Tag Issue Date:** Not reported **Green Tag Expire Date:** Not reported Fee Due: Not reported Motor Fuel Permit Inspection Date: Not reported Motor Fuel Permit Expiration Date: Not reported MOTOR FUEL TYPE: Not reported Pending Nov: Ν

IEMA: Not reported Equipment Type: Not reported Equipment: Not reported Equipment: Not reported Last Passing Date: Not reported Test Expire Date: Not reported Removed Date: 9/6/1996 Abandoned Date: Not reported

Tank Number: **Tank Status:** Removed 1100 Tank Capacity: Heating Oil Tank Substance: Last Used Date: 1/1/1985 **OSFM First Notify Date:** 1/20/1994 Red Tag Issue Date: Not reported 1/1/1961 Install Date: **Green Tag Decal:** Not reported Green Tag Issue Date: Not reported **Green Tag Expire Date:** Not reported Not reported Fee Due: Not reported Motor Fuel Permit Inspection Date: Motor Fuel Permit Expiration Date: Not reported MOTOR FUEL TYPE: Not reported Pending Nov:

IEMA: Not reported Equipment Type: Not reported Equipment: Not reported Equipment: Not reported Last Passing Date: Not reported Test Expire Date: Not reported Removed Date: 10/1/1996 Abandoned Date: Not reported

Direction Distance

Distance Elevation Site EDR ID Number Database(s) EPA ID Number

A6 IL ARMY NTL GUARD FMS6 AASF3 BOL S125272885
Target 2323 S AIRPORT RD N/A

Target 2323 S AIRPORT RD Property PEORIA, IL 61607

Site 6 of 37 in cluster A

Actual: 644 ft.

BOL:

Name: IL ARMY NTL GUARD FMS6 AASF3

Address: 2323 S AIRPORT RD
City,State,Zip: PEORIA, IL 61607
Site Id: 170000401054
Inv Num: 143065AZT
Interest Name: Hangar Interior Ofcs
Interest Type: ASBESTOS/NESHAP

Media Code: AIR
Latitude: 40.661580
Longitude: -89.680570

Name: IL ARMY NTL GUARD FMS6 AASF3

Address: 2323 S AIRPORT RD
City,State,Zip: PEORIA, IL 61607
Site Id: 170000401054
Inv Num: 143065AZT

Interest Name: IL Army Ntl Guard FMS6 AASF3

Interest Type: BOA
Media Code: AIR
Latitude: 40.661180
Longitude: -89.682010

Name: IL ARMY NTL GUARD FMS6 AASF3

Address: 2323 S AIRPORT RD
City,State,Zip: PEORIA, IL 61607
Site Id: 170000401054
Inv Num: 143065AZT

Interest Name: IL Army Ntl Guard FMS6 AASF3 - Boiler & Piping

Interest Type: ASBESTOS/NESHAP

Media Code: AIR
Latitude: 40.658978
Longitude: -89.682186

A7 SPILLS S111910542
Target 2323 SOUTH AIRPORT ROAD N/A

Property PEORIA, IL

Site 7 of 37 in cluster A

Actual: 644 ft.

SPILLS:

 Incident ID:
 20011806

 Incident Date:
 10/30/2001

 Date Received:
 10/30/2001

Lust Ind: No

Facility Address: 2323 SOUTH AIRPORT ROAD

Facility City: PEORIA

PRP Name: ILLINOIS ARMY NATIONAL GUARD

AC: Not reported

Source Table: dbo_OCIN_INCIDENTCUR

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

A8 IL ARMY NTL GUARD FMS6 AASF3 BOL S125282413 **Target**

2323 S AIRPORT RD N/A

PEORIA, IL 61607 Property

Site 8 of 37 in cluster A

BOL: Actual: 644 ft.

IL ARMY NTL GUARD FMS6 AASF3 Name:

Address: 2323 S AIRPORT RD City,State,Zip: **PEORIA. IL 61607** Site Id: 170000401054 Inv Num: ILR005059

Interest Name: Idoma-Army Av. Sup. Fac.-#3

NPDES Interest Type: Media Code: WATER Latitude: 40.661580 Longitude: -89.680570

Α9 SPILLS S115757977

2323 S. AIRPORT ROAD **Target** N/A

Property PEORIA, IL

Site 9 of 37 in cluster A

Actual: IEMA SPILLS: 644 ft.

Name: Not reported

Address: 2323 S. AIRPORT ROAD

City,State,Zip: PEORIA, IL Incident Number: H 2001 1806 Incident Report Date: 10/30/2001

Street Address Of Incident Location: 2323 S. AIRPORT ROAD

Incident Location City: **PEORIA** Incident Location County: **PEORIA** Entered By: Not reported Date Entered: Not reported Data Input Status: CLOSED Leaking Underground Storage Tank (Lust)?: Not reported Not reported Caller Represents: Not reported

LEAK OR SPILL, WATER INVOLVMENT (STORM DRAIN) Hazmat Incident Type:

Not reported

Date/Time Occurred: Not reported Mile Post: Not reported Section: Not reported Township: Not reported Range: Not reported FIXED FACILITY Area Involved: Media/Medium Into Which Release Occurred: Not reported Temp: Not reported Wind: **UNK UNK** Material Name: JP8 FUEL Type: LIQUID Chris Code: Not reported CAS#: Not reported UN/NA #: Not reported 302(A) Extremely Hazardous Substance?: Not reported

Is This A RCRA Regulated Facility?: Not reported MOBILE FUEL TANKER Container Type:

Container Size: 2,500 GAL Amount Released: 63 GALS, EST.

Is This A RCRA Hazardous Waste?:

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

(Continued) S115757977

Rate Of Release/Min: N/A

Duration Of Release: Not reported

Cause Of Release: 1301 N. MacArthur BLVD., SPRINGFIELD., IL. 62702 Estimated Spill Extent: CONTAINED WITHIN SECONDARY CONTAINMENT

Spill Extent Units: Not reported Date/Time Incident Occurred: Not reported Not reported Check If Unknown (Occurrence): Not reported Date/Time Discovered: Check If Unknown (Discovered): Not reported Where Taken: Not reported JOHN CYCOTTE On Scene Contact:

Public Health Risks/Precautions Taken: NONE Number Of People Evacuated: NONE Assistance Needed From State Agencies: NONE

SECONDARY CONTAINMENT HELD MOST OF THE SPILL. SOCKS WERE PLACED INS Containment/Cleanup Actions And Plans:

OF THE STORM DRAIN AND SOME WERE ALSO PLACE AT

Responsible Name: #3

Facility Manager: Not reported Facility Manager Phone #: Not reported

1301 N. MacArthur BLVD., SPRINGFIELD., IL. 62702 Street1:

Contacted ESDA?: Not reported ESDA On Scene?: Not reported Specific ESDA Agency Contacted: Not reported Contacted Fire Department?: YES

YES Fire Department On Scene?: Name Of Fire Department Contacted: SAME Contacted Police Department?: Not reported Police Department On Scene?: Not reported Name Of Police Department Contacted: Not reported Sheriff Police Department?: Not reported Sheriff Department On Scene?: Not reported Name Of Sheriff Department Contacted: Not reported Was An Agency Other Than ESDA: Not reported Fire Police Or Sheriff Contacted?: Not reported Not reported Was This Other Agency On Scene?: Name Of Other Agency Contacted: Not reported Agency Notified Name: Not reported Date/Time Agency Notified: Not reported

Narrative: IEPA, OSFM, REG 6

Follow Up: Not reported

SPILLS S111897023 A10 N/A

BLDG. 103, 2323 S. AIRPORT ROAD **Target Property** PEORIA, IL

Site 10 of 37 in cluster A

SPILLS: Actual: 644 ft.

Incident ID: 19961725 Incident Date: Not reported Date Received: 09/18/1996 Lust Ind: Yes

Facility Address: BLDG. 103, 2323 S. AIRPORT ROAD

Facility City: **PEORIA**

PRP Name: IL AIR NATIONAL GUARD

AC: Not reported

dbo_OCIN_INCIDENTCUR Source Table:

Direction Distance

Elevation Site Database(s) **EPA ID Number**

A11 SPILLS S111897020 **Target** N/A

BLDG. 19, 2323 S. AIRPORT ROAD

Property PEORIA, IL

Site 11 of 37 in cluster A

SPILLS: Actual: 644 ft.

19961722 Incident ID: Incident Date: Not reported 09/18/1996 Date Received: Lust Ind: Yes

Facility Address: BLDG. 19, 2323 S. AIRPORT ROAD

Facility City: **PEORIA**

PRP Name: IL AIR NATIONAL GUARD

AC: Not reported

Source Table: dbo_OCIN_INCIDENTCUR

A12 SPILLS S111896947 N/A

Target 2323 SOUTH AIRPORT ROAD

Property PEORIA, IL

Site 12 of 37 in cluster A

SPILLS: Actual: 644 ft.

19961649 Incident ID: Incident Date: 09/06/1996 Date Received: 09/07/1996 Lust Ind: Yes

Facility Address: 2323 SOUTH AIRPORT ROAD

Facility City: **PEORIA** PRP Name: IL ANG AC: Not reported

Source Table: dbo_OCIN_INCIDENTCUR

A13 IL ARMY NATIONAL GUARD, PEORIA AVIATION FACILITY TIER 2 S110153322

Target 2323 S. AIRPORT ROAD **Property PEORIA, IL 61607**

Site 13 of 37 in cluster A

Actual: TIER 2:

644 ft. Year: 2018

> Corporate Name: IL Army National Guard, Peoria Aviation Facility

Latitude: 40.6661 -89.6801 Longitude:

Fire Dept: Greater Peoria Airport Fire Department

LEPC: Peoria

Owner: Illinois Army National Guard

Owner Phone: 2177613735 1301 N. MacArthur Owner Street: Owner City/State/ZipCode: Springfield, IL 62702-Mailing Name: IL Army National Guard Mailing Street: 1301 N MacArthur Blvd.

Mailing City/State/ZipCode: Springfield, IL 62702-Chemical Name: JP8 FUEL CAS Number: 109864

Chemical EHS: No **Chemical Contents:** Pure, Liquid, N/A

EDR ID Number

Direction Distance

Elevation Site Database(s) **EPA ID Number**

IL ARMY NATIONAL GUARD, PEORIA AVIATION FACILITY (Continued)

S110153322

EDR ID Number

Chemical Health Hazards: Fire, Immediate, Delayed,

50,000-74,999 Chemical Max Daily Amount(pounds): Chemical Avg Daily Amount(pounds): 25,000-49,999 Max Daily Range: Not reported

Year: 2017

Corporate Name: IL Army National Guard, Peoria Aviation Facility

Latitude: 40.6661 -89.6801 Longitude:

Fire Dept: Greater Peoria Airport Fire Department

LEPC: Peoria

Illinois Army National Guard Owner:

Owner Phone: 2177613735 Owner Street: 1301 N. MacArthur Owner City/State/ZipCode: Springfield, IL 62702-Mailing Name: IL Army National Guard Mailing Street: 1301 N MacArthur Blvd. Mailing City/State/ZipCode: Springfield, IL 62702-

Chemical Name: JP8 FUEL 109864 CAS Number: Chemical EHS: No

Chemical Contents: Pure, Liquid,

Fire, Immediate, Delayed, Chemical Health Hazards:

Chemical Max Daily Amount(pounds): 50,000-74,999 Chemical Avg Daily Amount(pounds): 25,000-49,999 Max Daily Range: Not reported

Year:

Corporate Name: IL Army National Guard, Peoria Aviation Facility

40.6661 Latitude: -89.6801 Longitude:

Fire Dept: Greater Peoria Airport Fire Department

LEPC: Peoria

Owner: Illinois Army National Guard

Owner Phone: 2177613735 1301 N. MacArthur Owner Street: Owner City/State/ZipCode: Springfield, IL 62702-Mailing Name: IL Army National Guard Mailing Street: 1301 N MacArthur Blvd. Mailing City/State/ZipCode: Springfield, IL 62702-

JP8 FUEL Chemical Name: CAS Number: 109864 Chemical EHS: No **Chemical Contents:** Pure, Liquid,

Fire, Immediate, Delayed, Chemical Health Hazards:

50,000-74,999 Chemical Max Daily Amount(pounds): Chemical Avg Daily Amount(pounds): 25,000-49,999 Max Daily Range: Not reported

2015 Year:

Corporate Name: IL Army National Guard, Peoria Aviation Facility

Latitude: 40.6661 -89.6801 Longitude:

Fire Dept: Greater Peoria Airport Fire Department

LEPC: Peoria

Illinois Army National Guard Owner:

Owner Phone: 2177613735

Direction Distance

Elevation Site Database(s) EPA ID Number

IL ARMY NATIONAL GUARD, PEORIA AVIATION FACILITY (Continued)

S110153322

EDR ID Number

Owner Street:

Owner City/State/ZipCode:

Mailing Name:

Mailing Street:

Mailing City/State/ZipCode:

Springfield, IL 62702IL Army National Guard
1301 N MacArthur Blvd.

Mailing City/State/ZipCode:

Springfield, IL 62702

Chemical Name: JP8 FUEL
CAS Number: 109864
Chemical EHS: No
Chemical Contents: Pure, Liquid,

Chemical Health Hazards: Fire, Immediate, Delayed,

Chemical Max Daily Amount(pounds): 50,000-74,999
Chemical Avg Daily Amount(pounds): 25,000-49,999
Max Daily Range: Not reported

Year: 2014

Corporate Name: IL Army National Guard, Peoria Aviation Facility

Latitude: 40.6661
Longitude: -89.6801
Fire Dept: Not reported
LEPC: Peoria

Owner: Illinois Army National Guard

Owner Phone: 2177613592
Owner Street: 1301 N. MacArthur
Owner City/State/ZipCode: Springfield, IL 62702
Mailing Name: IL Army National Guard
Mailing Street: 1301 N MacArthur Blvd.

Mailing City/State/ZipCode: Springfield, IL 62702

Chemical Name:

CAS Number:

Chemical EHS:

Chemical Contents:

Chemical Health Hazards:

Chemical Max Daily Amount(pounds):

Chemical Avg Daily Amount(pounds):

Chemical Avg Daily Amount(pounds):

Chemical Avg Daily Amount(pounds):

Chemical Avg Daily Amount(pounds):

Chemical Avg Daily Amount(pounds):

Chemical Avg Daily Amount(pounds):

Chemical Avg Daily Amount(pounds):

Chemical Avg Daily Amount(pounds):

Max Daily Range: Not reported

Year: 2013

Corporate Name: IL Army National Guard, Peoria Aviation Facility

Latitude: Not reported Longitude: Not reported

Fire Dept: Greater Peoria Airport Fire Department

LEPC: Peoria

Owner: Illinois Army National Guard

Owner Phone: 2177613592
Owner Street: 1301 N. MacArthur
Owner City/State/ZipCode: Springfield, IL 62702
Mailing Name: IL Army National Guard
Mailing Street: 1301 N MacArthur Blvd.
Mailing City/State/ZipCode: Springfield, IL 62702

Chemical Name: JP8 FUEL
CAS Number: 109864
Chemical EHS: No
Chemical Contents: Pure, Liquid,

Chemical Health Hazards: Fire, Immediate, Delayed, Chemical Max Daily Amount(pounds): 50,000,000-99,999,999 Chemical Avg Daily Amount(pounds): 10,000,000-49,999,999

Max Daily Range: Not reported

Distance
Elevation Site Database(s)

IL ARMY NATIONAL GUARD, PEORIA AVIATION FACILITY (Continued)

S110153322

EDR ID Number

EPA ID Number

Year: 2011

Corporate Name: IL Army National Guard, Peoria Aviation Facility Latitude: Not reported

Not reported Longitude: Fire Dept: Not reported LEPC: Not reported Owner: Not reported Not reported Owner Phone: Owner Street: Not reported Owner City/State/ZipCode: Not reported Mailing Name: Not reported Mailing Street: Not reported Mailing City/State/ZipCode: Not reported Chemical Name: JP8 Fuel CAS Number: 109-86-4 Chemical EHS: Not reported **Chemical Contents:** Not reported Chemical Health Hazards: Not reported Chemical Max Daily Amount(pounds): Not reported Chemical Avg Daily Amount(pounds): Not reported Max Daily Range: Not reported

Year: 2011

Corporate Name: IL Army National Guard, Peoria Aviation Facility

Latitude: Not reported Longitude: Not reported Fire Dept: Not reported LEPC: Not reported Owner: Not reported Not reported Owner Phone: Owner Street: Not reported Owner City/State/ZipCode: Not reported Mailing Name: Not reported Mailing Street: Not reported Mailing City/State/ZipCode: Not reported Chemical Name: JP8 FUEL CAS Number: 109-86-4 Chemical EHS: Not reported **Chemical Contents:** Not reported Chemical Health Hazards: Not reported Chemical Max Daily Amount(pounds): Not reported Chemical Avg Daily Amount(pounds): Not reported Max Daily Range: Not reported

Year: 2011

Corporate Name: IL Army National Guard, Peoria Aviation Facility

Latitude: Not reported Longitude: Not reported Fire Dept: Not reported LEPC: Not reported Owner: Not reported Owner Phone: Not reported Owner Street: Not reported Owner City/State/ZipCode: Not reported Not reported Mailing Name: Mailing Street: Not reported Mailing City/State/ZipCode: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

IL ARMY NATIONAL GUARD, PEORIA AVIATION FACILITY (Continued)

S110153322

EDR ID Number

Chemical Name: JP8 FUEL CAS Number: 109864 Chemical EHS: Not reported **Chemical Contents:** Not reported Chemical Health Hazards: Not reported Not reported Chemical Max Daily Amount(pounds): Chemical Avg Daily Amount(pounds): Not reported Max Daily Range: Not reported

Year: 2010

Corporate Name: IL Army National Guard, Peoria Aviation Facility

Latitude: 40.666080000000001 Longitude: -89.680130000000005

Fire Dept: Not reported LEPC: Not reported Owner: Not reported Not reported Owner Phone: Owner Street: Not reported Owner City/State/ZipCode: Not reported Mailing Name: Not reported Mailing Street: Not reported Mailing City/State/ZipCode: Not reported Chemical Name: JP8 FUEL CAS Number: 109864 Chemical EHS: Not reported **Chemical Contents:** Not reported Chemical Health Hazards: Not reported Chemical Max Daily Amount(pounds): Not reported Chemical Avg Daily Amount(pounds): Not reported 10,000-99,9999 Max Daily Range:

Year: 2009

Corporate Name: IL Army National Guard, Peoria Aviation Facility

Latitude: 40.666080000000001 Longitude: -89.680130000000005

Fire Dept: Not reported LEPC: Not reported Owner: Not reported Owner Phone: Not reported Owner Street: Not reported Owner City/State/ZipCode: Not reported Mailing Name: Not reported Mailing Street: Not reported Mailing City/State/ZipCode: Not reported Chemical Name: JP8 FUEL CAS Number: 109864 Chemical EHS: Not reported **Chemical Contents:** Not reported Chemical Health Hazards: Not reported Chemical Max Daily Amount(pounds): Not reported Chemical Avg Daily Amount(pounds): Not reported Max Daily Range: 10,000 - 99,999

Year: 2008

Corporate Name: IL Army National Guard, Peoria Aviation Facility

Latitude: 40.666080000000001 Longitude: -89.68013000000005

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

IL ARMY NATIONAL GUARD, PEORIA AVIATION FACILITY (Continued)

S110153322

Fire Dept: Not reported LEPC: Not reported Owner: Not reported Owner Phone: Not reported Owner Street: Not reported Owner City/State/ZipCode: Not reported Mailing Name: Not reported Mailing Street: Not reported Mailing City/State/ZipCode: Not reported Chemical Name: JP8 FUEL 109864 CAS Number: Not reported Chemical EHS: **Chemical Contents:** Not reported Chemical Health Hazards: Not reported Chemical Max Daily Amount(pounds): Not reported Chemical Avg Daily Amount(pounds): Not reported 10,000 - 99,999 Max Daily Range:

A14 IDOMA-ARMY AV. SUP. FAC.-#3 **Target** 2323 S. AIRPORT RD. **Property PEORIA, IL 61607**

SPILLS S111893456 **BOL** N/A

NPDES

Site 14 of 37 in cluster A

Actual: 644 ft.

SPILLS:

Incident ID: 19950755 Incident Date: Not reported Date Received: 04/14/1995

Lust Ind: No

Facility Address: 2323 S AIRPORT RD

Facility City: **PEORIA**

PRP Name: ILL AIR NATIONAL GUARD

AC: Not reported

Source Table: dbo_OCIN_INCIDENTCUR

BOL:

IL ARMY NTL GUARD FMS6 AASF3 Name:

Address: 2323 S AIRPORT RD City,State,Zip: **PEORIA, IL 61607** Site Id: 170000401054 Inv Num: 1438080005

Interest Name: IL Army Ntl Guard FMS6 AASF3

Interest Type: **BOL** Media Code: LAND Latitude: 40.658978 Longitude: -89.682186

IL ARMY NTL GUARD FMS6 AASF3 Name:

2323 S AIRPORT RD Address: City,State,Zip: **PEORIA, IL 61607** Site Id: 170000401054 Inv Num: 1438080005

Interest Name: IL Army Ntl Guard FMS6 AASF3

FFU Interest Type: Media Code: LAND Latitude: 40.661900 Longitude: -89.680340

Direction Distance

Elevation Site Database(s) EPA ID Number

IDOMA-ARMY AV. SUP. FAC.-#3 (Continued)

S111893456

EDR ID Number

Name: IL ARMY NTL GUARD FMS6 AASF3

Address: 2323 S AIRPORT RD
City,State,Zip: PEORIA, IL 61607
Site Id: 170000401054
Inv Num: 1438080005

Interest Name: IL Army Ntl Guard FMS6 AASF3

Interest Type: LUST
Media Code: LAND
Latitude: 40.661900
Longitude: -89.680340

Name: IL ARMY NTL GUARD FMS6 AASF3

Address: 2323 S AIRPORT RD
City,State,Zip: PEORIA, IL 61607
Site Id: 170000401054
Inv Num: 1438080005

Interest Name: IL Army Ntl Guard FMS6 AASF3

Interest Type: RCRA
Media Code: LAND
Latitude: 40.661900
Longitude: -89.680340

Name: IL ARMY NTL GUARD FMS6 AASF3

Address: 2323 S AIRPORT RD
City,State,Zip: PEORIA, IL 61607
Site Id: 170000401054
Inv Num: 1438080005

Interest Name: IL Army Ntl Guard FMS6 AASF3

Interest Type: SOLID WASTE
Media Code: LAND
Latitude: 40.658978
Longitude: -89.682186

Name: IL ARMY NTL GUARD FMS6 AASF3

Address: 2323 S AIRPORT RD
City,State,Zip: PEORIA, IL 61607
Site Id: 170000401054
Inv Num: 1438080005

Interest Name: IL Army Ntl Guard FMS6 AASF3

Interest Type: VSRU
Media Code: LAND
Latitude: 40.658978
Longitude: -89.682186

NPDES:

State Facility Id: Not reported
Permit Id No: ILR005059
Date Permit Issued: 05/01/2009
Eacility Receiving Water: LAMARSH CR

Facility Receiving Water: LAMARSH CREEK Effective Date: 05/01/2009

Expiration Date: 04/30/2014
Current Major/Minor: Minor
State Region: 03

State Water Body: Not reported Perm Feature Id: Not reported

DMR Cognization Official: IL DEPT. OF MILITARY AFFAIRS

DMR Cognization Official Telephone:217-785-7967

Direction Distance

Elevation Site Database(s) EPA ID Number

IDOMA-ARMY AV. SUP. FAC.-#3 (Continued)

S111893456

EDR ID Number

Latitude: Not reported Longitude: Not reported

Facility Type Description: Privately Owned Facility

A15 SPILLS S115745753

N/A

Target 2323 SO AIRPORT RD. Property PEORIA, IL

Site 15 of 37 in cluster A

Actual: IEMA SPILLS: 644 ft. Name:

Name: Not reported

Address: 2323 SO AIRPORT RD.

City,State,Zip: PEORIA, IL Incident Number: 961945 Incident Report Date: 10/21/1996

Street Address Of Incident Location: 2323 SO AIRPORT RD.

Incident Location City:
Incident Location County:
Incident Location County:
Entered By:
Date Entered:
Data Input Status:
Leaking Underground Storage Tank (Lust)?:

PEORIA
PEORIA
Not reported
CLOSED
Not reported

Caller: ROXANNE ALSTORIA
Caller Represents: ILLINOIS NAT'L GUARD

Hazmat Incident Type: LEAK Date/Time Occurred: Not reported Mile Post: Not reported Section: Not reported Township: Not reported Range: Not reported Area Involved: FIXED FACILITY Media/Medium Into Which Release Occurred: Not reported Not reported Temp: Wind: Not reported Material Name: **HEATING OIL** Type: UNKNOWN Chris Code: Not reported Not reported CAS#: Not reported UN/NA #: 302(A) Extremely Hazardous Substance?: Not reported Is This A RCRA Hazardous Waste?: Not reported

Is This A RCRA Regulated Facility?:

Container Type:

Container Size:

Not reported

UNDERGROUND TANK

UNDERGROUND TANK

Amount Released: UNKNOWN Rate Of Release/Min: Not reported Not reported **Duration Of Release:** Cause Of Release: **UNKNOWN** Estimated Spill Extent: Not reported Spill Extent Units: Not reported Date/Time Incident Occurred: Not reported Check If Unknown (Occurrence): Not reported Date/Time Discovered: Not reported Check If Unknown (Discovered): Not reported

Where Taken: -0-

On Scene Contact: Not reported Public Health Risks/Precautions Taken: NONE

Direction Distance

Elevation Site Database(s) **EPA ID Number**

(Continued) S115745753

Number Of People Evacuated: -0-

Assistance Needed From State Agencies: Not reported Containment/Cleanup Actions And Plans: Not reported

ILLINOIS NAT'L GUARD Responsible Name:

Facility Manager: Not reported Facility Manager Phone #: Not reported

2416 S. FALCON BLVD., PEORIA, IL 61607-5023 Street1:

Contacted ESDA?: Not reported ESDA On Scene?: Not reported Specific ESDA Agency Contacted: Not reported Contacted Fire Department?: Not reported Fire Department On Scene?: Not reported Name Of Fire Department Contacted: Not reported Contacted Police Department?: Not reported Police Department On Scene?: Not reported Name Of Police Department Contacted: Not reported Sheriff Police Department?: Not reported Sheriff Department On Scene?: Not reported Name Of Sheriff Department Contacted: Not reported Was An Agency Other Than ESDA: Not reported Fire Police Or Sheriff Contacted?: Not reported Not reported Was This Other Agency On Scene?: Not reported Name Of Other Agency Contacted: Agency Notified Name: Not reported Date/Time Agency Notified: Not reported Narrative: Not reported Follow Up: Not reported

SPILLS S115745916

Target 2323 SOUTH AIRPORT ROAD PEORIA, IL

Property

A16

Site 16 of 37 in cluster A

IEMA SPILLS: Actual:

644 ft. Name: Not reported

Address: 2323 SOUTH AIRPORT ROAD

City, State, Zip: PEORIA, IL Incident Number: 962108 Incident Report Date: 11/12/1996

Street Address Of Incident Location: 2323 SOUTH AIRPORT ROAD

Incident Location City: **PEORIA** Incident Location County: **PEORIA** Entered By: Not reported Date Entered: Not reported Data Input Status: **CLOSED** Leaking Underground Storage Tank (Lust)?: Not reported

Caller: **ROXANNE LASTORIA** ILLINOIS AIR NATIONAL GRD Caller Represents:

Hazmat Incident Type: **LEAK** Date/Time Occurred: Not reported Mile Post: Not reported Section: Not reported Township: Not reported Range: Not reported

OTHER/PARKING LOT @BLDG 3 Area Involved:

Media/Medium Into Which Release Occurred: Not reported Temp: Not reported

N/A

EDR ID Number

MAP FINDINGS Map ID Direction

Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

(Continued) S115745916

Wind: Not reported HEATING OIL Material Name: UNKNOWN Type: Chris Code: Not reported CAS#: Not reported Not reported UN/NA #: Not reported 302(A) Extremely Hazardous Substance?: Is This A RCRA Hazardous Waste?: Not reported Is This A RCRA Regulated Facility?: Not reported

UNDERGROUND TANK Container Type: UNDERGROUND TANK Container Size:

Amount Released: **UNKNOWN** Rate Of Release/Min: Not reported **Duration Of Release:** Not reported

Cause Of Release: HOLE IN 2000 GAL TANK

Estimated Spill Extent: Not reported Spill Extent Units: Not reported Date/Time Incident Occurred: Not reported Check If Unknown (Occurrence): Not reported Date/Time Discovered: Not reported Check If Unknown (Discovered): Not reported Where Taken: -0-Not reported On Scene Contact: Public Health Risks/Precautions Taken: NONE Number Of People Evacuated: -0-

Assistance Needed From State Agencies: Not reported Containment/Cleanup Actions And Plans: Not reported

Responsible Name: ILLINOIS AIR NATIONAL GUARD

Facility Manager: Not reported Facility Manager Phone #: Not reported

2416 SOUTH FALCON BLVD, PEORIA,IL 61607-5023 Street1: Contacted ESDA?: Not reported

ESDA On Scene?: Not reported Specific ESDA Agency Contacted: Not reported Contacted Fire Department?: Not reported Fire Department On Scene?: Not reported Name Of Fire Department Contacted: Not reported Contacted Police Department?: Not reported Police Department On Scene?: Not reported Name Of Police Department Contacted: Not reported Not reported Sheriff Police Department?: Sheriff Department On Scene?: Not reported Name Of Sheriff Department Contacted: Not reported Not reported Was An Agency Other Than ESDA: Fire Police Or Sheriff Contacted?: Not reported Was This Other Agency On Scene?: Not reported Name Of Other Agency Contacted: Not reported Agency Notified Name: Not reported Date/Time Agency Notified: Not reported Not reported Narrative: Follow Up: Not reported

Direction Distance

EDR ID Number Elevation **EPA ID Number** Site Database(s)

A17 SPILLS S111897022 N/A

Target BLDG. 4, 2323 S. AIRPORT ROAD

Property PEORIA, IL

Site 17 of 37 in cluster A

Actual: 644 ft.

SPILLS: Incident ID: 19961724 Incident Date:

Not reported Date Received: 09/18/1996 Yes

Lust Ind:

Facility Address: BLDG. 4, 2323 S. AIRPORT ROAD

Facility City: **PEORIA**

PRP Name: IL AIR NATIONAL GUARD

AC: Not reported

Source Table: dbo_OCIN_INCIDENTCUR

A18 SPILLS S111897021 N/A

Target BLDG. 125, 2323 S. AIRPORT ROAD

Property PEORIA, IL

Site 18 of 37 in cluster A

Actual: 644 ft.

SPILLS:

Incident ID: 19961723 Incident Date: Not reported Date Received: 09/18/1996 Lust Ind: Yes

Facility Address: BLDG. 125, 2323 S. AIRPORT ROAD

Facility City: **PEORIA**

PRP Name: IL AIR NATIONAL GUARD

AC: Not reported

Source Table: dbo_OCIN_INCIDENTCUR

S115508589 A19 **ILLINOIS AIR NATIONAL GUARD RGA LUST Target** 2323 SOUTH AIRPORT RD. N/A

Property PEORIA, IL

Site 19 of 37 in cluster A

Actual: RGA LUST:

644 ft. 2012 ILLINOIS AIR NATIONAL GUARD 2323 SOUTH AIRPORT RD. ILLINOIS AIR NATIONAL GUARD 2323 SOUTH AIRPORT RD. 2012 2012 ILLINOIS AIR NATIONAL GUARD 2323 SOUTH AIRPORT RD.

> 2011 ILLINOIS AIR NATIONAL GUARD 2323 SOUTH AIRPORT RD. 2011 ILLINOIS AIR NATIONAL GUARD 2323 SOUTH AIRPORT RD. 2011 ILLINOIS AIR NATIONAL GUARD 2323 SOUTH AIRPORT RD. 2010 ILLINOIS AIR NATIONAL GUARD 2323 SOUTH AIRPORT RD. 2010 ILLINOIS AIR NATIONAL GUARD 2323 SOUTH AIRPORT RD. 2010 ILLINOIS AIR NATIONAL GUARD 2323 SOUTH AIRPORT RD. 2009 ILLINOIS AIR NATIONAL GUARD 2323 SOUTH AIRPORT RD. 2009 ILLINOIS AIR NATIONAL GUARD 2323 SOUTH AIRPORT RD. ILLINOIS AIR NATIONAL GUARD 2009 2323 SOUTH AIRPORT RD. 2008 ILLINOIS AIR NATIONAL GUARD 2323 SOUTH AIRPORT RD. ILLINOIS AIR NATIONAL GUARD 2008 2323 SOUTH AIRPORT RD. 2008 ILLINOIS AIR NATIONAL GUARD 2323 SOUTH AIRPORT RD. 2007 ILLINOIS AIR NATIONAL GUARD 2323 SOUTH AIRPORT RD.

2007 ILLINOIS AIR NATIONAL GUARD 2323 SOUTH AIRPORT RD.

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ILLINOIS AIR NATIONAL GUARD (Continued)

S115508589

FINDS

ECHO

1005569135

N/A

2007	ILLINOIS AIR NATIONAL GUARD	2323 SOUTH AIRPORT RD.
2006	ILLINOIS AIR NATIONAL GUARD	2323 SOUTH AIRPORT RD.
2006	ILLINOIS AIR NATIONAL GUARD	2323 SOUTH AIRPORT RD.
2006	ILLINOIS AIR NATIONAL GUARD	2323 SOUTH AIRPORT RD.
2005	ILLINOIS AIR NATIONAL GUARD	2323 SOUTH AIRPORT RD.
2005	ILLINOIS AIR NATIONAL GUARD	2323 SOUTH AIRPORT RD.
2005	ILLINOIS AIR NATIONAL GUARD	2323 SOUTH AIRPORT RD.
2004	ILLINOIS AIR NATIONAL GUARD	2323 SOUTH AIRPORT RD.
2004	ILLINOIS AIR NATIONAL GUARD	2323 SOUTH AIRPORT RD.
2004	ILLINOIS AIR NATIONAL GUARD	2323 SOUTH AIRPORT RD.
2003	ILLINOIS AIR NATIONAL GUARD	2323 SOUTH AIRPORT RD.
2003	ILLINOIS AIR NATIONAL GUARD	2323 SOUTH AIRPORT RD.
2003	ILLINOIS AIR NATIONAL GUARD	2323 SOUTH AIRPORT RD.
2002	ILLINOIS AIR NATIONAL GUARD	2323 SOUTH AIRPORT RD.
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2000	ILLINOIS AIR NATIONAL GUARD	2323 SOUTH AIRPORT RD.
2000	ILLINOIS AIR NATIONAL GUARD	2323 SOUTH AIRPORT RD.

A20 **IDOMA-ARMY AV. SUP. FAC.-#3**

2323 S. AIRPORT RD. **Target Property PEORIA, IL 61607**

Site 20 of 37 in cluster A

Actual: FINDS:

644 ft.

Registry ID: 110010002102

Environmental Interest/Information System

US National Pollutant Discharge Elimination System (NPDES) module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

1005569135 Envid: Registry ID: 110010002102

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110010002102

Direction Distance

Elevation Site Database(s) EPA ID Number

A21 ILLINOIS AIR NATIONAL GUARD LUST S103694194
Target BLDG. 103, 2323 SOUTH AIRPORT RD. LUST N/A

Property PEORIA, IL 61607

Site 21 of 37 in cluster A

Actual: LUST: 644 ft. Nan

Name: ILLINOIS AIR NATIONAL GUARD
Address: BLDG. 103, 2323 SOUTH AIRPORT RD.

City, State, Zip: PEORIA, IL 61607

 Incident Num:
 961725

 IL EPA Id:
 1438080005

 Product:
 Jet Fuel

 IEMA Date:
 1996-09-18

 Project Manager:
 Putrich

Project Manager Phone: (217) 524-4827

Email: Steve.Putrich@illinois.gov
PRP Name: Illinois Air National Guard
PRP Contact: Roxanne Lastoria
PRP Address: 2416 South Falcon Blvd.
PRP City,St,Zip: Peoria, IL 61607-5023

PRP Phone: Not reported Site Classification: Not reported

Section 57.5(g) Letter: 734

Date Section 57.5(g) Letter: Not reported Non LUST Determination Letter: Not reported 20 Report Received: 1996-10-01 45 Report Received: 1996-10-21 NFA/NFR Letter: 2016-02-16 NFR Date Recorded: 2016-03-23 Heating Oil Date: Not reported Non-Lust LR Date: Not reported

A22 ILLINOIS AIR NATIONAL GUARD LUST S103694197
Target BLDG. 4, 2323 SOUTH AIRPORT RD. LUST N/A

Property PEORIA, IL 61607

Site 22 of 37 in cluster A

Actual: LUST: 644 ft. Nam

Name: ILLINOIS AIR NATIONAL GUARD
Address: BLDG. 4, 2323 SOUTH AIRPORT RD.

City,State,Zip: PEORIA, IL 61607

Incident Num: 961724 IL EPA Id: 1438080005

Product: Gasoline, Unleaded Gas

IEMA Date: 1996-09-18
Project Manager: Putrich
Project Manager Phone: (217) 524-4827

Email: Steve.Putrich@illinois.gov
PRP Name: Illinois Air National Guard
PRP Contact: Roxanne Lastoria
PRP Address: 2416 South Falcon Blvd.
PRP City,St,Zip: Peoria, IL 61607-5023

PRP Phone: Not reported Site Classification: HIGH Section 57.5(g) Letter: 732

Date Section 57.5(g) Letter: Not reported Non LUST Determination Letter: Not reported 20 Report Received: 1996-09-25

EDR ID Number

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ILLINOIS AIR NATIONAL GUARD (Continued)

S103694197

45 Report Received: 1996-10-21 NFA/NFR Letter: 2010-08-04 2010-08-25 NFR Date Recorded: Heating Oil Date: Not reported Non-Lust LR Date: Not reported

A23 **IL ARMY NATIONAL GUARD AASF3 & FMS6 Target**

RCRA-SQG 1000133266 **FINDS** IL2572825907

2323 S AIRPORT RD **Property**

ECHO

PEORIA, IL 61607

Site 23 of 37 in cluster A

Actual: RCRA-SQG: 644 ft.

Date form received by agency: 2008-09-24 00:00:00.0

IL ARMY NATIONAL GUARD AASF3 & FMS6 Facility name:

Facility address: 2323 S AIRPORT RD

PEORIA, IL 61607

EPA ID: IL2572825907

Mailing address: 1301 N MACARTHUR BLVD

SPRINGFIELD, IL 62702

MARTHA M MILLER Contact: Contact address: 2323 S AIRPORT RD

PEORIA, IL 61607

Contact country: US

217-761-3735 Contact telephone:

MARTHA.M.MILLER@US.ARMY.MIL Contact email:

EPA Region:

Small Small Quantity Generator Classification:

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: IL ARMY NATIONAL GUARD

Owner/operator address: Not reported

IL

Owner/operator country: US

Owner/operator telephone: Not reported Owner/operator email: Not reported Not reported Owner/operator fax: Not reported Owner/operator extension: Legal status: Federal

Owner/Operator Type: Operator

Owner/Op start date: 2008-09-24 00:00:00.0

Owner/Op end date: Not reported

IL ARMY NATIONAL GUARD Owner/operator name:

Owner/operator address: Not reported

IL

Owner/operator country: US

Owner/operator telephone: Not reported Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Federal Legal status:

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

IL ARMY NATIONAL GUARD AASF3 & FMS6 (Continued)

1000133266

Owner/Operator Type: Owner

2008-09-24 00:00:00.0 Owner/Op start date:

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

Historical Generators:

Date form received by agency: 1990-02-28 00:00:00.0

182ND TACTICAL AIR SUPPORT Site name:

Large Quantity Generator Classification:

Date form received by agency: 1980-08-18 00:00:00.0

182 TACTICAL AIR SUPPORT GROUP Site name:

Classification: Not a generator, verified

Hazardous Waste Summary:

D001 Waste code:

IGNITABLE WASTE Waste name:

Waste code:

Waste name: **CORROSIVE WASTE**

Waste code: D003

REACTIVE WASTE Waste name:

Waste code: D006 Waste name: **CADMIUM**

Waste code: D007

Waste name: **CHROMIUM**

D008 Waste code: Waste name: **LEAD**

Waste code: D009 **MERCURY** Waste name:

Waste code: D011 Waste name: **SILVER** Map ID
Direction
Distance

Site

Elevation

MAP FINDINGS

EDR ID Number
Database(s) EPA ID Number

IL ARMY NATIONAL GUARD AASF3 & FMS6 (Continued)

1000133266

. Waste code: F001

. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLORETHYLENE, METHYLENE CHLORIDE,

TETRACHLOROETHYLENE, TRICHLORETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE AND CHLORINATED

FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE

SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F002

. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE,

METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE,

 $CHLOROBENZENE,\,1,1,2\text{-}TRICHLORO\text{-}1,2,2\text{-}TRIFLUOROETHANE},$

ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2,

TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND

SPENT SOLVENT MIXTURES.

Waste code: F003

. Waste name: THE FOLLOWING SPENT NONHALOGENATED 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 NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED 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: F004

. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: CRESOLS, CRESYLIC ACID,

AND NITROBENZENE; AND THE STILL BOTTOMS FROM THE RECOVERY OF THESE SOLVENTS; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND

SPENT SOLVENT MIXTURES.

. Waste code: F005

Waste name: THE FOLLOWING SPENT NONHALOGENATED 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 NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF

THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F010

. Waste name: QUENCHING BATH RESIDUES FROM OIL BATHS FROM METAL HEAT TREATING

OPERATIONS IN WHICH CYANIDES ARE USED IN THE PROCESS.

. Waste code: F011

. Waste name: SPENT CYANIDE SOLUTIONS FROM SLAT BATH POT CLEANING FROM METAL HEAT

Direction Distance Elevation

on Site Database(s) EPA ID Number

IL ARMY NATIONAL GUARD AASF3 & FMS6 (Continued)

1000133266

EDR ID Number

TREATING OPERATIONS.

. Waste code: F012

. Waste name: QUENCHING WASTEWATER TREATMENT SLUDGES FROM METAL HEAT TREATING

OPERATIONS IN WHICH CYANIDES ARE USED IN THE PROCESS.

. Waste code: F017
. Waste name: Not Defined

. Waste code: F018
. Waste name: Not Defined

. Waste code: P019
. Waste name: Not Defined

Waste code: U002

Waste name: 2-PROPANONE (I) (OR) ACETONE (I)

Waste code: U080

. Waste name: METHANE, DICHLORO- (OR) METHYLENE CHLORIDE

Waste code: U140

Waste name: 1-PROPANOL, 2-METHYL- (I,T) (OR) ISOBUTYL ALCOHOL (I,T)

Waste code: U154

. Waste name: METHANOL (I) (OR) METHYL ALCOHOL (I)

. Waste code: U159

. Waste name: 2-BUTANONE (I,T) (OR) METHYL ETHYL KETONE (MEK) (I,T)

. Waste code: U228

. Waste name: ETHENE, TRICHLORO- (OR) TRICHLOROETHYLENE

Waste code: U239

. Waste name: BENZENE, DIMETHYL- (I,T) (OR) XYLENE (I)

Violation Status: No violations found

FINDS:

Registry ID: 110005808698

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.

<u>Click this hyperlink</u> while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1000133266 Registry ID: 110005808698

Direction Distance

Target

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

IL ARMY NATIONAL GUARD AASF3 & FMS6 (Continued)

1000133266

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110005808698

A24 DEPARTMENT OF MILITARY AFFAIRSTANK#3-180

AST A100411543

N/A

Property PEORIA, IL 61607

Site 24 of 37 in cluster A

2323 SOUTH AIRPORT ROAD

Actual: AST: 644 ft. Na

Name: DEPARTMENT OF MILITARY AFFAIRS/TANK# 1-240

Address: 2323 SOUTH AIRPORT ROAD

City,State,Zip: PEORIA, IL 61607 City,State,Zip: PEORIA, IL 61607 Occupancy Number: 1431722598658

Occupant Type: 059 - ABOVE GROUND BULK STORAGE

Section Number: PA

Property Owner Name: DEPARTMENT OF MILITARY AFFAIRS

Type: TANK - ABOVE GROUND BU

Name: DEPARTMENT OF MILITARY AFFAIRSTANK#2-280

Address: 2323 SOUTH AIRPORT ROAD

 City, State, Zip:
 PEORIA, IL 61607

 City, State, Zip:
 PEORIA, IL 61607

 Occupancy Number:
 PA-059-1486396484139

Occupant Type: 059 - ABOVE GROUND BULK STORAGE

Section Number: PA

Property Owner Name: DEPARTMENT OF MILITARY AFFAIRS

Type: TANK - ABOVE GROUND BULK

Name: DEPARTMENT OF MILITARY AFFAIRSTANK#3-180

Address: 2323 SOUTH AIRPORT ROAD

 City,State,Zip:
 PEORIA, IL 61607

 City,State,Zip:
 PEORIA, IL 61607

 Occupancy Number:
 PA-059-1486396635965

Occupant Type: 059 - ABOVE GROUND BULK STORAGE

Section Number: PA

Property Owner Name: DEPARTMENT OF MILITARY AFFAIRS
Type: TANK - ABOVE GROUND BULK

A25 BUILDING #20 & 21 FINDS 1011853290
Target 2323 S AIRPORT RD N/A

Property PEORIA, IL 61607

Site 25 of 37 in cluster A

Actual: FINDS: 644 ft.

Registry ID: 110037154744

Environmental Interest/Information System

ACES (Illinois - Agency Compliance And Enforcement System) is the

Illinois EPA Project to facilitate the permitting operations

<u>Click this hyperlink</u> while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

A26 **IL ARMY NTL GUARD FMS6 AASF3 FINDS** 1008135942 N/A

Target 2323 S AIRPORT RD **Property PEORIA, IL 61607**

Site 26 of 37 in cluster A

Actual:

FINDS: 644 ft.

> 110018326373 Registry ID:

Environmental Interest/Information System

ACES (Illinois - Agency Compliance And Enforcement System) is the

Illinois EPA Project to facilitate the permitting operations

Click this hyperlink while viewing on your computer to access

additional FINDS: detail in the EDR Site Report.

LUST S103694196 A27 **ILLINOIS AIR NATIONAL GUARD Target** BLDG. 2323 SOUTH AIRPORT RD. N/A

Property PEORIA, IL 61607

Site 27 of 37 in cluster A

LUST: Actual: 644 ft.

ILLINOIS AIR NATIONAL GUARD Name: BLDG. 2323 SOUTH AIRPORT RD. Address:

City, State, Zip: **PEORIA, IL 61607**

Incident Num: 961723 IL EPA Id: 1438080005 Product: Jet Fuel IEMA Date: 1996-09-19 Project Manager: Putrich

Project Manager Phone: (217) 524-4827 Email:

Steve.Putrich@illinois.gov PRP Name: Illinois Air National Guard PRP Contact: Roxanne Lastoria PRP Address: 2416 South Falcon Blvd. PRP City,St,Zip: Peoria, IL 61607-5023

PRP Phone: Not reported Site Classification: HIGH Section 57.5(g) Letter: 732

Date Section 57.5(g) Letter: Not reported Non LUST Determination Letter: Not reported 1996-09-25 20 Report Received: 45 Report Received: 1996-10-21 NFA/NFR Letter: 2010-08-04 NFR Date Recorded: 2010-08-25 Heating Oil Date: Not reported Non-Lust LR Date: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

A28 ILLINOIS AIR NATIONAL GUARD LUST S103694195
Target BLDG. 19, 2323 SOUTH AIRPORT RD. N/A

Property PEORIA, IL 61607

Site 28 of 37 in cluster A

Actual: LUST: 644 ft. Nan

Name: ILLINOIS AIR NATIONAL GUARD
Address: BLDG. 19, 2323 SOUTH AIRPORT RD.

City,State,Zip: PEORIA, IL 61607

 Incident Num:
 961722

 IL EPA Id:
 1438080005

 Product:
 Diesel

 IEMA Date:
 1996-09-18

 Project Manager:
 Putrich

 Project Manager:
 Putrich

Project Manager Phone: (217) 524-4827

Email: Steve.Putrich@illinois.gov
PRP Name: Illinois Air National Guard
PRP Contact: Roxanne Lastoria
PRP Address: 2416 South Falcon Blvd.
PRP City,St,Zip: Peoria, IL 61607-5023

PRP Phone: Not reported
Site Classification: HIGH
Section 57.5(g) Letter: 732

Date Section 57.5(g) Letter: Not reported Non LUST Determination Letter: Not reported 1996-09-25 20 Report Received: 45 Report Received: 1996-10-21 NFA/NFR Letter: 2010-08-04 NFR Date Recorded: 2010-09-13 Heating Oil Date: Not reported Non-Lust LR Date: Not reported

A29 SPILLS S111897243
Target 2323 S AIRPORT ROAD N/A

Property PEORIA, IL

Site 29 of 37 in cluster A

Actual: SPILLS:

644 ft. Incident ID: 19961945
Incident Date: Not reported
Date Received: 10/21/1996

Lust Ind: Yes

Facility Address: 2323 S AIRPORT ROAD

Facility City: PEORIA

PRP Name: ILLINOIS NATIONAL GUARD

AC: Not reported

Source Table: dbo_OCIN_INCIDENTCUR

EDR ID Number

Direction Distance

Elevation Site

EDR ID Number EPA ID Number Database(s)

A30 **ILLINOIS AIR NATIONAL GUARD RGA LUST** S115508594 **Target** BLDG. 4, 2323 SOUTH AIRPORT RD. N/A

PEORIA, IL **Property**

Site 30 of 37 in cluster A

RGA LUST:

Actual: 644 ft.

2012 ILLINOIS AIR NATIONAL GUARD BLDG. 4, 2323 SOUTH AIRPORT

RD.

2011 ILLINOIS AIR NATIONAL GUARD BLDG. 4, 2323 SOUTH AIRPORT

RD.

2010 ILLINOIS AIR NATIONAL GUARD BLDG. 4, 2323 SOUTH AIRPORT

RD. 2009

ILLINOIS AIR NATIONAL GUARD BLDG. 4, 2323 SOUTH AIRPORT

RD. 2008

ILLINOIS AIR NATIONAL GUARD BLDG. 4, 2323 SOUTH AIRPORT

RD.

2007 ILLINOIS AIR NATIONAL GUARD BLDG. 4, 2323 SOUTH AIRPORT RD.

2006 ILLINOIS AIR NATIONAL GUARD BLDG. 4, 2323 SOUTH AIRPORT

RD.

2005 ILLINOIS AIR NATIONAL GUARD BLDG. 4, 2323 SOUTH AIRPORT

RD. 2004

ILLINOIS AIR NATIONAL GUARD BLDG. 4, 2323 SOUTH AIRPORT RD.

2003

ILLINOIS AIR NATIONAL GUARD BLDG. 4, 2323 SOUTH AIRPORT

RD. 2002

ILLINOIS AIR NATIONAL GUARD BLDG. 4, 2323 SOUTH AIRPORT

RD. 2001

ILLINOIS AIR NATIONAL GUARD BLDG. 4, 2323 SOUTH AIRPORT RD.

ILLINOIS AIR NATIONAL GUARD BLDG. 4, 2323 SOUTH AIRPORT 2000

RD.

A31 SPILLS S111897406 **Target** N/A

2323 SOUTH AIRPORT ROAD

Property PEORIA, IL

Site 31 of 37 in cluster A

Actual: 644 ft.

SPILLS:

Incident ID: 19962108 Incident Date: Not reported Date Received: 11/12/1996

Lust Ind: Yes

Facility Address: 2323 SOUTH AIRPORT ROAD

Facility City: **PEORIA**

PRP Name: IL AIR NATIONAL GUARD

AC: Not reported

Source Table: dbo_OCIN_INCIDENTCUR

Direction
Distance

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

A32 SPILLS S111897102

N/A

S115509047

N/A

RGA LUST

Target 2323 SOUTH AIRPORT ROAD Property PEORIA, IL

Site 32 of 37 in cluster A

Actual: SPILLS:

644 ft. SPILLS

Incident ID: 19961804
Incident Date: Not reported
Date Received: 10/01/1996
Lust Ind: Yes

Facility Address: 2323 SOUTH AIRPORT ROAD

Facility City: PEORIA

PRP Name: IL AIR NATIONAL GUARD

AC: Not reported

Source Table: dbo_OCIN_INCIDENTCUR

-

A33 ILLINOIS NATIONAL GUARD Target 2323 SOUTH AIRPORT RD.

Property PEORIA, IL

Site 33 of 37 in cluster A

Actual: RGA LUST: 644 ft.

ILLINOIS NATIONAL GUARD 2323 SOUTH AIRPORT RD. 2012 2011 ILLINOIS NATIONAL GUARD 2323 SOUTH AIRPORT RD. 2010 ILLINOIS NATIONAL GUARD 2323 SOUTH AIRPORT RD. 2009 ILLINOIS NATIONAL GUARD 2323 SOUTH AIRPORT RD. 2008 ILLINOIS NATIONAL GUARD 2323 SOUTH AIRPORT RD. 2007 ILLINOIS NATIONAL GUARD 2323 SOUTH AIRPORT RD. 2006 ILLINOIS NATIONAL GUARD 2323 SOUTH AIRPORT RD. 2005 ILLINOIS NATIONAL GUARD 2323 SOUTH AIRPORT RD. 2004 ILLINOIS NATIONAL GUARD 2323 SOUTH AIRPORT RD. 2003 ILLINOIS NATIONAL GUARD 2323 SOUTH AIRPORT RD. 2002 ILLINOIS NATIONAL GUARD 2323 SOUTH AIRPORT RD. 2001 ILLINOIS NATIONAL GUARD 2323 SOUTH AIRPORT RD. 2000 ILLINOIS NATIONAL GUARD 2323 SOUTH AIRPORT RD.

A34 ILLINOIS AIR NATIONAL GUARD RGA LUST S115508592
Target BLDG. 19, 2323 SOUTH AIRPORT RD. N/A

Property PEORIA, IL

Site 34 of 37 in cluster A

Actual: RGA LUST:

644 ft. 2012 ILLINOIS AIR NATIONAL GUARD BLDG. 19, 2323 SOUTH AIRPORT

RD.
2011 ILLINOIS AIR NATIONAL GUARD BLDG. 19, 2323 SOUTH AIRPORT RD.
2010 ILLINOIS AIR NATIONAL GUARD BLDG. 19, 2323 SOUTH AIRPORT RD.
2009 ILLINOIS AIR NATIONAL GUARD BLDG. 19, 2323 SOUTH AIRPORT RD.

2008 ILLINOIS AIR NATIONAL GUARD BLDG. 19, 2323 SOUTH AIRPORT RD.

2007 ILLINOIS AIR NATIONAL GUARD BLDG. 19, 2323 SOUTH AIRPORT RD.

2006 ILLINOIS AIR NATIONAL GUARD BLDG. 19, 2323 SOUTH AIRPORT

RD.

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ILLINOIS AIR NATIONAL GUARD (Continued)

S115508592

ILLINOIS AIR NATIONAL GUARD	BLDG. 19, 2323 SOUTH AIRPORT
ILLINOIS AIR NATIONAL GUARD	BLDG. 19, 2323 SOUTH AIRPORT
ILLINOIS AIR NATIONAL GUARD	BLDG. 19, 2323 SOUTH AIRPORT
ILLINOIS AIR NATIONAL GUARD	BLDG. 19, 2323 SOUTH AIRPORT
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A35 **ILLINOIS NATIONAL GUARD** 2323 SOUTH AIRPORT RD. **Target Property PEORIA, IL 61607**

LUST S104521779 SRP N/A

UIC

Site 35 of 37 in cluster A

Actual: 644 ft.

LUST:

ILLINOIS AIR NATIONAL GUARD Name: Address: 2323 SOUTH AIRPORT RD.

City,State,Zip: **PEORIA, IL 61607**

Incident Num: 961649 1438080005 IL EPA Id:

Product: Diesel, Fuel Oil, Jet Fuel

1996-09-07 IEMA Date: Project Manager: Putrich Project Manager Phone: (217) 524-4827

Steve.Putrich@illinois.gov Email: PRP Name: Illinois Air National Guard PRP Contact: Roxanne Lastoria PRP Address: 2416 South Falcon Blvd. Peoria, IL 61607-5023 PRP City,St,Zip: PRP Phone: Not reported

HIGH Site Classification: Section 57.5(g) Letter: 732 Date Section 57.5(g) Letter: Not reported Non LUST Determination Letter: Not reported 20 Report Received: 1996-09-25 45 Report Received: 1996-10-21 NFA/NFR Letter: 2010-08-04 NFR Date Recorded: 2010-09-13 Heating Oil Date: Not reported

Non-Lust LR Date:

Name: ILLINOIS AIR NATIONAL GUARD 2323 SOUTH AIRPORT RD. Address:

Not reported

City,State,Zip: **PEORIA, IL 61607**

Incident Num: 961804 IL EPA Id: 1438080005 Product: Other Petroleum IEMA Date: 1996-10-01 Putrich Project Manager: Project Manager Phone: (217) 524-4827

Email: Steve.Putrich@illinois.gov PRP Name: Illinois Air National Guard PRP Contact: Roxanne Lastoria PRP Address: 2416 South Falcon Blvd.

Direction Distance

Elevation Site Database(s) EPA ID Number

ILLINOIS NATIONAL GUARD (Continued)

S104521779

EDR ID Number

PRP City,St,Zip: Peoria, IL 61607-5023

PRP Phone: Not reported
Site Classification: HIGH
Section 57.5(g) Letter: 732

Date Section 57.5(g) Letter: Not reported Non LUST Determination Letter: Not reported 1996-10-18 20 Report Received: 1996-10-21 45 Report Received: NFA/NFR Letter: 2010-08-04 NFR Date Recorded: 2010-08-25 Heating Oil Date: Not reported Non-Lust LR Date: Not reported

Name: ILLINOIS NATIONAL GUARD Address: 2323 SOUTH AIRPORT RD.

City, State, Zip: PEORIA, IL 61607

 Incident Num:
 961945

 IL EPA Id:
 1438080005

 Product:
 Other Petroleum

 IEMA Date:
 1996-10-21

 Project Manager:
 Putrich

Project Manager Phone: (217) 524-4827

Email: Steve.Putrich@illinois.gov
PRP Name: Illinois Air National Guard
PRP Contact: Roxanne Alstoria

PRP Address: 2416 South Falcon Blvd. PRP City,St,Zip: Peoria, IL 61607-5023

PRP Phone: Not reported Site Classification: HIGH Section 57.5(g) Letter: 732

Not reported Date Section 57.5(g) Letter: Non LUST Determination Letter: Not reported 20 Report Received: 1996-11-08 45 Report Received: 1996-12-10 NFA/NFR Letter: 2010-08-04 NFR Date Recorded: 2010-08-25 Heating Oil Date: Not reported Non-Lust LR Date: Not reported

Name: ILLINOIS AIR NATIONAL GUARD Address: 2323 SOUTH AIRPORT RD.

City, State, Zip: PEORIA, IL 61607

Incident Num: 962108
IL EPA Id: 1438080005
Product: Other Petroleum
IEMA Date: 1996-11-12
Project Manager: Putrich
Project Manager Phone: (217) 524-4827

Email: Steve.Putrich@illinois.gov
PRP Name: Illinois Air National Guard
PRP Contact: Roxanne Lastoria
PRP Address: 2416 South Falcon Blvd.
PRP City,St,Zip: Peoria, IL 61607-5023

PRP Phone: Not reported Site Classification: HIGH Section 57.5(g) Letter: 732

Date Section 57.5(g) Letter: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

ILLINOIS NATIONAL GUARD (Continued)

S104521779

EDR ID Number

Non LUST Determination Letter: Not reported 20 Report Received: 1996-12-02 45 Report Received: 1996-12-23 NFA/NFR Letter: 2010-08-04 NFR Date Recorded: 2010-08-25 Heating Oil Date: Not reported Non-Lust LR Date: Not reported

SRP:

 IL EPA Id:
 1438080005

 US EPA Id:
 IL2572825907

 Longitude:
 -89.682186

 Latitude:
 40.658978

Contact Name: Roxanne Lastoria

Contact Address: 2416 South Falcon Boulevard

Contact City, St, Zip: Peoria, IL 61607-5023

Date Enrolled: 01/29/1996
Point Of Contact: Not reported
Consultant Company: PDC Response, Inc.
Consultant Address: 4349 West Southport Road
Consultant City, St, Zip: Peoria, IL 61615-9683

Proj Mgr Assigned: Paul Lake Sec. 4 Letter Date: 03/11/1996

Active: No

Remediation Applicant Co: Illinois Air National Guard

UIC:

Facility Id: ILEA555
Facility Type: Not reported
Facility State Id: 555

NAICS Code: Not reported SIC Code: Not reported

Well:

Well Id: ILEA5X2612516555
Well Name: Not reported

Permit Id: ILEA5RA
AOR Well: Not reported

AUT Status: RA

Ownership Type: Not reported

Permit State Id: IL

Submission Date: Not reported

Aquifer Exempt: No

Total Depth: Not reported
Geology Id: Not reported
Well Site: Not reported
Well In Source Water Area: Not reported
Status Date: 2008-06-17 00:00:00

Operate Status Code: UC

Well Type: 5B6

Well Type Date: 2008-06-17 00:00:00

Contact Id: ILEA555 Contact Phone: 309/633-5277

Contact Name: Col. John W. Newman
Contact Street: 2323 South Airport Road
Contact City/State/Zip: Peoria, IL 61607-5023

Direction Distance Elevation

tion Site Database(s) EPA ID Number

ILLINOIS NATIONAL GUARD (Continued)

S104521779

EDR ID Number

Well Id: ILEA5X2612517555

Well Name: Not reported

Permit Id: ILEA5RA

AOR Well: Not reported

AUT Status: RA

Ownership Type: Not reported

Ownership Type. Not reported

Permit State Id: IL

Submission Date: Not reported

Aguifer Exempt: No

Total Depth: Not reported
Geology Id: Not reported
Well Site: Not reported
Well In Source Water Area: Not reported
Status Date: 2008-06-17 00:00:00

Operate Status Code: UC Well Type: 5B6

Well Type Date: 2008-06-17 00:00:00

Contact Id: ILEA555 Contact Phone: 309/633-5277

Contact Name: Col. John W. Newman
Contact Street: 2323 South Airport Road
Contact City/State/Zip: Peoria, IL 61607-5023

Well Id: ILEA5X2612518555
Well Name: Not reported
Permit Id: ILEA5RA
AOR Well: Not reported
AUT Status: RA

Ownership Type: Not reported

Permit State Id: IL

Submission Date: Not reported

Aguifer Exempt: No

Total Depth: Not reported
Geology Id: Not reported
Well Site: Not reported
Well In Source Water Area: Not reported
Status Date: 2008-06-17 00:00:00

Operate Status Code: UC

Well Type: 5B6

Well Type Date: 2008-06-17 00:00:00

Contact Id: ILEA555 Contact Phone: 309/633-5277

Contact Name: Col. John W. Newman
Contact Street: 2323 South Airport Road
Contact City/State/Zip: Peoria, IL 61607-5023

Well Id: ILEA5X2612519555

Well Name: Not reported Permit Id: ILEA5RA AOR Well: Not reported

AUT Status: RA

Ownership Type: Not reported

Permit State Id: IL

Submission Date: Not reported

Aquifer Exempt: No

Direction Distance Elevation

n Site Database(s) EPA ID Number

ILLINOIS NATIONAL GUARD (Continued)

S104521779

EDR ID Number

Total Depth: Not reported
Geology Id: Not reported
Well Site: Not reported
Well In Source Water Area: Not reported
Status Date: 2008-06-17 00:00:00

Operate Status Code: UC Well Type: 5B6

Well Type Date: 2008-06-17 00:00:00

Contact Id: ILEA555 Contact Phone: 309/633-5277

Contact Name: Col. John W. Newman
Contact Street: 2323 South Airport Road
Contact City/State/Zip: Peoria, IL 61607-5023

Well Id: ILEA5X2612520555
Well Name: Not reported
Permit Id: ILEA5RA
AOR Well: Not reported

AUT Status: RA

Ownership Type: Not reported

Permit State Id: IL

Submission Date: Not reported

Aquifer Exempt: No

Total Depth: Not reported Geology Id: Not reported Well Site: Not reported Well In Source Water Area: Not reported

Status Date: 2008-06-17 00:00:00

Operate Status Code: UC Well Type: 5B6

Well Type Date: 2008-06-17 00:00:00

Contact Id: ILEA555 Contact Phone: 309/633-5277

Contact Name: Col. John W. Newman
Contact Street: 2323 South Airport Road
Contact City/State/Zip: Peoria, IL 61607-5023

Well Id: ILEA5X2612521555
Well Name: Not reported
Permit Id: ILEA5RA
AOR Well: Not reported

AUT Status: RA

Ownership Type: Not reported

Permit State Id: IL

Submission Date: Not reported Aquifer Exempt: No Total Depth: Not reported

Geology Id:
Well Site:
Well In Source Water Area:
Status Date:
Not reported
Not reported
Not reported
Not reported
Not reported
2008-06-17 00:00:00

Operate Status Code: UC

Well Type: 5B6

Well Type Date: 2008-06-17 00:00:00

Contact Id: ILEA555

Direction Distance

Elevation Site Database(s) EPA ID Number

ILLINOIS NATIONAL GUARD (Continued)

S104521779

EDR ID Number

Contact Phone: 309/633-5277
Contact Name: Col. John W. Newman
Contact Street: 2323 South Airport Road
Contact City/State/Zip: Peoria, IL 61607-5023

Well Id: ILEA5X2612522555
Well Name: Not reported
Permit Id: ILEA5RA
AOR Well: Not reported

AUT Status: RA

Ownership Type: Not reported

Permit State Id: IL

Submission Date: Not reported

Aquifer Exempt: No

Total Depth: Not reported
Geology Id: Not reported
Well Site: Not reported
Well In Source Water Area: Not reported

Status Date: 2008-06-17 00:00:00

Operate Status Code: UC Well Type: 5B6

Well Type Date: 2008-06-17 00:00:00

Contact Id: ILEA555 Contact Phone: 309/633-5277

Contact Name: Col. John W. Newman
Contact Street: 2323 South Airport Road
Contact City/State/Zip: Peoria, IL 61607-5023

Well Id: ILEA5X2612523555
Well Name: Not reported
Permit Id: ILEA5RA
AOR Well: Not reported
AUT Status: RA

Ownership Type: Not reported

Permit State Id: IL

Submission Date: Not reported

Aquifer Exempt: No

Total Depth: Not reported Geology Id: Not reported Well Site: Not reported Well In Source Water Area: Not reported

Status Date: 2008-06-17 00:00:00

Operate Status Code: UC

Well Type: 5B6

Well Type Date: 2008-06-17 00:00:00

Contact Id: ILEA555 Contact Phone: 309/633-5277

Contact Name: Col. John W. Newman
Contact Street: 2323 South Airport Road
Contact City/State/Zip: Peoria, IL 61607-5023

Well Id: ILEA5X2612524555
Well Name: Not reported
Permit Id: ILEA5RA

Direction Distance Elevation

n Site Database(s) EPA ID Number

ILLINOIS NATIONAL GUARD (Continued)

S104521779

EDR ID Number

AOR Well: Not reported

AUT Status: RA

Ownership Type: Not reported

Permit State Id: IL

Submission Date: Not reported

Aquifer Exempt: No

Total Depth: Not reported
Geology Id: Not reported
Well Site: Not reported
Well In Source Water Area: Not reported

Status Date: 2008-06-17 00:00:00

Operate Status Code: UC Well Type: 5B6

Well Type Date: 2008-06-17 00:00:00

Contact Id: ILEA555 Contact Phone: 309/633-5277

Contact Name: Col. John W. Newman
Contact Street: 2323 South Airport Road
Contact City/State/Zip: Peoria, IL 61607-5023

Well Id: ILEA5X2612525555

Well Name: Not reported Permit Id: ILEA5RA AOR Well: Not reported

AUT Status: RA

Ownership Type: Not reported

Permit State Id: IL

Submission Date: Not reported

Aquifer Exempt: No

Total Depth: Not reported
Geology Id: Not reported
Well Site: Not reported
Well In Source Water Area: Not reported

Status Date: 2008-06-17 00:00:00

Operate Status Code: UC Well Type: 5B6

Well Type Date: 2008-06-17 00:00:00

Contact Id: ILEA555 Contact Phone: 309/633-5277

Contact Name: Col. John W. Newman
Contact Street: 2323 South Airport Road
Contact City/State/Zip: Peoria, IL 61607-5023

Well Id: ILEA5X2612526555

Well Name: Not reported Permit Id: ILEA5RA AOR Well: Not reported

AUT Status: RA

Ownership Type: Not reported

Permit State Id:

Submission Date: Not reported

Aquifer Exempt: No

Total Depth: Not reported Geology Id: Not reported Well Site: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

ILLINOIS NATIONAL GUARD (Continued)

Well In Source Water Area: Not reported

Status Date: 2008-06-17 00:00:00

Operate Status Code: UC Well Type: 5B6

Well Type Date: 2008-06-17 00:00:00

Contact Id: ILEA555 Contact Phone: 309/633-5277

Contact Name: Col. John W. Newman
Contact Street: 2323 South Airport Road
Contact City/State/Zip: Peoria, IL 61607-5023

Well Id: ILEA5X2612527555
Well Name: Not reported
Permit Id: ILEA5RA
AOR Well: Not reported

AUT Status: RA

Ownership Type: Not reported

Permit State Id: IL

Submission Date: Not reported

Aquifer Exempt: No

Total Depth: Not reported Geology Id: Not reported Well Site: Not reported Well In Source Water Area: Not reported

Status Date: 2008-06-17 00:00:00

Operate Status Code: UC Well Type: 5B6

Well Type Date: 2008-06-17 00:00:00

Contact Id: ILEA555 Contact Phone: 309/633-5277

Contact Name: Col. John W. Newman
Contact Street: 2323 South Airport Road
Contact City/State/Zip: Peoria, IL 61607-5023

Well Id: ILEA5X2612528555
Well Name: Not reported
Permit Id: ILEA5RA
AOR Well: Not reported
AUT Status: RA

Ownership Type: Not reported

Permit State Id: IL

Submission Date: Not reported

Aquifer Exempt: No

Total Depth: Not reported Geology Id: Not reported Well Site: Not reported Well In Source Water Area: Not reported

Status Date: 2008-06-17 00:00:00

Operate Status Code: UC Well Type: 5B6

Well Type Date: 2008-06-17 00:00:00

Contact Id: ILEA555
Contact Phone: 309/633-5277

Contact Name: Col. John W. Newman
Contact Street: 2323 South Airport Road

S104521779

EDR ID Number

Distance

Elevation Site Database(s) EPA ID Number

ILLINOIS NATIONAL GUARD (Continued)

S104521779

EDR ID Number

Contact City/State/Zip: Peoria, IL 61607-5023

Well Id: ILEA5X2612529555
Well Name: Not reported
Permit Id: ILEA5RA
AOR Well: Not reported
AUT Status: RA

Ownership Type: Not reported

Permit State Id: IL

Submission Date: Not reported

Aquifer Exempt: No

Total Depth: Not reported
Geology Id: Not reported
Well Site: Not reported
Well In Source Water Area: Not reported
Status Date: 2008-06-17 00:00:00

Operate Status Code: UC Well Type: 5B6

Well Type Date: 2008-06-17 00:00:00

Contact Id: ILEA555 Contact Phone: 309/633-5277

Contact Name: Col. John W. Newman
Contact Street: 2323 South Airport Road
Contact City/State/Zip: Peoria, IL 61607-5023

Well Id: ILEA5X2612530555
Well Name: Not reported
Permit Id: ILEA5RA
AOR Well: Not reported

AUT Status: RA

Ownership Type: Not reported

Permit State Id: IL

Submission Date: Not reported

Aquifer Exempt: No

Total Depth: Not reported
Geology Id: Not reported
Well Site: Not reported
Well In Source Water Area: Not reported
Status Date: Not reported
2008-06-17 00:00:00

Operate Status Code: UC Well Type: 5B6

Well Type Date: 2008-06-17 00:00:00

Contact Id: ILEA555 Contact Phone: 309/633-5277

Contact Name: Col. John W. Newman
Contact Street: 2323 South Airport Road
Contact City/State/Zip: Peoria, IL 61607-5023

Well Id: ILEA5X2612531555
Well Name: Not reported
Permit Id: ILEA5RA
AOR Well: Not reported

AUT Status: RA

Ownership Type: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ILLINOIS NATIONAL GUARD (Continued)

S104521779

Permit State Id:

Not reported Submission Date:

Aquifer Exempt: No

Total Depth: Not reported Geology Id: Not reported Well Site: Not reported Well In Source Water Area: Not reported

2008-06-17 00:00:00 Status Date:

Operate Status Code: UC Well Type: 5B6

Well Type Date: 2008-06-17 00:00:00

Contact Id: ILEA555 Contact Phone: 309/633-5277

Contact Name: Col. John W. Newman Contact Street: 2323 South Airport Road Contact City/State/Zip: Peoria, IL 61607-5023

A36 **ILLINOIS AIR NATIONAL GUARD Target** BLDG. 2323 SOUTH AIRPORT RD.

Property PEORIA, IL RGA LUST \$115508593

N/A

Site 36 of 37 in cluster A

Actual: 644 ft.

RGA LUST:

2012	ILLINOIS AIR NATIONAL GUARD	BLDG. 2323 SOUTH AIRPORT RD.
2011	ILLINOIS AIR NATIONAL GUARD	BLDG. 2323 SOUTH AIRPORT RD.
2010	ILLINOIS AIR NATIONAL GUARD	BLDG. 2323 SOUTH AIRPORT RD.
2009	ILLINOIS AIR NATIONAL GUARD	BLDG. 2323 SOUTH AIRPORT RD.
2008	ILLINOIS AIR NATIONAL GUARD	BLDG. 2323 SOUTH AIRPORT RD.
2007	ILLINOIS AIR NATIONAL GUARD	BLDG. 2323 SOUTH AIRPORT RD.
2006	ILLINOIS AIR NATIONAL GUARD	BLDG. 2323 SOUTH AIRPORT RD.
2005	ILLINOIS AIR NATIONAL GUARD	BLDG. 2323 SOUTH AIRPORT RD.
2004	ILLINOIS AIR NATIONAL GUARD	BLDG. 2323 SOUTH AIRPORT RD.
2003	ILLINOIS AIR NATIONAL GUARD	BLDG. 2323 SOUTH AIRPORT RD.
2002	ILLINOIS AIR NATIONAL GUARD	BLDG. 2323 SOUTH AIRPORT RD.
2001	ILLINOIS AIR NATIONAL GUARD	BLDG. 2323 SOUTH AIRPORT RD.
2000	ILLINOIS AIR NATIONAL GUARD	BLDG. 2323 SOUTH AIRPORT RD.

A37 **ILLINOIS AIR NATIONAL GUARD** BLDG. 103, 2323 SOUTH AIRPORT RD. **Target**

Property PEORIA, IL RGA LUST S115508591 N/A

Site 37 of 37 in cluster A

Actual: RGA LUST: 644 ft.

2012 ILLINOIS AIR NATIONAL GUARD BLDG. 103, 2323 SOUTH AIRPORT RD.

2011 ILLINOIS AIR NATIONAL GUARD BLDG. 103, 2323 SOUTH AIRPORT RD.

2010 ILLINOIS AIR NATIONAL GUARD BLDG. 103, 2323 SOUTH AIRPORT RD.

2009 ILLINOIS AIR NATIONAL GUARD BLDG. 103, 2323 SOUTH AIRPORT RD.

2008 ILLINOIS AIR NATIONAL GUARD BLDG. 103, 2323 SOUTH AIRPORT

RD.

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ILLINOIS AIR NATIONAL GUARD (Continued)

S115508591

2007	ILLINOIS AIR NATIONAL GUARD	BLDG. 103, 2323 SOUTH AIRPORT
RD.		
2006	ILLINOIS AIR NATIONAL GUARD	BLDG. 103, 2323 SOUTH AIRPORT
RD.		
2005	ILLINOIS AIR NATIONAL GUARD	BLDG. 103, 2323 SOUTH AIRPORT
RD.		
2004	ILLINOIS AIR NATIONAL GUARD	BLDG. 103, 2323 SOUTH AIRPORT
RD.		
2003	ILLINOIS AIR NATIONAL GUARD	BLDG. 103, 2323 SOUTH AIRPORT
RD.		
2002	ILLINOIS AIR NATIONAL GUARD	BLDG. 103, 2323 SOUTH AIRPORT
RD.		
2001	ILLINOIS AIR NATIONAL GUARD	BLDG. 103, 2323 SOUTH AIRPORT
RD.		
2000	ILLINOIS AIR NATIONAL GUARD	BLDG. 103, 2323 SOUTH AIRPORT
RD.		

LUST S104527106 **B38** SPECK, IDA **NNE** 2176 SOUTH AIRPORT RD. N/A

< 1/8 **PEORIA, IL 61607** 0.018 mi.

97 ft. Site 1 of 5 in cluster B

LUST: Relative: Higher Name: SPECK, IDA

2176 SOUTH AIRPORT RD. Address: Actual: City, State, Zip: **PEORIA, IL 61607** 647 ft.

Incident Num: 900912 IL EPA Id: 1430655219 Product: Gasoline IEMA Date: 1990-04-09 Project Manager: NOT ASSIGNED Project Manager Phone: Not reported Email: Not reported PRP Name: Ida Speck PRP Contact: Not reported

PRP Address: 2705 West Wardcliff Dr. PRP City,St,Zip: Peoria, IL 61604 PRP Phone: Not reported Site Classification: Not reported

Section 57.5(g) Letter: 731

Date Section 57.5(g) Letter: Not reported Non LUST Determination Letter: Not reported 20 Report Received: Not reported 45 Report Received: Not reported NFA/NFR Letter: 1991-11-08 NFR Date Recorded: Not reported Heating Oil Date: Not reported Non-Lust LR Date: Not reported

Direction Distance

Distance Elevation Site EDR ID Number

EDR ID Number

EPA ID Number

B39 MINIT MART PEORIA #613 UST U004276962
NNE 2136 S. AIRPORT RD. N/A

< 1/8 PEORIA, IL 61607

0.018 mi.

97 ft. Site 2 of 5 in cluster B

 Relative:
 UST:

 Higher
 Name:
 MINIT MART PEORIA #613

 Actual:
 Address:
 2136 S. AIRPORT RD.

647 ft. City: PEORIA
Zip: 61607

Zip: 61607
Facility ID: 3034373
Facility Status: ACTIVE

Facility Type: SELF-SERVICE STATION

Owner Id: U0039389
Owner Name: Minit Mart, LLC

Owner Address: 302 W. 3rd Street, Floor 3 Owner City,St,Zip: Cincinnati, OH 45202

Tank Number:

Tank Status: Currently in use

Tank Capacity: 8000 Tank Substance: Diesel Fuel Last Used Date: Not reported OSFM First Notify Date: 9/23/1996 Red Tag Issue Date: Not reported Install Date: 5/2/1996 S001458 **Green Tag Decal: Green Tag Issue Date:** 7/6/2017 **Green Tag Expire Date:** 12/31/2019

Fee Due: \$0.00

Motor Fuel Permit Inspection Date: 5/5/2017

Motor Fuel Permit Expiration Date: 12/31/2019

MOTOR FUEL TYPE: SelfSrv

Pending Nov: N

IEMA: Not reported

Equipment Type: Corrosion Prot - Piping

Equipment: Sacrificial Anode Cathodic Protection
Last Passing Date: 11/9/2016
Test Expire Date: 11/9/2019

Test Expire Date: 11/9/2019
Removed Date: Not reported
Abandoned Date: Not reported

Tank Number: 2

Tank Status: Currently in use

Tank Capacity: 6000
Tank Substance: E-85

Last Used Date:

OSFM First Notify Date:

Red Tag Issue Date:

Install Date:

Green Tag Decal:

Green Tag Issue Date:

Green Tag Expire Date:

12/31/2019

So One

Fee Due: \$0.00

Motor Fuel Permit Inspection Date: 5/5/2017

Motor Fuel Permit Expiration Date: 12/31/2019

MOTOR FUEL TYPE: SelfSrv

Direction Distance

Elevation Site Database(s) EPA ID Number

MINIT MART PEORIA #613 (Continued)

U004276962

EDR ID Number

Pending Nov: N

IEMA: Not reported

Equipment Type: Corrosion Prot - Piping

Equipment: Sacrificial Anode Cathodic Protection

Last Passing Date: 11/9/2016
Test Expire Date: 11/9/2019
Removed Date: Not reported
Abandoned Date: Not reported

Tank Number:

Tank Status: Currently in use

15000 Tank Capacity: Tank Substance: Gasoline Last Used Date: Not reported **OSFM First Notify Date:** 9/23/1996 Red Tag Issue Date: Not reported Install Date: 5/2/1996 **Green Tag Decal:** S001458 Green Tag Issue Date: 7/6/2017 **Green Tag Expire Date:** 12/31/2019 Fee Due: \$0.00 Motor Fuel Permit Inspection Date: 5/5/2017 Motor Fuel Permit Expiration Date: 12/31/2019

Motor Fuel Permit Expiration Date: 12/31/2019
MOTOR FUEL TYPE: SelfSrv
Pending Nov: N

IEMA: Not reported

Equipment Type: Corrosion Prot - Piping

Equipment: Sacrificial Anode Cathodic Protection

Last Passing Date: 11/9/2016
Test Expire Date: 11/9/2019
Removed Date: Not reported
Abandoned Date: Not reported

Tank Number: 4

Tank Status: Currently in use

Tank Capacity: 12000 Tank Substance: Gasoline Last Used Date: Not reported OSFM First Notify Date: 9/23/1996 Red Tag Issue Date: Not reported Install Date: 5/2/1996 **Green Tag Decal:** S001458 Green Tag Issue Date: 7/6/2017 **Green Tag Expire Date:** 12/31/2019 Fee Due: \$0.00 Motor Fuel Permit Inspection Date: 5/5/2017

Motor Fuel Permit Inspection Date: 5/5/2017
Motor Fuel Permit Expiration Date: 12/31/2019
MOTOR FUEL TYPE: SelfSrv
Pending Nov: N

IEMA: Not reported

Equipment Type: Corrosion Prot - Piping

Equipment: Sacrificial Anode Cathodic Protection

Last Passing Date: 11/9/2016
Test Expire Date: 11/9/2019
Removed Date: Not reported

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

Not reported

MINIT MART PEORIA #613 (Continued)

Abandoned Date:

Tank Number:

Pending Nov:

U004276962

Tank Status: Currently in use

Tank Capacity: 12000 Tank Substance: Gasoline Last Used Date: Not reported **OSFM First Notify Date:** 9/23/1996 Red Tag Issue Date: Not reported Install Date: 5/2/1996 **Green Tag Decal:** S001458 Green Tag Issue Date: 7/6/2017 **Green Tag Expire Date:** 12/31/2019 Fee Due: \$0.00 Motor Fuel Permit Inspection Date: 5/5/2017 Motor Fuel Permit Expiration Date: 12/31/2019 MOTOR FUEL TYPE: SelfSrv

Not reported IEMA:

Equipment Type: Corrosion Prot - Piping

Equipment: Sacrificial Anode Cathodic Protection

Last Passing Date: 11/9/2016 Test Expire Date: 11/9/2019 Removed Date: Not reported Abandoned Date: Not reported

AIRPORT 66 UST U004276959 **B40** NNE 2136 S AIRPORT RD N/A

< 1/8 **PEORIA, IL 61607**

0.018 mi.

97 ft. Site 3 of 5 in cluster B

Relative: UST: Higher

Name: **AIRPORT 66** 2136 S AIRPORT RD Address:

Actual: 647 ft.

City: **PEORIA** Zip: 61607 Facility ID: 3014469 Facility Status: CLOSED Facility Type: **NONE** Owner Id: U0025362 Owner Name: Speck Ida M Owner Address: 2705 W Warocliff Dr

Peoria, IL 61604 Owner City,St,Zip:

Tank Number:

Tank Status: Removed Tank Capacity: 2000 Tank Substance: Gasoline Last Used Date: 10/1/1989 OSFM First Notify Date: 8/11/1987 Red Tag Issue Date: Not reported Install Date: Not reported **Green Tag Decal:** Not reported **Green Tag Issue Date:** Not reported **Green Tag Expire Date:** Not reported Fee Due: Not reported

Direction
Distance
Elevation

on Site Database(s) EPA ID Number

AIRPORT 66 (Continued) U004276959

Motor Fuel Permit Inspection Date:

Motor Fuel Permit Expiration Date:

MOTOR FUEL TYPE:

Not reported

Not reported

Pending Nov: N

IEMA:
Requipment Type:
Requipment:
Requipment:
Not reported
Requipment:
Not reported
Not reported
Not reported
Not reported
Not reported
Removed Date:
Removed Date:
Abandoned Date:
Not reported
Not reported
Not reported

Tank Number: Tank Status: Removed Tank Capacity: 3000 Gasoline Tank Substance: Last Used Date: 10/1/1989 OSFM First Notify Date: 8/11/1987 Red Tag Issue Date: Not reported Install Date: Not reported **Green Tag Decal:** Not reported **Green Tag Issue Date:** Not reported **Green Tag Expire Date:** Not reported Fee Due: Not reported Not reported Motor Fuel Permit Inspection Date: Motor Fuel Permit Expiration Date: Not reported MOTOR FUEL TYPE: Not reported

Pending Nov: N

IEMA: Not reported Equipment Type: Not reported Equipment: Not reported Last Passing Date: Not reported Test Expire Date: Not reported Removed Date: 4/1/1990 Abandoned Date: Not reported

Tank Number: 3 Removed Tank Status: Tank Capacity: 500 Tank Substance: Used Oil Last Used Date: 10/1/1989 OSFM First Notify Date: 8/11/1987 Red Tag Issue Date: Not reported Install Date: Not reported **Green Tag Decal:** Not reported **Green Tag Issue Date:** Not reported **Green Tag Expire Date:** Not reported Not reported Fee Due: Motor Fuel Permit Inspection Date: Not reported

MOTOR FUEL TYPE: Not reported Pending Nov: N

Motor Fuel Permit Expiration Date:

IEMA: Not reported Equipment Type: Not reported Equipment: Not reported

Not reported

EDR ID Number

Direction Distance

Elevation Site Database(s) EPA ID Number

AIRPORT 66 (Continued) U004276959

Last Passing Date:

Test Expire Date:

Removed Date:

Abandoned Date:

Not reported
4/1/1990

Not reported

Not reported

B41 ILLICO INCORPORATED EDR Hist Auto 1020327848
NNE 2136 AIRPORT RD N/A

NNE 2136 AIRPORT RD < 1/8 PEORIA, IL 61607

0.018 mi.

97 ft. Site 4 of 5 in cluster B

Relative: Higher EDR Hist Auto

Actual: Year: Name:

647 ft. 1986 ERNIES AIRPORT RD 66 1987 ERNIES AIRPORT RD 66 1988 ERNIES AIRPORT RD 66

> 1989 ERNIES AIRPORT RD 66 1997 CITGO INC 1998 CITGO INC 1999 ILLICO INDEPENDENT OIL CO

2000 ILLICO INDEPENDENT OIL CO 2001 ILLICO INCORPORATED 2002 ILLICO INCORPORATED 2003 ILLICO INCORPORATED ILLICO INCORPORATED 2004 2005 ILLICO INCORPORATED 2006 ILLICO INCORPORATED 2007 ILLICO INCORPORATED 2008 ILLICO INCORPORATED 2009 ILLICO INCORPORATED 2010

2010 ILLICO INCORPORATED
2011 ILLICO INCORPORATED
2012 ILLICO INCORPORATED
2013 ILLICO INCORPORATED
2014 ILLICO INCORPORATED

Type: Gasoline Service Stations

Gasoline Service Stations Gasoline Service Stations Gasoline Service Stations Gasoline Service Stations

Gasoline Service Stations
Gasoline Service Stations
Gasoline Service Stations
Gasoline Service Stations
Gasoline Service Stations
Gasoline Service Stations
Gasoline Service Stations

Gasoline Service Stations
Gasoline Service Stations, NEC
Gasoline Service Stations, NEC
Gasoline Service Stations, NEC
Gasoline Service Stations, NEC
Gasoline Service Stations, NEC

Gasoline Service Stations, NEC
Gasoline Service Stations, NEC
Convenience Stores
Convenience Stores

Convenience Stores
Convenience Stores

ILLICO INDEPENDENT OIL CO

2126 SOUTH AIRPORT RD

RCRA-SQG 1000612599
FINDS ILD984828301

< 1/8 PEKIN, IL 61607

0.022 mi.

B42

NNE

114 ft. Site 5 of 5 in cluster B

Relative: RCRA-SQG:

Higher Date form received by agency: 1991-06-10 00:00:00.0

Actual: Facility name: ILLICO INDEPENDENT OIL CO
647 ft. Facility address: 2126 SOUTH AIRPORT RD

PEKIN, IL 61607
EPA ID: ILD984828301
Mailing address: 616 KEOKUK

LINCOLN, IL 62656
Contact: LEE LUCKHART
Contact address: 616 KEOKUK

LINCOLN, IL 62656

Contact country: US

Contact telephone: 217-732-4193

ECHO

EDR ID Number

Distance Elevation

n Site Database(s) EPA ID Number

ILLICO INDEPENDENT OIL CO (Continued)

1000612599

EDR ID Number

Contact email: Not reported

EPA Region: 05

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: ILLICO INDEPENDENT OIL CO

Not reported

Owner/operator address: 617 KEOKUK LINCOLN, IL 62656

Owner/operator country: Not reported Owner/operator telephone: 217-732-4193 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

Handler Activities Summary:

Owner/Op end date:

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

Hazardous Waste Summary:

Waste code: D001

Waste name: IGNITABLE WASTE

Violation Status: No violations found

FINDS:

Registry ID: 110006404925

Environmental Interest/Information System

ACES (Illinois - Agency Compliance And Enforcement System) is the

Illinois EPA Project to facilitate the permitting operations

RCRAInfo is a national information system that supports the Resource

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ILLICO INDEPENDENT OIL CO (Continued)

1000612599

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: 1000612599 110006404925 Registry ID:

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110006404925

43 CATERPILLAR INC. LUST S104521536 NNW 5904 WEST SUTLIFF RD. **BOL** N/A **PEORIA, IL 61607**

1/4-1/2 0.393 mi. 2077 ft.

Relative: LUST: Lower Name:

CATERPILLAR INC. Address: 5904 WEST SUTLIFF RD. Actual: City,State,Zip: **PEORIA, IL 61607** 642 ft.

Incident Num: 950063 IL EPA Id: 1430655011 Product: Jet Fuel

IEMA Date: 1995-01-09 Project Manager: Heaton Project Manager Phone: (217) 524-3312

Email: Mike.Heaton@illinois.gov

PRP Name: Caterpillar Inc. PRP Contact: Kevin Kitchen PRP Address: 5904 West Sutliff Rd. PRP City, St, Zip: Peoria, IL 61607 PRP Phone: Not reported Site Classification: Not reported

Section 57.5(g) Letter: 732

Date Section 57.5(g) Letter: Not reported Non LUST Determination Letter: Not reported 20 Report Received: 1995-02-07 45 Report Received: 1995-03-31 NFA/NFR Letter: 2008-05-08 NFR Date Recorded: 2008-06-10 Heating Oil Date: Not reported Non-Lust LR Date: Not reported

CATERPILLAR INC. Name: Address: 5904 WEST SUTLIFF RD.

PEORIA, IL 61607 City, State, Zip:

Incident Num: 970704 IL EPA Id: 1430655011 Product: Other Petroleum IEMA Date: 1997-04-24 Project Manager: Heaton Project Manager Phone: (217) 524-3312

Direction Distance

Elevation Site Database(s) EPA ID Number

CATERPILLAR INC. (Continued)

S104521536

EDR ID Number

Email: Mike.Heaton@illinois.gov

PRP Name: Caterpillar Inc. PRP Contact: Kevin Kitchen

PRP Address: 100 Northeast Adams St. PRP City,St,Zip: Peoria, IL 61629-0380

PRP Phone: Not reported Site Classification: Not reported

Section 57.5(g) Letter: 732

Date Section 57.5(g) Letter: Not reported Non LUST Determination Letter: Not reported 1997-05-16 20 Report Received: 45 Report Received: 1997-06-10 NFA/NFR Letter: 2008-05-08 NFR Date Recorded: 2008-06-10 Heating Oil Date: Not reported Non-Lust LR Date: Not reported

BOL:

Name: ATS SERVICES LLC Address: 5904 W SUTLIFF RD City,State,Zip: PEORIA, IL 61607-1217

 Site Id:
 170000135342

 Inv Num:
 1430655011

 Interest Name:
 ATS Services LLC

Interest Type: BOL
Media Code: LAND
Latitude: 40.668083
Longitude: -89.686417

 Name:
 ATS SERVICES LLC

 Address:
 5904 W SUTLIFF RD

 City,State,Zip:
 PEORIA, IL 61607-1217

 Site Id:
 170000135342

Inv Num: 1430655011 Interest Name: ATS Services LLC

Interest Type: LUST
Media Code: LAND
Latitude: 40.668700
Longitude: -89.686680

Name: ATS SERVICES LLC Address: 5904 W SUTLIFF RD City,State,Zip: PEORIA, IL 61607-1217

 Site Id:
 170000135342

 Inv Num:
 1430655011

 Interest Name:
 ATS Services LLC

Interest Type: RCRA
Media Code: LAND
Latitude: 40.668083
Longitude: -89.686417

Name: ATS SERVICES LLC
Address: 5904 W SUTLIFF RD
City,State,Zip: PEORIA, IL 61607-1217

 Site Id:
 170000135342

 Inv Num:
 1430655011

 Interest Name:
 ATS Services LLC

Direction Distance

Elevation Site Database(s) EPA ID Number

CATERPILLAR INC. (Continued) S104521536

Interest Type: SOLID WASTE Media Code: LAND

Latitude: 40.668700 Longitude: -89.686680

44 GREATER PEORIA AIRPORT AUTHORITY LUST \$104004369 WNW 5100 DIRKSEN PKWY. N/A

WNW 5100 DIRKSEN PKWY. 1/4-1/2 PEORIA, IL 61607

0.488 mi. 2575 ft.

Relative: LUST:
Higher Name: GREATER PEORIA AIRPORT AUTHORITY

Actual: Address: 5100 DIRKSEN PKWY.
647 ft. City,State,Zip: PEORIA, IL 61607

Incident Num: 990522
IL EPA Id: 1430655531
Product: Diesel
IEMA Date: 1999-03-04
Project Manager: Rahman
Project Manager Phone: Not reported
Email: Not reported

PRP Name: Greater Peoria Airport Authority

PRP Contact: Scott Hinderman
PRP Address: 6100 Dirksen Pkwy.
PRP City, St, Zip: Peoria, IL 61607
PRP Phone: 3096978272

Site Classification: Low Section 57.5(g) Letter: 732

Date Section 57.5(g) Letter: Not reported Non LUST Determination Letter: Not reported 1999-03-22 20 Report Received: 1999-05-25 45 Report Received: NFA/NFR Letter: 2004-01-27 NFR Date Recorded: 2004-02-24 Heating Oil Date: Not reported Non-Lust LR Date: Not reported

EDR ID Number

Count: 2 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
BARTONVILLE	1017802207	PEORIA COUNTY HWY DEPT 89265-AIRPO	AIRPORT RD		FINDS
PEORIA	S109027270	HERTZ RENT A CAR	1900 SOUTH MAXWELL ROAD (PEORI		LUST

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: 07/19/2019 Source: EPA Date Data Arrived at EDR: 07/30/2019 Telephone: N/A

Date Made Active in Reports: 09/03/2019 Last EDR Contact: 11/07/2019

Number of Days to Update: 35 Next Scheduled EDR Contact: 01/13/2020 Data Release Frequency: Quarterly

NPL Site Boundaries

EPA's Environmental Photographic Interpretation Center (EPIC)

Telephone: 202-564-7333

EPA Region 1 EPA Region 6

Telephone 617-918-1143 Telephone: 214-655-6659

EPA Region 3 EPA Region 7

Telephone 215-814-5418 Telephone: 913-551-7247

EPA Region 4 **EPA Region 8**

Telephone 404-562-8033 Telephone: 303-312-6774

EPA Region 5 EPA Region 9

Telephone 312-886-6686 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: 07/19/2019 Date Data Arrived at EDR: 07/30/2019

Date Made Active in Reports: 09/03/2019

Number of Days to Update: 35

Source: EPA Telephone: N/A

Last EDR Contact: 11/07/2019

Next Scheduled EDR Contact: 01/13/2020 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: 07/19/2019 Date Data Arrived at EDR: 07/30/2019 Date Made Active in Reports: 09/03/2019

Number of Days to Update: 35

Source: EPA Telephone: N/A

Last EDR Contact: 11/07/2019

Next Scheduled EDR Contact: 01/13/2020 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: 04/03/2019 Date Data Arrived at EDR: 04/05/2019 Date Made Active in Reports: 05/14/2019

Number of Days to Update: 39

Source: Environmental Protection Agency Telephone: 703-603-8704

Last EDR Contact: 10/04/2019

Next Scheduled EDR Contact: 01/13/2020 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: 07/19/2019
Date Data Arrived at EDR: 07/30/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Lindate: 35

Number of Days to Update: 35

Source: EPA Telephone: 800-424-9346 Last EDR Contact: 11/07/2019

Next Scheduled EDR Contact: 01/27/2020 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: 07/19/2019 Date Data Arrived at EDR: 07/30/2019 Date Made Active in Reports: 09/03/2019

Number of Days to Update: 35

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 11/07/2019

Next Scheduled EDR Contact: 01/27/2020 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: 06/24/2019 Date Data Arrived at EDR: 06/26/2019 Date Made Active in Reports: 10/17/2019

Number of Days to Update: 113

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 10/28/2019

Next Scheduled EDR Contact: 01/06/2020 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: 06/24/2019 Date Data Arrived at EDR: 06/26/2019 Date Made Active in Reports: 10/17/2019

Number of Days to Update: 113

Source: Environmental Protection Agency

Telephone: 312-886-6186 Last EDR Contact: 10/28/2019

Next Scheduled EDR Contact: 01/06/2020 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: 06/24/2019
Date Data Arrived at EDR: 06/26/2019
Date Made Active in Reports: 10/17/2019

Number of Days to Update: 113

Source: Environmental Protection Agency Telephone: 312-886-6186

Last EDR Contact: 10/28/2019

Next Scheduled EDR Contact: 01/06/2020 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: 06/24/2019 Date Data Arrived at EDR: 06/26/2019 Date Made Active in Reports: 10/17/2019

Number of Days to Update: 113

Source: Environmental Protection Agency

Telephone: 312-886-6186 Last EDR Contact: 10/28/2019

Next Scheduled EDR Contact: 01/06/2020 Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly 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). Very small quantity generators (VSQGs) generate
less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/24/2019 Date Data Arrived at EDR: 06/26/2019 Date Made Active in Reports: 10/17/2019

Number of Days to Update: 113

Source: Environmental Protection Agency

Telephone: 312-886-6186 Last EDR Contact: 10/28/2019

Next Scheduled EDR Contact: 01/06/2020 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: 08/13/2019 Date Data Arrived at EDR: 08/20/2019 Date Made Active in Reports: 08/26/2019

Number of Days to Update: 6

Source: Department of the Navy Telephone: 843-820-7326 Last EDR Contact: 11/07/2019

Next Scheduled EDR Contact: 02/24/2020 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: 08/19/2019 Date Data Arrived at EDR: 08/20/2019 Date Made Active in Reports: 08/26/2019

Number of Days to Update: 6

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 08/20/2019

Next Scheduled EDR Contact: 12/09/2019 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: 08/19/2019 Date Data Arrived at EDR: 08/20/2019 Date Made Active in Reports: 08/26/2019

Number of Days to Update: 6

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 08/20/2019

Next Scheduled EDR Contact: 12/09/2019 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: 09/09/2019 Date Data Arrived at EDR: 09/09/2019 Date Made Active in Reports: 09/23/2019

Number of Days to Update: 14

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180 Last EDR Contact: 09/09/2019

Next Scheduled EDR Contact: 01/06/2020 Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

SSU: State Sites Unit Listing

The State Response Action Program database identifies the status of all sites under the responsibility of the

Illinois EPA's State Sites Unit.

Date of Government Version: 08/08/2019
Date Data Arrived at EDR: 08/09/2019
Date Made Active in Reports: 10/10/2019

Number of Days to Update: 62

Source: Illinois Environmental Protection Agency

Telephone: 217-524-4826 Last EDR Contact: 10/21/2019

Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Varies

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: Available Disposal for Solid Waste in Illinois - Solid Waste Landfills Subject to State Surcharge 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: 12/31/2017 Date Data Arrived at EDR: 07/26/2018 Date Made Active in Reports: 08/07/2018

Number of Days to Update: 12

Source: Illinois Environmental Protection Agency

Telephone: 217-785-8604 Last EDR Contact: 10/25/2019

Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Annually

CCDD: Clean Construction or Demolition Debris

Construction and demolition (C and D) debris is nonhazardous, uncontaminated material resulting from construction, remodeling, repair, or demolition of utilities, structures, and roads.

Date of Government Version: 04/11/2018 Date Data Arrived at EDR: 05/01/2018 Date Made Active in Reports: 05/30/2018

Number of Days to Update: 29

Source: Illinois EPA Telephone: 217-524-3300 Last EDR Contact: 10/11/2019

Next Scheduled EDR Contact: 01/20/2020 Data Release Frequency: Varies

LF WMRC: Waste Management & Research Center Landfill Database

The Waste Management & Research Center Landfill Database includes records from the Department of Public Health, Department of Mines & Minerals, Illinois Environmental Protection Agency, State Geological Survey, Northeastern Illinois Planning Commission and Pollution Control Board.

Date of Government Version: 12/31/2001 Date Data Arrived at EDR: 10/06/2006 Date Made Active in Reports: 11/06/2006

Number of Days to Update: 31

Source: Department of Natural Resources

Telephone: 217-333-8940 Last EDR Contact: 09/18/2009

Next Scheduled EDR Contact: 12/28/2009 Data Release Frequency: No Update Planned

LF SPECIAL WASTE: Special Waste Site List

These landfills, as of January 1, 1990, accept non-hazardous special waste pursuant to the Illinois EPA Non-Hazardous Special Waste Definition. List A includes landfills that may receive any non-hazardous waste, Non-Regional Pollution Control Facilities are so noted. List B includes landfills designed to receive specific non-hazardous wastes. List B landfills are designated as a Regional Pollution Control Facility by RPCF, or Non-Regional Pollution Control Facility by Non-RPCF.

Date of Government Version: 01/01/1990 Date Data Arrived at EDR: 06/17/2009 Date Made Active in Reports: 07/15/2009

Number of Days to Update: 28

Source: Illinois EPA Telephone: 217-782-9288 Last EDR Contact: 06/10/2009 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

IL NIPC: Solid Waste Landfill Inventory

Solid Waste Landfill Inventory. NIPC is an inventory of active and inactive solid waste disposal sites, based on state, local government and historical archive data. Included are numerous sites which previously had never been identified largely because there was no obligation to register such sites prior to 1971.

Date of Government Version: 08/01/1988 Date Data Arrived at EDR: 08/01/1994 Date Made Active in Reports: 08/12/1994

Number of Days to Update: 11

Source: Northeastern Illinois Planning Commission

Telephone: 312-454-0400 Last EDR Contact: 05/23/2006 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank Sites

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: 07/22/2019 Date Data Arrived at EDR: 07/23/2019 Date Made Active in Reports: 09/25/2019

Number of Days to Update: 64

Source: Illinois Environmental Protection Agency

Telephone: 217-524-3300 Last EDR Contact: 10/22/2019

Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Semi-Annually

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 07/02/2019 Date Data Arrived at EDR: 10/16/2019 Date Made Active in Reports: 10/24/2019

Number of Days to Update: 8

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 10/25/2019

Next Scheduled EDR Contact: 02/03/2020 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: 04/08/2019 Date Data Arrived at EDR: 07/29/2019 Date Made Active in Reports: 10/17/2019

Number of Days to Update: 80

Source: Environmental Protection Agency

Telephone: 415-972-3372 Last EDR Contact: 10/25/2019

Next Scheduled EDR Contact: 02/03/2020 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: 05/01/2019 Date Data Arrived at EDR: 07/29/2019 Date Made Active in Reports: 10/17/2019

Number of Days to Update: 80

Source: EPA Region 6 Telephone: 214-665-6597 Last EDR Contact: 10/25/2019

Next Scheduled EDR Contact: 02/03/2020 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: 04/16/2019 Date Data Arrived at EDR: 07/29/2019 Date Made Active in Reports: 10/17/2019

Number of Days to Update: 80

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 10/25/2019

Next Scheduled EDR Contact: 02/03/2020 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: 05/02/2019 Date Data Arrived at EDR: 10/22/2019 Date Made Active in Reports: 11/11/2019

Number of Days to Update: 20

Source: EPA Region 8 Telephone: 303-312-6271 Last EDR Contact: 10/25/2019

Next Scheduled EDR Contact: 02/03/2020

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: 04/11/2019 Date Data Arrived at EDR: 07/29/2019 Date Made Active in Reports: 10/17/2019

Number of Days to Update: 80

Source: EPA Region 1 Telephone: 617-918-1313 Last EDR Contact: 10/25/2019

Next Scheduled EDR Contact: 02/03/2020

Data Release Frequency: Varies

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: 04/08/2019 Date Data Arrived at EDR: 07/30/2019 Date Made Active in Reports: 10/17/2019

Number of Days to Update: 79

Source: EPA, Region 5 Telephone: 312-886-7439 Last EDR Contact: 10/25/2019

Next Scheduled EDR Contact: 02/03/2020 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: 04/12/2019 Date Data Arrived at EDR: 07/29/2019 Date Made Active in Reports: 10/17/2019

Number of Days to Update: 80

Source: EPA Region 4 Telephone: 404-562-8677 Last EDR Contact: 10/25/2019

Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Varies

LUST TRUST: Underground Storage Tank Fund Payment Priority List

In case sufficient funds are not available in the Underground Storage Tank Fund, requests for payment are entered on the Payment Priority List by "queue date" order. As required by the Environmental Protection Act, the queue date is the date that a complete request for partial or final payment was received by the Agency. The queue date is "officially" confirmed at the end of the payment review process when a Final Decision Letter is sent to the site owner.

Date of Government Version: 06/06/2016 Date Data Arrived at EDR: 07/27/2016 Date Made Active in Reports: 10/18/2016

Number of Days to Update: 83

Source: Illinois EPA Telephone: 217-782-6762 Last EDR Contact: 10/17/2019

Next Scheduled EDR Contact: 02/03/2020

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: 08/27/2019 Date Data Arrived at EDR: 08/28/2019 Date Made Active in Reports: 11/11/2019

Number of Days to Update: 75

Source: FEMA

Telephone: 202-646-5797 Last EDR Contact: 10/11/2019

Next Scheduled EDR Contact: 01/20/2020 Data Release Frequency: Varies

UST: Underground Storage Tank Facility List

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: 07/22/2019 Date Data Arrived at EDR: 07/23/2019 Date Made Active in Reports: 09/26/2019

Number of Days to Update: 65

Source: Illinois State Fire Marshal Telephone: 217-785-0969 Last EDR Contact: 10/22/2019

Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Quarterly

AST: Above Ground Storage Tanks

Listing of all aboveground tanks inspected by Office of State Fire Marshal.

Date of Government Version: 08/15/2019 Date Data Arrived at EDR: 08/20/2019 Date Made Active in Reports: 10/10/2019

Number of Days to Update: 51

Source: State Fire Marshal Telephone: 217-785-1011 Last EDR Contact: 11/14/2019

Next Scheduled EDR Contact: 03/02/2020

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: 05/01/2019 Date Data Arrived at EDR: 07/29/2019 Date Made Active in Reports: 10/17/2019

Number of Days to Update: 80

Source: EPA Region 6 Telephone: 214-665-7591 Last EDR Contact: 10/25/2019

Next Scheduled EDR Contact: 02/03/2020 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: 04/08/2019 Date Data Arrived at EDR: 07/29/2019 Date Made Active in Reports: 10/17/2019

Number of Days to Update: 80

Source: EPA Region 9 Telephone: 415-972-3368 Last EDR Contact: 10/25/2019

Next Scheduled EDR Contact: 02/03/2020 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: 04/11/2019 Date Data Arrived at EDR: 07/30/2019 Date Made Active in Reports: 10/17/2019

Number of Days to Update: 79

Source: EPA, Region 1 Telephone: 617-918-1313 Last EDR Contact: 10/25/2019

Next Scheduled EDR Contact: 02/03/2020

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: 04/12/2019 Date Data Arrived at EDR: 07/29/2019 Date Made Active in Reports: 10/17/2019

Number of Days to Update: 80

Source: EPA Region 4 Telephone: 404-562-9424 Last EDR Contact: 10/25/2019

Next Scheduled EDR Contact: 02/03/2020 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: 05/02/2019 Date Data Arrived at EDR: 10/22/2019 Date Made Active in Reports: 11/11/2019

Number of Days to Update: 20

Source: EPA Region 8 Telephone: 303-312-6137 Last EDR Contact: 10/25/2019

Next Scheduled EDR Contact: 02/03/2020

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: 04/16/2019 Date Data Arrived at EDR: 07/30/2019 Date Made Active in Reports: 10/17/2019

Number of Days to Update: 79

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 10/25/2019

Next Scheduled EDR Contact: 02/03/2020 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: 04/08/2019 Date Data Arrived at EDR: 07/29/2019 Date Made Active in Reports: 10/17/2019

Number of Days to Update: 80

Source: EPA Region 5 Telephone: 312-886-6136 Last EDR Contact: 10/25/2019

Next Scheduled EDR Contact: 02/03/2020

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: 05/02/2019 Date Data Arrived at EDR: 07/29/2019 Date Made Active in Reports: 10/17/2019

Number of Days to Update: 80

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 10/25/2019

Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

ENG CONTROLS: Sites with Engineering Controls

Sites using of engineered barriers (e.g., asphalt or concrete paving).

Date of Government Version: 07/01/2019 Date Data Arrived at EDR: 07/01/2019 Date Made Active in Reports: 09/16/2019

Number of Days to Update: 77

Source: Illinois Environmental Protection Agency

Telephone: 217-782-6761 Last EDR Contact: 09/30/2019

Next Scheduled EDR Contact: 01/13/2020 Data Release Frequency: Quarterly

Inst Control: Institutional Controls

Legal or administrative restrictions on land use and/or other activities (e.g., groundwater use restrictions) which effectively limit exposure to contamination may be employed as alternatives to removal or treatment of contamination.

Date of Government Version: 07/01/2019 Date Data Arrived at EDR: 07/01/2019 Date Made Active in Reports: 09/16/2019

Number of Days to Update: 77

Source: Illinois Environmental Protection Agency

Telephone: 217-782-6761 Last EDR Contact: 09/30/2019

Next Scheduled EDR Contact: 01/13/2020 Data Release Frequency: Quarterly

State and tribal voluntary cleanup sites

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

SRP: Site Remediation Program Database

The database identifies the status of all voluntary remediation projects administered through the pre-notice site cleanup program (1989 to 1995) and the site remediation program (1996 to the present).

Date of Government Version: 07/01/2019 Date Data Arrived at EDR: 07/01/2019 Date Made Active in Reports: 09/16/2019

Number of Days to Update: 77

Source: Illinois Environmental Protection Agency

Telephone: 217-785-9407 Last EDR Contact: 09/30/2019

Next Scheduled EDR Contact: 01/13/2020 Data Release Frequency: Semi-Annually

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: 09/19/2019

Next Scheduled EDR Contact: 01/06/2020 Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Municipal Brownfields Redevelopment Grant Program Project Descriptions

The Illinois Municipal Brownfields Redevelopment Grant Program (MBRGP) offers grants worth a maximum of \$240,000 each to municipalities to assist in site investigation activities, development of cleanup objectives, and performance of cleanup activities. Brownfields are abandoned or underused industrial and/or commercial properties that are contaminated (or thought to be contaminated) and have an active potential for redevelopment.

Date of Government Version: 02/11/2010 Date Data Arrived at EDR: 07/31/2014 Date Made Active in Reports: 09/08/2014

Number of Days to Update: 39

Source: Illinois Environmental Protection Agency

Telephone: 217-785-3486 Last EDR Contact: 10/25/2019

Next Scheduled EDR Contact: 02/03/2020

Data Release Frequency: Varies

BROWNFIELDS: Redevelopment Assessment Database

The Office of Site Evaluations Redevelopment Assessment database identifies the status of all properties within the State in which the Illinois EPA's Office of Site Evaluation has conducted a municipal Brownfield Redevelopment Assessment.

Date of Government Version: 07/22/2019 Date Data Arrived at EDR: 07/23/2019 Date Made Active in Reports: 09/25/2019

Number of Days to Update: 64

Source: Illinois Environmental Protection Agency

Telephone: 217-524-1658 Last EDR Contact: 10/22/2019

Next Scheduled EDR Contact: 02/03/2020

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: 06/03/2019 Date Data Arrived at EDR: 06/04/2019 Date Made Active in Reports: 08/26/2019

Number of Days to Update: 83

Source: Environmental Protection Agency

Telephone: 202-566-2777 Last EDR Contact: 09/19/2019

Next Scheduled EDR Contact: 12/30/2019 Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

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: 10/28/2019

Next Scheduled EDR Contact: 02/10/2020 Data Release Frequency: Varies

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

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: 10/17/2019

Next Scheduled EDR Contact: 02/03/2020 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: 11/01/2019

Next Scheduled EDR Contact: 02/10/2020 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: 06/11/2019 Date Data Arrived at EDR: 06/13/2019 Date Made Active in Reports: 09/03/2019

Number of Days to Update: 82

Source: Drug Enforcement Administration

Telephone: 202-307-1000 Last EDR Contact: 08/21/2019

Next Scheduled EDR Contact: 12/09/2019
Data Release Frequency: No Update Planned

CDL: Meth Drug Lab Site Listing

A listing of clandestine/meth drug lab locations.

Date of Government Version: 12/31/2018 Date Data Arrived at EDR: 04/09/2019 Date Made Active in Reports: 05/23/2019

Number of Days to Update: 44

Source: Department of Public Health

Telephone: 217-782-5750 Last EDR Contact: 10/08/2019

Next Scheduled EDR Contact: 01/20/2020

Data Release Frequency: Varies

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: 06/11/2019 Date Data Arrived at EDR: 06/13/2019 Date Made Active in Reports: 09/03/2019

Number of Days to Update: 82

Source: Drug Enforcement Administration

Telephone: 202-307-1000 Last EDR Contact: 08/21/2019

Next Scheduled EDR Contact: 12/09/2019 Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

CHICAGO TANKS: CDPH Storage Tanks Listing

This dataset contains Aboveground Storage Tank (AST) and Underground Storage Tank (UST) information from the Department of Public Healtha??s (CDPH) Tank Asset Database. The Tank Asset Database contains tank information from CDPH AST and UST permit applications as well as UST records imported from the historic Department of Environment (DOE) database. This dataset also includes AST records from the historic DOE and pre-1992 UST records from the Building Department.

Date of Government Version: 08/21/2019 Date Data Arrived at EDR: 08/23/2019 Date Made Active in Reports: 08/27/2019

Number of Days to Update: 4

Source: Department of Public Health Telephone: 312-747-2374 Last EDR Contact: 09/16/2019

Next Scheduled EDR Contact: 12/30/2019 Data Release Frequency: Quarterly

Local Land Records

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: 07/30/2019 Date Data Arrived at EDR: 07/30/2019 Date Made Active in Reports: 09/03/2019

Number of Days to Update: 35

Source: Environmental Protection Agency

Telephone: 202-564-6023 Last EDR Contact: 11/07/2019

Next Scheduled EDR Contact: 01/13/2020 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: 06/24/2019 Date Data Arrived at EDR: 06/26/2019 Date Made Active in Reports: 09/23/2019

Number of Days to Update: 89

Source: U.S. Department of Transportation

Telephone: 202-366-4555 Last EDR Contact: 09/24/2019

Next Scheduled EDR Contact: 01/06/2020 Data Release Frequency: Quarterly

SPILLS: State spills

A listing of incidents reported to the Office of Emergency Response.

Date of Government Version: 05/23/2019 Date Data Arrived at EDR: 07/10/2019 Date Made Active in Reports: 09/19/2019

Number of Days to Update: 71

Source: Illinois EPA Telephone: 217-782-3637 Last EDR Contact: 10/02/2019

Next Scheduled EDR Contact: 01/20/2020 Data Release Frequency: Semi-Annually

IEMA SPILLS: Illinois Emergency Management Agency Spills

A listing of hazardous materials incidents reported to the Illinois Emergency Management Agency.

Date of Government Version: 07/29/2019 Date Data Arrived at EDR: 07/31/2019 Date Made Active in Reports: 10/10/2019

Number of Days to Update: 71

Source: Illinois Emergency Management Agency

Telephone: 217-524-0770 Last EDR Contact: 10/29/2019

Next Scheduled EDR Contact: 02/10/2020 Data Release Frequency: Quarterly

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: 07/18/2012 Date Data Arrived at EDR: 01/03/2013 Date Made Active in Reports: 03/15/2013

Number of Days to Update: 71

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: 06/24/2019 Date Data Arrived at EDR: 06/26/2019 Date Made Active in Reports: 10/17/2019

Number of Days to Update: 113

Source: Environmental Protection Agency

Telephone: 312-886-6186 Last EDR Contact: 10/28/2019

Next Scheduled EDR Contact: 01/06/2020 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: 05/15/2019 Date Data Arrived at EDR: 05/21/2019 Date Made Active in Reports: 08/08/2019

Number of Days to Update: 79

Source: U.S. Army Corps of Engineers

Telephone: 202-528-4285 Last EDR Contact: 08/23/2019

Next Scheduled EDR Contact: 12/02/2019

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: 10/11/2019

Next Scheduled EDR Contact: 01/20/2020 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: 04/02/2018 Date Data Arrived at EDR: 04/11/2018 Date Made Active in Reports: 11/06/2019

Number of Days to Update: 574

Source: U.S. Geological Survey Telephone: 888-275-8747 Last EDR Contact: 10/07/2019

Next Scheduled EDR Contact: 01/20/2020

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: 11/11/2019

Next Scheduled EDR Contact: 02/24/2020 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: 06/24/2019 Date Data Arrived at EDR: 06/26/2019 Date Made Active in Reports: 09/23/2019

Number of Days to Update: 89

Source: Environmental Protection Agency

Telephone: 202-566-1917 Last EDR Contact: 09/24/2019

Next Scheduled EDR Contact: 01/06/2020 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: 10/31/2019

Next Scheduled EDR Contact: 02/17/2020 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: 11/08/2019

Next Scheduled EDR Contact: 02/17/2020 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: 09/19/2019

Next Scheduled EDR Contact: 12/30/2019 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: 08/23/2019

Next Scheduled EDR Contact: 12/02/2019 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: 09/30/2018 Date Data Arrived at EDR: 04/24/2019 Date Made Active in Reports: 08/08/2019

Number of Days to Update: 106

Source: EPA

Telephone: 202-564-4203 Last EDR Contact: 10/23/2019

Next Scheduled EDR Contact: 02/03/2020 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: 07/19/2019 Date Data Arrived at EDR: 07/30/2019 Date Made Active in Reports: 09/03/2019

Number of Days to Update: 35

Source: EPA

Telephone: 703-416-0223 Last EDR Contact: 11/07/2019

Next Scheduled EDR Contact: 02/17/2020 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: 04/25/2019 Date Data Arrived at EDR: 05/02/2019 Date Made Active in Reports: 05/23/2019

Number of Days to Update: 21

Source: Environmental Protection Agency

Telephone: 202-564-8600 Last EDR Contact: 10/21/2019

Next Scheduled EDR Contact: 02/03/2020 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: 08/20/2019 Date Data Arrived at EDR: 09/05/2019 Date Made Active in Reports: 09/23/2019

Number of Days to Update: 18

Source: EPA

Telephone: 202-564-6023 Last EDR Contact: 11/07/2019

Next Scheduled EDR Contact: 02/17/2020 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: 03/20/2019 Date Data Arrived at EDR: 04/10/2019 Date Made Active in Reports: 05/14/2019

Number of Days to Update: 34

Source: EPA

Telephone: 202-566-0500 Last EDR Contact: 10/11/2019

Next Scheduled EDR Contact: 01/20/2020 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: 10/07/2019

Next Scheduled EDR Contact: 01/20/2020 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: No Update Planned

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: No Update Planned

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: 06/20/2019 Date Data Arrived at EDR: 06/20/2019 Date Made Active in Reports: 08/08/2019

Number of Days to Update: 49

Source: Nuclear Regulatory Commission

Telephone: 301-415-7169 Last EDR Contact: 10/25/2019

Next Scheduled EDR Contact: 02/03/2020 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: 11/06/2019

Next Scheduled EDR Contact: 12/16/2019 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: 01/12/2017 Date Data Arrived at EDR: 03/05/2019 Date Made Active in Reports: 11/11/2019

Number of Days to Update: 251

Source: Environmental Protection Agency

Telephone: N/A

Last EDR Contact: 09/03/2019

Next Scheduled EDR Contact: 12/16/2019

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: 11/06/2019

Next Scheduled EDR Contact: 02/17/2020 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: 07/01/2019 Date Data Arrived at EDR: 07/01/2019 Date Made Active in Reports: 09/23/2019

Number of Days to Update: 84

Source: Environmental Protection Agency

Telephone: 202-343-9775 Last EDR Contact: 11/12/2019

Next Scheduled EDR Contact: 01/13/2020 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: 07/01/2019 Date Data Arrived at EDR: 07/31/2019 Date Made Active in Reports: 10/24/2019

Number of Days to Update: 85

Source: Department of Transporation, Office of Pipeline Safety

Telephone: 202-366-4595 Last EDR Contact: 10/29/2019

Next Scheduled EDR Contact: 02/10/2020 Data Release Frequency: Quarterly

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: 06/30/2019 Date Data Arrived at EDR: 07/16/2019 Date Made Active in Reports: 10/02/2019

Number of Days to Update: 78

Source: Department of Justice, Consent Decree Library

Telephone: Varies

Last EDR Contact: 10/02/2019

Next Scheduled EDR Contact: 01/20/2020 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: 09/16/2019

Next Scheduled EDR Contact: 01/06/2020 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: 10/06/2019

Next Scheduled EDR Contact: 01/19/2020 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: 11/04/2019

Next Scheduled EDR Contact: 02/17/2020 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: 08/01/2019 Date Data Arrived at EDR: 08/21/2019 Date Made Active in Reports: 11/11/2019

Number of Days to Update: 82

Source: Department of Energy Telephone: 505-845-0011 Last EDR Contact: 11/15/2019

Next Scheduled EDR Contact: 03/02/2020 Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 07/19/2019 Date Data Arrived at EDR: 07/30/2019 Date Made Active in Reports: 09/03/2019

Number of Days to Update: 35

Source: Environmental Protection Agency

Telephone: 703-603-8787 Last EDR Contact: 11/07/2019

Next Scheduled EDR Contact: 01/13/2020 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

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 06/06/2019 Date Data Arrived at EDR: 06/06/2019 Date Made Active in Reports: 10/24/2019

Number of Days to Update: 140

Source: DOL, Mine Safety & Health Admi

Telephone: 202-693-9424 Last EDR Contact: 09/12/2019

Next Scheduled EDR Contact: 12/16/2019 Data Release Frequency: Quarterly

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: 08/01/2019 Date Data Arrived at EDR: 08/27/2019 Date Made Active in Reports: 11/11/2019

Number of Days to Update: 76

Source: Department of Labor, Mine Safety and Health Administration

Telephone: 303-231-5959 Last EDR Contact: 08/27/2019

Next Scheduled EDR Contact: 12/09/2019 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: 08/30/2019

Next Scheduled EDR Contact: 12/09/2019

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: 08/30/2019

Next Scheduled EDR Contact: 12/09/2019 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: 09/10/2019 Date Data Arrived at EDR: 09/10/2019 Date Made Active in Reports: 10/17/2019

Number of Days to Update: 37

Source: Department of Interior Telephone: 202-208-2609 Last EDR Contact: 09/10/2019

Next Scheduled EDR Contact: 12/23/2019 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: 05/03/2019 Date Data Arrived at EDR: 06/05/2019 Date Made Active in Reports: 09/03/2019

Number of Days to Update: 90

Source: EPA

Telephone: (312) 353-2000 Last EDR Contact: 09/04/2019

Next Scheduled EDR Contact: 12/16/2019 Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2017 Date Data Arrived at EDR: 01/17/2019 Date Made Active in Reports: 04/01/2019

Number of Days to Update: 74

Source: Department of Defense Telephone: 703-704-1564 Last EDR Contact: 10/10/2019

Next Scheduled EDR Contact: 01/27/2020 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: 08/21/2019

Next Scheduled EDR Contact: 12/09/2019 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: 07/06/2019 Date Data Arrived at EDR: 07/09/2019 Date Made Active in Reports: 10/02/2019

Number of Days to Update: 85

Source: Environmental Protection Agency

Telephone: 202-564-2280 Last EDR Contact: 10/08/2019

Next Scheduled EDR Contact: 01/20/2020 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: 08/19/2019 Date Data Arrived at EDR: 08/20/2019 Date Made Active in Reports: 11/11/2019

Number of Days to Update: 83

Source: EPA

Telephone: 800-385-6164 Last EDR Contact: 08/20/2019

Next Scheduled EDR Contact: 12/02/2019 Data Release Frequency: Quarterly

AIRS: Air Inventory Listing

A listing of air permits and emissions information.

Date of Government Version: 06/18/2019 Date Data Arrived at EDR: 06/28/2019 Date Made Active in Reports: 08/27/2019

Number of Days to Update: 60

Source: Illinois EPA Telephone: 217-557-0314 Last EDR Contact: 09/25/2019

Next Scheduled EDR Contact: 01/13/2020

Data Release Frequency: Varies

ASBESTOS: ASBESTOS

A listing of asbestos abatement & demolition project site locations in the state.

Date of Government Version: 06/28/2019 Date Data Arrived at EDR: 06/28/2019 Date Made Active in Reports: 08/27/2019

Number of Days to Update: 60

Source: Illinois EPA Telephone: 217-558-5101 Last EDR Contact: 09/25/2019

Next Scheduled EDR Contact: 01/13/2020 Data Release Frequency: Varies

BOL: Bureau of Land Inventory Database

Bureau of Land inventory for facility information. Data results are cross-linked with all on-line database system applications from IEPA - Bureau of Land as well as USEPA FRS database.

Date of Government Version: 08/20/2019 Date Data Arrived at EDR: 08/26/2019 Date Made Active in Reports: 10/11/2019

Number of Days to Update: 46

Source: Illinois Environmental Protection Agency

Telephone: 217-785-9407 Last EDR Contact: 08/21/2019

Next Scheduled EDR Contact: 12/09/2019

Data Release Frequency: Varies

CHICAGO ENV: Environmental Records Dataset

This dataset serves as a lookup table to determine if environmental records exist in a Chicago Department of Public Health (CDPH) environmental dataset for a given address. COMPLAINTS: A "Y" indicates that one or more records exist in the CDPH Environmental Complaints dataset. NESHAPS and DEMOLITON NOTICES: A "Y" indicates that one or more records exist in the CDPH Asbestos and Demolition Notification dataset. ENFORCEMENT: A "Y" indicates that one or more records exist in the CDPH Environmental Enforcement dataset. INSPECTIONS: A "Y" indicates that one or more records exist in the CDPH Environmental Inspections dataset. PERMITS: A "Y" indicates that one or more records exist in the CDPH Environmental Permits dataset. TANKS: A "Y" indicates that one or more records exist in the CDPH Storage Tanks dataset.

Date of Government Version: 08/21/2019 Date Data Arrived at EDR: 08/23/2019 Date Made Active in Reports: 08/27/2019

Number of Days to Update: 4

Source: Chicago Department of Public Health

Telephone: 312-745-3136 Last EDR Contact: 09/16/2019

Next Scheduled EDR Contact: 12/30/2019

Data Release Frequency: Varies

COAL ASH: Coal Ash Site Listing
A listing of coal ash site lcoations.

Date of Government Version: 10/01/2011 Date Data Arrived at EDR: 03/09/2012 Date Made Active in Reports: 04/10/2012

Number of Days to Update: 32

Source: Illinois EPA Telephone: 217-782-1654 Last EDR Contact: 08/30/2019

Next Scheduled EDR Contact: 12/09/2019 Data Release Frequency: Annually

DRYCLEANERS: Illinois Licensed Drycleaners

Any retail drycleaning facility in Illinois must apply for a license through the Illinois Drycleaner Environmental Response Trust Fund. Drycleaner Environmental Response Trust Fund of Illinois.

Date of Government Version: 08/18/2019 Date Data Arrived at EDR: 08/21/2019 Date Made Active in Reports: 10/10/2019

Number of Days to Update: 50

Source: Drycleaner Environmental Response Trust Fund of Illinois

Telephone: 800-765-4041 Last EDR Contact: 08/21/2019

Next Scheduled EDR Contact: 12/02/2019 Data Release Frequency: Varies

Financial Assurance: Financial Assurance Information Listing

Information for hazardous 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: 12/14/2017 Date Data Arrived at EDR: 02/22/2018 Date Made Active in Reports: 03/12/2018

Number of Days to Update: 18

Source: Illinois Environmental Protection Agency

Telephone: 217-782-9887 Last EDR Contact: 11/14/2019

Next Scheduled EDR Contact: 03/02/2020 Data Release Frequency: No Update Planned

HWAR: Hazard Waste Annual Report

Each year, Illinois hazardous-waste generators tell the Illinois EPA the amounts and kinds of hazardous waste they produced during the previous year. Generators indicate by code the types of wastes produced and the steps they took to manage these wastes. If some or all of these wastes were sent to commercial treatment, storage, and disposal facilities (TSDFs), that information and the identity of each receiving facility also are submitted. Illinois TSDFs likewise report the types and quantities of wastes received from in-state and out-of-state generators; they also report the procedures they used to manage these wastes.

Date of Government Version: 12/31/2017 Date Data Arrived at EDR: 02/08/2019 Date Made Active in Reports: 04/04/2019

Number of Days to Update: 55

Source: Illinois EPA Telephone: 217-524-3300 Last EDR Contact: 10/02/2019

Next Scheduled EDR Contact: 01/20/2020 Data Release Frequency: Annually

IMPDMENT: Surface Impoundment Inventory

Statewide inventory of industrial, municipal, mining, oil & gas, and large agricultural impoundment. This study was conducted by the Illinois EPA to assess potential for contamination of shallow aquifers. This was a one-time study. Although many of the impoundments may no longer be present, the sites may be contaminated.

Date of Government Version: 12/31/1980 Date Data Arrived at EDR: 03/08/2002 Date Made Active in Reports: 06/03/2002

Number of Days to Update: 87

Source: Illinois Waste Management & Research Center

Telephone: 217-333-8940 Last EDR Contact: 02/20/2002 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

NPDES: A Listing of Active Permits

A listing of facilities currently active in the state. The types of permits are public, private, federal and state.

Date of Government Version: 04/16/2014 Date Data Arrived at EDR: 04/18/2014 Date Made Active in Reports: 05/20/2014

Number of Days to Update: 32

Source: Illinois EPA Telephone: 217-782-0610 Last EDR Contact: 09/25/2019

Next Scheduled EDR Contact: 01/13/2020 Data Release Frequency: Varies

PIMW: Potentially Infectious Medical Waste

Potentially infectious Medical Waste (PIMW) is waste generated in connection with the diagnosis, treatment (i.e., provision of medical services), or immunization of human beings or animals; research pertaining to the provision of medical services; or the provision or testing of biologicals.

Date of Government Version: 06/18/2019 Date Data Arrived at EDR: 06/20/2019 Date Made Active in Reports: 08/27/2019

Number of Days to Update: 68

Source: Illinois EPA Telephone: 217-524-3289 Last EDR Contact: 09/16/2019

Next Scheduled EDR Contact: 12/30/2019 Data Release Frequency: Varies

TIER 2: Tier 2 Information Listing

A listing of facilities which store or manufacture hazardous materials and submit a chemical inventory report.

Date of Government Version: 12/31/2018 Date Data Arrived at EDR: 05/14/2019 Date Made Active in Reports: 05/24/2019

Number of Days to Update: 10

Source: Illinois Emergency Management Agency

Telephone: 217-785-9860 Last EDR Contact: 11/07/2019

Next Scheduled EDR Contact: 02/24/2020 Data Release Frequency: Annually

UIC: Underground Injection Wells

Injection wells are used for disposal of fluids by "injection" into the subsurface. The construction of injection wells range from very technical designs with twenty-four hour monitoring to simply a hole dug in the ground to control runoff. As a result of this diversity, the UIC Program divides injection wells into five different classes.

Date of Government Version: 06/25/2018 Date Data Arrived at EDR: 09/04/2018 Date Made Active in Reports: 09/11/2018

Number of Days to Update: 7

Source: Illinois EPA Telephone: 217-782-9878 Last EDR Contact: 11/14/2019

Next Scheduled EDR Contact: 03/02/2020 Data Release Frequency: Semi-Annually

MINES MRDS: Mineral Resources Data System

Mineral Resources Data System

Date of Government Version: 04/06/2018 Date Data Arrived at EDR: 10/21/2019 Date Made Active in Reports: 10/24/2019

Number of Days to Update: 3

Source: USGS

Telephone: 703-648-6533 Last EDR Contact: 08/30/2019

Next Scheduled EDR Contact: 12/09/2019 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 Source: EDR, Inc.
Date Data Arrived at EDR: N/A Telephone: N/A
Date Made Active in Reports: N/A Last EDR Contact: N/A

Number of Days to Update: 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 Source: EDR, Inc.
Date Data Arrived at EDR: N/A Telephone: N/A
Date Made Active in Reports: N/A Last EDR Contact: N/A

Number of Days to Update: 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 Natural Resources in Illinois.

Date of Government Version: N/A Source: Department of Natural Resources
Date Data Arrived at EDR: 07/01/2013 Telephone: N/A

Date Made Active in Reports: 12/30/2013

Number of Days to Update: 182

Last EDR Contact: 06/01/2012

Next Scheduled EDR Contact: N/A

Data Release Frequency: Varies

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Illinois Environmental Protection Agency in Illinois.

Date of Government Version: N/A Source: Illinois Environmental Protection Agency
Date Data Arrived at EDR: 07/01/2013 Telephone: N/A

Date Made Active in Reports: 01/10/2014

Number of Days to Update: 193

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 Illinois Environmental Protection Agency in Illinois.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013

Number of Days to Update: 182

Source: Illinois Environmental Protection Agency

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.

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: 05/14/2019 Date Data Arrived at EDR: 05/14/2019 Date Made Active in Reports: 08/05/2019

Number of Days to Update: 83

Source: Department of Energy & Environmental Protection

Telephone: 860-424-3375 Last EDR Contact: 11/11/2019

Next Scheduled EDR Contact: 02/24/2020 Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2018 Date Data Arrived at EDR: 04/10/2019 Date Made Active in Reports: 05/16/2019

Number of Days to Update: 36

Source: Department of Environmental Protection

Telephone: N/A

Last EDR Contact: 10/02/2019

Next Scheduled EDR Contact: 01/20/2020 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: 01/01/2019 Date Data Arrived at EDR: 05/01/2019 Date Made Active in Reports: 06/21/2019

Number of Days to Update: 51

Source: Department of Environmental Conservation

Telephone: 518-402-8651 Last EDR Contact: 10/29/2019

Next Scheduled EDR Contact: 02/10/2020 Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 06/30/2018 Date Data Arrived at EDR: 07/19/2019 Date Made Active in Reports: 09/10/2019

Number of Days to Update: 53

Source: Department of Environmental Protection

Telephone: 717-783-8990 Last EDR Contact: 10/09/2019

Next Scheduled EDR Contact: 12/07/2020 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: 11/14/2019

Next Scheduled EDR Contact: 03/02/2020 Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 05/31/2018 Date Data Arrived at EDR: 06/19/2019 Date Made Active in Reports: 09/03/2019

Number of Days to Update: 76

Source: Department of Natural Resources

Telephone: N/A

Last EDR Contact: 09/06/2019

Next Scheduled EDR Contact: 12/23/2019 Data Release Frequency: Annually

Oil/Gas Pipelines

Source: Endeavor Business Media

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 Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data

Source: Endeavor Business Media

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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: Homes & Centers Listing

Source: Department of Children & Family Services

Telephone: 312-814-4150

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: Wetland Inventory
Source: Illinois State Geological Survey

Telephone: 217-333-4747

Current USGS 7.5 Minute Topographic Map Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK®-PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

PEORIA AASF 2323 SOUTH AIRPORT ROAD PEORIA, IL 61607

TARGET PROPERTY COORDINATES

Latitude (North): 40.660502 - 40° 39' 37.81" Longitude (West): 89.681434 - 89° 40' 53.16"

Universal Tranverse Mercator: Zone 16 UTM X (Meters): 273315.4 UTM Y (Meters): 4504317.0

Elevation: 644 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map: 5681195 PEORIA WEST, IL

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.

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).

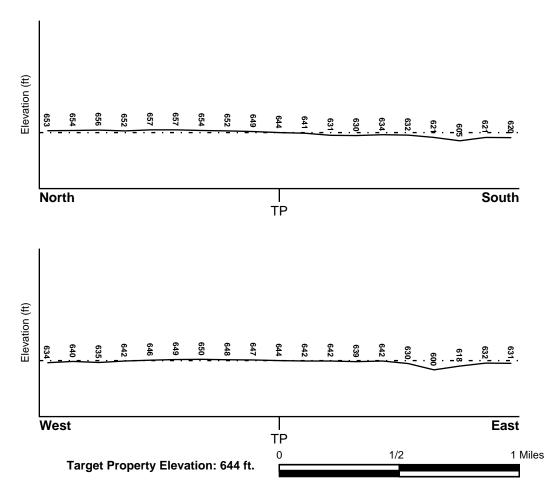
TOPOGRAPHIC INFORMATION

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 SSE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



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.

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

1705330175B FEMA Q3 Flood data

Additional Panels in search area: FEMA Source Type

NO PANEL ID FEMA Q3 Flood data 1705340005C FEMA Q3 Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property Data Coverage

PEORIA WEST 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.

LOCATION GENERAL DIRECTION

MAP ID FROM TP GROUNDWATER FLOW

Not Reported

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

GEOLOGIC AGE IDENTIFICATION

Era: Paleozoic Category: Stratifed Sequence

System: Pennsylvanian
Series: Des Moinesian Series

Code: PP2 (decoded above as Era, System & Series)

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).

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. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name: ROZETTA
Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep,

moderately well and well drained soils with moderately coarse

textures.

Soil Drainage Class: Moderately well drained. Soils have a layer of low hydraulic

conductivity, wet state high in the profile. Depth to water table is 3

to 6 feet.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: MODERATE

Depth to Bedrock Min: > 60 inches

Depth to Bedrock Max: > 60 inches

			Soil Layer	Information			
	Вои	ındary		Classi	fication		
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	4 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 2.00 Min: 0.60	Max: 7.30 Min: 5.10
2	4 inches	11 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 2.00 Min: 0.60	Max: 7.30 Min: 4.50
3	11 inches	50 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 2.00 Min: 0.60	Max: 6.00 Min: 4.50
4	50 inches	60 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 2.00 Min: 0.60	Max: 7.80 Min: 5.60

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: loam

silty clay loam

Surficial Soil Types: loam

silty clay loam

Shallow Soil Types: No Other Soil Types

Deeper Soil Types: sandy loam

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 1 mile

State Database 1.000

FEDERAL USGS WELL INFORMATION

LOCATION

MAP ID WELL ID FROM TP

No Wells Found

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID WELL ID FROM TP

No PWS System Found

Note: PWS System location is not always the same as well location.

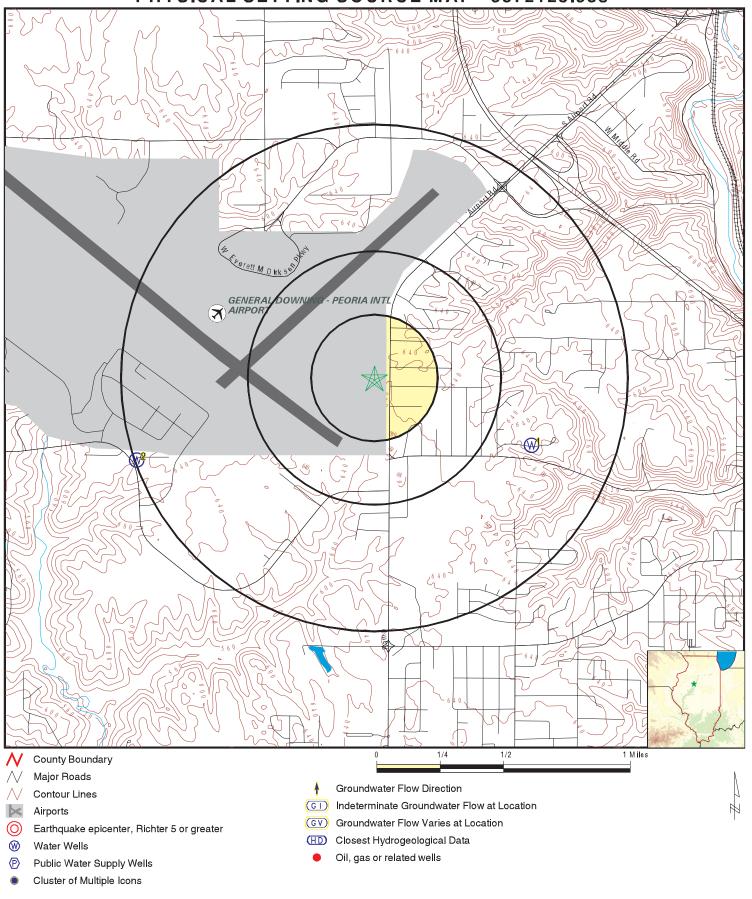
STATE DATABASE WELL INFORMATION

 MAP ID
 WELL ID
 FROM TP

 1
 ILSG30000249605
 1/2 - 1 Mile ESE

 2
 ILSG30000247854
 1/2 - 1 Mile WSW

PHYSICAL SETTING SOURCE MAP - 5872123.58s



SITE NAME: Peoria AASF ADDRESS: 2323 South Airport Road Peoria IL 61607

LAT/LONG: 40.660502 / 89.681434

CLIENT: AECOM CONTACT: Hans Sund INQUIRY#: 5872123.58s

DATE: November 18, 2019 9:15 am

GEOCHECK®-PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance

Elevation Database EDR ID Number

ESE 1/2 - 1 Mile IL WELLS ILSG30000249605

121430160600

ILSG30000247854

IL WELLS

Higher

Database: Water Well Records API #: 121432384800

IL State Water Survey P #: 0 Status: Water Well

Well Name: Roberts, Dave Well: Not Reported

Driller: Sauder, Steven E. Date Drilled: 0

Elevation:0Elevation Reference:Not ReportedTotal Depth:136Lithologic Formation:dry holeTop of Formation (ft):0Bottom of Formation (ft):0

Pump Flow (gal/min): 0

2 WSW 1/2 - 1 Mile Lower

wer _______

Database: Water Well Records API #:

IL State Water Survey P #: 0 Status:

 IL State Water Survey P #:
 0
 Status:
 Water Well

 Well Name:
 Behrends, William
 Well:
 1

Driller: Scherf, Robert W. Date Drilled: 1971 625 Elevation: 0 Elevation Reference: Not Reported 37 Total Depth: Lithologic Formation: gravel Top of Formation (ft): 25 Bottom of Formation (ft): 26

Pump Flow (gal/min): 0

GEOCHECK®- PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

State Database: IL Radon

Radon Test Results

Zipcode	Resul
61607	2.9
61607	2.7
61607	1.2
61607	2.1
61607	4.5
61607	4.4
61607	4.5
61607	2.1
61607	4.5
61607	5.2
61607	2.6

Federal EPA Radon Zone for PEORIA County: 1

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: 61607

Number of sites tested: 2

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	Not Reported	Not Reported	Not Reported	Not Reported
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	2.750 pCi/L	50%	50%	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: Wetland Inventory Source: Illinois State Geological Survey

Telephone: 217-333-4747

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.

OTHER STATE DATABASE INFORMATION

Oil and Gas Wells Listing

Source: Illinois State Geological Survey

Telephone: 217-333-5109

Oil and gas wells location points from the Illinois State Geological Survey database.

Water Well Records

Source: Illinois Geological Survey Telephone: 217-333-4747

Illinois Private Well Database and PICS (Public, Industrial, Commercial Survey)

Source: Illinois State Water Survey

Telephone: 217-333-9043

Water Well Location Information

Source: Illinois Environmental Protection Agency

Telephone: 217-782-0810

RADON

State Database: IL Radon

Source: Department of Nuclear Safety

Telephone: 217-785-9958 County Radon Results

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.

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.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

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

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Peoria AASF 2323 South Airport Road Peoria, IL 61607

Inquiry Number: 5872123.59

November 15, 2019

Certified Sanborn® Map Report



Certified Sanborn® Map Report

11/15/19

Site Name: Client Name:

Peoria AASF AECOM

2323 South Airport Road 12120 Shamrock Plaza Peoria, IL 61607 Omaha, NE 68154

EDR Inquiry # 5872123.59 Contact: Hans Sund



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 # 5CE6-4626-9DDF

PO# NA

Proiect Peoria 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 #: 5CE6-4626-9DDF

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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Appendix B Preliminary Assessment Documentation

Appendix B.1 Interview Records

Facility: Peoria AASF #3, Illinois Interviewer: Date/Time: 11/05/2019 at 1330

		2400122	1101 11/00/2019 40 100		
Interviewee: Title: AASF Sh	e PA Report? Y or				
Phone Number	:	Can you recommend anyone we can interview?			
Email: Y or N					
Roles or activit	oles or activities with the Facility/Years working at the Facility:				
Has been at the	AASF for 19 years.				
releases, storage systems (as buil	container size (maintenance, fin ts), fueling stations, crash sites,	se locations, time frame of release, re training, firefighting, buildings v pest management, recreational, din trials ordered/purchased/disposed/s	with suppression ing facilities, shared with others?		
			Known Uses		
	tinguishers	NC 4h-m-m-min-H-1-m €m-	Use		
 When ARNG took over from ANG, there were nine Halon fire extinguishers present 			Procurement		
0	Received 3 TriMax30 TM in the	<u> </u>	Disposition		
	occurred on ramp between 200 was dispensed on ramp area R	-2002, where on TriMax30 ^{1M} un off from the area goes south	Storage (Mixed)		
	into the grassy area and ultimat	tely to the ditch that leads to the	Storage (Solution)		
	stormwater system. The TriMa hydrostatically tested due to fur		Inventory, Off-Spec		
	could not get them hydrostatica	ally tested, they were removed	Containment		
from the AASF and sent to PFO at Camp Lincoln in		O at Camp Lincoln in	SOP on Filling		
0	approximately 2004/2005. Purple K has replaced the TriM	Iax30™ units	Leaking Vehicles		
Bulk Concentrate Storage			Nozzle and Suppression System Testing		
0	Three, 6-gallon bulk AFFF con		Dining Facilities		
	in the POL building since the T presumed that the bulk concent	rate was taken to Camp Lincoln,	Vehicle Washing		
	but the ultimate fate of the con-	centrate is unknown. The bulk	Ramp Washing		
0	AFFF was not present during the No leaking or spilling of AFFF occurred.	he visual sight inspection (VSI). has been reported as having	Fuel Spill Washing and Fueling Stations		
	occurred.		Chrome Plating or Waterproofing		

Facility: Peoria AASF #3, Illinois Interviewer:

Date/Time: 11/05/2019 at 1330

- Runoff into Grassy Area
 - The grassy area immediately south of the ramp area has been excavated three times
 - o In 2000, three 3,500 gallon underground storage tanks (UST) were removed and backfilled to approximately 40 ft.
 - o In 2007, the soil was excavated again and refilled
 - o In 2014, the soil was excavated again and backfilled with sand, dirt, and rocks although the ultimate fate of the soil is unknown.

Facility: Peoria AASF #3, Illinois

		Interviewer:		
		Date/Time: 11/	/05/2019	at 1330
-	-			

		Date/Ti	me: 1 <mark>1/05/2019 at 133</mark> 0
Interviewee: Title: AASF Main	tenance Supervisor	Can your name/role be used in the N	•
Phone Number: Email: Can you recommend anyone we Y or N			can interview?
Roles or activities	with the Facility/Years wor	rking at the Facility:	
Has been at the Peo	ria AASF #3 facility for +30	years.	
releases, storage consystems (as builts),	ntainer size (maintenance, fin fueling stations, crash sites,	se locations, time frame of release, re training, firefighting, buildings verses management, recreational, dinerials ordered/purchased/disposed/serials	with suppression ing facilities,
			Known Uses
• Hangar 1	· · · · · · · · · · · · · · · · · · ·		Use
 Built in 1946, no fire suppression system. Hangar 23 Demolished now (currently just a concrete pad), however never 		Procurement	
			Disposition
		t a concrete pad), however never	
	d a fire suppression system.		Storage (Mixed)
	(Building 12) hen the ANG was occupying	the location of the current	Storage (Solution)
	ASF, there were firetrucks with		Inventory, Off-Spec
	s unknown how many and h		•
	eck the PA/SI that the ANG		Containment
	ot currently a firehouse; no fi	retrucks at the AASF.	SOP on Filling
• Drains	4	.114	Leaking Vehicles
	oor drains in all the buildings stormwater sewer.	s lead to oil/water separator then	Nozzle and
	l drains were capped in the n	nid 1990's	Suppression System
		n/ramp area all lead to an outfall	Testing
	the south side of the ramp.	1	Dining Facilities
Emergency Services			Vehicle Washing
	NG are first responders for ai	•	
		ave occurred at the airport or	Ramp Washing
	ASF. of fire training by the ANG ha	as accurred	Fuel Spill Washing
	o fire departments are at the a		and Fueling Stations
		and are used with water only to	Chrome Plating or Waterproofing
	ht forest fires	, -	11 attributing
_	ceives water from City of Ba	artonville municipal water	

Facility: Peoria AASF #3, Illinois Interviewer:

Date/Time: 11/05/2019 at 1330

- Building 2 Metal Plating
 - Metal Plating occurred in building 2 from the 1940s to 1990s
 - Some of the metals used include chromium, cadmium, and zinc as well as other electroplating activities.
 - o Currently, it is used as a locker room.
 - O During metal plating, they would dump metal waste down the sink and drain.
- Construction at AASF
 - o Hangar 23 was demolished between 2012 and 2013.
 - O Several parts of the concrete ramp area were replaced in 2017 primarily on the west and south side of the ramp area.

Appendix B.2 Visual Site Inspection Checklists

Names(s) of people performing VSI:				
	Recorded by:			
A	RNG Contact:			
Γ	Date and Time: 11/5/2019 1330			
Method of visit (walking, driv	ing, adjacent): walking, driving			
Source/Release Information				
Site Name / Area Name / Unique ID:	Peoria AASF #3			
Site / Area Acreage:	approximately 44 acres			
Historic Site Use (Brief Description): In 1947, the land the Peoria AASF #3 currently resides on was leased to the ANG. The ANG continued to operate on the land, until 1994 when they moved to a new facility they had constructed which is located on the west side of the Peoria International Airport. This was when the ILARNG took occupancy of the vacanted land.				
Current Site Use (Brief Description): The Peoria AASF #3 supports the Illinois Army National Guard (ILARNG).				
Physical barriers or access restrictions:	Access to the area is restricted to ILARNG.			
There was a TriMax30 TriMax30 TM unit was	a? Y/N now PFAS was used and usage time (e.g., fire fighting training 2001 to 2014): O TM fire extinguisher training event that occurred between 2000 and 2002, where one dispensed on the ramp area between pad 5 and 6. Also, three 6-gallon drums of bulk re stored in the POL building at the Peoria AASF #3.			
	2a. If yes, keep a record (place electronic files on a disk): Documentation of what is known is in the interview documents.			
3a. Indicate what businesses are located near the site? Industrial / Commercial / Plating / Waterproofing / Residential 3a. Indicate what businesses are located near the site General Wayne A. Downing Peoria International Airport is adjacent.				
4. Is this site located at an airport/flightline? 4a. If yes, provide a decorated at an airport of the site of the	escription of the airport/flightline tenants:			
Peoria International A	• • •			

Other Significant Si	te Features:			
1. Does the facility ha	ave a fire suppression system?			
	1a. If yes, indicate which type of AFFF has been used	l:		
	1b. If yes, describe maintenance schedule/leaks:			
	10 If you have often in the AEEE numbered.			
	1c. If yes, how often is the AFFF replaced:			
	1d. If yes, does the facility have floor drains and when	re do they l	lead? Can we	obtain an as built drawing?
Transport / Dath	nas Information			
Transport / Pathy Migration Potential				
	nage flow off installation? Y/N			
1. Does site/area arai	1a. If so, note observation and location:			
	Surface water flows generally flows south towards the	e Illinois R	iver.	
2 Is there channelize	d flow within the site/area?		Y / N	
2. Is there charmenze	2a. If so, please note observation and location:		1 / 11	
	N/A			
2.4			\$7./37	T
3. Are monitoring or	drinking water wells located near the site?		Y/N	
	3a. If so, please note the location: There are 2 private wells located within a mile of the	Peoria AA	SF #3	
	There are 2 private wens rocated within a finite of the	1 00114 7171	.51 115.	
				T
4. Are surface water i	ntakes located near the site?		Y / N	
	4a. If so, please note the location:	"1	C.1 C '1'	
	The East Branch of the Lamarsh Creek flows within a	i mile west	of the facility	•
5. Can wind dispersion	on information be obtained? Y/N			
	5a. If so, please note and observe the location.			
	N/A			
6. Does an adjacent n	on-ARNG PFAS source exist? Y/N			
· ·	6a. If so, please note the source and location.			
	Yes, there are 12 potential adjacent sources of PFAS.			
	6b. Will off-site reconnaissance be conducted?	Y / N		

1. Is access to the site restricted? 1a. If so, please note to what extent: The facility has controlled access. Site Workers / Construction Workers / Trespassers / Residential / Recreational
Hangar 23 was demolished sometime between 2012 and 2013 and is currently just a concrete pad. Also several parts of the concrete ramp area were replaced in 2017 primarily on the west and south side of the ramp area. 2. Is the site/area vegetated? 2. If not vegetated, briefly describe the site/area composition: There is minimal vegetation located around the site, mostly consisting of grassy areas. 3. Does the site or area exhibit evidence of erosion? Y/N 3a. If yes, describe the location and extent of the erosion: N/A 4. Does the site/area exhibit any areas of ponding or standing water? 4a. If yes, describe the location and extent of the ponding: The ditch in the grassy area at the south side of the facility boundary is prone to having standing water. Receptor Information 1. Is access to the site restricted? Y/N 1a. If so, please note to what extent: The facility has controlled access. Site Workers / Construction Workers / Trespassers / Residential / Recreational 2a. Circle all that apply, note any not covered above: 3. Are residential areas located near the site? Y/N
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2a. Circle all that apply, note any not covered above: 3. Are residential areas located near the site? Y/N
3. Are residential areas located near the site? Y/N
3a. If so, please note the location/distance:
There are residential areas surrounding the facility.
4. Are any schools/day care centers located near the site? Y/N
4a. If so, please note the location/distance/type:
There is a school 0.5 miles east of the Peoria AASF #3 and multiple more located within 5 miles of the
facility.
5. Are any wetlands located near the site? Y / N
5a. If so, please note the location/distance/type:

Additional Notes			

Photographic Log

Photo ID/Name	Date & Location	Photograph Description
1	11/5/2019, Ramp area	One of the Purple K fire extinguishers placed on the ramp areas that have replaced the Tri-Max 30 TM mobile units.
2	11/5/2019, Pad 5 and 6	The ramp area between pad 5 and 6, where the Tri-Max 30 TM Former FTA was located.
3	11/5/2019, Grass south of ramp	The grassy area south of the ramp area. Overlying surface water flows off the ramp and to this area.
4	11/5/2019, Grass south of ramp	The ditch where the ramp and grass area drain. There is a stormwater drain that eventually flows to the Illinois River.
5	11/5/2019, Grass south of ramp	The stormwater drain in the ditch that ultimately leads to the Illinois River

Appendix B.3 Conceptual Site Model

Preliminary Assessment – Conceptual Site Model Information

Site Name: Peoria AASF #3

Why has this location been identified as a site?

Facility is an aviation support site with aircraft hangars, high probability of release due to asset type and historical site usage.

Are there any other activities nearby that could also impact this location?

Peoria International Airport and ILANG

Training Events

Have any training events with AFFF occurred at this site? Yes

If so, how often? One fire training event occurred sometime between 2000 and 2002 on the south side of the ramp area, between pad 5 and 6, located at 40°39'32.68"N and 89°40'53.94"W.

How much material was used? Is it documented? One TriMax30TM was dispensed on the ramp area. It was documented through interviews with current AASF personnel.

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? General surface water flow direction is to the southeast.

Average rainfall? 36.45 inches

Any flooding during rainy season? Yes

Direct or indirect pathway to ditches? *Indirect pathway to the ditch in the grassy areas at the southernmost boundary of the facility.*

Direct or indirect pathway to larger bodies of water? Yes, indirect pathway to the Illinois River.

Does surface water pond any place on site? No

Any impoundment areas or retention ponds? *No*

Any NPDES location points near the site? No

How does surface water drain on and around the flight line? Surface water that is north of the ANG facility drains tends to the west towards the East Branch of Lamarsh Creek, while surface water south of the ANG facility flows southeast toward the Illinois River.

Groundwater:

Groundwater flow direction? To the southeast.

Depth to groundwater? It can initially be found at depths ranging from 3-12 feet but can also be found as deep as 15 to 20 feet

Uses (agricultural, drinking water, irrigation)? Not used.

Any groundwater treatment systems? None known.

Preliminary Assessment – Conceptual Site Model Information

Any groundwater monitoring well locations near the site? No.

Is groundwater used for drinking water? *Drinking water is supplied by the City of Bartonville which sources water from aquifers under rivers and through public water wells.*

Are there drinking water supply wells on installation? *None*.

Do they serve off-post populations? *No*.

Are there off-post drinking water wells downgradient? Yes, there is one private well located about a mile to the southeast of the facility.

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? N/A

Do we understand the fate of sludge waste? *N/A*

Is surface water from potential contaminated sites treated? N/A

Equipment Rinse Water

- 1. Is firefighting equipment washed? Where does the rinse water go? *Unknown*.
- 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? *Unknown*.
- 3. Other?

Identify Potential Receptors:

Site Worker Yes

Construction Worker Yes

Recreational User No

Residential Yes

Child Yes

Ecological No

Note what is located near by the site (e.g. daycare, schools, hospitals, churches, agricultural, livestock)? *Airport, residential area, schools, churches, and agricultural land.*

Documentation

Ask for Engineering drawings (if applicable). Has there been a reconstruction or changes to the drainage system? When did that occur? *No*

Appendix C Photographic Log

APPENDIX C – Photographic Log

Army National Guard, Preliminary Assessment for PFAS

Peoria AASF #3

Illinois

Photograph No. 1

Description:

One of the Purple K fire extinguishers placed on the ramp areas that have replaced the Tri-Max 30^{TM} mobile units.



Photograph No. 2

Description:

The ramp area between pad 5 and 6, where the Tri-Max 30^{TM} Former FTA was located.



APPENDIX C – Photographic Log

Army National Guard, Preliminary
Assessment for PFAS

Peoria AASF #3

Illinois

Photograph No. 3

Description:

The grassy area south of the ramp area. Overlying surface water flows off the ramp and to this area.



Photograph No. 4

Description:

The ditch where the ramp and grass area drain. There is a stormwater drain that eventually flows to the Illinois River.



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