FINAL

Preliminary Assessment Report
Juneau Army Aviation Operating Facility
Alaska

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

October 2019

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Acronyms and Abbreviations

°F	degrees Fahrenheit
AAOF	Army Aviation Operating Facility
ADEC	Alaska Department of Environmental Conservation
AECOM	AECOM Technical Services, Inc.
AFFF	aqueous film forming foam
AKARNG	Alaska Army National Guard
AOI	area of interest
ARFF	Aircraft Rescue and Fire Fighting
ARNG	Army National Guard
bgs	below ground surface
CBJ	City and Borough of Juneau
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CSM	conceptual site model
EDR	Environmental Data Resource
FTA	fire training area
FTC	Fire Training Center
JIA	Juneau International Airport
PA	Preliminary Assessment
PFAS	per- and poly-fluoroalkyl substances
PFOA	perfluorooctanoic acid
PFOS	perfluorooctanesulfonic acid
US	United States
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency

Executive Summary

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

AECOM completed a PA for PFAS at Juneau Army Aviation Operating Facility (AAOF) in Juneau, Alaska to assess potential PFAS release areas and exposure pathways to receptors. Juneau AAOF services aircraft for the Alaska Army National Guard (AKARNG). The AKARNG has leased the property from the City and Borough of Juneau for 50 years from 1988 until 2038. The site is to remain an AAOF for the foreseeable future and land use is not expected to change at this time.

The performance of this PA included the following tasks:

- Reviewed data resources to obtain information relevant to suspected PFAS releases
- Conducted a 1-day site visit that included visual site inspections at known PFAS locations on 4 September 2018, and documented with photographs
- Interviewed current and former Juneau AAOF personnel during the site visit including the Facility Commander
- Interviewed Assistant Fire Chief of Operations at Capital City Fire/Rescue

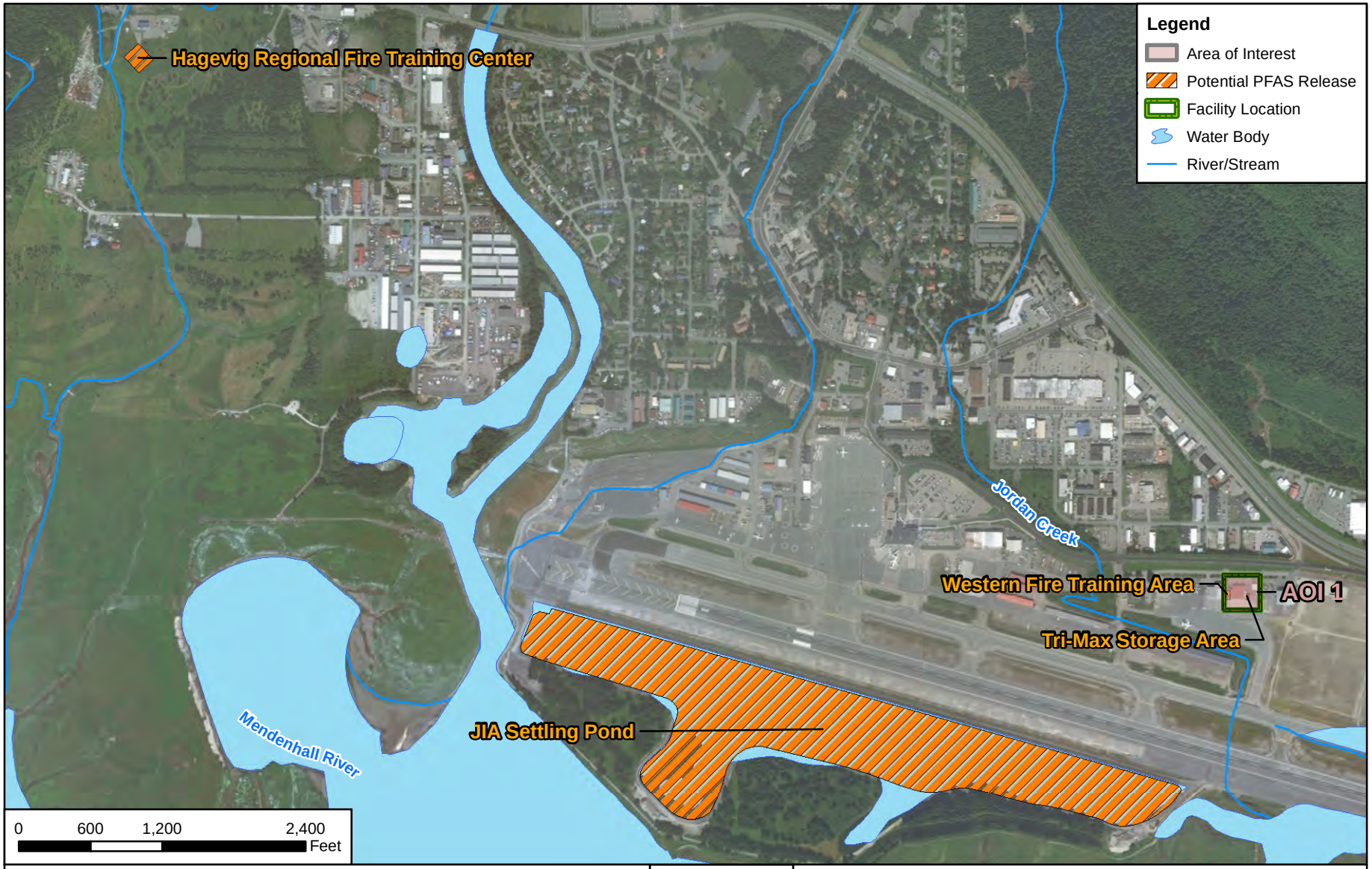
One area of interest (AOI) related to potential PFAS releases was identified at the Juneau AAOF during the PA. The dates of release for the AOI elements are estimated based on secondary information sources, exact dates of use are unknown. The AOI is shown on **Figure ES-1** and described in the table below.

Table ES-1: AOIs at Juneau AAOF

Area of Interest	Name	Used by	Potential Release Dates
AOI 1	AAOF	AKARNG	2010 to 2011

Two potential adjacent sources were identified during the PA, the Hagevig Regional Fire Training Center and the Juneau International Airport Settling Pond (**Figure ES-1**). The potential PFAS sources were identified through interviews with Juneau AAOF personnel. Fire training activities occurred at both locations and limited information was available on the type, amount, and concentration of AFFF used during the fire training at the activities.

Based on documented potential PFAS releases at AOI 1, there is potential for exposure to PFAS contamination in surface soil to site workers, construction workers, and trespassers via ingestion and inhalation; and to subsurface soil to construction workers via ingestion and inhalation. No surface water features flow through this AOI; therefore, surface water and sediment exposure pathways are incomplete. Juneau AAOF receives drinking water from the City and Borough of Juneau's Municipal Water Utility; therefore, the exposure pathway for groundwater is incomplete. The conceptual site model for the Juneau AAOF is presented on **Figure ES-2**.



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PROJECT	Preliminary Assessment for PFAS at Juneau AAOF, AK			
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Base Map: Sources: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community		PM	RG	1/24/2019

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Summary of Findings

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Figure ES-1

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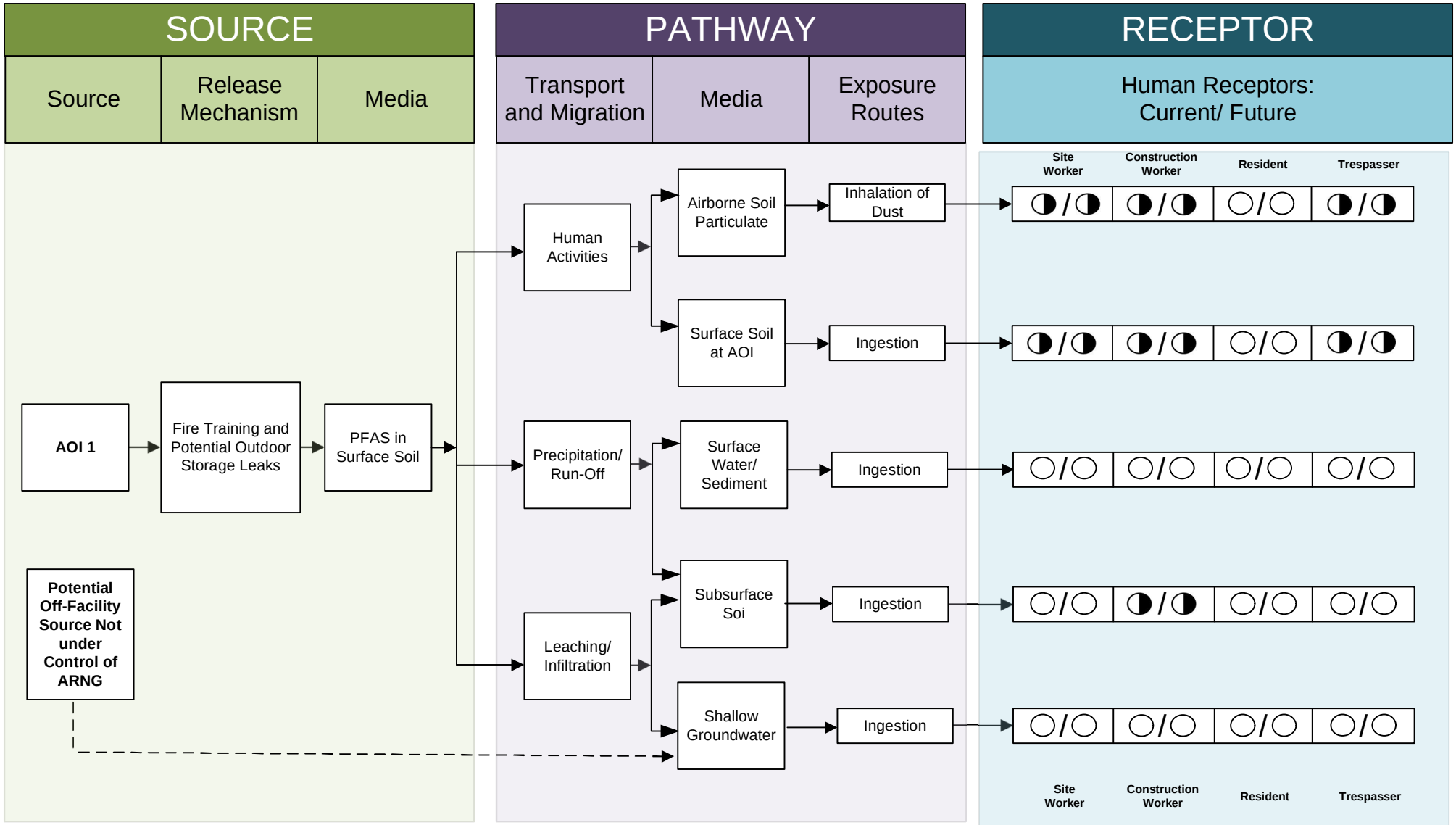

LEGEND

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

Notes:
1. Dermal contact exposure pathway is incomplete for PFAS.

Figure ES-2
Preliminary Conceptual Site Model
Juneau AAOF

1. Introduction

1.1 Authority and Purpose

The United States Army Corps of Engineers (USACE) Baltimore District on behalf of the Army National Guard (ARNG)-Installations & Environment Division, Cleanup Branch contracted AECOM Technical Services, Inc. (AECOM) to perform *Preliminary Assessments (PAs) and Site Inspections for Perfluorooctanesulfonic acid (PFOS) and Perfluorooctanoic acid (PFOA) Impacted Sites at ARNG Facilities Nationwide* under Contract Number W912DR-12-D-0014, Task Order W912DR17F0192, issued 11 August 2017, and Modification 01 issued 30 September 2017. The ARNG is assessing potential effects on human health related to processes at their facilities that used per- and poly-fluoroalkyl substances (PFAS) (a suite of related chemicals), primarily releases of aqueous film forming foam (AFFF) although other sources of PFAS are possible. In addition, the ARNG is assessing businesses or operations adjacent to the ARNG facility (not under the control of ARNG) that could potentially be responsible for a PFAS release.

PFAS are classified as emerging environmental contaminants that are garnering increasing regulatory interest due to their potential risks to human health and the environment. PFAS formulations contain highly diverse mixtures of compounds. Thus, the fate of these 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 August 2018, the Alaska Department of Environmental Conservation established non-promulgated action levels (70 parts per trillion) for PFOA and PFOS in groundwater water and surface water used for drinking water.

This report presents findings of a PA for PFAS at Juneau Army Aviation Operating Facility (AAOF) in Juneau, Alaska 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 USACE requirements and guidance.

This PA Report documents potential locations where PFAS containing materials are stored and have the potential to be released into the environment at or adjacent to the Juneau AAOF. The term PFAS will be used throughout this report to encompass all PFAS chemicals being evaluated, including PFOS and PFOA, which are key components of AFFF.

1.2 Preliminary Assessment Methods

The performance of this PA included the following tasks:

- Reviewed data resources to obtain information relevant to suspected PFAS releases
- Conducted a 1-day site visit that included visual site inspections at known PFAS locations on 4 September 2018, and documented with photographs
- Interviewed current and former Juneau AAOF personnel during the site visit including the Facility Commander
- Interviewed Assistant Fire Chief of Operations at Capital City Fire/Rescue

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** – **Conceptual Site Model:** describes the pathways of potential PFAS transport and receptors at the facility
- **Section 7** –**Conclusions:** summarizes the data findings and presents the conclusions and uncertainties of the PA
- **Section 8** – **References:** provides the references used to develop this document
- **Appendix A** – Data Resources
- **Appendix B** – Preliminary Assessment Documentation
- **Appendix C** – Photographic Log

1.4 Facility Location and Description

The Juneau AAOF was constructed in the mid-1980s and consists of a single hangar within the footprint of the Juneau International Airport (JIA), approximately 7 miles northwest of the City of Juneau, Alaska (**Figure 1-1**). A 1972 Alaska Tidelands Survey conducted by the City of Juneau depicts the majority of the airport land developed in its present day configuration without a few expansions (City of Juneau, 1972). Historically, pilots in World War II used what was then a strip of naturally-occurring flat land in an otherwise rugged terrain. The land on which JIA sits was built out in multiple phases throughout the twentieth century, largely with sediments dredged from the Gastineau Channel (**Figure 1-2**).

The Alaska Army National Guard (AKARNG) has been the tenant of this land since the late 1980's; A 50-year lease was signed in 1987 by the Alaska Department of Military and Veterans Affairs.

The AAOF is visible in historic imagery from the 1980's and is depicted as Building 40 on the JIA Master Plan (AECOM, 2016). In addition to the hangar, the AAOF also includes a parking area (asphalt), a concrete pad, several oil/fuel storage tanks, underground piping, and a wash water recycling system within its approximately 1.25-acre area.

1.5 Facility Environmental Setting

The JIA is located directly on the Gastineau Channel, at the mouth of the Mendenhall River within what is considered the Mendenhall Wetlands State Game Refuge, established in 1976 (AKDFG, 2018). This complex ecosystem is host to a large number of outdoor activities including fishing,

hunting, boating, photography, and hiking. The AAOF is approximately 550 yards from the perimeter of JIA where fluvial sediments meet the tarmac, and 15 feet above sea level (Google Earth, 2018). The elevation gradient immediately to the north is steep, rising almost 900 feet over a half mile. The fill on which JIA stands was taken primarily from fine-grained sandy deltaic deposits, but also consists of clastic slate, greenstone, and granite, silt, sawdust, and garbage. It ranges in thickness from 3 to 25 feet (Parsons, 2012).

1.5.1 Geology

The Juneau AAOF lies in the complex geological region of the southeast Alaska-Juneau gold lode system, an ore belt of significant economic interest. This region is geologically active and exhibits transverse plate movement, tectonic uplift, and volcanism.

The metamorphic belt in which the facility lies comprises a long geologic history with the deposition of protolithic sediments beginning as early as the Proterozoic (Gehrels & Berg, 1994). Deformation from regional metamorphism in the Late Cretaceous is recorded in rocks west of the Coast Mountains batholith, a large igneous plutonic suite emplaced in the Mesozoic. A total of ten unique terranes and metamorphic suites are recorded in the geologic record here, encompassing a wide variety of both sedimentary provenances and igneous structures, plutonic and volcanic. The formations become older across strike to the west.

The tectonic plate boundary near the facility is primarily a transform fault. Regardless, a number of volcanoes, such as Mt. Edgecumbe, have occurred as a result of volcanism due to the subduction of the Pacific Plate under the Aleutian Islands to the west. These volcanoes occur 130 miles to the southeast of the site, but are unlikely to erupt and are unmonitored by the Alaska Volcano Authority (AVO, 2018).

The landscape in place during much of Alaska's history was glaciated numerous times during the Holocene, and many of its high alpine peaks remain so today; the number one tourist attraction in Juneau, the Mendenhall Glacier, is 5 miles to the north. Due to present day glacial recedence and subsequent isostatic rebound, along with an active tectonic margin, the southeastern Alaskan area is currently uplifting at rates of 10 millimeters per year (Larson et al., 2004). Unlike the passive geologic margins which engendered the rich, flat glacial till-plains of the Midwestern States, southeastern Alaska's active tectonism has ensured its topography is dominated by high mountain peaks and glaciofluvial geomorphology.

1.5.2 Hydrogeology

The groundwater is believed to be hydrologically connected in the surficial deposits in the Juneau area. Due to the coastal proximity and seasonal glacial meltwater, the water table varies from 6 to 12 feet below ground surface (bgs) (EDR, 2018) and includes a marine/freshwater interface whose depth and inland transgression changes with the tides and the variably available glacial meltwater (Parsons, 2012) (**Figure 1-2**). Groundwater levels at the USGS monitoring station 2.75 miles north of the facility were below 11.10 feet bgs in December 2018 (USGS, 2018). Groundwater is expected to be shallower with increasing proximity to the shore. Groundwater flow is believed to be south/southeast directly into the Gastineau Channel, and the underlying aquifer is not accessed for water (Parsons, 2012). The JIA and surrounding area receives drinking water from the City and Borough of Juneau's Municipal Water Utility, which receive its water from the Last Chance Basin well field and Salmon Creek Watershed. Based on the USEPA Unregulated Contaminant Monitoring Rule 3 data, it was indicated that no PFAS was detected in a public water system above the USEPA Health Advisory Level within 20 miles of the facility.

1.5.3 Hydrology

The JIA is situated on river sediments dredged from the Gastineau Channel and is believed to be hydrologically connected to its surrounding waterways (**Figure 1-3**). Drainage outside the AAOF flows away from the hangar in all directions. Various storm drains and ditches catch surficial drainage in each direction, directing the water to proper catchments (Parsons, 2012).

The western boundary at JIA is located at the mouth of the Mendenhall River, a meltwater river recharged primarily by the Mendenhall Glacier as well as several small tributaries. The Mendenhall River's daily mean discharge ranges from 10,000 cubic feet per second (cfs) in the summer to a little over a couple hundred cfs in the winter (USGS, 2018). Smith's Pond, east of the AAOF, does not drain into another waterbody. Contractors have been depositing soil from local projects into the pond, in an attempt to fill it.

According to the US Fish and Wildlife Service, the AAOF grounds are classified as an emergent palustrine, or marshy, wetland subject to tidal influences (USFWS, 2018). The AAOF is approximately 500 yards from the "waterway," the runway used for landing seaplanes at JIA, and 550 yards from a nearby retaining pond. Despite the proximity to waterways, the AAOF is not considered to be within the 0.2% or 1% annual floodplains (FEMA, 2018).

Because of variable discharge from the Mendenhall Glacier and subsequent isostatic rebound affecting channel depth and sedimentation rates in the Gastineau Channel, hydrologic data in the area are difficult to quantify and can change drastically from season to season.

1.5.4 Climate

Because of its proximal distance to the Pacific Ocean, which carries warm tropical water up from the south, Juneau and the surrounding area enjoy a warm, Humid Continental Climate despite its northerly latitudes.

The average annual temperature is 42.8 degrees Fahrenheit (°F) with the warmest period occurring in the summer months with an average maximum temperature of 63.96 °F, in June, July, and August. Winter has an average minimum temperature of 25.8 °F, with February being the coldest month.

Total annual precipitation ranges from approximately 120 to 150 inches, with about 40% occurring as snowfall. Rainfall is fairly evenly distributed throughout the year with an average annual rainfall of 5 inches per month. Snowfall begins as early as October and continues well into April, with most months receiving over ten inches (NOAA, 2018).

1.5.5 Current and Future Land Use

The property is currently under lease by the AKARNG and is operated as an AAOF which services aircraft for the AKARNG. The AKARNG has leased the property from the City and Borough of Juneau for 50 years from 1988 until 2038. Reasonably anticipated future land use is not expected to change from the current land use described above.

CLIENT	ARNG			
NOTES	Preliminary Assessment for PFAS at Juneau AAOF, AK			
REVISED	1/24/2019	GIS BY	MS	1/24/2019
SCALE	1:31,680	CHK BY	CC	1/24/2019
Base Map: Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI,		PM	RG	1/24/2019

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Facility Location

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Figure 1-1

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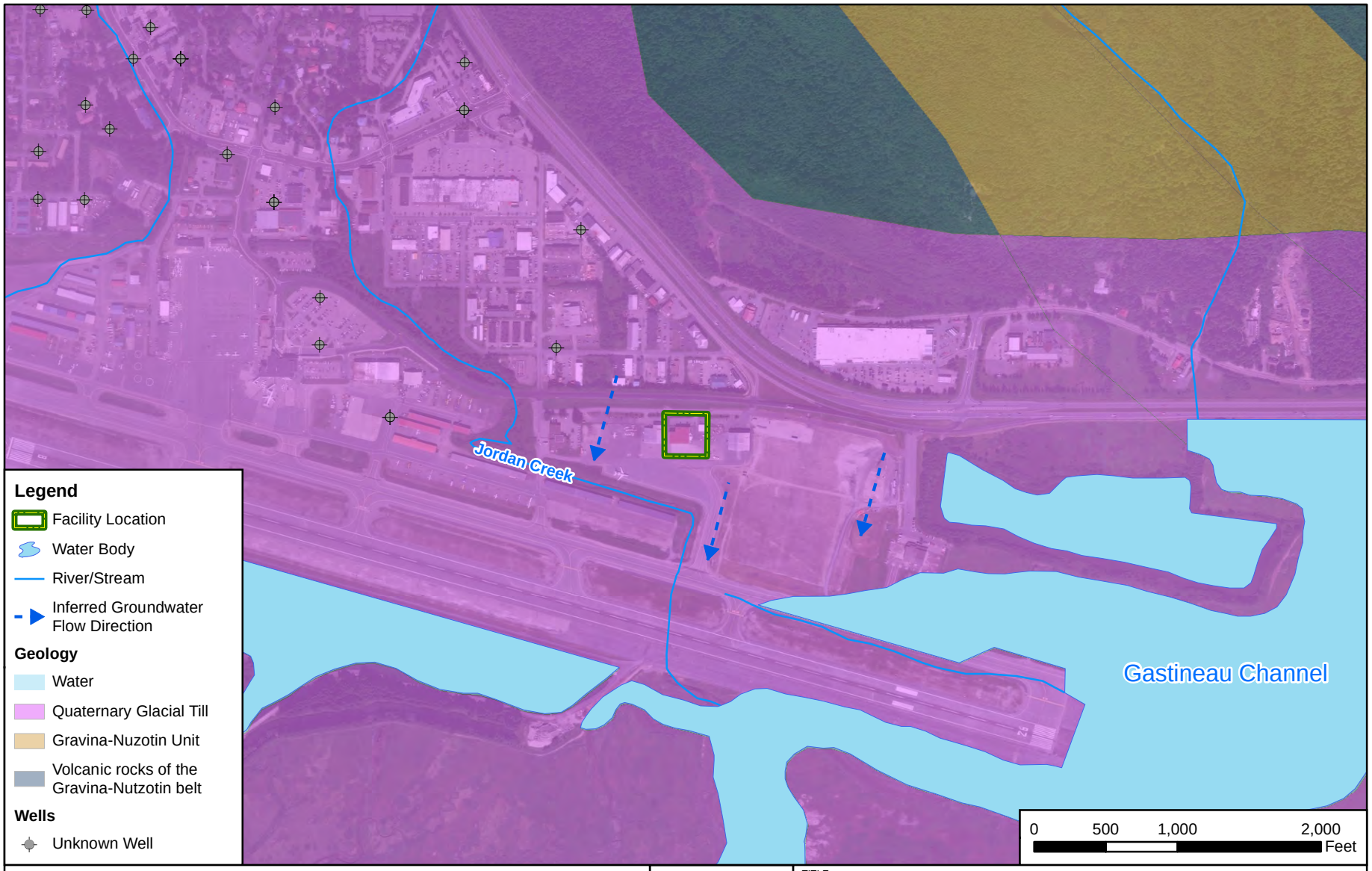

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Base Map: Sources: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community		PM	RG	1/24/2019

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TITLE

Groundwater Features

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Figure 1-2

CLIENT	ARNG			
PROJECT	Preliminary Assessment for PFAS at Juneau AAOF, AK			
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Surface Water Features

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Figure 1-3

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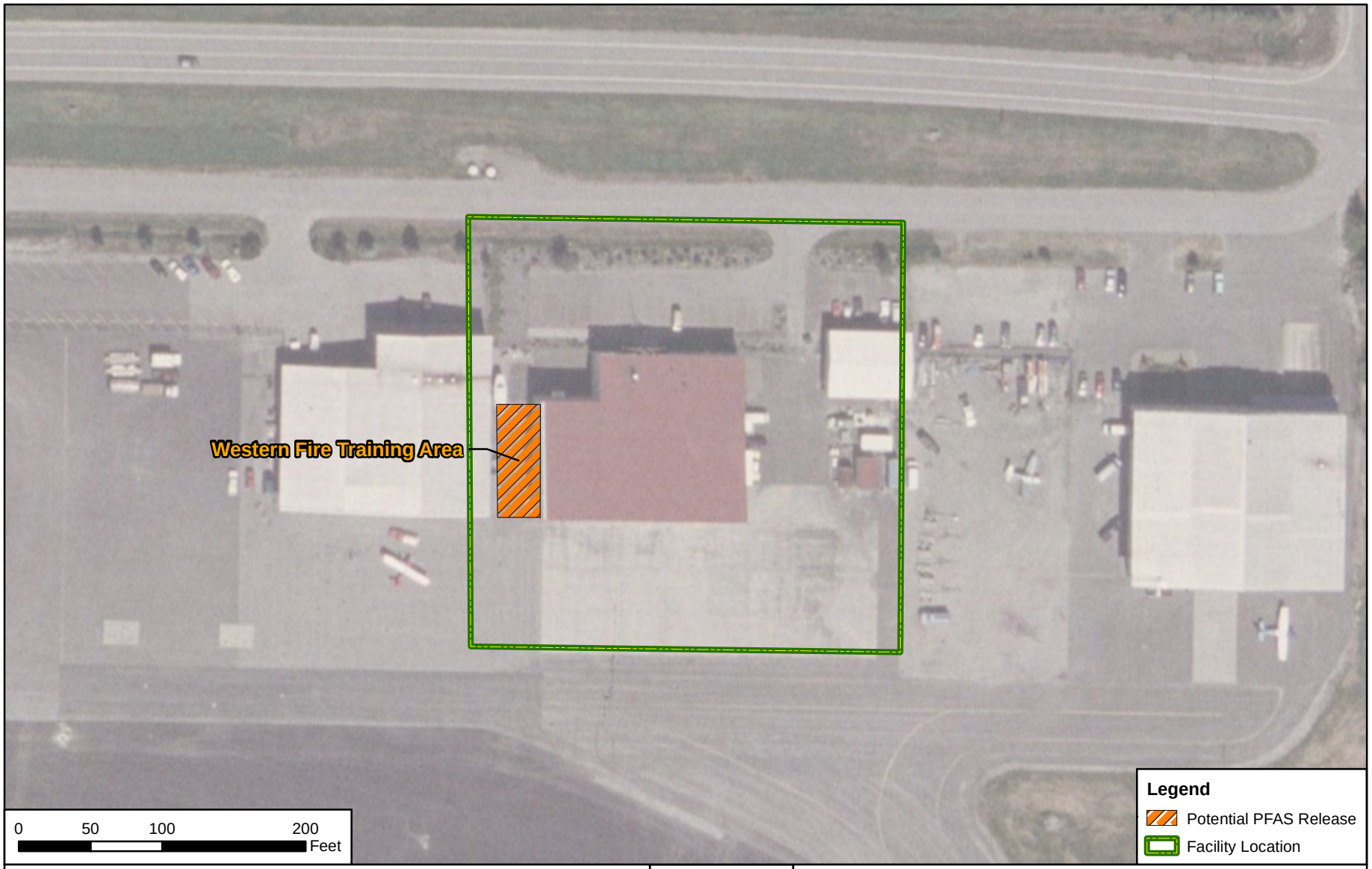
2. Fire Training Areas

One FTA was identified at Juneau AAOF during personnel interviews and the site visit. FTAs are considered a primary potential release area for PFAS because of the common use of AFFF in training events. Interview records appear in **Appendix B**. Photographs appear in **Appendix C**.

2.1 Western Fire Training Area

A training TRI-MAX 30 crash cart was historically stored outside of the AAOF. Interviews with current and former employees are inconsistent as to if and when AFFF was used for testing and training. One full-time employee stated that training foam was used once around 2010 as a training measure on the west side of the hangar (58°2127.76"N , 134°349.35"W) (**Figure 2-1**). A part-time employee stated that AFFF training foam was stored onsite in 2008 but was never used. Additionally, it was mentioned that the reading on the pressure gauge for the training TRI-MAX never indicated anything less than full.



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Base Map: Sources: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community		PM	RG	1/24/2019

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Fire Training Area

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Figure 2-1

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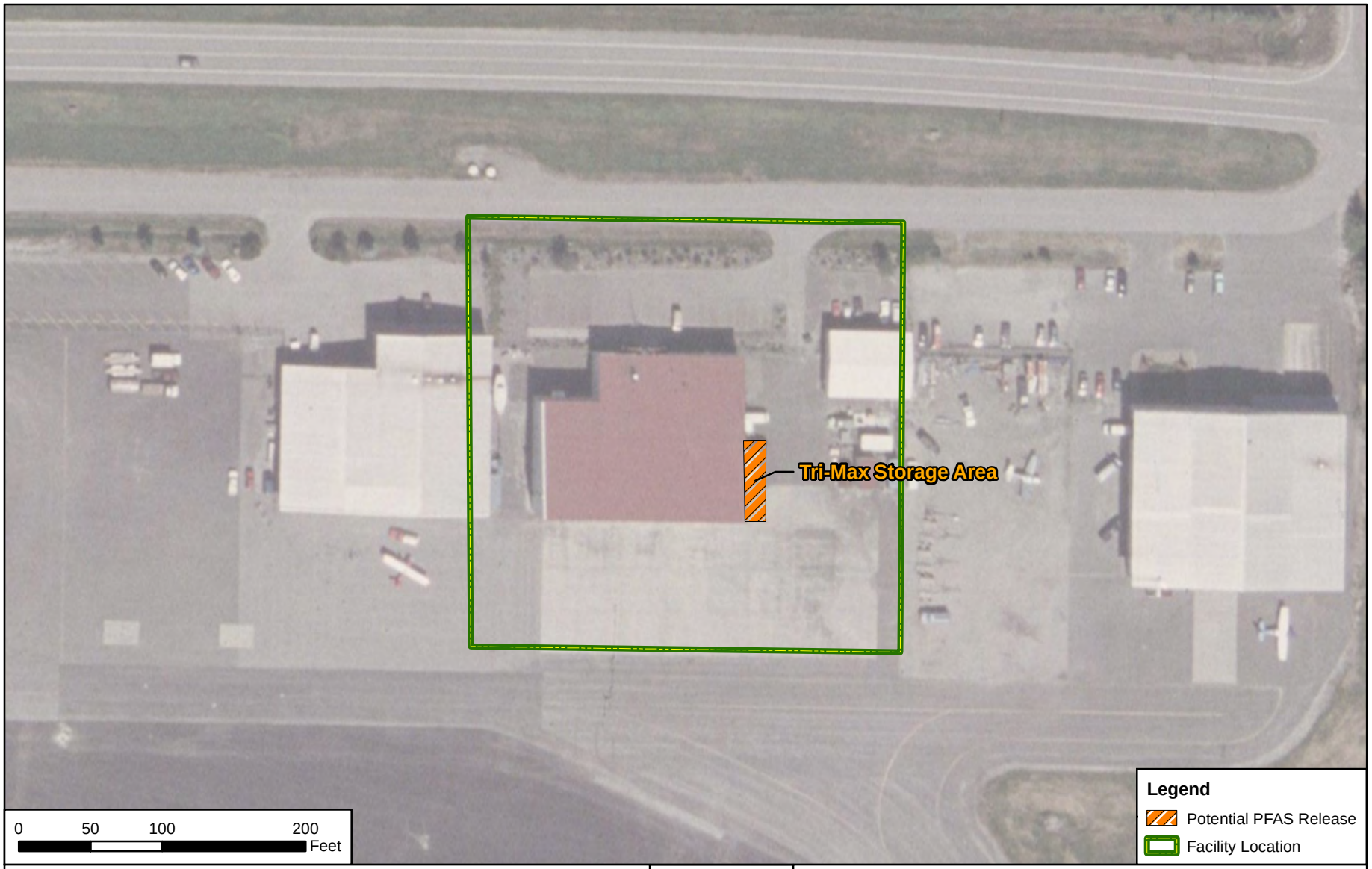
3. Non-Fire Training Areas

One non-FTA where PFAS was potentially released was identified during the PA (58°2127.53"N , 134°346.25"W) **(Figure 3-1)**. Interview records appear in **Appendix B**. Photographs appear in **Appendix C**.

3.1 TRI-MAX Storage Area

Emergency response TRI-MAX 30 crash carts containing AFFF were historically stored outside on the east side of the AAOF, with no more than a single cart being housed at the facility at a time. The TRI-MAX Storage Area has been enclosed under a roof; however, the carts are still exposed to outdoor elements. The date of the roof addition is unknown. Exposure to the outdoor elements and freeze-thaw weather cycles could cause failure in the hosing connections of the cart, potentially releasing AFFF to the environment.



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Base Map: Sources: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community		PM	RG	1/24/2019

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Non-Fire Training Area

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Figure 3-1

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4. Emergency Response Areas

The City and Borough of Juneau (CBJ) provides Aircraft Rescue and Fire Fighting (ARFF) for JIA. The Assistant City Fire Chief indicated that the city used protein foam (an AFFF predecessor) up until the early nineties. Two emergency response actions were identified at JIA during the PA based on interviews, online research, and the Environmental Data Resource (EDR) report (EDR, 2018; **Appendix A**).

Two accidents have occurred at JIA. The first emergency response involved a Boeing 377 Stratocruiser which crash landed into an embankment and caught fire in 1959 (ASN, 2019). Reports do not indicate how the fire was suppressed, but the response occurred prior to the development of AFFF. The second emergency response involved a Boeing 737-490 in 1998, which crash landed but did not catch fire. The plane was taxied to its gate and the 140 passengers disembarked without incident. The response to the second incident did not involve fire suppression; therefore, it is unlikely that AFFF was used. Coordinates for the crash sites were unavailable (NTSB, 1998).

5. Adjacent Sources

Three potential off-site PFAS sources were identified adjacent to the Juneau AAOF during PA interviews (**Appendix B**) and in the EDR report (**Appendix A**). **Figure 5-1** shows the location of the adjacent sources.

5.1 JIA Settling Pond FTA

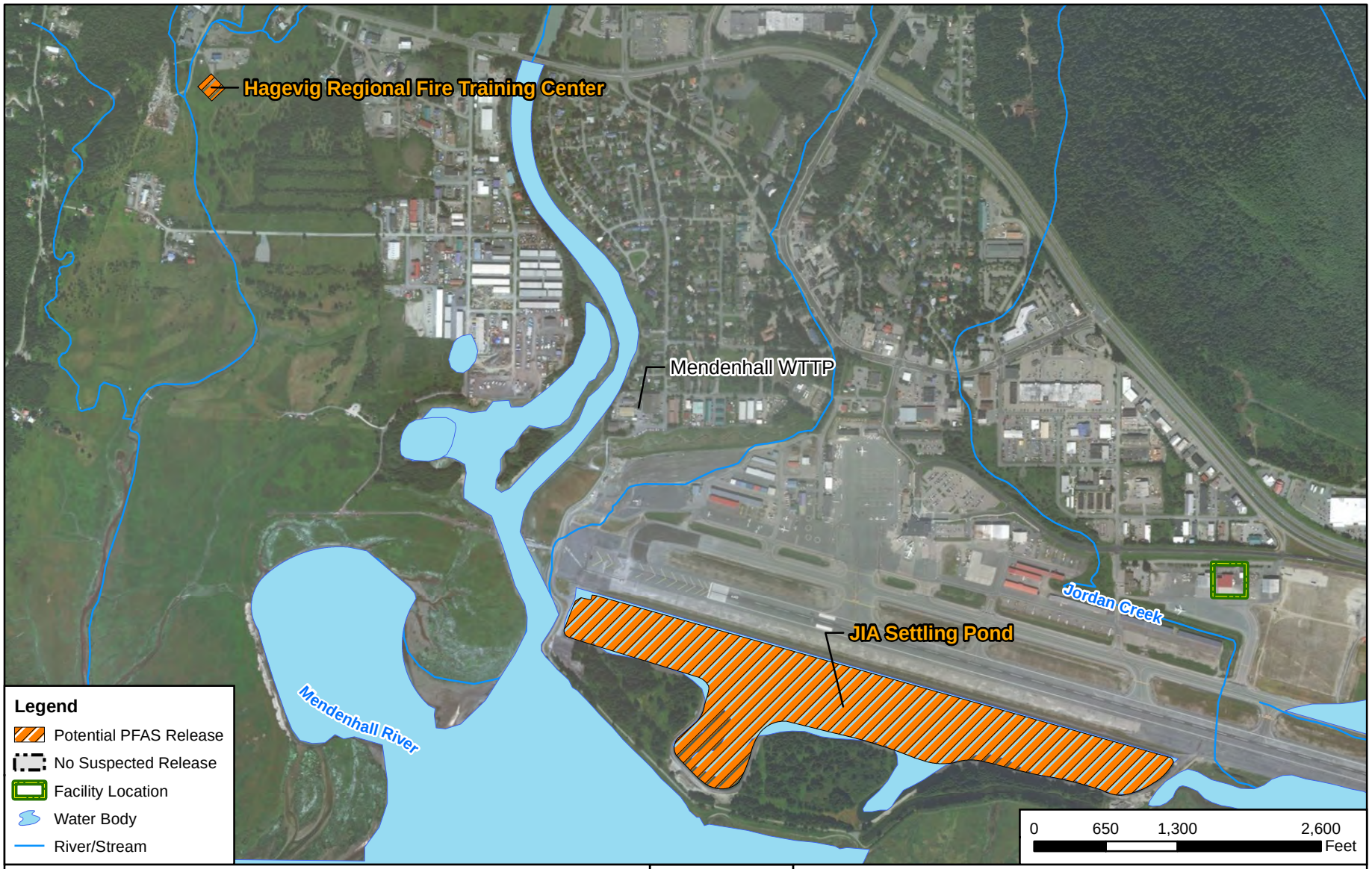
The Assistant Fire Chief indicated that the JIA Settling Pond is used by CBJ for AFFF training and testing of the ARFF trucks. The JIA Settling Pond also functions as the seaplane runway. The JIA Settling Pond is a lined containment area, but no additional information was available on the liner design or when the liner was installed. The type, amount, and concentration of AFFF used during the training activities is unknown.

5.2 Hagevig Regional Fire Training Center

The Assistant Fire Chief indicated that AFFF has been used at the Hagevig Regional Fire Training Center (FTC). Training occurs at the burn pit, where water and AFFF used for fire suppression collects in an underground storage tank. The tank is connected to the city's sewer management system, but it is unknown if this waste water is tested for PFAS. It is possible that some AFFF used during training activities drains into the FTC's settling pond. This site is listed as an "Active" in the Alaska Department of Environmental Conservation (ADEC) contaminated sites database, and most recent actions include the ADEC request for screening soil and groundwater for PFAS (ADEC, 2018). This site is approximately 2 miles to the northwest of the Juneau AAOF. The type, amount, and concentration of AFFF used during the training activities is unknown.

5.3 Mendenhall Wastewater Treatment Plant

The Mendenhall Wastewater Treatment Plant (WWTP) is one of three WWTPs in Juneau, and is approximately 1 mile west of the Juneau AAOF and 1 mile southeast of the Hagevig Regional FTC. The waste water discharges from Hagevig Regional FTC may be treated at this WWTP. It is unknown if waste water at the WWTP is tested or treated for PFAS. The Mendenhall WWTP is listed as an "Active" site in the ADEC contaminated sites database due to fuel leakage, but ADEC has not requested any actions for PFAS (ADEC, 2018).



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TITLE

Adjacent Sources

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Figure 5-1

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6. Preliminary Conceptual Site Model

Based on the PA findings one area of interest (AOI) was identified. The AOI is shown on **Figure 6-1**. The following sections describe the conceptual site model (CSM) components. The CSM identifies the three components necessary for a potentially complete exposure pathway: (1) source, (2) pathway, and (3) receptor. If any of these elements are missing, the pathway is considered incomplete.

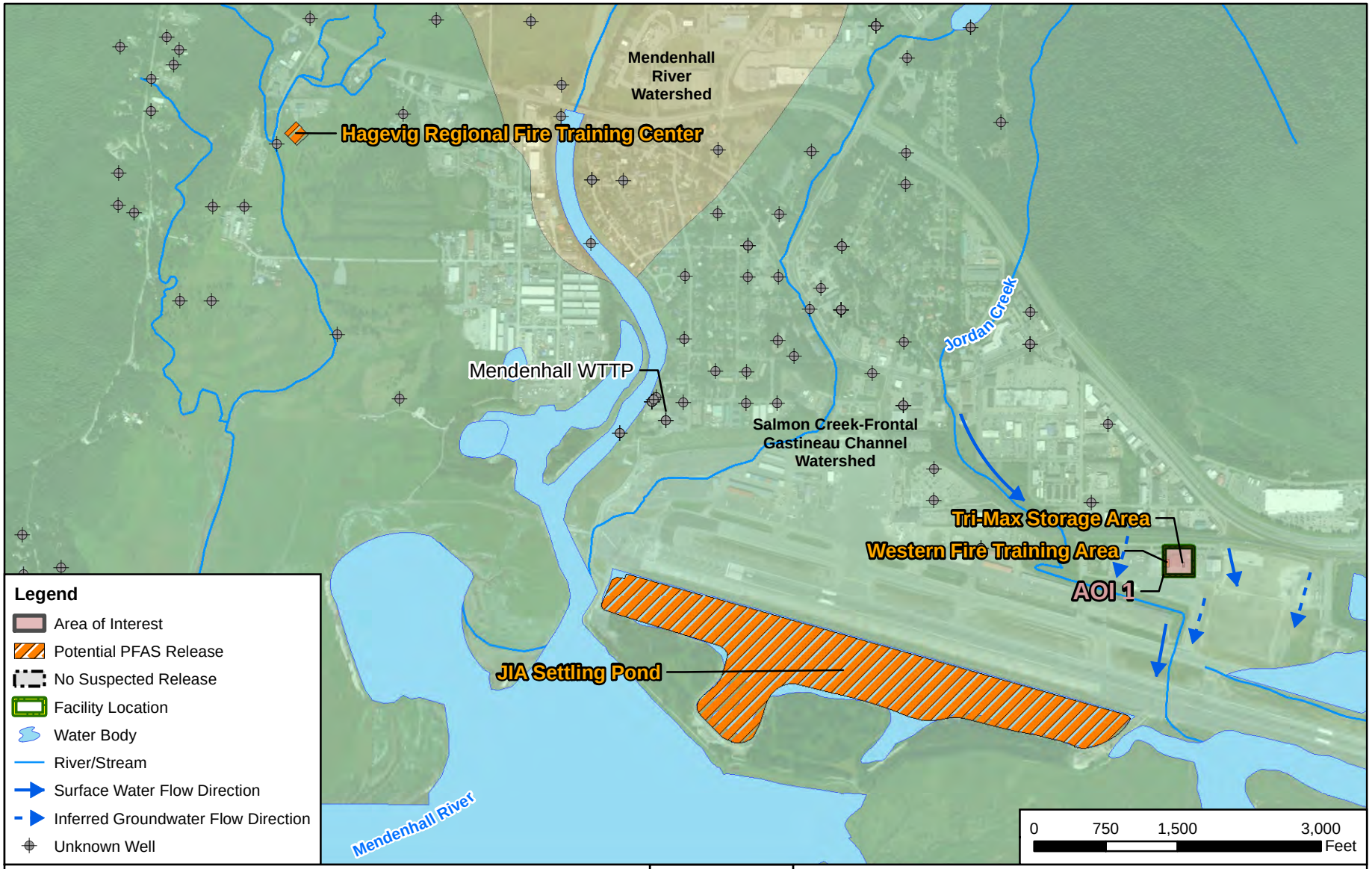
In general, the potential PFAS exposure pathways are ingestion and inhalation. Human exposure via the dermal contact pathway may occur, and current risk practice suggests it is an insignificant pathway compared to ingestion; however, exposure data for dermal pathways is sparse and continues to be the subject of PFAS toxicological study. Potential receptors at Juneau AAOF include site workers, construction workers, and trespassers. The CSM for AOI 1 indicates which specific receptors could potentially be exposed to PFAS, and is shown on **Figure 6-2.**

6.1 AOI 1 Juneau AAOF

A possible release of AFFF from a “training TRI-MAX” during a training activity around 2010 on the west side of the hangar in front of the bay doors may have occurred. Additionally, the one TRI-MAX on site is currently stored outside of the east side of the hangar and may have leaked due to freeze-thaw weather cycles.

The area surrounding each building is predominantly concrete and asphalt with a few grassy areas in between. PFAS are water soluble and can migrate readily from soil, concrete, and asphalt to groundwater, which is estimated to be at 10 feet bgs. Ground-disturbing activities in these areas may result in exposure to potential PFAS contamination via inhalation of dust or ingestion of surface soil site workers, construction workers, and trespassers. Ground-disturbing activities to subsurface soil may result construction worker exposure via inhalation or ingestion.

Groundwater at the facility generally flows directly south/southeast towards the Gastineau Channel. Juneau AAOF receives drinking water from the City and Borough of Juneau’s Municipal Water Utility; therefore the exposure pathway for groundwater is incomplete for all receptors. No surface water features flow through this AOI; therefore, surface water and sediment exposure pathways are incomplete. The conceptual site model for the AOI 1 is presented on **Figure 6-2**.



CLIENT	ARNG			
PROJECT	Preliminary Assessment for PFAS at Juneau AAOF, AK			
REVISED	1/24/2019	GIS BY	MS	1/24/2019
SCALE	1:18,000	CHK BY	CC	1/24/2019
Base Map: Sources: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community		PM	RG	1/24/2019

N

TITLE

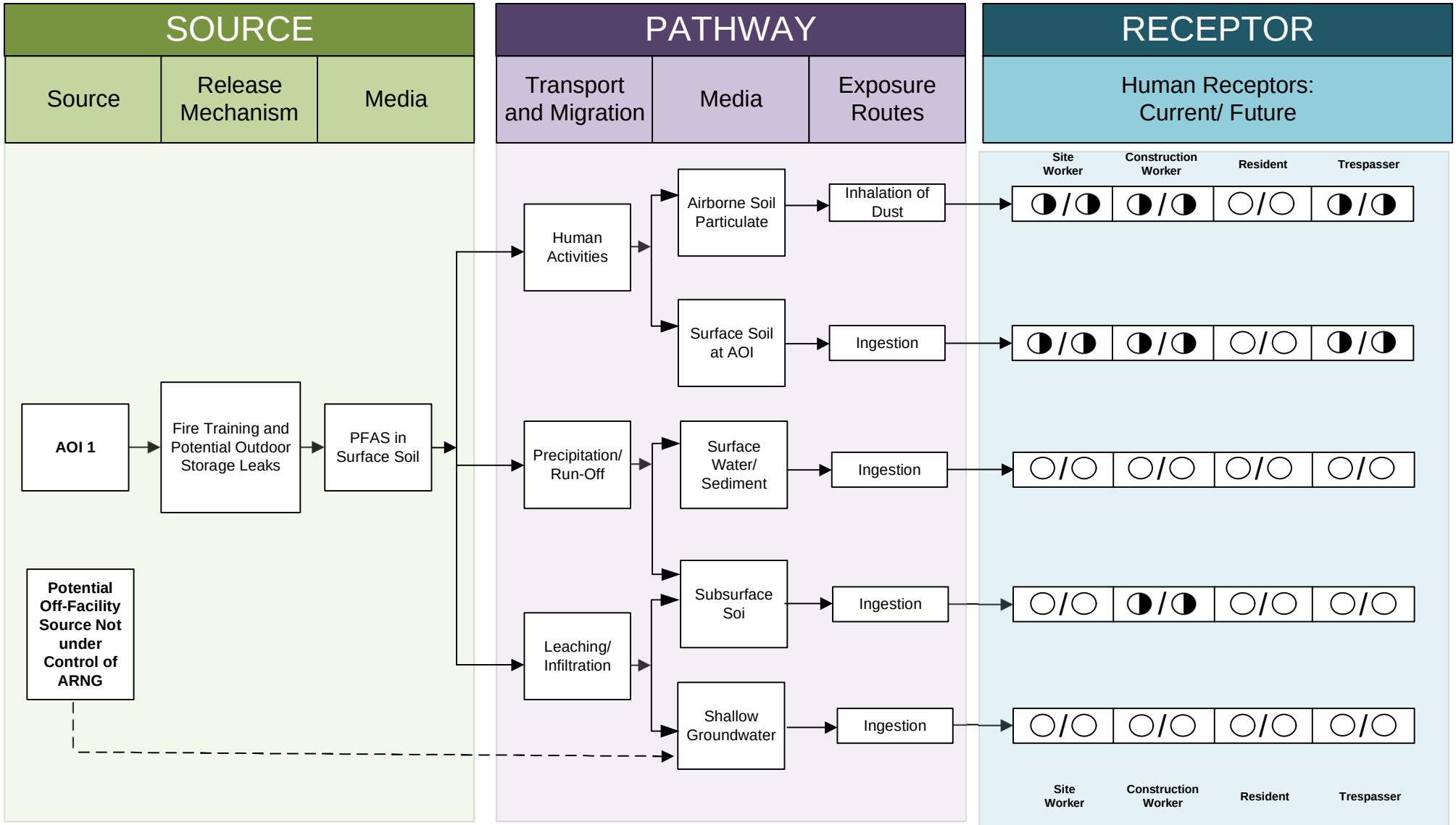
Areas of Interest

AECOM

12420 Milestone Center Drive
Germantown, MD 20876

Figure 6-1

Q:\Projects\ENV\GEARS\GEO\MAES 2012 Unrestricted\Fort Meade\E. Data Management\GIS\MXDs\Chisholm_6th\March2017\ Fig_6-1_Juneau_AAOF_AOIs.mxd



LEGEND

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

Notes:
1. Dermal contact exposure pathway is incomplete for PFAS.

Figure 6-2
Preliminary Conceptual Site Model
AOI 1 AAOF Hangar

7. Conclusions

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

7.1 Findings

One AOI related to potential PFAS releases was identified at the Juneau AAOF during the PA. **Figure 7-1** presents a summary of PA findings.

Table 7-1: AOIs at Juneau AAOF

Area of Interest	Name	Used by	Potential Release Dates
AOI 1	Juneau AAOF	AKARNG	2010- 2011

Based on one potential PFAS release at this AOI, there is potential for exposure to PFAS contamination in surface soil to site workers, construction workers, and trespassers via ingestion and inhalation and subsurface soil to construction workers via ingestion and inhalation.

The following area discussed in **Section 5** was determined to have no suspected release:

Table 7-2: No Suspected Release Areas

No Suspected Release Area	Used by	Rationale for No Suspected Release Area
Mendenhall WWTP	CBJ	Water from Hagevig Regional FTC has a potential to be treated at this plant; there is no known release of PFAS.

7.2 Uncertainty

A number of information sources were investigated during this PA to determine the potential for PFAS-containing materials to have been present, used, or released at 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 predominantly based on the information (or lack thereof) provided during interviews with personnel who had direct knowledge of PFAS use at the facility. 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, 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. Comprehensive information on all industrial practices that may potentially be sources of PFAS is incomplete. Therefore, this PA may not identify all potential PFAS sources.

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

Location	Source of Uncertainty
AOI 1	The release of AFFF on the west side of the hangar was reported by one former AKARNG employee, and no other interviewees or documentation reviewed indicates a release occurred during training activities.
AOI 1	The AKARNG TRI-MAX Storage Area was enclosed under a roof; however, the date of the roof addition is unknown. Exposure to the outdoor elements and of freeze-thaw weather cycles may have caused a release; but interviewees and documentation reviewed does not indicate if a release occurred.
Hagevig Regional FTC	The type, amount, and concentration of AFFF used during the training activities are unknown.
JIA Settling Pond	The type, amount, and concentration of AFFF used during the training activities are unknown.

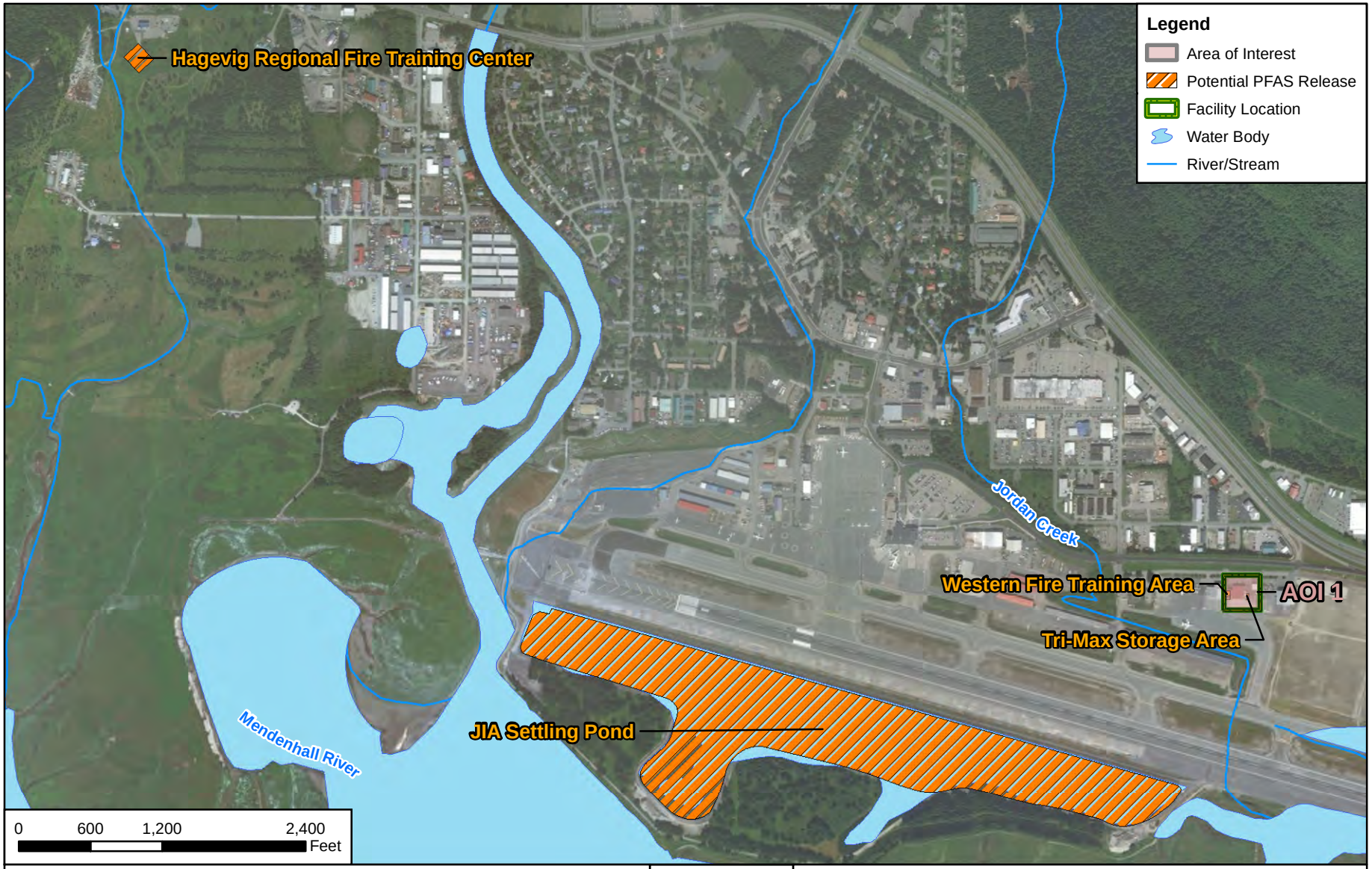
7.3 Potential Future Actions

Interviews and records (covering 1990s to present) indicate that ARNG activities may have resulted in potential PFAS releases at the AOI identified during the PA. Based on the CSM developed for the AOI, there is potential for receptors to be exposed to PFAS contamination in soil. **Table 7-4** summarizes the rationale used to determine if the AOI should be considered for further investigation under the CERCLA process and undergo an SI.

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

Table 7-4: PA Findings Summary

Area of Interest	AOI Location	Rationale	Potential Future Action
AOI 1 Juneau AAOF	58°2127.76"N 134°349.35"W	Fire training activities occurred outside on the west side of the Hangar, once in 2010.	Proceed to an SI, focus on soil and groundwater



CLIENT	ARNG			
PROJECT	Preliminary Assessment for PFAS at Juneau AAOF, AK			
REVISED	1/24/2019	GIS BY	MS	1/24/2019
SCALE	1:14,400	CHK BY	CC	1/24/2019
Base Map: Sources: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community		PM	RG	1/24/2019

N

TITLE

Summary of Findings

AECOM

12420 Milestone Center Drive
Germantown, MD 20876

Figure 7-1

Q:\Projects\ENV\GEARS\GEO\MAES 2012 Unrestricted\Fort Meade\E. Data Management\GIS\MXDs\Chisholm_6th\March2017\ Fig_7-1_Juneau_AAOF_Summary.mxd

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Appendix A
Data Resources

Data resources will be provided separately on CD. Data resources for Juneau AAOF include:

Leasing Information

- Juneau International Airport Lease and Addendum to the Alaska Department of Military and Veterans Affairs, 1988 to 2038.

Informational Reports

- Juneau Army Aviation Operations Facility (AAOF) Spill Prevention, Control &Countermeasure and Installation Spill Contingency Plans. Restoration Science & Engineering, LLC. October 2012.
- Site Investigation Report, Alaska Army National Guard Juneau AAOF, Juneau, Alaska; ADEC File No. 1513.38.060. December 2010, Bethel Services, Inc.
- Site Investigation Report for Juneau AAOF, Alaska Army National Guard Environmental Section, Fort Richardson, Alaska. Ch2MHill, January 1996.

Maps

- Aerial and Site Map, Juneau AAOF.
- FEMA National Flood Hazard Layer, Juneau AAOF.
- Location Map, Juneau AAOF.
- Airport Master Plan Layout

Environmental Data Resources Report

- 2018 EDR Summary Radius Map Report with GeoCheck; Aerial Photo Decade Package; Certified Sanborn Map Report; & EDR PUR-IQ Report; Target Property Juneau, 8425 Livingston Way, Juneau, AK 99801.

CITY AND BOROUGH OF JUNEAU
JUNEAU INTERNATIONAL AIRPORT
1873 Shell Simmons Drive
Juneau, Alaska 99801

LEASE

THIS INDENTURE made this 17th day of September, 1987, by and between the CITY AND BOROUGH OF JUNEAU, ALASKA, a municipal corporation (hereinafter called "Lessor"), and the ALASKA DEPARTMENT OF MILITARY AND VETERANS AFFAIRS, (hereinafter called "Lessee").

W I T N E S S E T H:

1. AUTHORITY. This lease is entered into pursuant to the authority of the City and Borough of Juneau Code, Title 53.20 "Lease of Lands"; and Title 62.25 "Juneau International Airport."

2. PREREQUISITE. Lessee affirms that it has complied with the application, fee, and deposit requirements of CBJ 53.20.030 (new leases) or CBJ 53.20.090 (lease renewals) as the case may be.

3. LEASED PREMISES. Lessor does hereby lease, and Lessee does hereby take from Lessor, the premises described as follows and as further shown in Exhibit A attached hereto and incorporated herein (hereinafter called "Leased Premises"), situated in the Juneau Recording District, State of Alaska:

> A certain tract or parcel of land lying and being situate within the boundaries of the Juneau International Airport, more particularly described as follows:
>
> Beginning at Corner No. 1 which bears S 68° 42' 00" E a distance of 2,144.69' from Corner No. 15, A.T.S. 716; thence S 0° 17' 15" W, 300.00' to Corner No. 2; thence N 89° 42' 45" W, 300.00' to Corner No. 3; thence N 0° 17' 15" E, 300.00' to Corner No. 4; thence S 89° 42' 45" E, 300.00' to the point of beginning containing 2.06 acres, more or less.

4. USE RESTRICTION. Except when otherwise provided in writing by the City and Borough Manager, the Leased Premises may not be used for any purpose not authorized in this paragraph.

Lessee agrees to use the Leased Premises for only the following "aviation, auxiliary, or utility use" as defined in CBJ 62.25.170;

> Lessee shall construct, maintain, and manage a hangar and an administrative/support facility for military support purposes by the National Guard. The initial facility shall be housed in a single building, encompassing approximately 14,500 square feet. Other improvements to the Leased Premises will include a parking area and an apron. Future growth of the local unit will require modification/ additions to the basic structure, and additional structures as required to maintain and operate National Guard aviation assets. No building permit shall be issued until the Lessee has submitted the proposed site and facility plans to the Planning Commission and received approval of those plans. Lessee shall also be required to submit its proposed facility plan to the Design Review Board and receive approval by the Board, prior to issuance of the building permit.

5. TERM. The term of this lease shall be for a period of fifty (50) years commencing on January 1, 1988, and terminating on December 31, 2038.

6. HOLDING OVER. If Lessee holds over beyond the expiration of the term of the lease, such holding over shall constitute a tenancy from month-to-month only.

7. RENT. The annual rent shall be one dollar ($1.00) and other good and valuable considerations.

8. ASSESSMENTS AND CHARGES. During the term of this lease, Lessee shall pay all assessments, rates, charges, and utility bills which Lessee may become liable to pay related to its construction or operations of the facility.

9. RELOCATION. The parties hereby agree that in the event implementation of the airport master plan, or any other airport modification made by the Lessor, requires (in the opinion of the Lessor) reallocation of leased space on the airport premises, and space affected thereby includes the Leased Premises, then this lease shall be subject to renegotiation upon ninety (90) days' notice to Lessee by Lessor, the objective of such renegotiation being to provide Lessee with equivalent space elsewhere on the airport while allowing Lessor's implementation of the airport master plan and other airport modifications. In the

event relocation is necessary, Lessor will provide a like facility on an acceptable site. Facility design and location would be subject to Alaska Department of Military and Veterans Affairs and National Guard Bureau approval. In time of war or national emergency, any relocation requirement must be agreed to by Lessee. Lessor shall bear all costs Lessee incurs because of moving to the new space (including moving costs and any loss of business), with the sole exception provided as follows for buildings constructed by the Lessee on the Leased Premises with the Lessor's prior written agreement. As to such buildings, Lessor shall have two options: (1) to move such buildings to Lessee's new location at Lessor's expense, or (2) to purchase such building from Lessee at fair market value. The fair market value shall be the value determined by the City and Borough Assessor for property tax purposes unless Lessee has protested and appealed such determination to the Board of Equalization as being too low, in which case, the determination by the Board of Equalization shall be the value. The right of Lessor under this paragraph to require Lessee to relocate does not in any way affect the authority of Lessor to exercise the power of eminent domain to acquire the leasehold and improvements thereto.

10. EASEMENTS. Lessee may not place any building or structure over any portion of the Leased Premises where the same has been set aside or reserved for utility easements as shown on the attached plat (Exhibit A).

11. SUBLEASE. The Lessee may not sublease the Leased Premises or any part thereof without first obtaining written approval of the City and Borough Manager therefor. Any sublease must be in writing and be made subject to the terms and conditions of this lease. Such approval shall not be unreasonably withheld.

12. ASSIGNMENT. Lessee may not assign this lease without first obtaining written approval of the City and Borough Manager. Any assignment is subject to all the provisions of this lease.

13. AMENDMENT. This lease may be amended only by an agreement in writing signed by both parties.

14. TERMINATION. Termination of this lease will occur under the following circumstances:

(a) The lease may be terminated at any time by mutual written agreement of the Lessee and Lessor.

(b) The Lessee may terminate this lease in its entirety at any time during the term of this lease be giving a written notice to the Lessor of such termination at least three (3) months in advance of the intended termination date.

15. WASTE. Lessee may not cut any timber, conduct mining or drilling operations, remove sand, gravel, or kindred substances from the ground, commit waste of any kind, nor in any manner substantially change the contour or condition of the land without prior written permission of the Lessor. Lessee shall, during the demised term, at his own cost, cause the the Leased Premises and any improvements and structures thereon to be kept in good repair, and in a safe, clean, healthy, and wholesome condition, and in accordance with the laws and ordinances in effect now or hereafter; and shall be liable to and promptly pay Lessor for any waste or injury to the Leased Premises.

16. FAILURE TO ENFORCE TERMS. The receipt of rent by the Lessor with knowledge of any breach of the lease by Lessee or of any default on the part of Lessee in observance or performances of any of the conditions or covenants of the lease, is not a waiver of any provision of the lease nor does it invalidate any condition or covenant nor discharge any performance in default. No failure on the part of the Lessor to enforce any covenant or provision herein contained, nor any waiver of any right thereunder by the Lessor unless in writing, is a discharge of any performance required under this lease, nor does it invalidate such covenants or provisions or affect the right of the Lessor to enforce the same in the event of subsequent breach or default. Receipt by the Lessor of any rent or other sum of money after the termination, in any manner, of the term herein demised, or after the giving by the Lessor of any notice hereunder to affect such termination, does not reinstate, continue, or extend the resultant term herein demised, or destroy or in any manner impair the efficacy of such notice of termination as may have been given hereunder by the Lessor to the Lessee prior to the receipt of any such sum of

money or other consideration, unless so agreed to in writing and signed by the Lessor.

17. ABANDONMENT. If Lessee abandons its facility and such disuse continues for a period in excess of one year, the Lessor may terminate the lease, at the discretion of the City and Borough Manager.

18. SNOW REMOVAL ON LEASED PREMISES. Lessee shall be responsible for snow removal on the Leased Premises.

19. ACCESS ROAD.

(a) Lessee will construct the access road to the width specified by the City and Borough Engineer.

(b) The Lessor reserves the right of inspection of access road construction during the construction phase.

(c) Access road as depicted on Exhibit A also included in lease term.

20. PEACEABLE SURRENDER. Unless the lease is renewed or sooner terminated as provided herein, the Lessee shall peaceably and quietly leave, surrender, and yield up onto the Lessor all of the Leased Premises on the last day of the term of the lease.

21. REMOVAL OF IMPROVEMENTS. The Lessee shall have the right, during the existence of this lease, to attach fixtures and erect structures or signs in or upon the premises hereby leased; which fixtures and structures or signs so placed in, upon, or attached to the said premises shall be and remain the property of the Lessee and may be removed or otherwise disposed of by the Lessee. Upon termination of the lease, the Lessee shall have sixty (60) days after the date of termination in which to remove all fixtures, structures, signs, or other improvements in or upon the premises; title to any fixtures, structures, signs, or other improvements not removed within the time period shall vest in the Lessor.

22. RENEWAL. Any renewal preference granted the Lessee is a privilege and is neither a right nor bargained for consideration. The lease renewal procedure and renewal preference shall be that provided by ordinance in effect on the date the application for renewal is received by the Lessor.

23. NONDISCRIMINATION. The Lessee, for himself, his heirs, personal representatives, successors in interest, and assigns, does hereby covenant and agree, as a covenant running with the land, that in utilizing and operating the Leased Premises, Lessee will comply with the following anti-discrimination provisions of federal law applicable to airport facilities which have benefited from federal funding, and with such provisions as may later be made applicable, to the extent these federal regulations are applicable to Lessee:

(a) Nondiscrimination in airport aid program, 14 C.F.R. Part 152, Subpart E.

(b) Nondiscrimination in federally-assisted programs of the Department of Transportation -- effectuation of Title VI of the Civil Rights Act of 1964, 49 C.F.R. Part 21.

(c) Participation by minority business enterprise in Department of Transportation programs, 49 C.F.R. Part 23.

(d) Nondiscrimination on the basis of handicap in programs and activities receiving or benefiting from federal financial assistance, 49 C.F.R. Part 27.

24. STATE DISCRIMINATION LAWS. Lessee further agrees, in utilizing and operating the Leased Premises, to comply with applicable sections of Alaska statutes prohibiting discrimination, particularly AS 18.80.220 (discrimination in employment) and AS 18.80.230 (discrimination in providing public accommodations or services). In the event of Lessee's failure to comply any of the above nondiscrimination covenants, the Lessor shall have the right to terminate the lease and to reenter and repossess the Leased Premises, and hold the same as if the lease had never been made or issued.

25. COMPLIANCE WITH LAWS. The Lessee, in conducting its activities on the Leased Premises, shall comply with all applicable laws and regulations, and Lessee's failure to do so is considered a breach of this lease agreement. In particular, the Lessee shall comply with all regulations or ordinances that a public authority in its discretion promulgates for the promotion of safety, health, public welfare, or any other public purpose. The Leased Premises must be used in accordance with all applicable building or zoning codes and ordinances now or hereafter enacted. The Lessee shall authorize representatives of the Lessor to enter upon the Leased Premises for inspection at any reasonable time.

26. LAWFUL AND REASONABLE USE. The Lessee may not do anything in or upon the Leased Premises, nor bring or keep anything therein, which will unreasonably increase or tend to increase the risk of fire, or cause a safety hazard to persons, or obstruct or interfere with the rights of any other tenant(s) or in any way injure or annoy them, or which violates or causes violation of any applicable health, fire, environmental, or other regulation of any level of government. The airport manager may notify Lessee of such violations and set a date for abatement. As used herein, an "unreasonable risk" does not include extraordinary risks necessitated by military requirements.

27. RESERVATION OF EASEMENT. The Lessor expressly reserves the right to grant or take underground utility easements or rights-of-way across the Leased Premises if they are determined to be in the best interest of Lessor. If the Lessor grants or takes an underground easement or right-of-way across any of the Leased Premises, the Lessee is entitiled only to damages for all Lessee-owned improvements destroyed or physically damaged thereby. Damages shall be limited to the cost of repair.

28. HOLD HARMLESS. Lessee agrees to indemnify, defend, and save Lessor harmless, to the maximum extent allowable under Alaska or federal law, from any claim or liability of whatsoever kind, including attorney fees, for damages to property or injury to persons arising out of Lessee's use and occupancy of the Leased Premises.

29. INSURANCE. Lessee understands that Lessor carries no fire insurance on the Leased Premises or improvements located thereon belonging to Lessee or Lessor.

30. SUCCESSORS. This lease shall be binding on the successors, administrators, executors, heirs, and assigns of the Lessee and Lessor.

31. NOTICE. Any notice of default must be made upon Lessee by Lessor by certified mail, return receipt requested, to the address of Lessee given below. Any notice of demand which under the terms of this lease or any statute or ordinance must be given or made by the parties hereto shall be in writing and

be given or made by certified mail, return receipt requested, addressed to the other party at the following addresses:

LESSOR: AIRPORT MANAGER
Juneau International Airport
1873 Shell Simmons Drive
Juneau, Alaska 99801

LESSEE: ALASKA DEPARTMENT OF MILITARY AND VETERANS AFFAIRS
Pouch L
Juneau, Alaska 99811

Each party may designate in writing such new or other address to which notice or demand must thereafter be given hereunder. Notice is deemed delivered when deposited in a United States Post Office with postage prepaid.

32. AIRPORT MANAGER AUTHORITY. The Airport Manager may act on behalf of the Lessor except where otherwise specifically provided.

33. JURISDICTION. Jurisdiction for claims hereunder shall be in the First Judicial District, Juneau, Alaska.

34. ENTIRE AGREEMENT, AMENDMENTS. This document contains the entire agreement between the parties, and said agreement may not be modified except in writing. There are no oral promises, representations, or warranties between the parties regarding any matter or thing connected with or related to the matters and things that are the subject of this lease.

IN WITNESS WHEREOF, the Lessor and Lessee have caused this lease to be executed the day and year first above written at Juneau, Alaska.

LESSOR: CITY AND BOROUGH OF JUNEAU, ALASKA

Approved as to form.

By: Kevin C. Ritchie
Kevin C. Ritchie, Manager

City-Borough Attorney

LESSEE: ALASKA DEPARTMENT OF MILITARY AND VETERANS AFFAIRS

By: Deputy Commissioner
JOHN W. SCHAEFFER
Title: The Adjutant General

ACKNOWLEDGMENT BY LESSOR

STATE OF ALASKA)
) ss.
FIRST JUDICIAL DISTRICT)

THIS IS TO CERTIFY that on this 17th day of September, 1987, before me, the undersigned, a Notary Public in and for the State of Alaska, duly commissioned and sworn, personally appeared KEVIN C. RITCHIE, to me known and known to me to be the Manager of the City and Borough of Juneau, Alaska, who acknowledged to me that he executed the foregoing LEASE as the free act and deed of the City and Borough for purposes therein mentioned, being fully authorized to do so.

WITNESS my hand and official seal the day, month, and year in this certificate first above written.

Betty Y. Hopper
Notary Public, State of Alaska
My commission expires: 7-23-88

ACKNOWLEDGMENT BY LESSEE

STATE OF ALASKA)
) ss.
FIRST JUDICIAL DISTRICT)

THIS IS TO CERTIFY that on this 21st day of Sep., 1987, before me, the undersigned, a Notary Public in and for the State of Alaska, duly commissioned and sworn, personally appeared John W. Schaeffer, to me known and known to me to be the Adjutant General of AK DEPT OF MILITARY AFFAIRS who acknowledged to me that (s)he executed the foregoing LEASE as the free act and deed of the Air National Guard for purposes therein mentioned, being fully authorized to do so.

WITNESS my hand and official seal the day, month, and year in this certificate first above written.

Christine Metzgerott
Notary Public, State of Alaska
My commission expires: 4/14/91

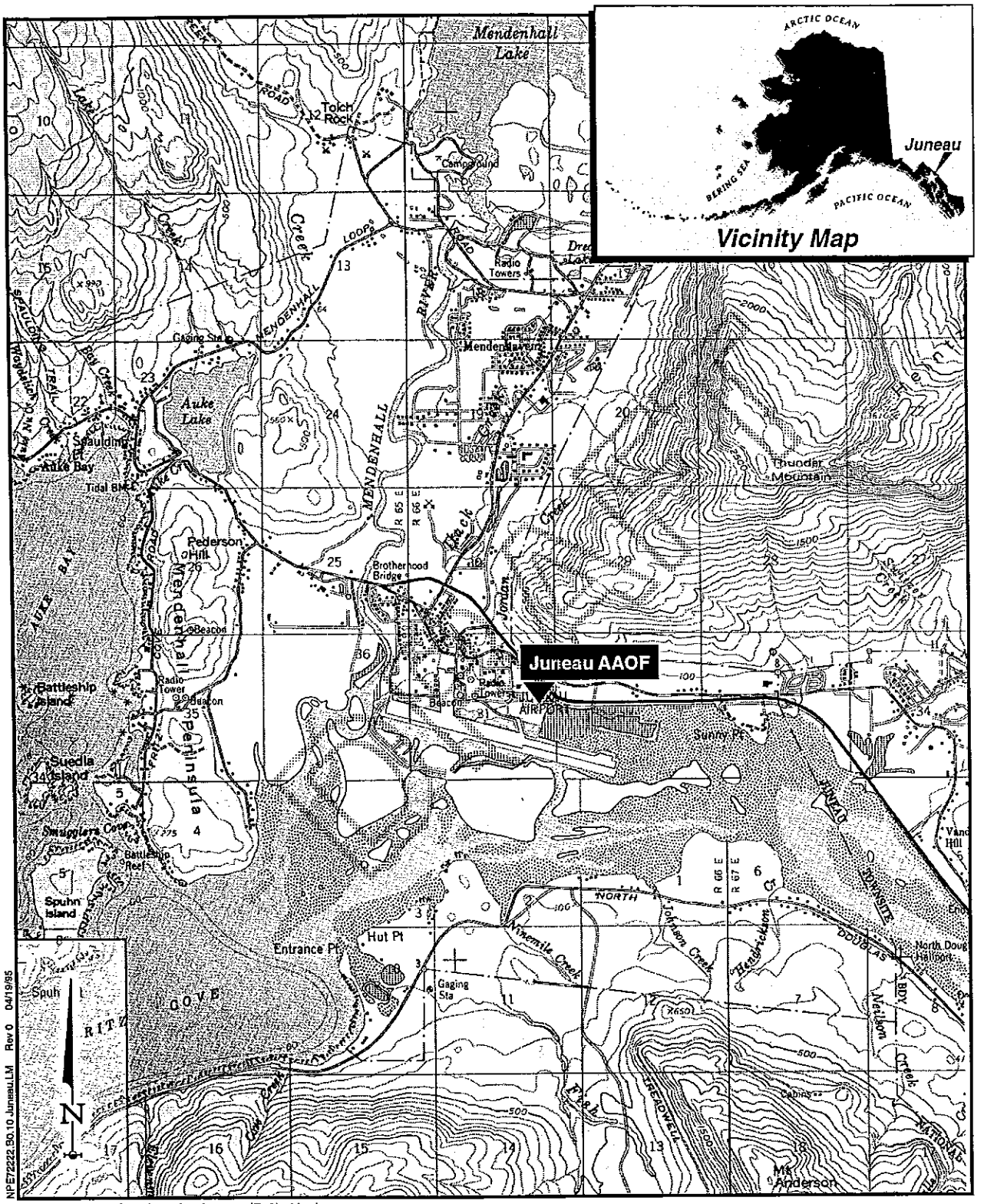
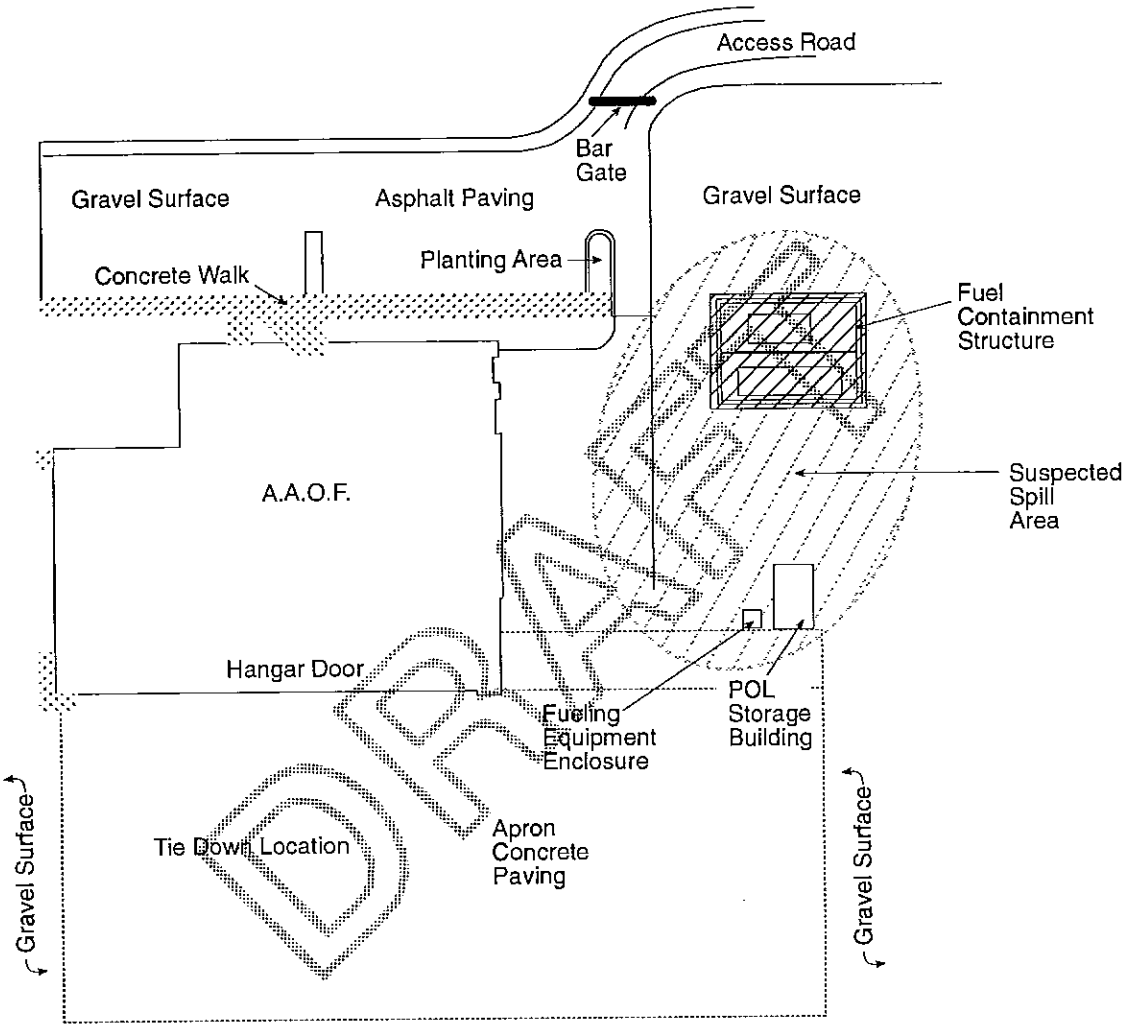


Figure 2-1
Location Map
Juneau AAOF



NPE72222.B0.10 Juneau.SP Rev 1 04/21/95

Source: FMO Files

Figure 2-2
Juneau AAOF
Site Map

JUNEAU INTERNATIONAL AIRPORT
ADDENDUM TO LAND LEASE

Notice is hereby given that certain lease entered into between the City and Borough of Juneau and Alaska Department of Military Affairs, (Alaska National Guard) dated 17 September 1987 1987, is ammended to revise the legal description of the National Guard lease site at Juneau International Airport.

LEGAL DESCRIPTION

ALASKA NATIONAL GUARD LEASE LOT 3 - JUNEAU INTERNATIONAL AIRPORT (SUBDIVISION)

A FRACTION OF TRACTS 13 AND 14, JUNEAU INTERNATIONAL AIRPORT.

A CERTAIN PARCEL OR TRACT OF LAND LOCATED AND BEING SITUATE WITHIN FRACTIONS OF TRACTS 14 AND 15, LAND ACCRETION TO U.S. SURVEY NO. 1195, AND WITHIN ALASKA TIDELAND SURVEY NO. 716 (PROTRACTED SECTION 31, T.40S., R.66E., C.R.M.), JUNEAU INTERNATIONAL AIRPORT, FIRST JUDICIAL DISTRICT, CITY AND BOROUGH OF JUNEAU, ALASKA, BEING MORE PARTICULARLY BOUNDED AND DESCRIBED AS FOLLOWS;

BEGINNING AT LAND MONUMENT CORNER 71, MENDENHALL WETLANDS STATE GAME REFUGE SURVEY WHICH IS A LAND MONUMENT ON LINE 11-12, ALASKA TIDELAND SURVEY NO. 716; THENCE N 55°56'00" W - 4493.53" TO THE TRUE POINT AND PLACE OF BEGINNING WHICH LIES S 23°48'15" W - 139.54' FROM FROM YANDUKIN CENTERLINE P.T. MONUMENT "P" 16+89.83 AND =/P.T. "P" 16+92.94 BK.

THENCE BY METES AND BOUNDS FROM THE TRUE POINT AND PLACE OF BEGINNING, THE FOLLOWING SURVEY COURSES: S 89°42'45" E - 300.00'; S 0°17'15" W - 300.00'; N 89°42'45" W - 300.00'; N 0°17'15" E 300.00'; TO THE TRUE POINT AND PLACE OF BEGINNING.

CONTAINING 2.066 ACRES (90,000 SQUARE FEET)

Therefore, pursuant to Paragraph 13 (Page 3) of subject lease, Legal Description only is ammended.

This addendum has an effective date of June 1, 1988 with term to coincide with remaining lease term of the 17 September 1987 lease, and all other provisions of that lease shall apply.

LESSOR:

CITY AND BOROUGH OF JUNEAU

By _____
Kevin Ritchie, Manager

Approved as to form:

_____
City Borough Attorney

Attest:

By: _____
City and Borough Clerk

LESSEE:

ALASKA DEPARTMENT OF MILITARY
AND VETERANS AFFAIRS

By: _____
Title: _____

CITY ACKNOWLEDGEMENT

STATE OF ALASKA)
) ss:
FIRST JUDICIAL DISTRICT)

THIS IS TO CERTIFY THAT ON THIS 14th day of July, 1989, before me, the undersigned, a Notary Public in and for the State of Alaska, duly commissioned and sworn, personally appeared KEVIN C. RITCHIE, to me known to be the CITY AND BOROUGH MANAGER of the CITY AND BOROUGH OF JUNEAU, ALASKA, a municipal corporation, the which executed the above and foregoing instrument; who on oath stated that he was duly authorized to execute said instrument and affix the corporate seal thereto on behalf of said corporation; who acknowledged to me that he signed and sealed the same freely and voluntarily on behalf of said corporation for the uses and purposes therein mentioned.

WITNESS my hand and official seal the day and year in the certificate first above written

(SEAL)

Donna K Norman
NOTARY PUBLIC FOR ALASKA
My Commission Expires: 8-20-91

ACKNOWLEDGEMENT BY LESSEE

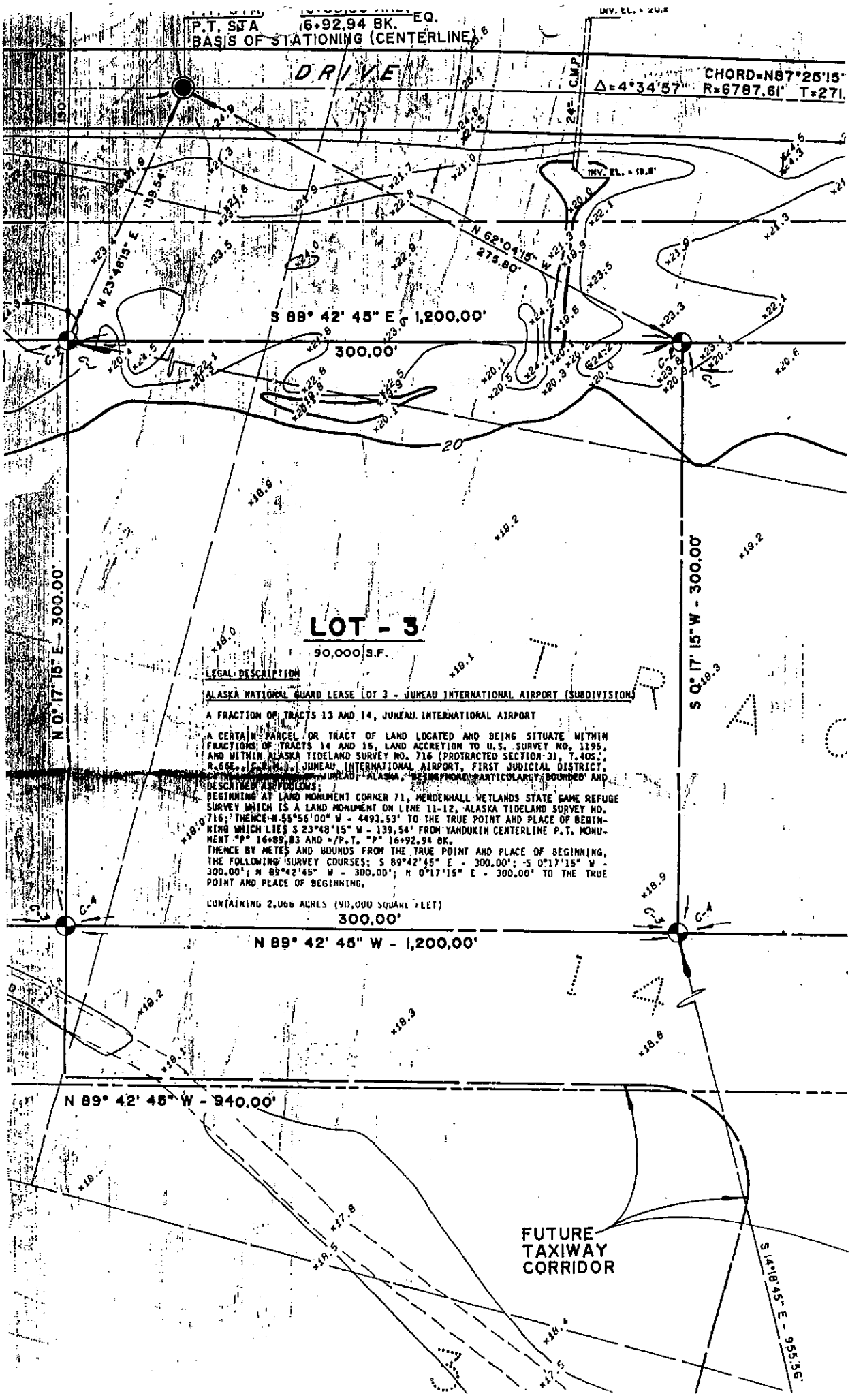
STATE OF ALASKA)
) ss:
FIRST JUDICIAL DISTRICT)

THIS IS TO CERTIFY THAT ON THIS _____ day of _____, 19___, before me, the undersigned, a Notary Public in and for the State of Alaska, duly commissioned and sworn, personally appeared _____ known to be the _____ of AK DEPT. OF MILITARY AFFAIRS, who acknowledged to me that (s)he executed the foregoing lease ammendment as the free act and deed of the AK. NATIONAL GUARD for purposes therein mentioned, being fully authorized to do so.

WITNESS my hand and official seal the day and year in this certificate above written.

(SEAL)

NOTARY PUBLIC FOR STATE OF ALASKA
My Commission Expires: _____


P.T. SNA
6+92.94 BK.
EQ.
BASIS OF STATIONING (CENTERLINE)
DRIVE
CHORD=N87°25'15"
Δ=4°34'57"
R=6787.61'
T=271.
INV. EL. = 19.8'
N 23°48'15" E
139.54'
N 62°04'15" W
275.80'
S 89° 42' 45" E - 1,200.00'
300.00'
N 0°17'15" E - 300.00'
S 0°17'15" W - 300.00'
LOT - 3
90,000 S.F.
LEGAL DESCRIPTION
ALASKA NATIONAL GUARD LEASE LOT 3 - JUNEAU INTERNATIONAL AIRPORT (SUBDIVISION)
A FRACTION OF TRACTS 13 AND 14, JUNEAU INTERNATIONAL AIRPORT
A CERTAIN PARCEL OR TRACT OF LAND LOCATED AND BEING SITUATE WITHIN FRACTIONS OF TRACTS 14 AND 15, LAND ACCRETION TO U.S. SURVEY NO. 1195, AND WITHIN ALASKA TIDELAND SURVEY NO. 716 (PROTRACTED SECTION 31, T.40S., R.69E., C.R.M.), JUNEAU INTERNATIONAL AIRPORT, FIRST JUDICIAL DISTRICT, STATE OF ALASKA, JUNEAU, ALASKA, BEING MORE PARTICULARLY BOUNDED AND DESCRIBED AS FOLLOWS;
BEGINNING AT LAND MONUMENT CORNER 71, MENDENHALL WETLANDS STATE GAME REFUGE SURVEY WHICH IS A LAND MONUMENT ON LINE 11-12, ALASKA TIDELAND SURVEY NO. 716; THENCE N 55°56'00" W - 4493.53' TO THE TRUE POINT AND PLACE OF BEGINNING WHICH LIES S 23°48'15" W - 139.54' FROM YAHDUKIN CENTERLINE P.T. MONUMENT "P" 16+89.83 AND ℄P.T. "P" 16+92.94 BK.
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CONTAINING 2.066 ACRES (90,000 SQUARE FEET)
300.00'
N 89° 42' 45" W - 1,200.00'
N 89° 42' 45" W - 940.00'
FUTURE
TAXIWAY
CORRIDOR
S 14°18'45" E - 955.56'

JUNEAU ARMY AVIATION OPERATIONS FACILITY (AAOF)

Spill Prevention, Control & Countermeasure
And
Installation Spill Contingency Plans

Photo: Juneau AAOF August 2012

OCTOBER 2012

Prepared for:
Contract: PSA 091-2-1526
Alaska Army National Guard
Department of Military and Veterans Affairs
Facilities Management Office – Environmental Section
P.O. Box 5800
Ft. Richardson, Alaska 99505-5549

Prepared By:
RESTORATION
Science & Engineering, LLC
911 West 8th Ave., Suite 100
Anchorage, Alaska 99501

JUNEAU ARMY AVIATION OPERATIONS FACILITY
INSTALLATION SPILL CONTINGENCY PLAN

CAN YOU CLEAN UP WITH THE MATERIALS AND PERSONNEL YOU HAVE ON HAND?

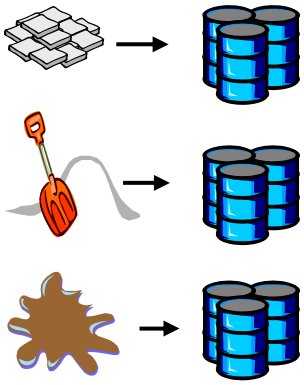
This includes a leak, fuel spill, or a finding of fuel-stained soil.

YES
Incidental Release

Put on personal protective equipment, such as gloves and goggles, found in the spill response kit.

Remove ignition sources and avoid vapors.

Stop flow of spill by closing valves, uprighting container, or creating a berm with boom, dirt or snow. Piping shut-off valves are placed at several locations in the fuel piping network.



Place pooled material and contaminated sorbent, snow, soil, and debris into 55-gallon drum(s) or onto plastic sheeting using non-sparking tools. This should be done as quickly as feasible after a spill to prevent further migration of oil.

Label drum(s). Example:

POL Spill Residue
October 2012

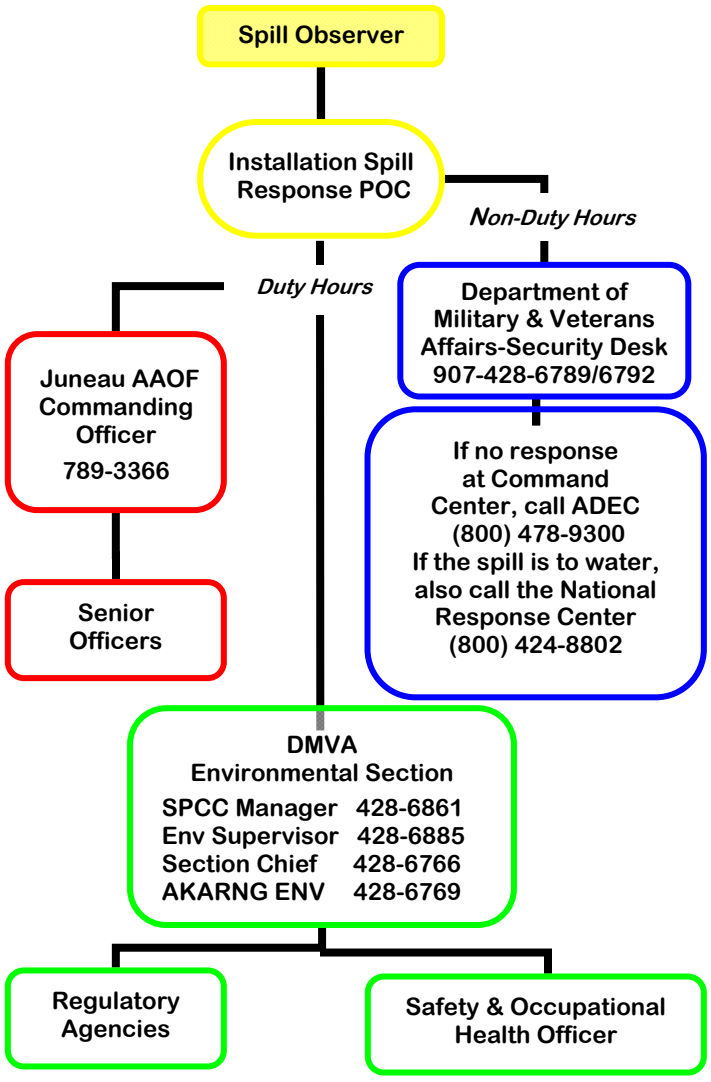
Contact DMVA Environmental Office to arrange for disposal: (907) 428-6861.

Use the adjacent notification chart for spill reporting once the spill response is complete.

NO
Uncontrolled Release

Evacuate Personnel if Necessary.

Use the following flow chart to notify Chain of Command and Environmental Section.



Do not leave only a voice mail. Notification is not complete until speaking with a person.

DMVA Environmental Office will contract outside resources for cleanup when necessary.

Juneau Army Aviation Operations Facility Contact List

AK ARNG Office / Personnel	Telephone Number
Juneau Army Aviation Operations Facility (AAOF)	(907) 789-3366
Juneau AAOF Maintenance Officer	(907) 789-3366
Juneau Readiness Center (3rd Battalion Headquarters)	(907) 465-4564
Juneau Field Maintenance Shop	(907) 465-4573
Facilities Maintenance Division (FMD)	
Anchorage Shop	(907) 428-6772
Deputy Director	(907) 428-6770
Environmental Office	
SPCC Manager	(907) 428-6861
Environmental Supervisor	(907) 428-6885
Haz-Waste Manager	(907) 428-6898
Section Chief	(907) 428-6766
Occupational Health Nurse – STARC Anchorage	(907) 428-6488
Public Affairs Officer	(907) 428-6030
If a spill occurs outside normal business hours, immediately notify:	
Department of Military & Veterans Affairs-Security Desk	(907) 428-6789
	(907) 428-6792
or Alaska Department of Environmental Conservation	(800) 478-9300
If oil enters or threatens a navigable waterway, also immediately notify:	
National Response Center – Washington D.C.	(800) 424-8802

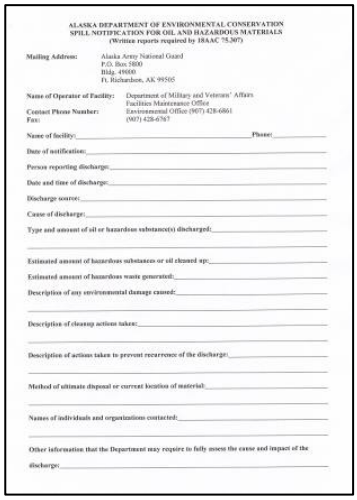
The Spill Response Point of Contact (POC) for the Juneau AAOF is the Maintenance Officer. The alternate POC is the Commanding Officer.

Spill Reporting

Even minor leaks or spills that are contained and cleaned up by the spiller or the first person on the scene must be reported to the Environmental Office. By doing so, mistakes or problems that caused the spill may be corrected.

The spill response POC should conduct spill notification following the flow chart on page 1. In addition, the Environmental Office will need the information on the form at the back of this SPCC Plan completed in order to document the spill, report to regulatory agencies, and prevent reoccurrence.

A release notification placard is posted on site. Spill records will be maintained at Camp Carroll for a minimum of three years.



ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SPILL NOTIFICATION FOR OIL AND HAZARDOUS MATERIALS
(Written reports required by 18AAC 75.307)

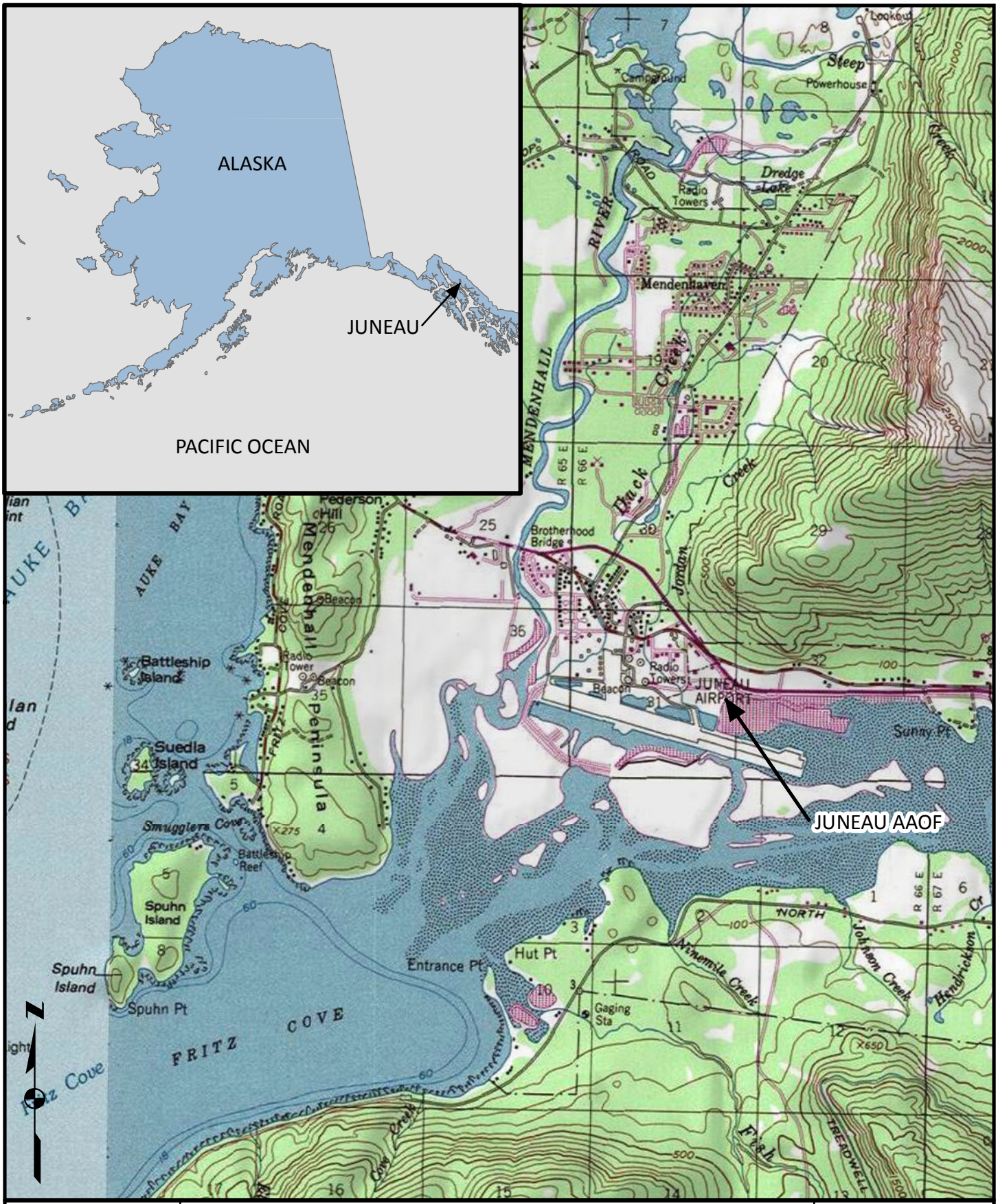
Mailing Address: Alaska Army National Guard
P.O. Box 5800
Bldg. 49600
Ft. Richardson, AK 99505

Name of Operator of Facility: Department of Military and Veterans' Affairs
Facilities Maintenance Office
Contact Phone Number: Environmental Office (907) 428-6861
Fax: (907) 428-6767

Name of facility: Phone:
Date of notification:
Person reporting discharge:
Date and time of discharge:
Discharge source:
Cause of discharge:
Type and amount of oil or hazardous substance(s) discharged:
Estimated amount of hazardous substances or oil cleaned up:
Estimated amount of hazardous waste generated:
Description of any environmental damage caused:
Description of cleanup actions taken:
Description of actions taken to prevent recurrence of the discharge:
Method of ultimate disposal or current location of material:
Names of individuals and organizations contacted:
Other information that the Department may require to fully assess the cause and impact of the discharge:

Spill Report Forms are located at the back of this SPCC Plan

JUNEAU AAOF



RESTORATION Science & Engineering, LLC	**JUNEAU ARMY AVIATION OPERATIONS FACILITY VICINITY MAP** **SPILL PREVENTION CONTROL & COUNTERMEASURE PLAN** **JUNEAU, ALASKA**		ALASKA ARMY NATIONAL GUARD
JOB NO: 12-951 DATE: JULY 2012	DRAWN BY: NW FILE: NGAK MAPPING	0 0.25 0.5 1 Miles	**FIGURE 1**

JUNEAU AAOF

RESTORATION Science & Engineering, LLC

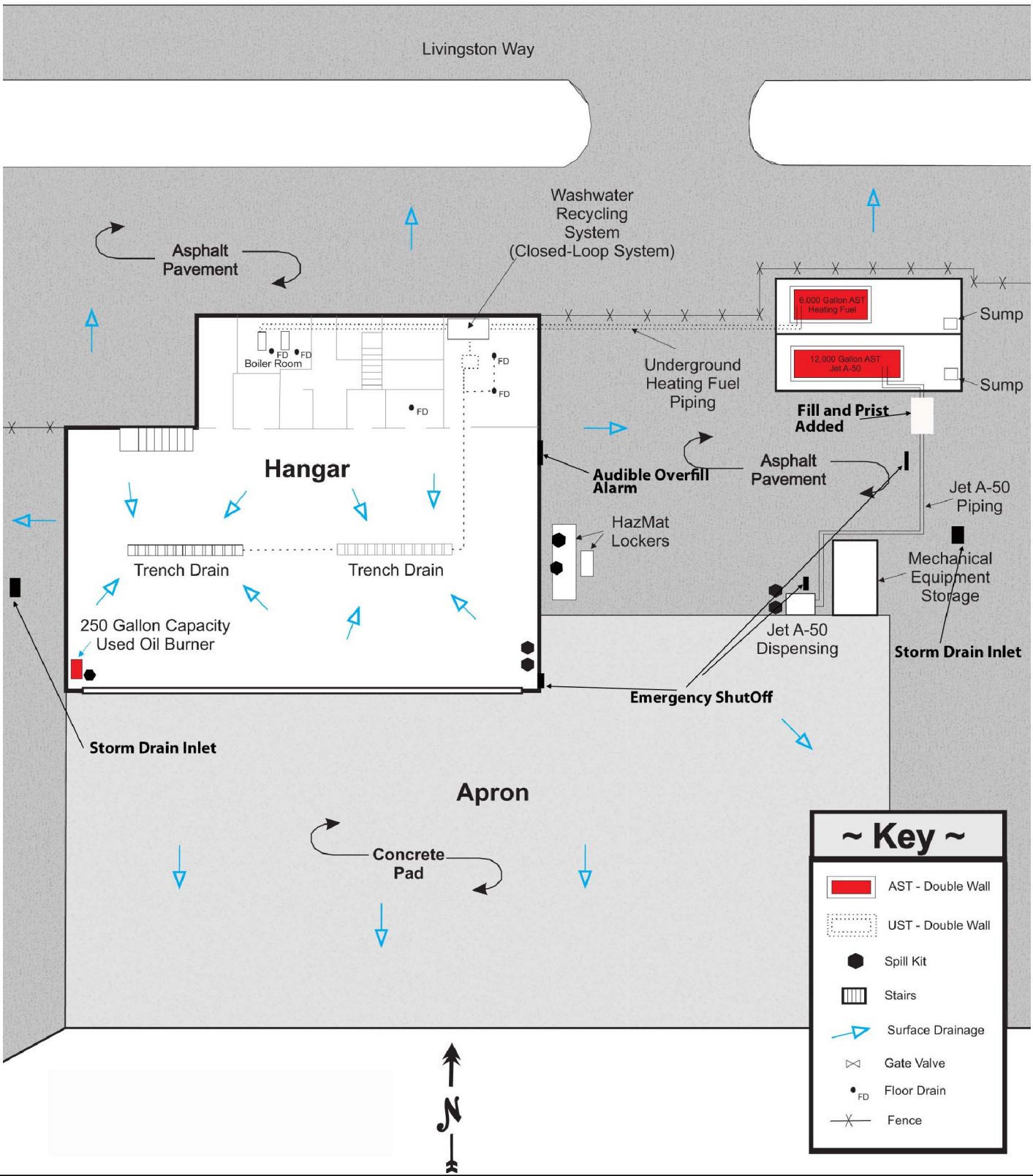
JUNEAU ARMY AVIATION OPERATIONS FACILITY LOCATION MAP
SPILL PREVENTION CONTROL & COUNTERMEASURE PLAN

JUNEAU, ALASKA

ALASKA ARMY NATIONAL GUARD

JOB NO: 12-951	DRAWN BY: NW	0 0.15 0.3 0.6 Miles	**FIGURE 2**
DATE: JULY 2012	FILE: NGAK MAPPING		

JUNEAU AAOF



RESTORATION Science & Engineering, LLC

JUNEAU ARMY AVIATION OPERATIONS FACILITY LAYOUT
SPILL PREVENTION CONTROL & COUNTERMEASURE PLAN

JUNEAU, ALASKA

ALASKA ARMY NATIONAL GUARD

JOB NO: 12-951	DRAWN BY: NW	NOT TO SCALE	**FIGURE 3**
DATE: AUGUST 2012	FILE: NGAK MAPPING		

SPILL PREVENTION, CONTROL AND COUNTERMEASURE PLAN

This Spill Prevention Control and Countermeasure (SPCC) Plan has been prepared to conform to requirements set forth under 40 CFR 112 as provided in the Federal Register, Volume 67, Number 137 dated July 17, 2002 and SPCC Plan amendments through the most recent amendment dated November 13, 2009 in Federal Register Volume 74, No. 117, page 29136.

Site Description

Site Name: Juneau Army Aviation Operations Facility (AAOF)

Physical Layout: The facility is located near the Juneau International Airport. It consists of the following site features:

- Metal-frame building, completed in 1990, with an approximate 13,500 square foot footprint. The building contains:
  - large hangar and shop area on the ground floor
  - ground support equipment room
  - boiler room
  - washwater recycling system
  - partial second story with office space
- Hazardous material storage locker with three compartments
- Hazardous material storage locker with one compartment
- Out-building used for unheated storage of mechanical equipment
- Out-building used to store fueling hose and equipment
- Aircraft parking apron
- 250-gallon used oil tank and associated used oil burner
- Covered enclosure with concrete lined containment dike for:
  - 6,000-gallon heating fuel aboveground storage tank (AST)
  - 12,000-gallon Jet A-50 AST

Fuel Storage

Bulk quantities of No. 1 heating oil for onsite use and Jet A-50 for fueling military planes are stored on site in ASTs located outside the AAOF building. An additional tank located in the hangar is used to store used oil.

Heating Oil AST

- Double-walled, UL 142 listed tank
- Nominal Capacity: 6,000 gallons
- Installed in 1990
- Located in covered and fenced enclosure
- Inner and outer tanks are vented to the atmosphere
- Gate valve installed on the drain port of the outer tank controls drainage of the interstitial space
- Placed within north side of bisected, concrete-lined containment dike

Jet A-50 AST

- Double-walled, UL 142 listed tank
- Nominal Capacity: 12,000 gallons
- Installed in 1990
- Located in covered and fenced enclosure
- Inner and outer tanks are vented to the atmosphere
- Gate valve installed on the drain port of the outer tank controls drainage of the interstitial space
- Placed within south side of bisected, concrete-lined containment dike

Used Oil Burner Tank

- Single-walled tank
- Nominal Capacity: 250 gallons
- Placed in 70″ x 34″ x 4.5″ spill pan
- Located inside hangar

Potential Spill and Predicted Flow

The largest spill sources on site are the ASTs. The amount of fuel that could potentially spill is 12,000 gallons, a full tank volume of the largest AST. The rate of flow from a potential spill ranges from 0.1 gal/min for a leak and 1,200 gal/min for a tank rupture. A spill outside of the self-diked tank would likely be contained within the concrete secondary containment unless the containment was compromised as well.

The area surrounding the facility is generally flat and the ground immediately surrounding the building is paved. Adjacent lots have similar flat terrain. Nearby open land is covered with sand and dredged fill which overlies a wet organic soil.

Surface drainage from the facility flows away from the building in all directions. North of the hangar, surface runoff is directed to a ditch that runs parallel to Livingston Way. South of the hangar, the surface runoff is directed toward the taxiway and into storm drain catch basins. West of the building and adjacent to and east of the fill and dispensing piping for the Jet A-50 AST are additional storm drain catch basins that direct runoff to wet areas of the airport..

Discharge Prevention

Heating Fuel and Jet A-50 ASTs

- *Tank Construction* - Tanks are constructed of steel appropriate for storage of petroleum products.
- *Alarm* – A real-time fuel level sensor integrated with an alarm/whistle is installed on the Jet A-50 tank.
- *Fuel Level Monitoring* – A third party fuel vendor is responsible for routinely checking and filling the tanks. The fuel levels in the ASTs are also monitored by electronic sensors with a readout panel on the wall in the office area on the second floor of the facility.
- *Manual Fuel Level Monitoring* – Fuel levels are physically measured with a dipstick prior to re-fueling the heating oil tank. Only the amount of fuel to fill the tank to 80% capacity is ordered.
- *Secondary Containment* - In the event of an inner tank leak or rupture, the outer, steel integral dikes will provide complete containment of the tank contents. Additionally, both tanks sit in a concrete-lined revetment with a separate compartment for each AST that will also hold the tank contents. The secondary

containment is covered to prevent precipitation from entering. Each compartment can be drained to a sump by manually operating a valve. The sump is an old storm drain inlet that has been plugged with concrete to prevent fluids from discharging from the containment areas.

- *Automatic Flow Restrictors* – An automatic flow restrictor (90% overfill prevention valve) is in place on the fill line of the Jet A-50 tank preventing spills due to overfilling the tank. The heating oil tank does not have an overfill prevention valve in place, although it is not required since the tank is located within secondary containment large enough to capture the contents of the tank.

- Provisions in place to meet overall intent of 40 CFR 112 include establishment of an integrity assessment program; installation spill contingency plans for both individual sites and state-wide emergency spill response; and management commitment of manpower, equipment and materials that provide on-site spill kits for small spills and contracts for cleanup of large spills.
- No mobile and portable tanks are located at the facility. Should any mobile and portable tanks be brought to the facility, they will be stationed in a location where general secondary containment will prevent potential discharges from reaching waters of the US.

Used Oil

A used oil burner with a 250 gallon storage tank is located in the hangar building. A fuel pump to a unit heater is located above the tank. Discharge prevention provisions are listed below.

- Tank is constructed of steel, appropriate for storage of petroleum products.
- A spill pan around the base of the tank would collect small leaks or spills. Large spills would be contained within the building and would flow to the floor drain and washwater recycling system.
- A fuel level gauge is installed which visually indicates the amount of fuel in the tank.
- The fill pipe is protected with an overfill bucket.
- A manually operated shutoff valve is located on the wall near the tank.

Aircraft Fuel Tanks

Blackhawk helicopters and fixed wing aircraft are parked onsite, both on the apron and within the hangar. The nominal capacity of a Blackhawk fuel tank is 362 gallons. AK ARNG readiness policy requires that aircraft fuel tanks generally be kept full.

A spill from a vehicle fuel tank inside the hangar would flow into the trench drain and associated washwater recycling system. A spill from a vehicle fuel tank parked on the apron would pool on the apron or flow toward adjacent land to the east and south.

Oil-filled equipment such as these are considered "motive-power containers" and are proposed by the EPA to be excluded from the SPCC rule. However, due diligence to prevent and report spills and contingency measures per this SPCC Plan are still applied to the aircraft fuel tanks.

Washwater Recycling System

Floor drains in the hangar, boiler room, and shops drain to an oil water separator which has been converted for use as an accumulation sump. The sump is located in the ground support equipment room and serves as the influent end of a SM^2 washwater recycling system.

Treated washwater is reused for the first wash of aircraft. When the 500-gallon effluent storage tank is full, a sample is collected for laboratory analysis and tested for hazardous waste constituents. Once the waste stream is characterized as a non-hazardous, it is discharged directly to the sanitary sewer.

This system may be removed in the future and the oil/water separator reinstated.

Fuel Transfer into ASTs

The heating fuel and Jet A-50 tank levels are kept full by a private contractor and/or the Defense Energy Support Center. The fuels are pumped from a delivery truck to the ASTs. Spills would be contained within the concrete-lined revetment.

Heating Fuel Piping & Fuel Transfer

Fuel is transferred through copper tube piping between the heating fuel AST and two boilers located in the boiler room. The piping runs unsupported from the top of the tank horizontally for about 3 feet, then bends in a broad arc to a vertical orientation adjacent to the outer tank before penetrating the bottom of the concrete containment structure and running underground to the boiler room. Underground piping is insulated, but is not provided with corrosion coating, secondary containment, or cathodic protection.

Piping discharge prevention provisions are listed below.

- Piping is suction-fed. If a leak occurs in the piping, the suction in the piping system will be broken and fuel flow between the AST and boilers will stop.
- Fuel transfer pumps on the boilers have automatic control switches which reduce the potential for human error during routine fuel transfers.
- Spill pans are located beneath the fuel filters for the water heater and the boilers to catch drips during normal operation and maintenance.
- Piping is supported by stands mounted on the floor of the containment area, as well as by the containment wall, before it turns to run underground to the boiler room.
- Piping elbows allow for movement resulting from thermal expansion and contraction.

Jet A-50 Piping & Fuel Transfer

Jet A-50 fuel is supplied to the fuel dispensing hose and housing, southeast of the hangar, via three-inch piping supported on steel supports bolted to the concrete slab surface.

- Piping is suction-fed. If a leak occurs in the piping, the suction in the piping system will be broken and fuel flow between the AST and dispensing stand will stop.
- A guardrail immediately west of the piping protects the pipe from vehicle traffic.
- While the dispensing pump is operating, a red warning light stays on outside the hangar.
- Emergency shutoff switches are located adjacent to the fill and dispensing cabinets as well as on the exterior of the east side of the hangar.
- Piping elbows are installed which allow for movement resulting from thermal expansion and contraction.

- Manually operated shutoff valves are located in the supply line of the AST and the dispensing hose. In case of fire, there are also automatic shutoff valves activated by a lead piece which melts and closes a spring-loaded valve.
- It is AK ARNG policy to ensure the integrity of the hose and dispensing equipment.

Miscellaneous Hazmat

In support of maintenance conducted at the facility, small quantities of oils and chemicals are stored on-site. Containers with a capacity below 55 gallons are not regulated under 40 CFR 112, but are noted here for informational purposes.

A three-compartment hazmat locker and a smaller single compartment locker, both constructed of heavy gauge steel, are located outside the hangar. The interiors contain steel shelving and secondary spill containment sumps. The spill sump in each

compartment of the larger locker has a capacity of approximately 300 gallons.

A flammables storage room located inside the hangar is equipped with a 4-inch curb at the threshold of the doorway to the room. The curb provides a nominal containment capacity of 380 gallons and forms a barrier to flow from the room.

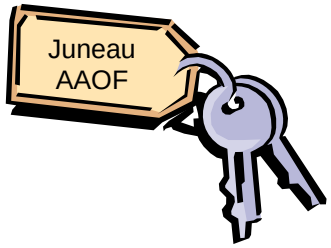
All containers with a capacity of 55-gallons or greater and contain any oil product must be stored with secondary containment of adequate capacity to hold the contents of the largest single container. DMVA policy is to provide secondary containment as required. Fuel storage beyond the secondary containment capacity of the site must be immediately contained or removed.

A double-walled underground storage tank located north of the building remains in place but is no longer is use. This tank was taken out of service in 1997.

Security

Spill prevention security features at the Juneau AAOF include the following:

- Light fixtures are mounted on the buildings to illuminate the exterior of the facility. Security lighting is controlled by an electric eye for operation during hours of darkness.
- Full time personnel attend the facility during normal business hours. It is also attended one weekend a month for training operations. The AAOF is locked when not attended.
- Access to the grounds is restricted by a chain link fence with a gate that is kept locked when not in use.
- The 6,000 and 12,000 gallon ASTs are enclosed in a fenced, concrete-lined containment area.
- All access to the ASTs is from the top of the tanks. There are no accessible drain ports to the main tanks.



Countermeasures

Spill Response Resources

In the event of a spill, the local spill response point of contact (POC) must make a determination whether the spill can be cleaned up with materials on hand. Materials on hand consist of a minimum of a spill response kit which includes two 55-gallon plastic drums with the following items:

- Oil-Absorbent Pads
- Absorbent Booms
- Protective Eyewear
- Overboots
- Shovels
- Garden Rake
- Duct tape
- Emergency Response Guidebooks
- Gloves (latex, nitrile, PVC/butyl, & Norfoil reinforced)
- Tyvek & Saranex Suits
- Wringers (manual, drum mounted)
- Caution tape
- Contractor's Bags (45 Gallon)

The Environmental Office will provide for outside resources if the cleanup requires activity beyond on-site capabilities.

Spill Residue Disposal

To dispose of spill residue and used clean-up materials, contact the DMVA Environmental Section. Phone numbers are listed in the contact list on page 2. The Environmental section will arrange for disposal through the Defense Logistics Agency (DLA) or private contractors.

Inspections

DMVA utilizes Steel Tank Institute (STI) *Standard for Inspection of In-Service Shop Fabricated Aboveground Tanks for Storage of Combustible and Flammable Liquids*, STI SP001 to meet AST integrity assessment requirements. Tank inspection records are maintained in Environmental Section files at Camp Carroll. Records will be kept for a minimum of three years.

- Annual inspections are conducted by FMD and include visual inspection of the tanks, piping, and other connected equipment in accordance with STI SP001. Needed repairs are corrected as soon as feasible.
- Owner inspections are conducted by knowledgeable personnel on a minimum annual and monthly basis, with additional periodic inspections performed on an opportunistic basis when DMVA environmental staff are in Juneau.
- Inspections are conducted to STI SP001 as appropriate for the tank construction, age, and condition. ASTs at DMVA facilities are repaired, maintained, or replaced as determined by these procedures. Inspections include a visual inspection of the tank's exterior surfaces including evidence of leaks, shell distortions, signs of settlement, corrosion, condition of foundation, paint coatings, appurtenances and piping.
- If liquid is found to be in the interstitial space during inspections, it is inspected for a sheen, treated if required and then discharged. Valves, pumps, or other methods may be used to drain interstitial space. Records of containment dewatering will be maintained with inspection records.
- Soldiers are instructed to maintain an active awareness of tank conditions by visually checking the tank for any problems during drills at the FSRC. Documentation of these inspections is only recorded if a problem is noted.

Training

In accordance with 40 CFR 112.7(f), oil-handling personnel are trained annually by DMVA's Environmental Office, or its agent, in the following:

- Operation and maintenance of equipment to prevent discharges;
- Discharge procedure protocols, including reporting;
- Applicable pollution control regulations and the content of this SPCC Plan.

Attendees include oil handling and facility personnel needing to know and implement SPCC-required response and reporting procedures. Official training records are kept at the Camp Carroll Environmental Office.

REGULATORY CROSS-REFERENCE

CITATION	DESCRIPTION	PLAN SECTION
§112.3(d)	Professional Engineer Certification	Page 14
§112.5(b)	Management of Five Year Review	Page 14
§112.7	**General requirements for SPCC Plans**	Pages 1-15
§112.7(a)(1)	Discussion of facility's conformance with general requirements	Page 6
§112.7(a)(2)	Non-conformance and alternate methods to achieve equivalent environmental protection	Pages 6-8
§112.7(a)(3)	Physical layout and facility diagrams	Figure 1, 2, and 3
§112.7(a)(3)(i)	Type of oil in each container and its storage capacity	Page 6-8 and Figure 3
§112.7(a)(3)(ii)	Discharge prevention measures	Page 7
§112.7(a)(3)(iii)	Discharge or drainage controls – secondary containment	Page 7
§112.7(a)(3)(iv)	Countermeasures for discharge discovery, response, and cleanup	Page 1, 11
§112.7(a)(3)(v)	Methods of disposal	Page 12
§112.7(a)(3)(vi)	Contact list and phone numbers	Page 2
§112.7(a)(4)	Notification procedures and phone numbers	Page 1, 2
§112.7(a)(5)	Discharge response procedures	Page 1, ISCP
§112.7(b)	Discharge analysis	Figure 3
112.7(c)	Secondary containment	Page 7
§112.7(d)	Impracticability and contingency planning	Not Applicable
§112.7(e)	Inspections, tests, and records	Page 12
§112.7(f)	Personnel training and discharge prevention procedures	Page 1, 7, and 12
§112.7(g)	Security (excluding oil production facilities)	Page 11
§112.7(h)	Tank car and tank truck loading/unloading rack (excluding offshore facilities, farms, and oil production facilities)	Not Applicable
§112.7(i)	Brittle fracture evaluation requirements	Not Applicable
§112.7(j)	Conformance with State requirements	Page 1, 2 (ADEC)
§112.7(k)	Oil-filled Operational Equipment	Not Applicable
§112.8	**SPCC Plan requirements for onshore facilities (excluding production facilities)**	Pages 1-15
§112.8(a)	General and specific requirements	Pages 1-15
§112.8(b)(1)	Restrain drainage from diked storage areas	Not Applicable
§112.8(b)(2)	Use of valves for drainage of diked areas	Page 12
§112.8(b)(3)	Drainage from undiked areas	Not Applicable
§112.8(b)(4)	Non-engineered drainage from undiked areas	Not Applicable
§112.8(b)(5)	Treatment of drainage waters	Page 12
§112.8(c)(1)	Bulk storage container material and construction	Page 6, 7
§112.8(c)(2)	Bulk storage container secondary containment	Page 7
§112.8(c)(3)	Drainage of secondary containment	Page 12
§112.8(c)(4)	Coatings or cathodic protection for completely buried metallic storage tanks	Not Applicable
§112.8(c)(5)	Coatings or cathodic protection for partially buried or bunkered metallic tanks	Not Applicable
§112.8(c)(6)	Integrity testing of aboveground containers	Page 12
§112.8(c)(7)	Leak detection and control of internal heating coils	Not Applicable
§112.8(c)(8)	Overfill protection (liquid level detection) for containers	Page 7-8
§112.8(c)(9)	Inspection of effluent treatment facilities	Not Applicable
§112.8(c)(10)	Clean-up of discharge accumulations in diked areas	Page 12
§112.8(c)(11)	Positioning and secondary containment for mobile or portable containers	Page 8
§112.8(d)(1)	Wrapping or coating and cathodic protection for buried oil transfer piping, and inspection	Not Applicable
§112.8(d)(2)	Out-of-service buried oil transfer piping	Not Applicable
§112.8(d)(3)	Piping supports for oil transfer piping	Page 9, 10
§112.8(d)(4)	Inspection of oil transfer piping, valves, and appurtenances	Page 12
§112.8(d)(5)	Protection of oil transfer piping from vehicle damage	Page 10

Spill Prevention Control and Countermeasure Plan
Compliance Inspection Review History

In accordance with 40 CFR 112, a management review and evaluation of this SPCC Plan is required at least once every five (5) years. As a result of this review and evaluation, this SPCC Plan will require amendment within six (6) months of the review to include more effective prevention and control technology if (1) such technology will significantly reduce the likelihood of a spill event from the facility, and (2) such technology has been field-proven at the time of review. If any changes to the facility design, construction, operation, or maintenance occurs which materially affects the facility's potential for the discharge of oil into or upon navigable waters of the United States or adjoining shorelines, an amendment is required for this SPCC plan as soon as possible. Any amendment to this SPCC Plan shall be certified by a Registered Professional Engineer as soon as possible and within six (6) months after facility changes take place. Non-technical SPCC Plan revisions are permitted by the facility Owner/Operator without engineer certification.

40 CFR 112.4 requires submittal of an SPCC Plan to the United States Environmental Protection Agency (EPA) Regional Administrator and the appropriate state agency in charge of oil pollution control activities whenever the facility discharges more than 1,000 gallons of oil in a single event, or discharges more than 42 gallons of oil in each of two discharge incidents within a 12-month period that reaches navigable waters of the U.S.. A standard report for submitting the information to the EPA Regional Administrator is included in Table 3: Release Reporting Checklist of this Plan.

Management Approval

State of Alaska is committed to the prevention of discharges of oil to navigable waters and the environment, and maintains the spill prevention control and countermeasures readiness in accordance with 40 CFR 112 through regular review, updating, training, and implementation of this Spill Prevention Control and Countermeasures Plan for the:

- Juneau AAOF

I hereby certify that this SPCC Plan will be implemented as described herein.

Authorized Representative	Signature	Title	Date
~~Joel T. Gilbert, LTC~~ LTC WILLIAM BOCDETT	William Boudett	Construction & Facilities Management Officer	6 OCT 14

Registered Professional Engineer Certification

I have reviewed the SPCC plan for this facility and attest that (1) I am familiar with the requirements of this plan; (2) either myself or my agent has visited and examined the facility; (3) this SPCC plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards, and the requirements of 40 CFR 112; (4) procedures for required inspections and testing have been established; and (5) this SPCC plan is adequate for this facility.

Engineer: David M. Nyman, PE
Signature:
Registration Number: CE-7794
Registration State: Alaska
Date:

Attachment C-II-Certification of the Applicability of the Substantial Harm Criteria

Facility Name: Juneau Army Aviation Operations Facility

Facility Address: 8425 Livingston Way, Juneau, Alaska 99801

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

   Yes _____ No X

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground storage tank area?

   Yes _____ No X

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using formula in Attachment C-III, Appendix C, 40 CFR 112 or a comparable formula[1]) such that a discharge from the facility could cause injury to fish and wildlife and sensitive areas? For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Environments" (Section 10, Appendix E, 40 CFR 112 for availability) and the applicable area Contingency Plan.

   Yes _____ No X

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance as calculated using the appropriate formula (Attachment C-III, Appendix C, 40 CFR 112 or a comparable formula[1]) such that a discharge from the facility would shut down a public drinking water intake[2]?

   Yes _____ No X

5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?

   Yes _____ No X

CERTIFICATION

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.

Printed Name LTC WILLIAM BURDETT ~~Joel T. Gilbert~~ Title Construction and Facilities Management Officer

Signature _____ Date 6 OCT 14

[1] If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

[2] For the purposes of 40 CFR 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).

Attachments

Alaska Department of Environmental Conservation Spill Notification Form

Containment Dewatering Log

SPCC Personnel Training Form

SPCC Plan Revisions/Annual Review Log

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SPILL NOTIFICATION FOR OIL AND HAZARDOUS MATERIALS
(Written reports required by 18AAC 75.307)

Mailing Address: Alaska Army National Guard
P.O. Box 5800
Bldg. 49000
Ft. Richardson, AK 99505

Name of Operator of Facility: Department of Military and Veterans' Affairs
Facilities Management Office
Contact Phone Number: Environmental Office (907) 428-6861
Fax: (907) 428-6767

Name of facility:_____ **Phone:**_____

Date of notification:_____

Person reporting discharge:_____

Date and time of discharge:_____

Discharge source:_____

Cause of discharge:_____

Type and amount of oil or hazardous substance(s) discharged:_____

Description of cleanup actions taken:_____

Estimated amount of hazardous substances or oil cleaned up:_____

Estimated amount of hazardous waste generated:_____

Description of any environmental damage caused:_____

Description of actions taken to prevent recurrence of the discharge:_____

Method of ultimate disposal or current location of material:_____

Names of individuals and organizations contacted:_____

Other information that the Department may require to fully assess the cause and impact of the discharge:_____

National Guard Alaska
Containment Dewatering Log

Facility: _____

Date	Estimated Amount Drained (Gallons)	Comments and AST ID

National Guard Alaska
SPCC Personnel Training Form Checklist

Annual SPCC Training Refresher Checklist

This form is designed to guide personnel in conducting Spill Prevention Control and Countermeasure Training. Address each item in sequence.

All personnel attending the spill meeting should be recorded at completion of the training meeting.

1. Record location, date and time of SPCC training meeting.
2. Record name and title of person leading the SPCC training meeting.
3. Discuss location(s) of spill response equipment.
4. Review location(s), type(s) and proper operation of spill response equipment.
5. Discuss the possible spill sources direction(s) and flow rate of a potential spill.

Any release actually or threatening to enter waters of the United States is a reportable spill, reference contact numbers in the SPCC Plan.

6. Discuss potential spill containment actions.
7. Discuss potential spill collection and disposal actions.
8. Discuss contractors available to help provide equipment and manpower.
9. Discuss the condition, use, and proper operation of hoses, pumps, piping and valves in the product transfer and storage systems.
10. Discuss preventative actions that can be taken to reduce the chance of a spill.
11. Discuss the definition of a spill or release and agency contact procedures.
12. Record SPCC training meeting action items.
13. Record personnel attending SPCC training meeting; have them sign their names as record of attendance.

National Guard Alaska SPCC Training Log Sign-in Sheet

Facility: _____

Date: _____

Name of Training Leader: _____ Title: _____

Attendees:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Copies of this sheet should be made and filled out for each training event.

National Guard Alaska
SPCC Plan Revisions/Annual Review Log

Facility: _____

Revision Date	Description of Changes	Pages Affected	PE Certification Required (Y/N)*

✶ *Engineers Certification and/or inspection is required for structural changes to SPCC-regulated above ground storage tanks, new or additional SPCC-regulated above ground storage tanks including: mobile bulk storage tanks and equipment containing SPCC-regulated bulk storage tanks over 55-gallons, and structural changes to secondary containments.*

FINAL

SITE INVESTIGATION REPORT
ALASKA ARMY NATIONAL GUARD JUNEAU AAOF
JUNEAU, ALASKA

ADEC File No. 1513.38.060

December 2010

Prepared For:

Department of Military and Veterans Affairs
Facilities Management Office-Environmental Section
P.O. Box 5-549
Fort Richardson, AK 99505

Prepared By:

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SITE INVESTIGATION REPORT
AKARNG JUNEAU AAOF
JUNEAU, ALASKA

Contract No. ACA-091-1-611
Bethel Services, Inc. Project No. 2010116

This Report has been prepared by Bethel Services, Inc. and has been reviewed and approved for distribution.

BSI Program Manager: _____
Sean P. Thomas, RES

BSI Project Manager/ Qualified Sampler: _____
Aemon Wetmore

BSI Qualified Sampler/ Report Preparer: _____
Joe Thomas

AKARNG Project Manager: _____
Herbert 'Gil' Guillory

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ACRONYMS AND ABBREVIATIONS

AAC .....Alaska Administrative Code
AAOF.....Army Aviation Operating Facility
ADEC.....Alaska Department of Environmental Conservation
AK.....Alaska Method
AKARNG .....Alaska Army National Guard
AOC .....Area of Concern
BSI .....Bethel Services, Inc.
bgs.....below ground surface
BTEX .....Benzene, toluene, ethylbenzene, and xylenes
CSM .....Conceptual Site Model
DO.....Dissolved Oxygen
DOT .....Department of Transportation
DRO .....Diesel Range Organics
EPA.....Environmental Protection Agency
°F.....degrees Fahrenheit
GRO .....Gasoline Range Organics
JNU .....Juneau International Airport
mg/kg .....milligrams per kilogram
mg/l .....milligrams per liter
NAPL .....non-aqueous phase liquid
NOAA.....National Oceanic and Atmospheric Administration
ORP.....Oxidation Reduction Potential
PAH.....Polycyclic Aromatic Hydrocarbons
pH.....potential hydrogen
PID .....Photoionization detector
ppm .....parts per million
ROW .....right-of-way
RRO .....Residual Range Organics
SIM .....Selected Ion Monitoring
TAH .....Total Aromatic Hydrocarbons
TAqH .....Total Aqueous Hydrocarbons
µg/kg .....micrograms per kilogram
µg/l.....micrograms per liter
USGS .....United States Geological Survey
WELTS .....Well Log Tracking System

1.0 INTRODUCTION

This report presents the findings from the site investigation performed by Bethel Services, Inc. (BSI) to characterize the extent of contamination at two areas of concern (AOC) at the Alaska Army National Guard (AKARNG) Army Aviation Operating Facility (AAOF) in Juneau, Alaska (Figure 1-1). The Juneau AAOF is located on Alaska Department of Transportation (DOT) land that the AKARNG uses under a long-term contract. The objectives of this work were to investigate the presence and extent of contamination at the fuel dispenser area as well as to assess whether fuel-impacted soil is present near the outfall of a former oil/water separator.

Subsurface soil samples for the characterization/assessment were collected from five borings and a groundwater sample was collected from a temporary well at the former fuel dispenser AOC. The investigation evaluated the vertical and horizontal extent of contamination at the location of the former fuel dispenser and the presence of contamination near the outfall of the oil/water separator.

The findings presented in this report are supported by the information from the *Site Investigation Report for Juneau AAOF* (CH2M Hill, 1996), which investigated fuel contamination around the fuel dispenser unit and outfall pipe and multiple other AOCs. The purpose of this investigation was to collect additional soil and groundwater data to evaluate remedial alternatives for the site if appropriate, or support a Decision Document that will be presented to the Alaska Department of Environmental Conservation (ADEC) to request a Cleanup Complete determination for the site.

1.1 BACKGROUND

A Site Investigation at the AAOF was performed by CH2M Hill in May of 1995, the results of which were reported in the *Site Investigation Report for Juneau AAOF*, dated January 1996. This site investigation report identified one area around the JP-5 fuel dispenser at the AAOF, which contained diesel-range organics (DRO) soil concentrations greater than the ADEC cleanup level at several locations between 0 and 5 feet below ground surface (bgs). CH2M Hill collected samples to a maximum depth of 5 feet bgs because samples were collected using a hand auger. Therefore, the vertical extent of the contamination was not fully characterized during the site investigation.

The ADEC Contaminated Sites Database lists one "Hazard ID" number for the Juneau AAOF under one File Number. The ADEC's file name, Hazard ID, and File Number for the site are given below:

Site Name	Hazard ID	File Number
AKARNG Juneau AAOF	2534	1513.38.060

A May 17, 2005 entry on the database stated additional investigation is needed in order for the ADEC to define the site conditions, delineate the nature and extent of contamination, and identify potential groundwater impacts (ADEC, 2010).

Aerial image provided by Google Earth Pro

N

APPROXIMATE SCALE IN MILES

0 0.25

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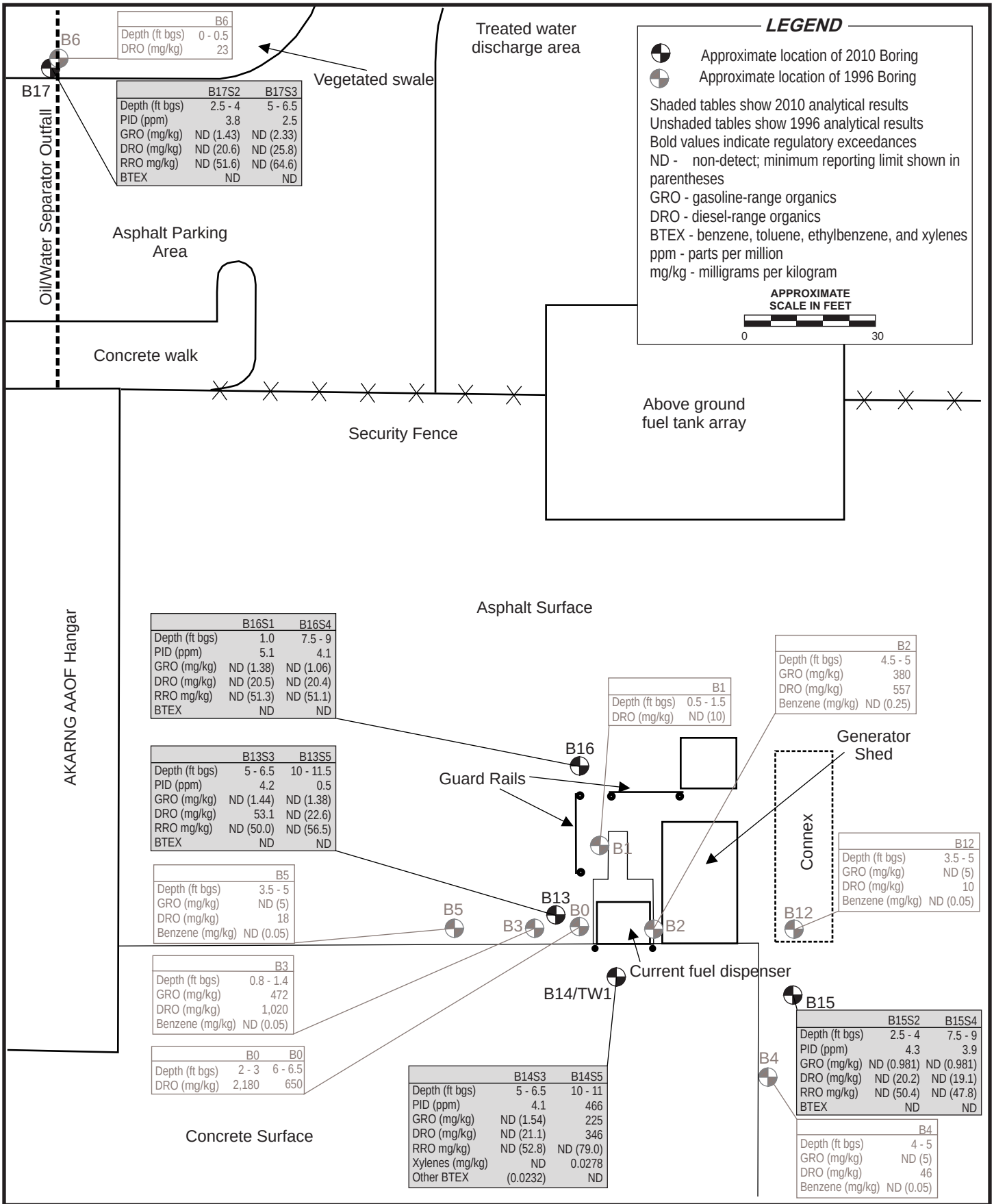
CLIENT: Alaska Army National Guard
CONTRACT NO.: ACA-091-1-611

AAOF JUNEAU VICINITY MAP

Alaska Army National Guard Juneau AAOF
Juneau, Alaska

PROJECT MANAGER: AEMON WETMORE	SCALE: APPROX 1" = 0.25 MILE.	DESIGNED: J.T.	FIGURE: 1-1
PROJECT NO: 2010116	DRAWN: J.T.	DATE: 12/6/2010	



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CLIENT: Alaska Army National Guard
CONTRACT NO.: ACA-091-1-611

AAOF JUNEAU SITE PLAN

Alaska Army National Guard Juneau AAOF
Juneau, Alaska

PROJECT MANAGER:	SCALE:	DESIGNED:	FIGURE:
AEMON WETMORE	APPROX 1" = 30'	J.T.	1-2
PROJECT NO: 2010116	DRAWN: J.T.	DATE: 12/6/2010	

1.2 PHYSICAL SETTING

The AAOF is located within the City and Borough of Juneau, Alaska, at the Juneau International Airport (JNU), approximately 7 miles northwest of the downtown area. The AAOF is situated along a taxi-way that parallels the main runway at JNU. The geographical location of the AAOF is approximate 45 degrees, 41 minutes, 18 seconds North latitude and 122 degrees, 32 minutes, 23 seconds West longitude, or Section 31of Township 40 South, Range 66 East, Copper River Meridian, according to the U.S. Geological Survey (USGS) Juneau B-2 Quadrangle. The site is relatively flat and is located at an elevation of approximately 15 feet above mean sea level (Google Earth, 2010).

Juneau has a humid continental climate despite its coastal location, influenced by the Pacific Ocean. The average annual precipitation at JNU is 57 inches (water equivalent) with 97 inches of snowfall. The average high temperature in July is 64 degrees Fahrenheit (°F), and the average low temperature in January is 20°F (National Oceanic and Atmospheric Administration [NOAA] Western Regional Climate Center, 2010).

Imported fill material underlying JNU ranges from 1 to 7.6 meters in depth and consists of rock, silt, sand, gravel, sawdust, and refuse. Most of the fill is fine-grained and much of it was obtained from borrow pits in sandy delta deposits adjacent to the runway. Slate, greenstone, and granite are the most common clast types (USGS, 1995).

Groundwater is believed to be hydraulically connected throughout the surficial deposits in the Juneau area. Further inland groundwater is generally fresh, but becomes progressively more saline with proximity to the coast and with depth, depending on the hydraulics of freshwater-saltwater contact. At the estuaries of the major drainages within Juneau and at the airport, fresh groundwater and seawater are hydraulically interconnected. The aquifer underlying the Juneau AAOF does not supply potable water for the facility and may be brackish (CH2MHill, 1996).

Groundwater either flows south-southeast directly into the Gastineau Channel or into streams that discharge directly into the channel. The groundwater table in the area under investigation is typically encountered between 6 and 12 feet bgs. Groundwater elevation data indicate that changes in the water table are caused by heavy rains related to the fall storms that generally occur from September through November and by runoff of the melting of glaciers during the summer. Precipitation is very light or falls as snow during the remainder of the year. The minimal precipitation contribution to the water table during the late winter months causes the water table to drop during that time (CH2MHill, 1996).

1.3 REGULATORY REQUIREMENTS AND APPROPRIATE CLEAN UP LEVELS

The site investigation was performed in accordance with ADEC regulations and guidance documents that pertain to the AKARNG Juneau AAOF project objectives, which include:

- 18 Alaska Administrative Code (AAC), Chapter 75 *Oil and Hazardous Substances Pollution Control* (ADEC, 2008);
- ADEC *Draft Field Guidance* (ADEC, 2010).

The ADEC default cleanup levels for both soil and groundwater, which are used for comparison purposes throughout this report, are identified in Table 1-1. Soil cleanup levels are based on Over 40 inch Zone. In addition, the most stringent soil cleanup level other than migration to groundwater (direct contact, ingestion, or inhalation) is included in Table 1-1.

Table 1-1: ADEC Cleanup Levels

ANALYTE	MIGRATION TO GROUNDWATER SOIL CLEANUP LEVEL[1] mg/kg	NEXT MOST STRINGENT SOIL CLEANUP LEVEL mg/kg	GROUNDWATER CLEANUP LEVEL mg/L[2]
Gasoline-range	260	1,400	2.2
Diesel-range organics (DRO)	230	8,250	1.5
Residual-range organics (RRO)	9,700	8,300	1.1
Polycyclic aromatic hydrocarbons (PAH)	Varies	Varies	Varies
Benzene	0.025	8.5	0.005
Toluene	6.5	220	1.0
Ethylbenzene	6.9	81	0.7
Xylenes (total)	63	63	10.0

[1] Method 2, Table B1 or B2 most stringent Soil Cleanup Levels (ADEC, 18 AAC 75)
[2] Cleanup levels for groundwater from Table C (ADEC, 18 ACC 75)
mg/L = milligrams per liter
mg/kg = milligrams per kilogram

2.0 FIELD ACTIVITIES

Site investigation field activities were performed on August 24 and 25, 2010. Field activities were conducted in accordance with the approved work plan and followed safety protocol referenced in the Site-Specific Safety and Health Plan (BSI, 2010).

Mr. Aemon Wetmore (BSI Project Manager/Field Team Leader) and Mr. Joe Thomas (BSI Scientist/ Field Support) mobilized from Anchorage, Alaska via air travel and met with local utility locators on August 24 to identify potential conflicts with the proposed boring locations along the Livingston Way right-of-way (ROW). Buried utilities within the AAOF property were identified prior to commencing field work by Sergeant Art Honea, who was also familiar with the former fuel dispenser unit. Representatives of R&M Consultants (drilling contractor) later arrived at the site to discuss the proposed boring locations and an appropriate plan to execute project work.

Test America Laboratories of Anchorage, Alaska provided third-party analytical laboratory analysis for environmental samples. Subsurface soil samples were collected directly from split-spoon samplers, from auger cuttings, or from the wall of the borings (if less than 2 feet bgs). Groundwater samples were collected with a peristaltic pump. The following sub-sections provide a detailed explanation of the field sampling procedures used by field personnel at the AAOF.

2.1 BORINGS

Four borings were advanced in the vicinity of the former fuel dispenser unit at distances ranging from less than 10 feet to almost 50 feet from the former source. Borings were located to characterize all sides of the former fuel dispenser (which has been replaced with a new dispenser since 1996), but two permanent and one temporary structure on the east side of the fill pad prevented sampling directly east of dispenser. Results from the 1996 site characterization suggested that fuel contamination did not extend significantly in this direction.

In addition, one boring was advanced north of the AAOF structure to characterize soil in the vicinity of the outfall of a former oil/water separator. Mature landscaping trees and shrubs, a sloped drainage swale, and ROW conflict prevented the drill rig from advancing this boring (B17) directly beneath the former outfall location. This boring was advanced approximately 15 feet south of where the outfall was believed to be located, which is hydraulically downgradient of the outfall.

Each boring at the AAOF was advanced using a truck-mounted CME 55 drill rig with an 8-inch outside diameter hollow-stem auger. Sub-surface soil samples were collected using an 18-inch long, 2-inch outer diameter split spoon sampler driven ahead of the auger by a 140 pound hydraulically-activated hammer. Boreholes were backfilled with their respective drill cuttings, tamped to minimize potential for future settling, and patched, as appropriate with asphalt or

concrete. A small quantity of sand shown to be clean by field-screening (and later verified by analytical samples) was containerized in 5-gallon buckets and reused by R&M Consulting, the Juneau-based driller for this project. Photographs taken during field work are provided in Appendix A.

2.2 SOIL SAMPLING

Soil samples for laboratory analysis were collected directly from an 18-inch split spoon sampler driven ahead of the hollow stem auger at 2.5 foot increments for the length of each boring. Subsurface soils at the site were typically gray sand with intermittent gravelly sand, which is likely entirely fill material based on the ubiquity of this soil type across the site. Each sample was placed directly into the appropriate laboratory-provided sample containers for the specified analyses with a pre-cleaned stainless steel spoon. A separate soil sample was collected from the split spoon sampler in a quart size sealable plastic bag for field screening of potential fuel contamination. Field screening was conducted using a photoionization detector (PID) and ADEC-approved headspace screening method. PID field-screening was used in conjunction with visual/olfactory observations to determine the appropriate depth interval for analytical sample selection.

Each soil sample collected for field headspace screening was placed in a one-quart zipper lock bag and filled to approximately one-third capacity and agitated for 15 seconds. Headspace samples were then placed in a warm vehicle to allow organic vapors to develop, and agitated again prior to taking readings with the PID. Headspace measurements were taken using a MiniRae 2000 PID that was calibrated to a 100 part per million (ppm) isobutylene gas on each morning of use.

Borings were generally advanced until groundwater was encountered. Samples submitted for laboratory analysis from each boring were selected from the interval with the highest PID field screening reading and from the sample closest to the groundwater smear zone. A new pair of nitrile gloves and a clean stainless-steel spoon was used to collect each sample. Field duplicate samples were collected as close as possible to the same point in space and time as the primary sample using the same techniques.

Soil samples collected for laboratory analysis were quickly collected in the appropriate laboratory-provided glass sample jars with Teflon-lined lids and filled as required by the analytical method. For field-preserved methods, such as gasoline-range organics (GRO) by State of Alaska Method (AK) 101, a minimum of 50 grams of soil were placed in a pre-tared 4-ounce container and preserved with 25 milliliters of methanol. For unpreserved samples, the sample containers were filled to the top, taking care to prevent soil from remaining in the lid threads prior to being sealed to prevent potential contaminant migration from the sample. Pertinent observations made during sampling, such as the presence of odor or staining, were recorded in the field logbook. A copy of the field log book is provided in Appendix B.

2.3 TEMPORARY WELL INSTALLATION

A temporary monitoring well, designated TW1, was installed in Boring B14 to obtain chemical groundwater data. Boring B14 was advanced in close proximity to the front of the fuel dispenser, as that area would have the highest potential to be impacted by any releases. Headspace PID readings taken during the advancement of the boring showed the highest readings of the project. Due to the high PID readings, boring B14 was selected to install the temporary well and collect a groundwater sample.

Groundwater was observed at approximately 10 feet bgs as the boring was advanced on August 24, 2010. Boring B14 was drilled to a depth of approximately 14.5 feet bgs and a 2-inch outer diameter schedule 40 polyvinyl chloride pipe was installed. An approximately five-foot section of 0.010-inch slotted screen was used between 8.5 feet bgs and 13.5 feet bgs, which was backfilled with native sandy soil. The construction of TW1 is depicted on the Log of Boring for B14 in Appendix C, and is visible on Photo 5 of Appendix A.

2.4 GROUNDWATER SAMPLING

Well TW1 was sampled August 25, 2010 using a peristaltic pump and low-flow procedures. Water quality parameters were measured and recorded at 3 to 4 minute intervals during purging using an YSI 556 water quality meter equipped with a flow-through cell. Samples were collected after groundwater stabilization criteria had been achieved. Stabilization was considered complete when temperature, pH, and specific conductance measurements had stabilized to within 10 percent for three successive readings. Measurements of dissolved oxygen (DO), oxidation/reduction potential (ORP), salinity, and turbidity were also recorded during the purging process. The Low-Flow Groundwater Sampling Data Sheet is included in Appendix B.

A duplicate set of groundwater samples was collected from TW1 and submitted to the project laboratory for analysis.

2.5 EQUIPMENT AND DECONTAMINATION PROCEDURES

BSI's field-staff used new; disposable; or clean, reusable sampling equipment to collect each sample. Split spoons and all reusable sampling equipment was wiped clean of soils after use and scrubbed with a stiff nylon brush while in a solution of hot water and laboratory grade cleaning detergent (e.g. Alconox®). The detergent wash was followed by a fresh water rinse and cleanliness inspection. Five-foot auger sections were steam washed off site by R&M. No free phase hydrocarbons or highly contaminated soils were encountered. Therefore, cross-contamination of samples was not considered a concern and a rinsate sample was not collected for this sampling event.

2.6 INVESTIGATION-DERIVED WASTE MANAGEMENT

Cuttings generated from boreholes were temporarily piled on paved surfaces adjacent to boreholes then placed back in to their respective holes after sampling. Purge water generated

during groundwater sampling and decon water was processed through a granulated activated carbon filter and discharged onto the vegetated drainage swale along the property's north boundary. Disposable sampling and personal protective equipment used during sampling activities was disposed in a municipal waste receptacle at the AAOF site.

3.0 SAMPLE ANALYSES

Soil and groundwater samples were analyzed for GRO by AK 101; DRO by AK 102; residual-range organics (RRO) by AK 103; and benzene, toluene, ethylbenzene, and total xylenes (BTEX) by Environmental Protection Agency (EPA) Method 8260B. In addition, one soil sample from each AOC and a groundwater sample were analyzed for polycyclic aromatic hydrocarbons (PAH) by EPA 8270B Selected Ion Monitoring (SIM).

Samples were packed in a chilled cooler and sent by Alaska Airlines Cargo Service to the Anchorage service desk for BSI pickup. BSI hand delivered sample coolers to Test America in Anchorage, Alaska. Samples were sent under chain-of-custody procedures and custody seals were placed on the coolers. Test America in Anchorage sent samples to be analyzed for PAH to Test America Spokane, Washington. Copies of the chain-of-custody forms, cooler receipt forms, and analytical reports are included in Appendix D.

4.0 QUALITY ASSURANCE/QUALITY CONTROL

Soil and groundwater sampling activities were conducted in accordance with procedures outlined in the *Final Work Plan Site Investigation Alaska Army National Guard Juneau AAOF Juneau, Alaska* (BSI, 2010). The Work Plan provided quality assurance objectives for collecting accurate, precise, and representative site data.

Test America laboratories generated Level 2 ADEC data deliverables for this work that underwent evaluation and approval by Test America prior to receipt by BSI. BSI performed additional data validation, including comparison of duplicate project samples, assessment of data usability, and data flagging, as appropriate. The results of this data validation are presented on the individual ADEC Data Review Checklists prepared for the laboratory report along with a Data Quality Report which is included in Appendix E. Test America Laboratory Data Reports are also presented in Appendix D.

5.0 INVESTIGATION RESULTS

The site investigation at the Juneau AAOF was conducted to assess the current concentrations and extent of hydrocarbon contamination at the former fuel dispenser area and to investigate the presence of petroleum contaminated soil near the outfall of a former oil water separator.

5.1 FORMER FUEL DISPENSER

5.1.1 Subsurface soil sample results

The 1996 site investigation results indicated that DRO and GRO-impacted soil was present in near-surface soils primarily west of the former fuel dispenser, and within 20 feet of the source. Historical borings characterized soil to a maximum depth of 5 feet. Soil samples from the 1996 investigation had concentrations of DRO up to 2,180 milligrams per kilogram (mg/kg) and GRO up to 472 mg/kg, which exceeds the ADEC cleanup levels of 230 mg/kg and 260 mg/kg, respectively. Selected analytical results from this site investigation are shown in Figure 1-2.

In general, site observations and field screening results indicated that hydrocarbon contamination at the site was not widespread. With the exception of one sample from Boring B14, each headspace PID reading was less than 6 ppm.

One of the eight primary samples collected from the former fuel dispenser area had a concentration of DRO that exceeds the ADEC Method 2 level of 230 mg/kg. Sample 10JUNAAOFB14S5, collected from between 10 feet and 11.5 feet bgs had a concentration of 346 mg/kg, which is less than twice the regulatory limit. The concentration of GRO from this sample was measured at 225 mg/kg, which approaches the cleanup level of 260 mg/kg. The GRO detection was flagged with a J for an estimated quantity during the data quality review because its surrogate recovery (73 percent) was below the laboratory's acceptance limit (75 – 125 percent). A trace concentration of (total) xylenes (also flagged J) was also detected in this sample. Other BTEX compounds and RRO were not detected in this soil sample. A duplicate PAH sample, designated Sample 10JUNAAOFB14S9, was also analyzed for this sample point. Although the primary and duplicate samples were not very comparable (refer to Data Quality Report in Appendix E), naphthalene, 2-methylnapthalene, 1-methylnapthalene, acenaphthene, and fluorine were detected in either one or both samples at concentrations below their applicable cleanup levels. The disparity in concentrations is thought to be a result of a high concentration gradient across the sample interval (that transects the smear zone) and the inability to collect duplicate volumes from a discrete point within the split spoon's length.

The only other sample from the former fuel dispenser area that had a detection of a target analyte was Sample 10JUNAAOFB13S3, which had a DRO detection of 53.1 mg/kg. This sample was collected in proximity to the 1996 Borings B0 and B3, which had the highest measured DRO concentrations. Summaries of soil sample results are presented in Tables 5-1 and 5-2. Analyte detections (except PAH) are also shown in Figure 1-2.

Table 5-1: DRO, RRO, GRO, and BTEX Analytical results for Soil samples collected from Former Fuel Dispenser Area

Sample Number	Field Screening result (ppm)	DRO	RRO	GRO	Benzene, Toluene, and Ethylbenzene	Total Xylenes
10JUNAAOFB13S3	4.2	53.1	ND (50.0)	ND (1.44)	ND	ND (0.0217)
10JUNAAOFB13S5	0.5	ND (22.6)	ND (56.5)	ND (1.38)	ND	ND (0.0207)
10JUNAAOFB14S3	4.1	ND (21.1)	ND (52.8)	ND (1.54)	ND	ND (0.0232)
10JUNAAOFB14S8*	4.1	ND (20.6)	ND (51.5)	ND (1.53)	ND	ND (0.0229)
10JUNAAOFB14S5	466	**346**	ND (79.0)	225 J	ND UJ	0.0278 J
10JUNAAOFB15S2	4.3	ND (20.2)	ND (50.4)	ND (1.37)	ND	ND (0.0214)
10JUNAAOFB15S4	3.9	ND (19.1)	ND (47.8)	ND (0.981)	ND	ND (0.0147)
10JUNAAOFB16S1	5.1	ND (20.5)	ND (51.3)	ND UJ (1.38)	ND UJ	ND (0.0207) UJ
10JUNAAOFB16S4	4.1	ND (20.4)	ND (51.1)	ND (1.06)	ND	ND (0.0159)
10JUNAAOFSTB (Trip Blank)	-	-	-	ND (3.33)	ND	ND (0.0500)
Cleanup Levels [1]	260	230	10,000	260	Various	63

Notes:
[1] Soil Cleanup Levels used for comparison are most stringent Method Two Table B1 or B2, Over 40 Inch Zone, 18 AAC 75 (October 2009)
* = Duplicate of Sample 10JUNAAOFB14S3
Bold value indicate concentrations greater than cleanup level
ND indicates non-detect at levels above the minimum reporting limits (MRL) the number shown is the MRL
ppm – Part per million
DRO – Diesel range organics
RRO – Residual range organics
GRO – Gasoline range organics
J - The associated numerical value is an estimated quantity because the Quality Control criteria were not met.
UJ - The reported quantitation limit is estimated because Quality Control criteria were not met. Element or compound was not detected.
All concentrations other than field screening results are listed in milligrams per kilogram

Table 5-2: PAH Analytical results for Soil samples collected from Former Fuel Dispenser Area

Sample Number	Field Screening result (ppm)	Naphthalene	2-Methylnaph-thalene	1-Methylnaph-thanene	Acenaphthene	Fluorene	Other PAHs
10JUNAAOFB14S5	466	ND (0.0550) UJ/J	0.238 J	0.224 J	0.0323 J	ND (0.0220) UJ/J	ND
10JUNAAOFB14S9*	466	0.341 UJ/J	3.27 J	2.61 J	0.160 J	0.116 UJ/J	ND
Cleanup Levels [1]	-	20	6.1	6.2	20	6.5	-

Notes:
[1] Soil Cleanup Levels used for comparison are most stringent Method Two Table B1 or B2, Over 40 Inch Zone, 18 AAC 75(October 2009)
* = Duplicate of Sample 10JUNAAOFB14S5
J - The associated numerical value is an estimated quantity because the Quality Control criteria were not met.
UJ - The reported quantitation limit is estimated because Quality Control criteria were not met. Element or compound was not detected.
ND indicates non-detect at levels above the minimum reporting limits (MRL) with MRL in parenthesis
ppm – part per million
PAH – Polycyclic aromatic hydrocarbon. All concentrations other than field screening results are listed in milligrams per kilogram

5.1.2 Groundwater field data and sample results

Temporary monitoring Well TW1 was installed in Boring B14, because of the high PID headspace field screening readings recorded there, to obtain field and analytical groundwater data from a point downgradient of the former source area. Well TW1 was installed to a depth of approximately 13.8 feet bgs, approximately 10 feet south of the former fuel dispenser. Boring B14 is the only boring advanced south of the former fuel dispenser. This is due primarily to the presence of the thick concrete aircraft apron south of the dispenser which made placing borings in that area difficult. The static depth to groundwater was measured to be 9.6 feet bgs on August 25, 2010, the day after well installation.

Water quality parameters including: pH, conductivity, temperature, salinity, ORP, DO, and turbidity were measured prior to sample collection and after stabilization criteria were achieved. Results from field-measured groundwater measurements are shown in Table 5-3.

Table 5-3: Field Parameters for Temporary Groundwater Monitoring Well TW1

Well ID	Temperature (degrees Celsius)	pH (standard units)	Specific Conductance (mS/cm)	Dissolved Oxygen (mg/l)	ORP (millivolts)	Salinity (percent)	Turbidity (NTUs)
TW1	11.69	8.40	0.267	0.28	11.5	0.13	8.28

Notes:
mg/l = milligrams per liter
NTUs = Nephelometric turbidity units
ORP = oxidation-reduction potential
pH = potential hydrogen
µS/cm = microsiemens per centimeter

Samples 10JUNAAOFB14GW1 and 10JUNAAOFB14GW2 (primary and duplicate samples, respectively) were collected from TW1 using low-flow sampling procedures. The concentration of DRO in duplicate sample (1.96 mg/l) exceeded the groundwater cleanup level of 1.5 mg/l, however, the primary sample was less than the cleanup level (1.43 mg/l). Concentrations of GRO were detected in both samples (0.0814 mg/l and 0.0783 mg/l) which are less than the cleanup level of 2.2 mg/L. The GRO concentration was flagged J and the BTEX concentrations were flagged UJ (the reported quantitation limit is estimated because Quality Control criteria were not met). Element or compound was not detected) for both the primary and duplicate water sample. As with the associated soil sample, the PAH compounds: naphthalene, 1-methylnaphthalene, acenaphthene, and fluorene were detected in the groundwater samples at concentrations orders of magnitude less than their respective cleanup levels. RRO and BTEX compounds were not detected in project samples. Analytical groundwater results are shown in Tables 5-4 and 5-5.

Table 5-4: DRO, RRO, GRO, and BTEX Analytical results for Temporary Groundwater Monitoring Well TW1

Sample Number	DRO (mg/l)	RRO (mg/l)	GRO (mg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)
10JUNAAOFGW1	1.43 J	ND (0.407)	0.0814 J	ND (0.500) UJ	ND (1.00) UJ	ND (1.00) UJ	ND (3.00) UJ
10JUNAAOFGW2*	**1.96 J**	ND (0.400)	0.0783 J	ND (0.500) UJ	ND (1.00) UJ	ND (1.00) UJ	ND (3.00) UJ
10JUNAAOFGWTB1 (Trip Blank)	-	-	ND (0.05) UJ	ND (0.500) UJ	ND (1.00) UJ	ND (1.00) UJ	ND (3.00) UJ
Cleanup Level[1]	1.5	1.1	2.2	5.0	1,000	700	10,000

Notes:
[1] Groundwater Cleanup Levels from Table C, 18 AAC 75 (October 2009)
Bold value indicates concentration greater than ADEC groundwater cleanup level
* = Duplicate of Sample 10JUNAAOFGW1
ND indicates non-detect at levels above the minimum reporting limits (MRL) with MRL in parenthesis
Units of measurement are identified beneath analytes
J - The associated numerical value is an estimated quantity because the Quality Control criteria were not met.
UJ - The reported quantitation limit is estimated because Quality Control criteria were not met. Element or compound was not detected.
µg/l = micrograms per liter

Table 5-5: PAH Analytical results for Temporary Groundwater Monitoring Well TW1

Sample Number	Naphthalene	1-Methylnaphthalene	Acenaphthene	Fluorene	Other PAHs
10JUNAAOFGW1	0.958 J	0.948 J	0.129	0.233	ND (0.0993)
10JUNAAOFGW2*	1.31 J	3.01 J	0.143	0.275	ND (0.0983)
Cleanup Level	730	150	2,200[1]	1,500	Varies

Notes:
[1] Groundwater Cleanup Levels from Table C, 18 AAC 75 (October 2009)
* = Duplicate of Sample 10JUNAAOFGW1J - The associated numerical value is an estimated quantity because the Quality Control criteria were not met.
ND indicates non-detect at levels above the minimum reporting limits (MRL) with MRL in parenthesis
Units of measurement in micrograms per liter

5.2 FORMER OIL/WATER SEPARATOR SEWAGE OUTFALL

During the 1996 site investigation three soil samples, two field screenings and one analytical, were collected from the vicinity of the former oil/water separator outfall from depths not greater than 2 feet bgs. The DRO result from the analytical sample, collected between 0 and 0.5 feet bgs, was well below the cleanup criteria at 23 mg/kg. Field headspace readings from a soil boring advanced at a nearby point were less than 5 ppm.

During the 2010 site investigation boring B17 was advanced near the outfall of the former oil/water separator. Analytical results for the two samples collected from this boring were all below their respective reporting limits. Analytical results are shown in Tables 5-6 and 5-7.

Table 5-6: DRO, RRO, GRO, and BTEX Analytical results for Soil samples collected from Sewage Outfall Area

Sample Number	Field Screening result (ppm)	DRO	RRO	GRO	BTEX
10JUNAAOFB17S2	3.8	ND (20.6)	ND (51.6)	ND (1.43)	ND
10JUNAAOFB17S3	2.5	ND (25.8)	ND (64.6)	ND (2.33)	ND
10JUNAAOFSTB (Trip Blank)	-	-	-	ND (3.33)	ND
Cleanup Level[1]		230	10,000	260	Various

Notes:
[1] Soil Cleanup Levels used for comparison are most stringent Method Two Table B1 or B2, Over 40 Inch Zone, 18 AAC 75 (October 2009)
ND indicates non-detect at levels above the minimum reporting limits (MRL) with MRL in parenthesis
All concentrations other than filed screening results are listed in milligrams per kilogram

Table 5-7: PAH Analytical results for Soil samples collected from Sewage Outfall Area

Sample Number	Field Screening result (ppm)	Naphthalene	2-Methylnaph-thalene	1-Methylnaph-thanene	Acenaphthene	Fluorene	Other PAHs
10JUNAAOFB17S3	2.5	ND (0.0107)	ND (0.0107)	ND (0.0107)	ND (0.0107)	ND (0.0107)	ND (0.0107)
Cleanup Level[1]	-	20	6.1	6.2	20	6.5	-

Notes:
[1] Soil Cleanup Levels used for comparison are most stringent Method Two Table B1 or B2, Over 40 Inch Zone, 18 AAC 75 (October 2009)
ND indicates non-detect at levels above the minimum reporting limits (MRL) with MRL in parenthesis
All concentrations other than filed screening results are listed in milligrams per kilogram

6.0 CONCEPTUAL SITE MODEL

A graphical (wire frame) conceptual site model (CSM) for the Juneau AAOF site is shown in Table 6-1. The conceptual site model is intended to show the potential present and future routes or pathways that site contaminants may take as they move from a release location to a potential receptor.

The left side of Table 6-1 attributes the fuel hydrocarbons released to leaks and spills associated with the JP-5 fuel dispenser. A release from the above grade fuel dispenser would tend to initially cause surface and subsurface soil contamination. Following the spill or leak the fugitive fuel would tend to infiltrate through the soil column toward the water table. If a sufficient quantity of fuel was spilled, it would reach the water table where it would tend to spread laterally and be immobilized (trapped) in the zone of seasonal water table fluctuation.

While the fuel was moving through the soil as a separate phase and after the non-aqueous phase liquid (NAPL) was immobilized the individual constituents making up the fuel would tend to partition from the NAPL into the vapor, dissolved and adsorbed phases according to the phase partitioning relationships, and then would tend to be transported away from the NAPL contaminated source area as shown in the center portion of Table 6-1. The transport mechanisms vary according to the media. Vapors would tend to migrate away from the source area by the processes of diffusion (which is driven by concentration gradients) and advection (which is driven by pressure gradients). Dissolved constituents in the soil moisture in the vadose zone would tend to be carried to the water table by infiltrating precipitation and dissolved phase constituents in the saturated zone would be advected downgradient by the flowing groundwater. Both vapor and dissolved phase constituents would tend to be sorbed and biodegraded during transport.

Because nearly the entire Juneau AAOF property is either covered with asphalt or concrete, precipitation runoff and sheet wash are not interpreted to be significant dissolved phase or sediment transport routes for any existing fuel contamination remaining at the site. Impacted soil observed during the current site investigation was limited to subsurface soil in one isolated location approximately 10 feet bgs, which further reduces the potential for exposure to current or future site workers.

The potential receptors, exposure routes and exposure media are shown on the right side of Table 6-1. None of the potential human receptors would expect to be exposed to site contaminants given the current site conditions. This is mainly attributable to the widespread impervious groundcover surfaces at and surrounding the site, which not only presents a permanent barrier between the isolated area of contamination, but inhibit precipitation infiltration at the site. Given that the site is located at that Juneau Airport, designated land uses at this property are not likely to change within the next several decades. In addition, the ground surface is capped with approximately six inches of reinforced concrete in the vicinity and downgradient of the

contaminated soil and groundwater. This concrete runway apron extends approximately 250 feet south of where the diesel-impacted groundwater was observed. Based on the moderate level of groundwater contamination and distance of sample point from the former source, the concrete cap likely extends well beyond the boundaries of the groundwater contamination plume.

There are no potential ecological receptors that are at risk of being exposed to site contaminants because vegetation within the site boundaries is minimal, and only located along the northern property boundary, far from the contamination. In addition the wild plant ingestion route is interpreted to not be complete for site workers or site visitors, because plants do not assimilate fuel hydrocarbons into their tissues and plants (or berries) are not collected or consumed from this industrial site. Similarly, the wild meat ingestion route is interpreted to not be complete for residents, site workers or site visitors as food gathering, subsistence, and recreational activities are not believed to be significant in or near close proximity to the site due to access restrictions.

The ingestion or inhalation of subsurface soil pathway may be considered potentially complete because there is nothing permanently preventing exposure to the subsurface soil. This is unlikely, however, due to the 6-inch concrete surface overlying the impacted soil. Exposure to DRO-impacted soil to human receptors includes industrial and site workers, but only if removal of the paved surface and excavation of several feet of soil is to occur.

There are no drinking water wells on site. Groundwater in this vicinity is considered a non-potable source because of high salinity (CH2MHill, 1996). Groundwater in the area is hydraulically connected to the nearby Gastineau Channel, making it marginally brackish and unviable as a drinking water source. A demonstration that groundwater at the site cannot be used as a drinking water source is provided below, and rejects the notion that ingestion of groundwater is a complete pathway to potential receptors.

Exemption Under Authority of 18 AAC 75.350 (Groundwater Use)

Groundwater at the Juneau AAOF site is appropriate for consideration as an unsuitable source for drinking water under authority of 18 AAC 75.350. Groundwater at the site is currently not used as a drinking water source, is not suitable for future groundwater use, and migration of contaminants off the AAOF site is considered highly unlikely. Hence, the groundwater ingestion exposure pathway should be considered incomplete.

The Juneau airport and surrounding area is serviced by the Juneau municipal drinking water system, which receive its water from the Last Chance Basin well field and Salmon Creek watershed. Last Chance Basin is located in the lower Gold Creek watershed, near downtown Juneau. Salmon Creek provides water for both a hydroelectric power plant and intermittently for the Juneau Water Utility. The Salmon Creek water source is a reservoir approximately six miles east of and 1,100 feet higher than the site. As of 2006, 176 miles of water mains made up the Juneau municipal water distribution system, including a water main along Livingston Way, north

of and adjacent to the AAOF site. This water main supplies water to the AAOF and other properties along this road.

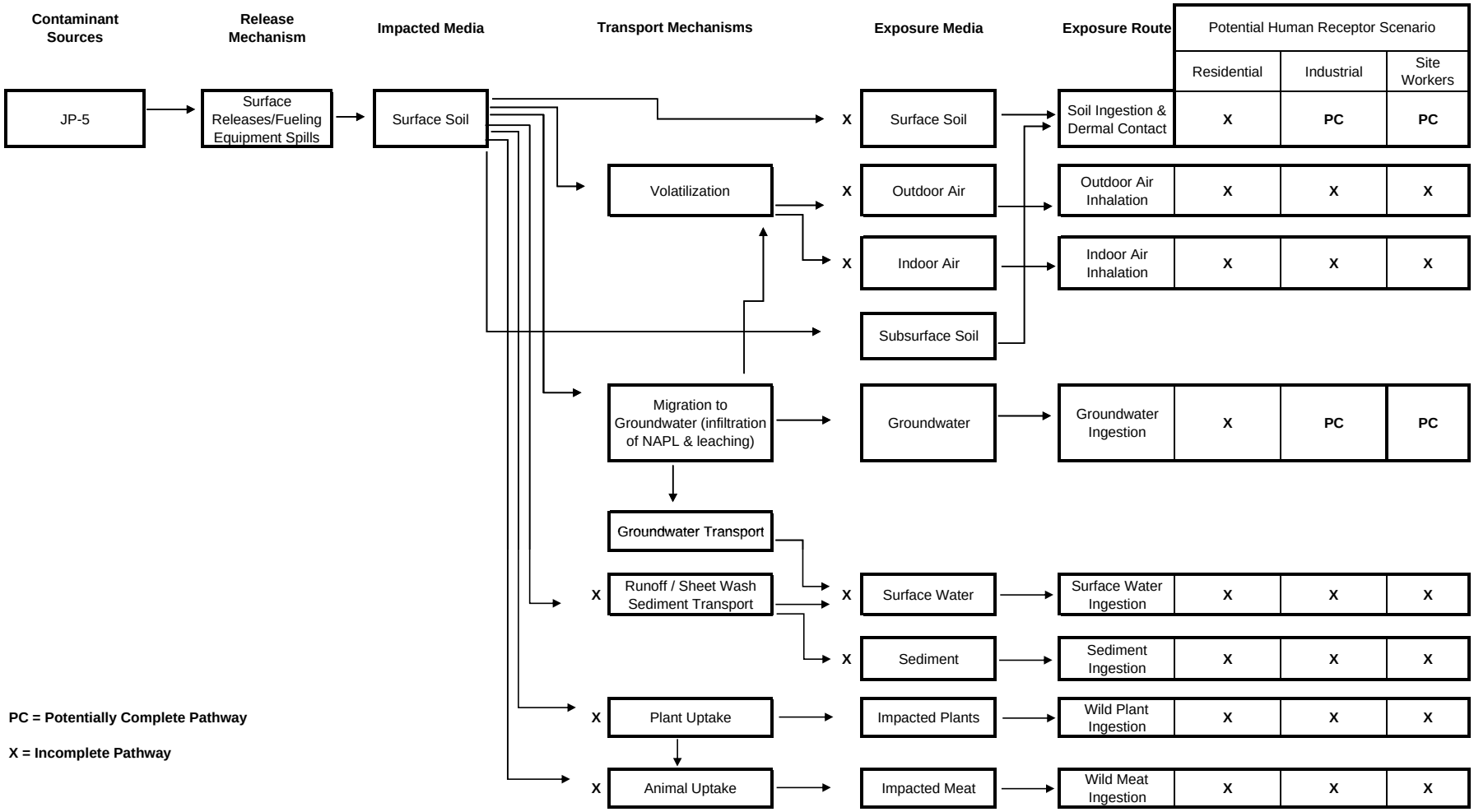
Groundwater in the vicinity is also not reasonably expected to be a future drinking water source due to saltwater intrusion. The Alaska Department of Natural Resources Well Log Tracking System (WELTS) database lists 25 wells within one mile east and west of the site and approximately one-half a mile north of the site (Sections 31 and 32 of Township 40 South, Range 66 East, Copper River Meridian). Each of these wells is located on the hydrologic upgradient (north) side or more than one-half mile west of the site and outside of the historic high-water line of Gastineau Channel. The only exceptions are for wells at the airport fire station and the airport terminal. The airport fire station, which is built upon imported fill material, along with the runway, has a 100-foot-deep well that according to its drilling report, yielded approximately 75 gallons of saltwater per minute in a 1979 capacity test (provided in Appendix F). This well is located approximately 900 feet west of the AAOF. The only other listed wells in the airport complex are part of a geothermal well field associated with recent airport terminal heating system improvements. It should be noted that each of the drinking water wells listed on the WELTS database were installed between 1959 and 1983, prior to extending the municipal water supply system to the airport area.

DRO-impacted groundwater at the site is not anticipated to be transported to current or potentially future sources of drinking water because the groundwater contamination plume is: 1) limited to an area much smaller than AAOF premises, as observed during the site investigation, 2) is capped with an impermeable surface (concrete and asphalt) reducing infiltration and the spread of contamination, and 3) flows toward the airport runway and Gastineau Channel, both areas that would not be considered for future wells.

Similarly, when BTEX and PAH compounds are summed into TAH and TAqH equivalents, the resulting levels are well below surface water standards in the case that groundwater at the site enters surface water bodies adjacent to the airport. Cleanup standards for freshwater and marine surface water sources are summarized in 18 AAC Chapter 70 *Water Quality Standards*, Sections 70.020 (5)(A)(iii) and (17)(A)(i), respectively (ADEC, 2009). Standards for total aromatic hydrocarbon (TAH) and total aqueous hydrocarbons (TAqH) are 10 micrograms per liter (µg/l) and 15 µg/l, respectively, for both freshwater and marine water uses. Calculations for TAH and TAqH from BTEX and PAH data derived from the temporary well at the site indicate concentrations are less than these standards (non-detect for TAH and 4.7 µg/l for TAqH). It can be concluded that even in the unlikely possibility that contaminated groundwater from the site migrated to surface water bodies (fresh water or marine), hydrocarbon concentrations would nonetheless be less than regulatory standards.

Therefore, the site should be considered for an exemption under 18 AAC 75.350 since fuel-impacted groundwater present at the site does not qualify as a potential drinking water source, and does not pose a risk to human health or the environment.

Table 6-1 Juneau AAOF, Human Health Conceptual Site Model



7.0 CONCLUSIONS AND RECOMMENDATIONS

Five borings and one temporary well were advanced/installed at the AKARNG Juneau AAOF on August 24 and 25, 2010 to investigate hydrocarbon concentration levels at two AOCs. One AOC is the area around the JP-5 fuel dispenser where a site investigation in 1996 found DRO and GRO concentrations above cleanup levels in the near surface soils resulting from surface releases. The other AOC is the outfall of a former oil/water separator.

Results from BSI's site investigation suggest that near-surface fuel-impacted soil in the vicinity of the former (and current) fuel dispenser has naturally attenuated since the 1996 site investigation. Laboratory testing in 1996 found concentrations of GRO and DRO greater than ADEC cleanup levels in two near-surface samples immediately adjacent to and west of the former dispenser unit. Samples from similar depths collected during our investigation resulted in a DRO concentration of 53.1 mg/kg (approximately one-fifth of cleanup level) in one sample. GRO and BTEX compounds were not detected in this area.

A soil sample collected from approximately 10 feet south of the former dispenser at approximately 10 feet bgs resulted in a DRO concentration between one and two times the ADEC cleanup level. This sample also had detections of GRO, xylenes, and four PAH compounds, but at concentrations less than their respective cleanup levels. This location and depth had the most heavily impacted soil as determined by PID headspace screening and analytical testing. It should be noted that the analytical sample collected between 5 and 6.5 feet bgs from this boring did not have detections of any measured analytes and that field headspace samples yielded near-zero results.

A groundwater sample from this boring also contained a concentrations of DRO that exceeded the groundwater cleanup level. The duplicate DRO sample result was less than the cleanup level. GRO and four PAHs were also detected in the groundwater samples, but at concentrations well below their respective cleanup levels.

Dissolved oxygen and temperature measurements taken as the temporary well was being purged support the possibility that biodegradation of dissolved-phase hydrocarbons is occurring at the site. Anoxic groundwater conditions are often present where biodegradation rates are high, resulting from the metabolism of hydrocarbons (petroleum or naturally-occurring). Warm groundwater also encourages biodegradation; groundwater was nearly 12 degrees Celsius during sampling.

Groundwater at the site may be considered unusable as a potential drinking water source under the criteria outlined in 18 AAC 75.350, and thus Method Two Migration to Groundwater soil cleanup levels and Table C Groundwater cleanup levels may not apply. If so, the most stringent of the Direct Contact or Outdoor Inhalation (Table B1) and Ingestion or Inhalation (Table B2)

cleanup levels would represent soil standards for the site. Contaminant concentrations measured during the 2010 site investigation in soil do not exceed these levels.

Results from field screening and analytical samples collected in the vicinity of the former oil/water separator outfall indicate that fuel-impacted soil is not present in this area. Although site conditions did not allow for advancing a boring in the ideal location (immediately below outfall pipe), contamination from this potential source would have likely spread outward with depth, and should have been intercepted by this boring. It is our opinion that if fuel contamination from the former oil/water separator had impacted the soil underlying the outfall, it is currently not evident by observations or sample results.

When considering the findings from the 1996 and current site investigations, it is apparent that fuel-impacted soil has substantially attenuated to levels that are currently below or marginally above ADEC default standards. Concentrations of DRO in duplicated groundwater samples collected at the most likely impacted area were approximately at the groundwater cleanup level, whereas other fuel compounds were not detected or below cleanup levels. In addition, the brackish nature of groundwater in the vicinity of the site precludes it from being a viable drinking water source. We believe impacts from past surface releases at the Juneau AAOF are negligible and do not pose a threat to human health and the environment, and recommend that ADEC grant Cleanup Complete status for the site.

8.0 REFERENCES

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APPENDIX A

PHOTOGRAPHIC LOG

AKARNG JUNEAU AAOF PHOTOGRAPHIC LOG
JUNEAU, ALASKA

Photo 1: Boring B13 was advanced approximately 10 feet west of the current (and former) fuel dispenser unit. Photo taken facing North (August 25, 2010).

Photo 2: Drill rig shown advancing Boring B13 west of the current (and former) fuel dispenser unit. Photo taken facing east (August 25, 2010).

Photo 3: An approximately 5-inch thick block of concrete was cut from the taxiway surface to allow advancing Boring B14. This was the only boring with fuel contamination. Photo taken facing north (August 25, 2010).

Photo 4: Concrete block removed at location of Boring B14 and temporary monitoring well TW1. (August 25, 2010).

Photo 5: Boring B15 (being advanced by drill rig) was located near the east property boundary in an asphalt-covered area. Two-inch PVC casing for temporary well TWI is visible in foreground. Photo taken facing east (August 25, 2010).

Photo 6: Drill rig advancing Boring B15. Photo taken facing south. (August 25, 2010).

Photo 7: Boring B16 was located northwest of the fuel dispenser. Photo taken facing south (August 26, 2010).

Photo 8: Boring B16 was located northwest of the fuel dispenser. Photo taken facing west (August 26, 2010).

Photo 9: Boring B17 was located north of the paved parking area north of the hangar, and was advanced to characterize soil in the vicinity of the former oil/water separator outfall. Photo taken facing east (August 26, 2010).

Photo 10: Mature landscaping trees and shrubs, the sloped drainage swale, and right-of-way conflict prevented the drill rig from advancing Boring B17 directly above the former outfall location, which is believed to be approximately where the red arrow is pointed. Photo taken facing west (August 26, 2010).

APPENDIX B

FIELD LOG BOOK AND FIELD FORMS

"Outdoor writing products for outdoor writing people."

RECYCLABLE

"Rite in the Rain" - A unique All-Weather Writing paper created to shed water and enhance the written image. It is widely used throughout the world for recording critical field data in all kinds of weather.

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ALL-WEATHER WRITING PAPER

HORIZONTAL LINE

All-Weather Notebook
No. 391

Juneau Decision Document
20101116

4 5/8" x 7" - 48 Numbered Pages

8-23-10

Plane was delayed getting in Mechanical problems

arrived in Juneau @ 0900 Pm

8-24-10

0800

Picked up cargo

0820

arrived on site

Met Mark Pusich

Mark K Johnson

+ Zack Driller from Denali

0845

Water, Sewer, GCI, ACS, AEL&P

No conflicts except a potential water line crossing to a hydrant in the ferry area

1020

Arrived @ SFO

and informed Jim (FAA) what we are doing

Depths to water

MWA-15 - 8.21 FBTOC

No pressure Noted

Attempted to connect to Data Logger

Error 6146 Could Not Find any Devices

Possible Remedies

1) check the connections

2) Detach & re attach the Cable

3) Be sure the Device has Power

No Dice

Well Depths

MWA-14 11.40 FBTOC

MWA-10 ~~8.13~~ sgw

Positive Pressure 8.12

1040
Will have the well cap of MW A-15 off overnight to see if it develops also MW A-10

1155
Art Honea with Council arrived for a meeting to discuss utility relocations location of OWS outfall

1215
Art Sid dispensers on in Sayre heighting & showed us where other utilities run and it just too big a deal if we hit one going to the shed

1230
will begin with Boring on west side of Dispenser then do Concrete Boring

1255
Begin Drilling through asphalt for Boring B13

1355
completed Boring B13
Will keep samples 13-3 & 13-5 for analysis
13-5 in the smear zone

1450
Mark Pusich arrived on site with Concrete saw

1455
Begin cutting out Concrete for boring B14
Saw Works surprisingly well

1530
finished Concrete cutting

1545
Begin Boring
B14

1625
Finish Boring
will put in temporary
Monitoring well in B14

1640
Will analyze samples
B14503
B14505 - PAH collected twice
PID 466
Smelly
~~B14505~~ and
~~PAH Duplicate~~
~~B14504~~

~~B14503~~

~~B14504~~
B14508 BTEX 1620 + DRO
Duplicate of B14503

B14509 PAH
Duplicate of B14505

1710
Heavy Sand Making
it difficult to install
temporary Monitoring well
to depth.

1720
Finish installation of
temporary Monitoring well

1620
Begin Boring B15

8-25-10

0900
calibrated YSI
PH is a bit Funky

Weather overcast & warm
No rain Yet

Prepped for day

1000
Arrive on site
Set up for drilling near
OWS outfall
Found what looks to be
washout area ~~across from~~
area identified by Art as
the OWS

Joe Calibrated PID
with Tedlar Bag of gas

1035
R&M arrive on site

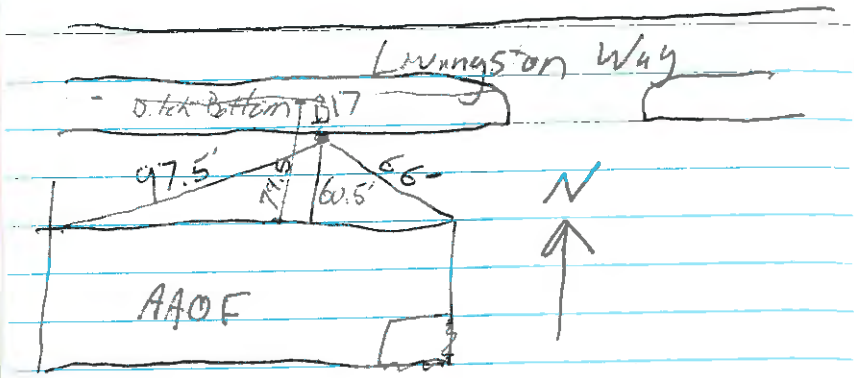
1500
Drilled down 16 & 17
found No Contamination

Sampled Boring 14 for water
& pulled Casing by Hand

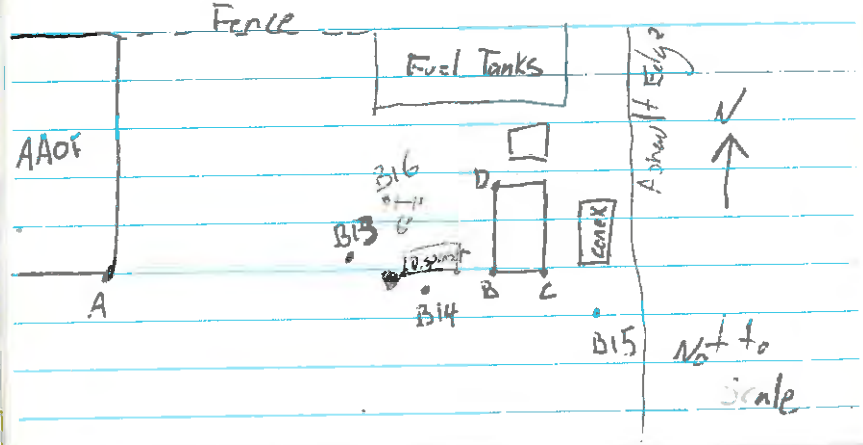
R&M will now Patch
asphalt & Concrete

Tim Roy arrived on site
around 11:00

1600
R&M finished Concrete
Patch - will do asphalt
tomorrow & Sod pictures



Not to Scale



B → B14 12.0'
A → B14 75.3'

A → B13 67.5'
D → B13 26.0'

A → B16 88.3'
D → B16 20.7'

A → B15 107.5Ft
C → B15 12.0 Ft

3-26-10

0630

Pulled data logger from MWA-4

checked water level of MWA-15 7.04 ft after sitting with plug out for a day

LOG OF EXPLORATORY BOREHOLE / MONITORING WELL DETAILS

Borehole / Well Designation: B13

PROJECT NAME: AKARNG Juneau AAOF Site Investigation
LOCATION: Juneau AAOF, Juneau, AK
PROJECT MANAGER: Aemon Wetmore
LOGGED BY: Aemon and Joe
PROJECT NUMBER: 2010116

START & END TIME / DATE: 12:45 8/24/10
TIME & DATE COMPLETED: 1400 8/24/10
TOTAL BOREHOLE DEPTH: ~~8.5~~ 10 (RAM consulting)
DRILLING CONTRACTOR: ~~AMEC~~ ES
DRILL RIG TYPE: ~~Split Spoon~~
SAMPLING METHOD: Split Spoon

BLOW COUNTS (per 6 inches)	DRIVEN/ RECOVERED (INCHES)	PID (ppm)	NOTES: GROUNDWATER LEVEL, WELL DETAIL	SAMPLES	GRAPHIC MONITORING POINT DETAILS	LITHOLOGIC AND MONITORING POINT DESCRIPTION	LITHO-LOGIC COLUMN
Bulk	NA	1.5	B13S1 (1300)			Brown/gray gravelly SAND; moist slight petro odor	
8/11/13	1.5'/0.8'	2.3	B13S2 (1313)			Gray SAND, moist no odor	
* 5/9/14	1.5'/1.0'	4.2	B13S3 (1325)			@ 10JUNAAOFB13SS3	
9/27/20	1.5'/1.1'	0.5	B13S4 (1340)			Gray, gravelly SAND, moist (Appears to be native)	
						2"OD Split spoons 1.5' length	

DATE:
CHECKED BY:
DRAWN:
PROJECT:

BSI, Inc.

COMMENTS: ~0.2' Asphalt
~10' West of dispenser

SHEET 1 OF 2

LOG OF EXPLORATORY BOREHOLE / MONITORING WELL DETAILS

Borehole / Well Designation: B13

PROJECT NAME: AKARNG Juneau AAOF Site Investigation
LOCATION: Juneau AAOF, Juneau, AK
PROJECT MANAGER: Aemon Wetmore
LOGGED BY: Aemon and Joe
PROJECT NUMBER: 2010116

START & END TIME / DATE: 8/24/10
TIME & DATE COMPLETED:
TOTAL BOREHOLE DEPTH:
DRILLING CONTRACTOR:
DRILL RIG TYPE:
SAMPLING METHOD:

BLOW COUNTS (per 6 Inches)	DRIVEN/ RECOVERED (INCHES)	PID (ppm)	NOTES: GROUNDWATER LEVEL, WELL DETAIL	SAMPLES	GRAPHIC MONITORING POINT DETAILS	LITHOLOGIC AND MONITORING POINT DESCRIPTION	LITHO-LOGIC COLUMN
* 11/17/13	1.5'/1.1'	0.5	B1355 (1350) GW@ 9.5-10.0'			Gray Sandy, GRAVEL; wet 10JUNAAOFB1355	

DATE: 8/24/10
~~CHECKED BY:~~ JOE
DRAWN: Thomas J
PROJECT:

BSI, Inc.

COMMENTS:

SHEET 2 OF 2

Sampled

Aemon Wetmore

LOG OF EXPLORATORY BOREHOLE / MONITORING WELL DETAILS

Borehole / Well Designation: B14

PROJECT NAME: AKARNG Juneau AAOF Site Investigation
LOCATION: Juneau AAOF, Juneau, AK
PROJECT MANAGER: Aemon Wetmore
LOGGED BY: Aemon and Joe
PROJECT NUMBER: 2010116

START & END TIME / DATE: 1545 5/24/10
TIME & DATE COMPLETED: 1625 5/24/10
TOTAL BOREHOLE DEPTH: 15'
DRILLING CONTRACTOR: RTM
DRILL RIG TYPE: CME 55 Hollow Stem Auger
SAMPLING METHOD: Split Spoon

BLOW COUNTS (per 6 inches)	DRIVEN/ RECOVERED (INCHES)	PID (ppm)	NOTES: GROUNDWATER LEVEL, WELL DETAIL	SAMPLES	GRAPHIC MONITORING POINT DETAILS	LITHOLOGIC AND MONITORING POINT DESCRIPTION	LITHO-LOGIC COLUMN
NA Bulk Sample	NA	2.5	B14S01 ~~H-P~~ 1545			Sand; Grey, Moist	
5/15/20	1 Ft	3.5	B14S02 1550.			Grey ~~SAND~~; Moist	
* 5/24/17	14"	4.1 Peak Reading	B14S03 B14S08 1555 1600			Grey SAND, Moist 10JUNAAOFB1453 10JUNAAOFB1458 Duplicate for ~~BTEX~~, GRO, DRO + RRO	
11/13/16	1'	2.2	B404 1610			Sandy GRAVEL, Moist	

DATE:
CHECKED BY:
DRAWN
PROJECT:

BSI, Inc.

COMMENTS: ~6' South of fuel dispenser. Temporary Well TW1 installed to ~14' bgs in B14, then removed after sampling

SHEET 1 OF 2

LOG OF EXPLORATORY BOREHOLE / MONITORING WELL DETAILS

Borehole / Well Designation: B14

PROJECT NAME: AKARNG Juneau AAOF Site Investigation
LOCATION: Juneau AAOF, Juneau, AK
PROJECT MANAGER: Aemon Wetmore
LOGGED BY: Aemon and Joe
PROJECT NUMBER: 2010116

START & END TIME / DATE: 1345 - 1625 5-24-10
TIME & DATE COMPLETED: 1625 5-24-10
TOTAL BOREHOLE DEPTH:
DRILLING CONTRACTOR: RAM
DRILL RIG TYPE: CME 55
SAMPLING METHOD: Split Spoon

BLOW COUNTS (per 6 inches)	DRIVEN/ RECOVERED (INCHES)	PID (ppm)	NOTES: GROUNDWATER LEVEL, WELL DETAIL	SAMPLES	GRAPHIC MONITORING POINT DETAILS	LITHOLOGIC AND MONITORING POINT DESCRIPTION	LITHO-LOGIC COLUMN
10/14/12	1'	466	B14505 1620 (B14509) 1625 Dupe			Top 0.5' Gravelly Silt/ND Bottom 0.5' Silt, Grey Sampling Bottom, Smelly 10JUNAAOFB1455 10JUNAAOFB1459 – Dup PAH	

0.010 slot screen
13.7' bgs
cap

2" Schedule 40 PVC casing
5' Screen Interval (~8.7' bgs – 13.5' bgs)

DATE:
CHECKED BY:
DRAWN:
PROJECT:

BSI, Inc.

COMMENTS:

SHEET 2 OF 2

LOG OF EXPLORATORY BOREHOLE / MONITORING WELL DETAILS

Borehole / Well Designation: B15

PROJECT NAME: AKARNG Juneau AAOF Site Investigation
LOCATION: Juneau AAOF, Juneau, AK
PROJECT MANAGER: Aemon Wetmore
LOGGED BY: Aemon and Joe
PROJECT NUMBER: 2010116

START & END TIME / DATE: 1420 8/24/10
TIME & DATE COMPLETED:
TOTAL BOREHOLE DEPTH:
DRILLING CONTRACTOR: RAM
DRILL RIG TYPE: CME 55
SAMPLING METHOD: Split Spoon

BLOW COUNTS (per 6 Inches)	DRIVEN/ RECOVERED (INCHES)	PID (ppm)	NOTES: GROUNDWATER LEVEL, WELL DETAIL	SAMPLES	GRAPHIC MONITORING POINT DETAILS	LITHOLOGIC AND MONITORING POINT DESCRIPTION	LITHO-LOGIC COLUMN
NA		1.5	B15S01 (1910)	1		Gray SAND; moist	
* 7/10/14	1'	4.3	B15S02 1830	3		Grey SAND; Moist 10JUNAAOFB15S2	
7/12/20	16"	3.2	B15S03 1840	5		Grey SAND; Moist	
* 11/19/20	1'	3.9	B15S04 1850	8		Sandy GRAVEL 10JUNAAOFB15S4	

DATE:
CHECKED BY:
DRAWN:
PROJECT:

BSI, Inc.

COMMENTS: ~30' East of Fuel Dispenser

SHEET 1 OF 2

LOG OF EXPLORATORY BOREHOLE / MONITORING WELL DETAILS

Borehole / Well Designation: B15

PROJECT NAME: AKARNG Juneau AAOF Site Investigation
LOCATION: Juneau AAOF, Juneau, AK
PROJECT MANAGER: Aemon Wetmore
LOGGED BY: Aemon and Joe
PROJECT NUMBER: 2010116

START & END TIME / DATE: 1620 / 4-24-10
TIME & DATE COMPLETED: 1900 / 4-24-10
TOTAL BOREHOLE DEPTH: 14.5 ft
DRILLING CONTRACTOR: AMEC
DRILL RIG TYPE: CME 55
SAMPLING METHOD: Split Spoon

BLOW COUNTS (per 6 Inches)	DRIVEN/ RECOVERED (INCHES)	PID (ppm)	NOTES: GROUNDWATER LEVEL, WELL DETAIL	SAMPLES	GRAPHIC MONITORING POINT DETAILS	LITHOLOGIC AND MONITORING POINT DESCRIPTION	LITHO-LOGIC COLUMN
7/13/11	9"	3.7	B15505 1900			Sandy GRAVEL; wet	

DATE:
CHECKED BY:
DRAWN:
PROJECT:

BSI, Inc.

COMMENTS:

SHEET 2 OF 2

LOG OF EXPLORATORY BOREHOLE / MONITORING WELL DETAILS

Borehole / Well Designation: B16

PROJECT NAME: AKARNG Juneau AAOF Site Investigation
LOCATION: Juneau AAOF, Juneau, AK
PROJECT MANAGER: Aemon Wetmore
LOGGED BY: Aemon and Joe
PROJECT NUMBER: 2010116

START & END TIME / DATE: 1400 / 4-25-10
TIME & DATE COMPLETED: 1445 / 4-25-10
TOTAL BOREHOLE DEPTH: 10
DRILLING CONTRACTOR: Rtm
DRILL RIG TYPE: CME 55
SAMPLING METHOD: Split Spoon 14"

BLOW COUNTS (per 6 inches)	DRIVEN/ RECOVERED (INCHES)	PID (ppm)	NOTES: GROUNDWATER LEVEL, WELL DETAIL	SAMPLES	GRAPHIC MONITORING POINT DETAILS	LITHOLOGIC AND MONITORING POINT DESCRIPTION	LITHO-LOGIC COLUMN
* Bulk	NA	5.1	B16S01 1450			Grey SAND 10JUNAAOFB16S1	
3/13/14	1.1'	3.8	B16S02 1420			Grey SAND; Moist	
5/3/12	1.3'	5.1	B16S03 1430			Grey SAND; Moist	
* 7/10/21	10'	4.1	B16S04 1435			Gray SAND, moist (top 0.6') Gravely SAND; Moist (bottom 0.4') Sample from bottom 10JUNAAOFB16S4	

DATE:
CHECKED BY:
DRAWN:
PROJECT:

BSI, Inc.

COMMENTS: North of Fuel Dispenser

SHEET 1 OF 2

LOG OF EXPLORATORY BOREHOLE / MONITORING WELL DETAILS

Borehole / Well Designation: B16

PROJECT NAME: AKARNG Juneau AAOF Site Investigation
LOCATION: Juneau AAOF, Juneau, AK
PROJECT MANAGER: Aemon Wetmore
LOGGED BY: Aemon and Joe
PROJECT NUMBER: 2010116

START & END TIME / DATE: 1400 / 4-25-10
TIME & DATE COMPLETED: 1445 / 4-25-10
TOTAL BOREHOLE DEPTH: 10'
DRILLING CONTRACTOR: Shan
DRILL RIG TYPE: CME 55
SAMPLING METHOD: Split Spoon 4"

BLOW COUNTS (per 6 Inches)	DRIVEN/ RECOVERED (INCHES)	PID (ppm)	NOTES: GROUNDWATER LEVEL, WELL DETAIL	SAMPLES	GRAPHIC MONITORING POINT DETAILS	LITHOLOGIC AND MONITORING POINT DESCRIPTION	LITHO-LOGIC COLUMN
15/17/11	1.0'	2.0	B16505			Sandy GRAVEL: wet	

1
2
3
4
5
6
7
8
9
10

DATE:
CHECKED BY:
DRAWN:
PROJECT:

BSI, Inc.

COMMENTS:

SHEET 2 OF 2

LOG OF EXPLORATORY BOREHOLE / MONITORING WELL DETAILS

Borehole / Well Designation: B17

PROJECT NAME: AKARNG Juneau AAOF Site Investigation
LOCATION: Juneau AAOF, Juneau, AK
PROJECT MANAGER: Aemon Wetmore
LOGGED BY: Aemon and Joe
PROJECT NUMBER: 2010116

START & END TIME / DATE: 1050 / 5-25-10
TIME & DATE COMPLETED:
TOTAL BOREHOLE DEPTH:
DRILLING CONTRACTOR: N/A
DRILL RIG TYPE: GME 55
SAMPLING METHOD: Split Spoon (SS)

BLOW COUNTS (per 6 inches)	DRIVEN/ RECOVERED (INCHES)	PID (ppm)	NOTES: GROUNDWATER LEVEL, WELL DETAIL	SAMPLES	GRAPHIC MONITORING POINT DETAILS	LITHOLOGIC AND MONITORING POINT DESCRIPTION	LITHO-LOGIC COLUMN
NA	NA	2.1	(time)			Gray SAND; moist	
* 4/7/6	1.5'/1.2'	3.8	B1752 (1120)			Gray SAND; moist 10JUNAAOFB1752	
* ~~4/7/~~ 2/4/7	1.5'/1.3'	2.5	B1753 (1134)			Top 0.9' gray SAND; moist *bottom 0.4' Orange/brown finer SAND; moist to wet sample taken from this portion 10JUNAAOFB1753 w/ PAH	
10/16/16	1.5'/0.3'	~~34~~	B1754 (1143)		GW	Gray, gravelly coarse SAND; wet Hit refusal (Rock in shoe) not enough soil for	

DATE:
CHECKED BY:
DRAWN:
PROJECT:

BSI, Inc.

COMMENTS: outfall of oil water Separator

SHEET 1 OF 2

LOG OF EXPLORATORY BOREHOLE / MONITORING WELL DETAILS

Borehole / Well Designation: B17

PROJECT NAME: AKARNG Juneau AAOF Site Investigation
LOCATION: Juneau AAOF, Juneau, AK
PROJECT MANAGER: Aemon Wetmore
LOGGED BY: Aemon and Joe
PROJECT NUMBER: 2010116

START & END TIME / DATE: 1052/10-25-10
TIME & DATE COMPLETED:
TOTAL BOREHOLE DEPTH:
DRILLING CONTRACTOR: RAM
DRILL RIG TYPE: CME 55
SAMPLING METHOD: Split Spoon 18"

BLOW COUNTS (per 6 Inches)	DRIVEN/ RECOVERED (INCHES)	PID (ppm)	NOTES: GROUNDWATER LEVEL, WELL DETAIL	SAMPLES	GRAPHIC MONITORING POINT DETAILS	LITHOLOGIC AND MONITORING POINT DESCRIPTION	LITHO-LOGIC COLUMN
4/9/4 for 3" or 19 for 6"	15/15	3.1	B1755 (1158)			Gray course SAND; Wet	

DATE:
CHECKED BY:
DRAWN:
PROJECT:

BSI, Inc.

COMMENTS: Outfall of 0.1 Water Separater

SHEET 2 OF 2

Low-Flow Groundwater Sampling Data Sheet

Well ID: TW1

Project 2010116

Date: 8/25/10

Project Juneau Decision Document

Start Time: 1240

Site: B14 (TW1)

End Time: 1345

Field Team: Aemon W. & Joe T.

Sample ID: 10JNUAA0FB14GW Time: 1315 (primary) dup split ms/msd

Sample ID: 10JNUAA0FB14GW02 Time: 1320 primary (dup) split ms/msd

Sample ID: ____ Time: ____ primary dup split ms/msd

Weather Conditions: Partly Cloudy

DTW FBTOC 10.68'

Depth to Top of Product (FBTOC): NA

Depth to Water (FBTOC): (ground surface) 9.57

Depth to Oil/Water Interface* (FBTOC): NA

Total Depth (FBTOC): 14.82' BTOC

* Note: Same as depth to water

Screen Interval (FBTOC): ~~5.7 to 10.7'~~

Depth Water Drawn From (FBTOC): 9.8 – 14.8

12.5 ← Screen Int

Criteria for Stable Parameters

Parameter	Working Range	Stability Criteria	Notes
Temperature	>0.00 °C	± 10%	Once the readings for **pH, conductivity and**
pH	0-14	± 10%	**temperature** have stabilized to within 10% over
Conductivity	0-999 mS/m	± 10%	3 successive readings OR a total of 45 minutes
Dissolved Oxygen	0-19.99 mg/L	± 10%	have elapsed during purging (which ever occurs
Salinity		± 10%	first) collect sample from well.

Sensory Observations

Color: Clear, Amber, Tan, Brown, (Grey), Milky White, Other:

Odor: None, Low, (Medium), High, Very Strong, H2S, (Fuel Like), Chemical ?, Unknown

Turbidity: None, Low, Medium, High, Very Turbid, Heavy Silts

Instrument Observations

Round	Time	Turbidity	Temp °C	Conductivity (mS/cm)	Salinity	DO (mg/L)	pH	ORP (mV)	Color	Odor	Water Level (ft BTOC)	Draw-down
1	1300	20.7	11.89	0.273	0.13	0.44	8.75	2.7	tan	slight	10.69	0.0'
2	1306	14.4	11.88	0.270	0.13	0.34	8.51	7.5	"	"	10.69	0.00
3	1310	13.0	11.84	0.268	0.13	0.30	8.44	9.8	"	"	"	"
4	1313	8.28	11.69	0.267	0.13	0.28	8.40	11.5	"	"	"	"
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												

Notes: Drawdown should be less than 0.3 feet while sampling. Minimal drawdown shall be achieved and measured by pumping at a low rate (approximately 0.1 to 0.5 liter/minute) and continually measuring water levels in the well. Note that site's hydrogeology may make it difficult to achieve this specification.

Analyses	# of Bottles Collected
DRO	2x2 125ml
GRO/BTEX	3x2 40ml
GRO	~~3~~
DRO/RRO	2x2 125ml
PAH	2x2 1L

Comments: Temporary well installed on 8/24/10 Boring B14

Flow Rate (mL/min)	220
Well Casing Diameter (in)	2
Pump Used (sub/peri)	Peri.
Well Type - Stick-up or Flush Mount	Stickup

Signed [signature] Date: 8-25-10

APPENDIX C

BORING LOGS

LOG OF EXPLORATORY BORING
Borehole: B13

PROJECT NAME:	AKARNG AAOF JUNEAU SITE INVESTIGATION	COMPLETION DATE:	8/24/10
PROJECT #:	2010116	DRILL METHOD:	HOLLOW-STEM AUGER
LOCATION:	JUNEAU AAOF. JUNEAU, ALASKA	SAMPLING METHOD:	2-INCH SPLIT SPOON; 140# HAMMER
DRILLED BY:	R&M CONSULTING	TOTAL BOREHOLE DEPTH:	10.5'
LOGGED BY:	A. WETMORE	DRILL RIG TYPE:	CME-55

BLOW COUNTS (per 0.5 ft)	DRIVEN/ RECOVERED (FEET)	PID (ppm)	DEPTH IN FT.	INTERVAL / SAMPLES	WELL CONSTRUCTION DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
							0.0 feet - 0.2 feet **Asphalt**
Augered	NA	1.5		B13 S01			**0.2 feet - 2.5 feet** **Augered - Bulk sample** **Brown/gray, gravelly SAND; moist; slight petroleum odor**
8 11 13	1.5/0.8	2.3		B13 S02			**2.5 feet - 4.0 feet** **Gray SAND; moist**
			5				
5 9 14	1.5/1.0	4.2		**B13 S03**			**5.0 feet - 6.5 feet** **Gray SAND; moist** **(Sample 10JUNAAOFB13S3 collected)**
19 27 20	1.5/1.1	0.5		B13 S04			**7.5 feet - 9.0 feet** **Gray, gravelly SAND; moist (appears native)**
			10 ▽				
11 17 13	1.5/1.1	0.5		**B13 S05**			**10.0 feet - 11.5 feet** **Gray, sandy GRAVEL; wet** **(Sample 10JUNAAOFB13S5 collected)**
							Total Depth = 11.5 feet
			15				**KEY** ▽ **Groundwater at time of drilling**

Bethel Services, Inc.

COMMENTS: 2.5' - 10.5' 1.5ft Split-Spoon Sampling
Boring backfilled with cuttings.

LOG OF EXPLORATORY BORING / MONITORING WELL DETAILS
Borehole / Well Designation: B14 / TW1

PROJECT NAME:	AKARNG AAOF JUNEAU SITE INVESTIGATION	COMPLETION DATE:	8/25/10
PROJECT #:	2010118	DRILL METHOD:	HOLLOW-STEM AUGER
LOCATION:	JUNEAU AAOF. JUNEAU, ALASKA	SAMPLING METHOD:	2-INCH SPLIT SPOON; 140# HAMMER
DRILLED BY:	R&M CONSULTING	TOTAL BOREHOLE DEPTH:	14’
LOGGED BY:	J. THOMAS	DRILL RIG TYPE:	CME-55

BLOW COUNTS (per 0.5 ft)	DRIVEN/ RECOVERED (FEET)	PID (ppm)	DEPTH IN FT.	INTERVAL / SAMPLES	WELL CONSTRUCTION DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
Augered	NA	2.5		B14 S01			**0.0 feet - 0.4 feet** **Concrete** **0.4 feet - 2.5 feet** **Augered - Bulk sample** **Gray SAND; moist**
5 15	1.5/1.0	3.5		B14 S02			**2.5 feet - 4.0 feet** **Gray SAND; moist**
20			5				
8 14 17	1.5/1.2	4.1		**B14 S03**			**5.0 feet - 6.5 feet** **Gray SAND; moist** **(Duplicate Samples 10JUNAAOFB14S3 and 10JUNAAOFB14S8 collected)**
11 13 16	1.5/1.0	2.2		B14 S04			**7.5 feet - 9.0 feet** **Gray, sandy GRAVEL; moist**
			10				
10 14 12	1.5/1.0	466		**B14 S05**			**10.0 feet - 11.5 feet** **Gray SAND; wet; hydrocarbon odor** **(Duplicate Samples 10JUNAAOFB14S5 and 10JUNAAOFB14S9 collected)**
							KEY ▽ **Groundwater at time of drilling**
			15				**Total Depth = 14.0 feet**

Bethel Services, Inc.

COMMENTS: 2.5' - 10.5' Continuous Split-Spoon Sampling. Temporary Well TW1 installed to depth of 13.7 feet below ground surface (bgs).
Well construction: 2-inch, 40-schedule PVC riser (blank from surface to 8.5 feet bgs, 0.010-inch slotted screen from 8.5 to 13.5 feet bgs plus end cap). Native material sand pack.

LOG OF EXPLORATORY BORING
Borehole: B15

PROJECT NAME:	AKARNG AAOF JUNEAU SITE INVESTIGATION	COMPLETION DATE:	8/24/10
PROJECT #:	2010116	DRILL METHOD:	HOLLOW-STEM AUGER
LOCATION:	JUNEAU AAOF. JUNEAU, ALASKA	SAMPLING METHOD:	2-INCH SPLIT SPOON; 140# HAMMER
DRILLED BY:	R&M CONSULTING	TOTAL BOREHOLE DEPTH:	10.5'
LOGGED BY:	A. WETMORE	DRILL RIG TYPE:	CME-55

BLOW COUNTS (per 0.5 ft)	DRIVEN/ RECOVERED (FEET)	PID (ppm)	DEPTH IN FT.	INTERVAL / SAMPLES	WELL CONSTRUCTION DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
Augered	NA	1.5		B15 S01			**0.0 feet - 0.2 feet** **Asphalt** **0.2 feet - 2.5 feet Augered - Bulk sample** **Gray SAND; moist**
7 10 14	1.5/1.0	4.3		**B15 S02**			**2.5 feet - 4.0 feet** **Gray SAND; moist** **(Sample 10JUNAAOFB15S2 collected)**
7 12 20	1.5/1.4	3.2	5	B15 S03			**5.0 feet - 6.5 feet** **Gray SAND; moist**
11 19 20	1.5/1.0	3.9		**B15 S04**			**7.5 feet - 9.0 feet** **Gray, sandy GRAVEL; moist** **(Sample 10JUNAAOFB15S4 collected)**
7 13 11	1.5/0.8	3.7	10	B15 S05			**10.0 feet - 11.5 feet** **Gray, sandy GRAVEL; wet**
			15				**Total Depth = 11.5 feet**

KEY

▽ **Groundwater at time of drilling**

Bethel Services, Inc.

COMMENTS: 2.5' - 10.5' 1.5ft Split-Spoon Sampling
Boring backfilled with cuttings.

LOG OF EXPLORATORY BORING
Borehole: B16

PROJECT NAME:	AKARNG AAOF JUNEAU SITE INVESTIGATION	COMPLETION DATE:	8/25/10
PROJECT #:	2010116	DRILL METHOD:	HOLLOW-STEM AUGER
LOCATION:	JUNEAU AAOF. JUNEAU, ALASKA	SAMPLING METHOD:	2-INCH SPLIT SPOON; 140# HAMMER
DRILLED BY:	R&M CONSULTING	TOTAL BOREHOLE DEPTH:	10.5'
LOGGED BY:	A. WETMORE	DRILL RIG TYPE:	CME-55

BLOW COUNTS (per 0.5 ft)	DRIVEN/ RECOVERED (FEET)	PID (ppm)	DEPTH IN FT.	INTERVAL / SAMPLES	WELL CONSTRUCTION DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
							0.0 feet - 0.2 feet **Asphalt**
Augered	NA	5.1		**B16 S01**			**0.2 feet - 2.5 feet** **Augered - Bulk sample** **Gray SAND; moist** **(Sample 10JUNAAOFB16S1 collected)**
8 13 14	1.5/1.1	3.8		B16 S02			**2.5 feet - 4.0 feet** **Gray SAND; moist**
5 8 12	1.5/1.3	5.1	5	B16 S03			**5.0 feet - 6.5 feet** **Gray SAND; moist**
9 10 21	1.5/1.0	4.1		**B16 S04**			**7.5 feet - 9.0 feet** **Gray SAND; moist** **(Sample 10JUNAAOFB16S4 collected)**
15 17 11	1.5/1.0	2.0	10	B16 S05			**10.0 feet - 11.5 feet** **Gray, sandy GRAVEL; wet**
			15				**Total Depth = 11.5 feet**

KEY

▽ **Groundwater at time of drilling**

Bethel Services, Inc.

COMMENTS: 2.5' - 10.5' 1.5ft Split-Spoon Sampling
Boring backfilled with cuttings.

LOG OF EXPLORATORY BORING
Borehole: B17

PROJECT NAME:	AKARNG AAOF JUNEAU SITE INVESTIGATION	COMPLETION DATE:	8/25/10
PROJECT #:	2010116	DRILL METHOD:	HOLLOW-STEM AUGER
LOCATION:	JUNEAU AAOF. JUNEAU, ALASKA	SAMPLING METHOD:	2-INCH SPLIT SPOON; 140# HAMMER
DRILLED BY:	R&M CONSULTING	TOTAL BOREHOLE DEPTH:	10.5'
LOGGED BY:	J. THOMAS	DRILL RIG TYPE:	CME-55

BLOW COUNTS (per 0.5 ft)	DRIVEN/ RECOVERED (FEET)	PID (ppm)	DEPTH IN FT.	INTERVAL / SAMPLES	WELL CONSTRUCTION DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
Augered	NA	2.1		B17 S01			**0.0 feet - 2.5 feet Augered - Bulk sample** **Gray SAND; moist**
4 7 6	1.5/1.2	3.8		B17 S02			**2.5 feet - 4.0 feet** **Gray SAND; moist** **(Sample 10JUNAAOFB17S2 collected)**
2 4 7	1.5/1.3	2.5	5	B17 S03			**5.0 feet - 6.0 feet** **Gray SAND; moist** **6.0 feet - 6.5 feet** **Orange/brown fine SAND; moist** **(Sample 10JUNAAOFB17S3 collected)**
10 16 16	1.5/0.3	NM		B17 S04			**7.5 feet - 9.0 feet** **Gray gravelly SAND; wet** **(hit refusal; could not collect soil for field screening; no hydrocarbon odor)**
4 9 19	1.5/1.5	3.4	10 15	B17 S05			**10.0 feet - 11.5 feet** **Gray SAND; wet**
							Total Depth = 11.5 feet

KEY

▽ **Groundwater at time of drilling**

NM **Not measured**

COMMENTS: 2.5' - 10.5' 1.5ft Split-Spoon Sampling
Boring backfilled with cuttings. Boring advanced near outfall of oil water separator

Bethel Services, Inc.

APPENDIX D

ANALYTICAL REPORT FROM TESTAMERICA LABORATORY OF ANCHORAGE, ALASKA

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Anchorage
2000 West International Airport Road Suite A10
Anchorage, AK 99502-1119
Tel: (907) 563-9200

TestAmerica Job ID: ATH0081
TestAmerica Sample Delivery Group: ATH0081
Client Project/Site: 2010116
Client Project Description: JNU/FBX Decision Docs

For:
Bethel Services Incorporated
2605 Denali Street, Suite 100
Anchorage, AK/USA 99503

Attn: Aemon Wetmore

Johanna Dreher

Authorized for release by:
9/28/2010 9:03 AM

Johanna L Dreher
Client Services Manager
johanna.dreher@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Table of Contents

Qualifier Definition/Glossary

Client: Bethel Services Incorporated
Project/Site: 2010116

TestAmerica Job ID: ATH0081
SDG: ATH0081

Qualifiers

GCMS Volatiles

Qualifier	Qualifier Description
A-01	Re-extract for GRO only, GRO hold time is 28 days
C4	Calibration Verification recovery was below the method control limit for this analyte.
E	Concentration exceeds the calibration range and therefore result is semi-quantitative.
M7	The MS and/or MSD were above the acceptance limits. See Blank Spike (LCS).
Q8	Detected hydrocarbons in the gasoline range appear to be due to overlap of diesel range hydrocarbons.
R2	The RPD exceeded the acceptance limit.
R4	Due to the low levels of analyte in the sample, the duplicate RPD calculation does not provide useful information.
RL7	Sample required dilution due to high concentrations of target analyte.
Z2	Surrogate recovery was above the acceptance limits. Data not impacted.
Z6	Surrogate recovery was below acceptance limits.

Semivolatiles

Qualifier	Qualifier Description
ZX	Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.

Fuels

Qualifier	Qualifier Description
Q11	Detected hydrocarbons in the diesel range do not have a distinct diesel pattern and may be due to heavily weathered diesel.
Q2	Typical pattern for diesel
RL1	Reporting limit raised due to sample matrix effects.

Glossary

Glossary	Glossary Description
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis.

Detection Summary

Client: Bethel Services Incorporated
Project/Site: 2010116

TestAmerica Job ID: ATH0081
SDG: ATH0081

Client Sample ID: 10JUNAAOFB13S3 — Lab Sample ID: ATH0081-01

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics	53.1	Q11	20.0		mg/kg dry	1	☼	AK102/103	total

Client Sample ID: 10JUNAAOFB13S5 — Lab Sample ID: ATH0081-02

No Detections.

Client Sample ID: 10JUNAAOFB14S3 — Lab Sample ID: ATH0081-03

No Detections.

Client Sample ID: 10JUNAAOFB14S5 — Lab Sample ID: ATH0081-04

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics	181	E	1.75		mg/kg dry	33.3	☼	AK101-MS/EPA 82	total
Xylenes (total)	0.0278		0.0262		mg/kg dry	33.3	☼	AK101-MS/EPA 82	total
Diesel Range Organics	346	RL1, Q2	31.6		mg/kg dry	1	☼	AK102/103	total
Gasoline Range Organics - RE1	255	RL7, Q8, A-0	15.8		mg/kg dry	300	☼	AK101-MS/EPA 82	total
Acenaphthene	0.0323		0.0220		mg/kg dry	2	☼	EPA 8270 mod.	total
1-Methylnapthalene	0.224		0.0550		mg/kg dry	5	☼	EPA 8270 mod.	total
2-Methylnaphthalene	0.238		0.0550		mg/kg dry	5	☼	EPA 8270 mod.	total

Client Sample ID: 10JUNAAOFB14S8 — Lab Sample ID: ATH0081-05

No Detections.

Client Sample ID: 10JUNAAOFB14S9 — Lab Sample ID: ATH0081-06

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnapthalene	2.61		0.109		mg/kg dry	10	☼	EPA 8270 mod.	total
2-Methylnaphthalene	3.27		0.109		mg/kg dry	10	☼	EPA 8270 mod.	total
Acenaphthene	0.160		0.109		mg/kg dry	10	☼	EPA 8270 mod.	total
Fluorene	0.116		0.109		mg/kg dry	10	☼	EPA 8270 mod.	total
Naphthalene	0.341		0.109		mg/kg dry	10	☼	EPA 8270 mod.	total

Client Sample ID: 10JUNAAOFB15S2 — Lab Sample ID: ATH0081-07

No Detections.

Client Sample ID: 10JUNAAOFB15S4 — Lab Sample ID: ATH0081-08

No Detections.

Client Sample ID: 10JUNAAOFB16S1 — Lab Sample ID: ATH0081-09

No Detections.

Client Sample ID: 10JUNAAOFB16S4 — Lab Sample ID: ATH0081-10

No Detections.

Client Sample ID: 10JUNAAOFB17S2 — Lab Sample ID: ATH0081-11

No Detections.

Detection Summary

Client: Bethel Services Incorporated
Project/Site: 2010116

TestAmerica Job ID: ATH0081
SDG: ATH0081

Client Sample ID: 10JUNAAOFB17S3 — Lab Sample ID: ATH0081-12

No Detections.

Client Sample ID: 10JUNAAOFB14GW1 — Lab Sample ID: ATH0081-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics	81.4		50.0		ug/l	1		AK101-MS/EPA 82	total
Diesel Range Organics	1.43	Q11	0.407		mg/l	1		AK102/103	total
1-Methylnapthalene	0.948		0.0993		ug/l	1		EPA 8270 mod.	total
Acenaphthene	0.129		0.0993		ug/l	1		EPA 8270 mod.	total
Fluorene	0.233		0.0993		ug/l	1		EPA 8270 mod.	total
Naphthalene	0.958		0.0993		ug/l	1		EPA 8270 mod.	total

Client Sample ID: 10JUNAAOFB14GW2 — Lab Sample ID: ATH0081-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics	78.3		50.0		ug/l	1		AK101-MS/EPA 82	total
Diesel Range Organics	1.96	Q11	0.400		mg/l	1		AK102/103	total
1-Methylnapthalene	3.01		0.0983		ug/l	1		EPA 8270 mod.	total
Acenaphthene	0.143		0.0983		ug/l	1		EPA 8270 mod.	total
Fluorene	0.275		0.0983		ug/l	1		EPA 8270 mod.	total
Naphthalene	1.31		0.0983		ug/l	1		EPA 8270 mod.	total

Client Sample ID: 10JUNAAOFSTB — Lab Sample ID: ATH0081-15

No Detections.

Client Sample ID: 10JUNAAOFWTB1 — Lab Sample ID: ATH0081-16

No Detections.

Client Sample ID: 10JUNAAOFB13S3

Lab Sample ID: ATH0081-01

Date Collected: 08/24/10 13:25

Matrix: Soil

Date Received: 08/27/10 09:38

Percent Solids: 97.8

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		1.44		mg/kg dry	☼	09/05/10 07:00	09/05/10 11:48	33.3
Benzene	ND		0.00577		mg/kg dry	☼	09/05/10 07:00	09/05/10 11:48	33.3
Toluene	ND		0.0144		mg/kg dry	☼	09/05/10 07:00	09/05/10 11:48	33.3
Ethylbenzene	ND		0.0144		mg/kg dry	☼	09/05/10 07:00	09/05/10 11:48	33.3
Xylenes (total)	ND		0.0217		mg/kg dry	☼	09/05/10 07:00	09/05/10 11:48	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*106*		*75 - 125*	*09/05/10 07:00*	*09/05/10 11:48*	*33.3*
a,a,a-TFT	*84.2*		*50 - 150*	*09/05/10 07:00*	*09/05/10 11:48*	*33.3*
Toluene-d8	*97.3*		*75 - 125*	*09/05/10 07:00*	*09/05/10 11:48*	*33.3*
4-BFB	*100*		*75 - 125*	*09/05/10 07:00*	*09/05/10 11:48*	*33.3*

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	**53.1**	**Q11**	20.0		mg/kg dry	☼	09/02/10 08:44	09/02/10 21:11	1
Residual Range Organics	ND		50.0		mg/kg dry	☼	09/02/10 08:44	09/02/10 21:11	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*94.3*		*50 - 150*	*09/02/10 08:44*	*09/02/10 21:11*	*1*
Triacontane	*92.3*		*50 - 150*	*09/02/10 08:44*	*09/02/10 21:11*	*1*

Client Sample ID: 10JUNAAOFB13S5

Lab Sample ID: ATH0081-02

Date Collected: 08/24/10 13:50

Matrix: Soil

Date Received: 08/27/10 09:38

Percent Solids: 88.2

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		1.38		mg/kg dry	☼	09/05/10 07:00	09/05/10 12:20	33.3
Benzene	ND		0.00551		mg/kg dry	☼	09/05/10 07:00	09/05/10 12:20	33.3
Toluene	ND		0.0138		mg/kg dry	☼	09/05/10 07:00	09/05/10 12:20	33.3
Ethylbenzene	ND		0.0138		mg/kg dry	☼	09/05/10 07:00	09/05/10 12:20	33.3
Xylenes (total)	ND		0.0207		mg/kg dry	☼	09/05/10 07:00	09/05/10 12:20	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*99.7*		*75 - 125*	*09/05/10 07:00*	*09/05/10 12:20*	*33.3*
a,a,a-TFT	*85.5*		*50 - 150*	*09/05/10 07:00*	*09/05/10 12:20*	*33.3*
Toluene-d8	*95.1*		*75 - 125*	*09/05/10 07:00*	*09/05/10 12:20*	*33.3*
4-BFB	*101*		*75 - 125*	*09/05/10 07:00*	*09/05/10 12:20*	*33.3*

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		22.6		mg/kg dry	☼	09/02/10 08:44	09/07/10 19:22	1
Residual Range Organics	ND		56.5		mg/kg dry	☼	09/02/10 08:44	09/07/10 19:22	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*76.0*		*50 - 150*	*09/02/10 08:44*	*09/07/10 19:22*	*1*
Triacontane	*83.8*		*50 - 150*	*09/02/10 08:44*	*09/07/10 19:22*	*1*

Client Sample ID: 10JUNAAOFB14S3

Lab Sample ID: ATH0081-03

Date Collected: 08/24/10 15:55

Matrix: Soil

Date Received: 08/27/10 09:38

Percent Solids: 94.3

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		1.54		mg/kg dry	☼	09/05/10 07:00	09/05/10 13:23	33.3
Benzene	ND		0.00618		mg/kg dry	☼	09/05/10 07:00	09/05/10 13:23	33.3
Toluene	ND		0.0154		mg/kg dry	☼	09/05/10 07:00	09/05/10 13:23	33.3
Ethylbenzene	ND		0.0154		mg/kg dry	☼	09/05/10 07:00	09/05/10 13:23	33.3
Xylenes (total)	ND		0.0232		mg/kg dry	☼	09/05/10 07:00	09/05/10 13:23	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*91.1*		*75 - 125*	*09/05/10 07:00*	*09/05/10 13:23*	*33.3*
a,a,a-TFT	*100*		*50 - 150*	*09/05/10 07:00*	*09/05/10 13:23*	*33.3*
Toluene-d8	*96.0*		*75 - 125*	*09/05/10 07:00*	*09/05/10 13:23*	*33.3*
4-BFB	*100*		*75 - 125*	*09/05/10 07:00*	*09/05/10 13:23*	*33.3*

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		21.1		mg/kg dry	☼	09/02/10 08:44	09/07/10 19:22	1
Residual Range Organics	ND		52.8		mg/kg dry	☼	09/02/10 08:44	09/07/10 19:22	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*93.0*		*50 - 150*	*09/02/10 08:44*	*09/07/10 19:22*	*1*
Triacontane	*90.8*		*50 - 150*	*09/02/10 08:44*	*09/07/10 19:22*	*1*

Client Sample ID: 10JUNAAOFB14S5

Lab Sample ID: ATH0081-04

Date Collected: 08/24/10 16:20

Matrix: Soil

Date Received: 08/27/10 09:38

Percent Solids: 86

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	**181**	**E**	1.75		mg/kg dry	☼	09/05/10 07:00	09/05/10 14:58	33.3
Benzene	ND		0.00700		mg/kg dry	☼	09/05/10 07:00	09/05/10 14:58	33.3
Toluene	ND		0.0175		mg/kg dry	☼	09/05/10 07:00	09/05/10 14:58	33.3
Ethylbenzene	ND		0.0175		mg/kg dry	☼	09/05/10 07:00	09/05/10 14:58	33.3
Xylenes (total)	**0.0278**		0.0262		mg/kg dry	☼	09/05/10 07:00	09/05/10 14:58	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*98.7*		*75 - 125*	*09/05/10 07:00*	*09/05/10 14:58*	*33.3*
a,a,a-TFT	*89.7*		*50 - 150*	*09/05/10 07:00*	*09/05/10 14:58*	*33.3*
Toluene-d8	*108*		*75 - 125*	*09/05/10 07:00*	*09/05/10 14:58*	*33.3*
4-BFB	*72.9*	*Z6*	*75 - 125*	*09/05/10 07:00*	*09/05/10 14:58*	*33.3*

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B - RE1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	**255**	**RL7, Q8, A-01**	15.8		mg/kg dry	☼	09/08/10 11:39	09/09/10 00:51	300

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*73.4*	*Z6, A-01*	*75 - 125*	*09/08/10 11:39*	*09/09/10 00:51*	*300*
a,a,a-TFT	*125*	*RL7, A-01*	*50 - 150*	*09/08/10 11:39*	*09/09/10 00:51*	*300*
Toluene-d8	*84.5*	*A-01*	*75 - 125*	*09/08/10 11:39*	*09/09/10 00:51*	*300*
4-BFB	*87.3*	*A-01*	*75 - 125*	*09/08/10 11:39*	*09/09/10 00:51*	*300*

Client Sample ID: 10JUNAAOFB14S5

Lab Sample ID: ATH0081-04

Date Collected: 08/24/10 16:20

Matrix: Soil

Date Received: 08/27/10 09:38

Percent Solids: 90.9

Method: EPA 8270 mod. - Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.0550		mg/kg dry	☼	09/02/10 12:10	09/08/10 17:38	5
2-Methylnaphthalene	**0.238**		0.0550		mg/kg dry	☼	09/02/10 12:10	09/08/10 17:38	5
1-Methylnapthalene	**0.224**		0.0550		mg/kg dry	☼	09/02/10 12:10	09/08/10 17:38	5
Acenaphthylene	ND		0.0220		mg/kg dry	☼	09/02/10 12:10	09/07/10 20:52	2
Acenaphthene	**0.0323**		0.0220		mg/kg dry	☼	09/02/10 12:10	09/07/10 20:52	2
Fluorene	ND		0.0220		mg/kg dry	☼	09/02/10 12:10	09/07/10 20:52	2
Phenanthrene	ND		0.0220		mg/kg dry	☼	09/02/10 12:10	09/07/10 20:52	2
Anthracene	ND		0.0220		mg/kg dry	☼	09/02/10 12:10	09/07/10 20:52	2
Fluoranthene	ND		0.0220		mg/kg dry	☼	09/02/10 12:10	09/07/10 20:52	2
Pyrene	ND		0.0220		mg/kg dry	☼	09/02/10 12:10	09/07/10 20:52	2
Benzo (a) anthracene	ND		0.0220		mg/kg dry	☼	09/02/10 12:10	09/07/10 20:52	2
Chrysene	ND		0.0220		mg/kg dry	☼	09/02/10 12:10	09/07/10 20:52	2
Benzo (b) fluoranthene	ND		0.0220		mg/kg dry	☼	09/02/10 12:10	09/07/10 20:52	2
Benzo (k) fluoranthene	ND		0.0220		mg/kg dry	☼	09/02/10 12:10	09/07/10 20:52	2
Benzo (a) pyrene	ND		0.0220		mg/kg dry	☼	09/02/10 12:10	09/07/10 20:52	2
Indeno (1,2,3-cd) pyrene	ND		0.0220		mg/kg dry	☼	09/02/10 12:10	09/07/10 20:52	2
Dibenzo (a,h) anthracene	ND		0.0220		mg/kg dry	☼	09/02/10 12:10	09/07/10 20:52	2
Benzo (ghi) perylene	ND		0.0220		mg/kg dry	☼	09/02/10 12:10	09/07/10 20:52	2

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*105*		*30 - 140*	*09/02/10 12:10*	*09/08/10 17:38*	*5*
2-FBP	*146*	*ZX*	*30 - 140*	*09/02/10 12:10*	*09/07/10 20:52*	*2*
p-Terphenyl-d14	*94.4*		*30 - 150*	*09/02/10 12:10*	*09/07/10 20:52*	*2*

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	**346**	**RL1, Q2**	31.6		mg/kg dry	☼	09/02/10 08:44	09/07/10 20:25	1
Residual Range Organics	ND		79.0		mg/kg dry	☼	09/02/10 08:44	09/07/10 20:25	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*83.5*		*50 - 150*	*09/02/10 08:44*	*09/07/10 20:25*	*1*
Triacontane	*81.5*		*50 - 150*	*09/02/10 08:44*	*09/07/10 20:25*	*1*

Client Sample ID: 10JUNAAOFB14S8

Lab Sample ID: ATH0081-05

Date Collected: 08/24/10 16:00

Matrix: Soil

Date Received: 08/27/10 09:38

Percent Solids: 95.2

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		1.53		mg/kg dry	☼	09/05/10 07:00	09/05/10 15:30	33.3
Benzene	ND		0.00612		mg/kg dry	☼	09/05/10 07:00	09/05/10 15:30	33.3
Toluene	ND		0.0153		mg/kg dry	☼	09/05/10 07:00	09/05/10 15:30	33.3
Ethylbenzene	ND		0.0153		mg/kg dry	☼	09/05/10 07:00	09/05/10 15:30	33.3
Xylenes (total)	ND		0.0229		mg/kg dry	☼	09/05/10 07:00	09/05/10 15:30	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*98.0*		*75 - 125*	*09/05/10 07:00*	*09/05/10 15:30*	*33.3*
a,a,a-TFT	*85.6*		*50 - 150*	*09/05/10 07:00*	*09/05/10 15:30*	*33.3*
Toluene-d8	*94.7*		*75 - 125*	*09/05/10 07:00*	*09/05/10 15:30*	*33.3*
4-BFB	*97.6*		*75 - 125*	*09/05/10 07:00*	*09/05/10 15:30*	*33.3*

Client Sample ID: 10JUNAAOFB14S8

Lab Sample ID: ATH0081-05
Date Collected: 08/24/10 16:00
Matrix: Soil
Date Received: 08/27/10 09:38
Percent Solids: 95.2

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		20.6		mg/kg dry	☼	09/02/10 08:44	09/07/10 20:25	1
Residual Range Organics	ND		51.5		mg/kg dry	☼	09/02/10 08:44	09/07/10 20:25	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*89.5*		*50 - 150*	*09/02/10 08:44*	*09/07/10 20:25*	*1*
Triacontane	*88.4*		*50 - 150*	*09/02/10 08:44*	*09/07/10 20:25*	*1*

Client Sample ID: 10JUNAAOFB14S9

Lab Sample ID: ATH0081-06
Date Collected: 08/24/10 16:25
Matrix: Soil
Date Received: 08/27/10 09:38
Percent Solids: 91.8

Method: EPA 8270 mod. - Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	**0.341**		0.109		mg/kg dry	☼	09/02/10 12:10	09/03/10 13:36	10
2-Methylnaphthalene	**3.27**		0.109		mg/kg dry	☼	09/02/10 12:10	09/03/10 13:36	10
1-Methylnapthalene	**2.61**		0.109		mg/kg dry	☼	09/02/10 12:10	09/03/10 13:36	10
Acenaphthylene	ND		0.109		mg/kg dry	☼	09/02/10 12:10	09/03/10 13:36	10
Acenaphthene	**0.160**		0.109		mg/kg dry	☼	09/02/10 12:10	09/03/10 13:36	10
Fluorene	**0.116**		0.109		mg/kg dry	☼	09/02/10 12:10	09/03/10 13:36	10
Phenanthrene	ND		0.109		mg/kg dry	☼	09/02/10 12:10	09/03/10 13:36	10
Anthracene	ND		0.109		mg/kg dry	☼	09/02/10 12:10	09/03/10 13:36	10
Fluoranthene	ND		0.109		mg/kg dry	☼	09/02/10 12:10	09/03/10 13:36	10
Pyrene	ND		0.109		mg/kg dry	☼	09/02/10 12:10	09/03/10 13:36	10
Benzo (a) anthracene	ND		0.109		mg/kg dry	☼	09/02/10 12:10	09/03/10 13:36	10
Chrysene	ND		0.109		mg/kg dry	☼	09/02/10 12:10	09/03/10 13:36	10
Benzo (b) fluoranthene	ND		0.109		mg/kg dry	☼	09/02/10 12:10	09/03/10 13:36	10
Benzo (k) fluoranthene	ND		0.109		mg/kg dry	☼	09/02/10 12:10	09/03/10 13:36	10
Benzo (a) pyrene	ND		0.109		mg/kg dry	☼	09/02/10 12:10	09/03/10 13:36	10
Indeno (1,2,3-cd) pyrene	ND		0.109		mg/kg dry	☼	09/02/10 12:10	09/03/10 13:36	10
Dibenzo (a,h) anthracene	ND		0.109		mg/kg dry	☼	09/02/10 12:10	09/03/10 13:36	10
Benzo (ghi) perylene	ND		0.109		mg/kg dry	☼	09/02/10 12:10	09/03/10 13:36	10

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*178*	*ZX*	*30 - 140*	*09/02/10 12:10*	*09/03/10 13:36*	*10*
2-FBP	*114*		*30 - 140*	*09/02/10 12:10*	*09/03/10 13:36*	*10*
p-Terphenyl-d14	*98.0*		*30 - 150*	*09/02/10 12:10*	*09/03/10 13:36*	*10*

Client Sample ID: 10JUNAAOFB15S2

Lab Sample ID: ATH0081-07
Date Collected: 08/24/10 18:30
Matrix: Soil
Date Received: 08/27/10 09:38
Percent Solids: 96.8

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		1.37		mg/kg dry	☼	09/05/10 07:00	09/05/10 16:01	33.3
Benzene	ND		0.00547		mg/kg dry	☼	09/05/10 07:00	09/05/10 16:01	33.3
Toluene	ND		0.0137		mg/kg dry	☼	09/05/10 07:00	09/05/10 16:01	33.3
Ethylbenzene	ND		0.0137		mg/kg dry	☼	09/05/10 07:00	09/05/10 16:01	33.3
Xylenes (total)	ND		0.0205		mg/kg dry	☼	09/05/10 07:00	09/05/10 16:01	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*93.5*		*75 - 125*	*09/05/10 07:00*	*09/05/10 16:01*	*33.3*

Client Sample ID: 10JUNAAOFB15S2

Lab Sample ID: ATH0081-07
Date Collected: 08/24/10 18:30
Matrix: Soil
Date Received: 08/27/10 09:38
Percent Solids: 96.8

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B (Continued)

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-TFT	*95.9*		*50 - 150*	*09/05/10 07:00*	*09/05/10 16:01*	*33.3*
Toluene-d8	*93.4*		*75 - 125*	*09/05/10 07:00*	*09/05/10 16:01*	*33.3*
4-BFB	*95.9*		*75 - 125*	*09/05/10 07:00*	*09/05/10 16:01*	*33.3*

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		20.2		mg/kg dry	☼	09/02/10 08:44	09/07/10 15:09	1
Residual Range Organics	ND		50.4		mg/kg dry	☼	09/02/10 08:44	09/07/10 15:09	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*84.5*		*50 - 150*	*09/02/10 08:44*	*09/07/10 15:09*	*1*
Triacontane	*84.7*		*50 - 150*	*09/02/10 08:44*	*09/07/10 15:09*	*1*

Client Sample ID: 10JUNAAOFB15S4

Lab Sample ID: ATH0081-08
Date Collected: 08/24/10 18:50
Matrix: Soil
Date Received: 08/27/10 09:38
Percent Solids: 97.2

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		0.981		mg/kg dry	☼	09/05/10 07:00	09/05/10 21:54	33.3
Benzene	ND		0.00392		mg/kg dry	☼	09/05/10 07:00	09/05/10 21:54	33.3
Toluene	ND		0.00981		mg/kg dry	☼	09/05/10 07:00	09/05/10 21:54	33.3
Ethylbenzene	ND		0.00981		mg/kg dry	☼	09/05/10 07:00	09/05/10 21:54	33.3
Xylenes (total)	ND		0.0147		mg/kg dry	☼	09/05/10 07:00	09/05/10 21:54	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*99.3*	*C4*	*75 - 125*	*09/05/10 07:00*	*09/05/10 21:54*	*33.3*
a,a,a-TFT	*103*		*50 - 150*	*09/05/10 07:00*	*09/05/10 21:54*	*33.3*
Toluene-d8	*92.5*		*75 - 125*	*09/05/10 07:00*	*09/05/10 21:54*	*33.3*
4-BFB	*221*	*Z2*	*75 - 125*	*09/05/10 07:00*	*09/05/10 21:54*	*33.3*

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		19.1		mg/kg dry	☼	09/02/10 08:44	09/07/10 20:57	1
Residual Range Organics	ND		47.8		mg/kg dry	☼	09/02/10 08:44	09/07/10 20:57	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*82.5*		*50 - 150*	*09/02/10 08:44*	*09/07/10 20:57*	*1*
Triacontane	*81.5*		*50 - 150*	*09/02/10 08:44*	*09/07/10 20:57*	*1*

Client Sample ID: 10JUNAAOFB16S1

Lab Sample ID: ATH0081-09
Date Collected: 08/25/10 14:50
Matrix: Soil
Date Received: 08/27/10 09:38
Percent Solids: 96.9

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		1.38		mg/kg dry	☼	09/05/10 07:00	09/05/10 19:16	33.3
Benzene	ND		0.00552		mg/kg dry	☼	09/05/10 07:00	09/05/10 19:16	33.3
Toluene	ND		0.0138		mg/kg dry	☼	09/05/10 07:00	09/05/10 19:16	33.3
Ethylbenzene	ND		0.0138		mg/kg dry	☼	09/05/10 07:00	09/05/10 19:16	33.3

Client Sample ID: 10JUNAAOFB16S1

Lab Sample ID: ATH0081-09
Date Collected: 08/25/10 14:50
Matrix: Soil
Date Received: 08/27/10 09:38
Percent Solids: 96.9

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes (total)	ND		0.0207		mg/kg dry	☼	09/05/10 07:00	09/05/10 19:16	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*44.7*	*Z6, C4*	*75 - 125*	*09/05/10 07:00*	*09/05/10 19:16*	*33.3*
a,a,a-TFT	*87.0*		*50 - 150*	*09/05/10 07:00*	*09/05/10 19:16*	*33.3*
Toluene-d8	*92.4*		*75 - 125*	*09/05/10 07:00*	*09/05/10 19:16*	*33.3*
4-BFB	*93.5*		*75 - 125*	*09/05/10 07:00*	*09/05/10 19:16*	*33.3*

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		20.5		mg/kg dry	☼	09/02/10 08:44	09/07/10 20:57	1
Residual Range Organics	ND		51.3		mg/kg dry	☼	09/02/10 08:44	09/07/10 20:57	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*97.3*		*50 - 150*	*09/02/10 08:44*	*09/07/10 20:57*	*1*
Triacontane	*94.4*		*50 - 150*	*09/02/10 08:44*	*09/07/10 20:57*	*1*

Client Sample ID: 10JUNAAOFB16S4

Lab Sample ID: ATH0081-10
Date Collected: 08/25/10 14:35
Matrix: Soil
Date Received: 08/27/10 09:38
Percent Solids: 95.9

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		1.06		mg/kg dry	☼	09/05/10 07:00	09/05/10 19:47	33.3
Benzene	ND		0.00423		mg/kg dry	☼	09/05/10 07:00	09/05/10 19:47	33.3
Toluene	ND		0.0106		mg/kg dry	☼	09/05/10 07:00	09/05/10 19:47	33.3
Ethylbenzene	ND		0.0106		mg/kg dry	☼	09/05/10 07:00	09/05/10 19:47	33.3
Xylenes (total)	ND		0.0159		mg/kg dry	☼	09/05/10 07:00	09/05/10 19:47	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*105*	*C4*	*75 - 125*	*09/05/10 07:00*	*09/05/10 19:47*	*33.3*
a,a,a-TFT	*90.3*		*50 - 150*	*09/05/10 07:00*	*09/05/10 19:47*	*33.3*
Toluene-d8	*92.6*		*75 - 125*	*09/05/10 07:00*	*09/05/10 19:47*	*33.3*
4-BFB	*101*		*75 - 125*	*09/05/10 07:00*	*09/05/10 19:47*	*33.3*

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		20.4		mg/kg dry	☼	09/02/10 08:44	09/07/10 21:29	1
Residual Range Organics	ND		51.1		mg/kg dry	☼	09/02/10 08:44	09/07/10 21:29	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*84.5*		*50 - 150*	*09/02/10 08:44*	*09/07/10 21:29*	*1*
Triacontane	*85.2*		*50 - 150*	*09/02/10 08:44*	*09/07/10 21:29*	*1*

Client Sample ID: 10JUNAAOFB17S2

Lab Sample ID: ATH0081-11
Date Collected: 08/25/10 11:20
Matrix: Soil
Date Received: 08/27/10 09:38
Percent Solids: 94.9

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		1.43		mg/kg dry	☼	09/05/10 07:00	09/05/10 20:19	33.3

Client Sample ID: 10JUNAAOFB17S2

Lab Sample ID: ATH0081-11

Date Collected: 08/25/10 11:20

Matrix: Soil

Date Received: 08/27/10 09:38

Percent Solids: 94.9

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00571		mg/kg dry	☼	09/05/10 07:00	09/05/10 20:19	33.3
Toluene	ND		0.0143		mg/kg dry	☼	09/05/10 07:00	09/05/10 20:19	33.3
Ethylbenzene	ND		0.0143		mg/kg dry	☼	09/05/10 07:00	09/05/10 20:19	33.3
Xylenes (total)	ND		0.0214		mg/kg dry	☼	09/05/10 07:00	09/05/10 20:19	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*97.9*	*C4*	*75 - 125*	*09/05/10 07:00*	*09/05/10 20:19*	*33.3*
a,a,a-TFT	*105*		*50 - 150*	*09/05/10 07:00*	*09/05/10 20:19*	*33.3*
Toluene-d8	*92.8*		*75 - 125*	*09/05/10 07:00*	*09/05/10 20:19*	*33.3*
4-BFB	*95.2*		*75 - 125*	*09/05/10 07:00*	*09/05/10 20:19*	*33.3*

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		20.6		mg/kg dry	☼	09/02/10 08:44	09/07/10 21:29	1
Residual Range Organics	ND		51.6		mg/kg dry	☼	09/02/10 08:44	09/07/10 21:29	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*77.5*		*50 - 150*	*09/02/10 08:44*	*09/07/10 21:29*	*1*
Triacontane	*77.1*		*50 - 150*	*09/02/10 08:44*	*09/07/10 21:29*	*1*

Client Sample ID: 10JUNAAOFB17S3

Lab Sample ID: ATH0081-12

Date Collected: 08/25/10 11:34

Matrix: Soil

Date Received: 08/27/10 09:38

Percent Solids: 76.3

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		2.33		mg/kg dry	☼	09/05/10 07:00	09/05/10 20:50	33.3
Benzene	ND		0.00933		mg/kg dry	☼	09/05/10 07:00	09/05/10 20:50	33.3
Toluene	ND		0.0233		mg/kg dry	☼	09/05/10 07:00	09/05/10 20:50	33.3
Ethylbenzene	ND		0.0233		mg/kg dry	☼	09/05/10 07:00	09/05/10 20:50	33.3
Xylenes (total)	ND		0.0350		mg/kg dry	☼	09/05/10 07:00	09/05/10 20:50	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*97.1*	*C4*	*75 - 125*	*09/05/10 07:00*	*09/05/10 20:50*	*33.3*
a,a,a-TFT	*138*		*50 - 150*	*09/05/10 07:00*	*09/05/10 20:50*	*33.3*
Toluene-d8	*91.2*		*75 - 125*	*09/05/10 07:00*	*09/05/10 20:50*	*33.3*
4-BFB	*98.3*		*75 - 125*	*09/05/10 07:00*	*09/05/10 20:50*	*33.3*

Method: EPA 8270 mod. - Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.0107		mg/kg dry	☼	09/02/10 12:10	09/03/10 21:00	1
2-Methylnaphthalene	ND		0.0107		mg/kg dry	☼	09/02/10 12:10	09/03/10 21:00	1
1-Methylnapthalene	ND		0.0107		mg/kg dry	☼	09/02/10 12:10	09/03/10 21:00	1
Acenaphthylene	ND		0.0107		mg/kg dry	☼	09/02/10 12:10	09/03/10 21:00	1
Acenaphthene	ND		0.0107		mg/kg dry	☼	09/02/10 12:10	09/03/10 21:00	1
Fluorene	ND		0.0107		mg/kg dry	☼	09/02/10 12:10	09/03/10 21:00	1
Phenanthrene	ND		0.0107		mg/kg dry	☼	09/02/10 12:10	09/03/10 21:00	1
Anthracene	ND		0.0107		mg/kg dry	☼	09/02/10 12:10	09/03/10 21:00	1
Fluoranthene	ND		0.0107		mg/kg dry	☼	09/02/10 12:10	09/03/10 21:00	1
Pyrene	ND		0.0107		mg/kg dry	☼	09/02/10 12:10	09/03/10 21:00	1
Benzo (a) anthracene	ND		0.0107		mg/kg dry	☼	09/02/10 12:10	09/03/10 21:00	1

Client Sample ID: 10JUNAAOFB17S3

Lab Sample ID: ATH0081-12

Date Collected: 08/25/10 11:34

Matrix: Soil

Date Received: 08/27/10 09:38

Percent Solids: 93.8

Method: EPA 8270 mod. - Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	ND		0.0107		mg/kg dry	☼	09/02/10 12:10	09/03/10 21:00	1
Benzo (b) fluoranthene	ND		0.0107		mg/kg dry	☼	09/02/10 12:10	09/03/10 21:00	1
Benzo (k) fluoranthene	ND		0.0107		mg/kg dry	☼	09/02/10 12:10	09/03/10 21:00	1
Benzo (a) pyrene	ND		0.0107		mg/kg dry	☼	09/02/10 12:10	09/03/10 21:00	1
Indeno (1,2,3-cd) pyrene	ND		0.0107		mg/kg dry	☼	09/02/10 12:10	09/03/10 21:00	1
Dibenzo (a,h) anthracene	ND		0.0107		mg/kg dry	☼	09/02/10 12:10	09/03/10 21:00	1
Benzo (ghi) perylene	ND		0.0107		mg/kg dry	☼	09/02/10 12:10	09/03/10 21:00	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*68.6*		*30 - 140*	*09/02/10 12:10*	*09/03/10 21:00*	*1*
2-FBP	*107*		*30 - 140*	*09/02/10 12:10*	*09/03/10 21:00*	*1*
p-Terphenyl-d14	*108*		*30 - 150*	*09/02/10 12:10*	*09/03/10 21:00*	*1*

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		25.8		mg/kg dry	☼	09/02/10 08:44	09/07/10 22:01	1
Residual Range Organics	ND		64.6		mg/kg dry	☼	09/02/10 08:44	09/07/10 22:01	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*86.9*		*50 - 150*	*09/02/10 08:44*	*09/07/10 22:01*	*1*
Triacontane	*86.2*		*50 - 150*	*09/02/10 08:44*	*09/07/10 22:01*	*1*

Client Sample ID: 10JUNAAOFB14GW1

Lab Sample ID: ATH0081-13

Date Collected: 08/25/10 13:15

Matrix: Water

Date Received: 08/27/10 09:38

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	**81.4**		50.0		ug/l		09/05/10 12:48	09/06/10 21:18	1
Benzene	ND		0.500		ug/l		09/05/10 12:48	09/06/10 21:18	1
Toluene	ND		1.00		ug/l		09/05/10 12:48	09/06/10 21:18	1
Ethylbenzene	ND		1.00		ug/l		09/05/10 12:48	09/06/10 21:18	1
Xylenes (total)	ND		3.00		ug/l		09/05/10 12:48	09/06/10 21:18	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB	*94.4*		*85 - 115*	*09/05/10 12:48*	*09/06/10 21:18*	*1*
Dibromofluoromethane	*29.1*	*Z6, C4*	*65 - 125*	*09/05/10 12:48*	*09/06/10 21:18*	*1*
Toluene-d8	*89.3*		*78 - 115*	*09/05/10 12:48*	*09/06/10 21:18*	*1*

Method: EPA 8270 mod. - Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	**0.958**		0.0993		ug/l		08/31/10 09:43	08/31/10 16:26	1
2-Methylnaphthalene	ND		0.0993		ug/l		08/31/10 09:43	08/31/10 16:26	1
1-Methylnapthalene	**0.948**		0.0993		ug/l		08/31/10 09:43	08/31/10 16:26	1
Acenaphthylene	ND		0.0993		ug/l		08/31/10 09:43	08/31/10 16:26	1
Acenaphthene	**0.129**		0.0993		ug/l		08/31/10 09:43	08/31/10 16:26	1
Fluorene	**0.233**		0.0993		ug/l		08/31/10 09:43	08/31/10 16:26	1
Phenanthrene	ND		0.0993		ug/l		08/31/10 09:43	08/31/10 16:26	1
Anthracene	ND		0.0993		ug/l		08/31/10 09:43	08/31/10 16:26	1
Fluoranthene	ND		0.0993		ug/l		08/31/10 09:43	08/31/10 16:26	1
Pyrene	ND		0.0993		ug/l		08/31/10 09:43	08/31/10 16:26	1
Benzo (a) anthracene	ND		0.0993		ug/l		08/31/10 09:43	08/31/10 16:26	1

Client Sample ID: 10JUNAAOFB14GW1

Lab Sample ID: ATH0081-13

Date Collected: 08/25/10 13:15

Matrix: Water

Date Received: 08/27/10 09:38

Method: EPA 8270 mod. - Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	ND		0.0993		ug/l		08/31/10 09:43	08/31/10 16:26	1
Benzo (b) fluoranthene	ND		0.0993		ug/l		08/31/10 09:43	08/31/10 16:26	1
Benzo (k) fluoranthene	ND		0.0993		ug/l		08/31/10 09:43	08/31/10 16:26	1
Benzo (a) pyrene	ND		0.0993		ug/l		08/31/10 09:43	08/31/10 16:26	1
Indeno (1,2,3-cd) pyrene	ND		0.0993		ug/l		08/31/10 09:43	08/31/10 16:26	1
Dibenzo (a,h) anthracene	ND		0.0993		ug/l		08/31/10 09:43	08/31/10 16:26	1
Benzo (ghi) perylene	ND		0.0993		ug/l		08/31/10 09:43	08/31/10 16:26	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*53.9*		*30 - 150*	*08/31/10 09:43*	*08/31/10 16:26*	*1*
2-FBP	*68.1*		*21 - 122*	*08/31/10 09:43*	*08/31/10 16:26*	*1*
p-Terphenyl-d14	*99.6*		*35 - 150*	*08/31/10 09:43*	*08/31/10 16:26*	*1*

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	**1.43**	**Q11**	0.407		mg/l		08/30/10 14:08	09/03/10 20:59	1
Residual Range Organics	ND		0.407		mg/l		08/30/10 14:08	09/03/10 20:59	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*74.3*		*50 - 150*	*08/30/10 14:08*	*09/03/10 20:59*	*1*
Triacontane	*73.2*		*50 - 150*	*08/30/10 14:08*	*09/03/10 20:59*	*1*

Client Sample ID: 10JUNAAOFB14GW2

Lab Sample ID: ATH0081-14

Date Collected: 08/25/10 13:20

Matrix: Water

Date Received: 08/27/10 09:38

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	**78.3**		50.0		ug/l		09/05/10 12:48	09/06/10 21:50	1
Benzene	ND		0.500		ug/l		09/05/10 12:48	09/06/10 21:50	1
Toluene	ND		1.00		ug/l		09/05/10 12:48	09/06/10 21:50	1
Ethylbenzene	ND		1.00		ug/l		09/05/10 12:48	09/06/10 21:50	1
Xylenes (total)	ND		3.00		ug/l		09/05/10 12:48	09/06/10 21:50	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB	*94.7*		*85 - 115*	*09/05/10 12:48*	*09/06/10 21:50*	*1*
Dibromofluoromethane	*44.1*	*Z6, C4*	*65 - 125*	*09/05/10 12:48*	*09/06/10 21:50*	*1*
Toluene-d8	*90.1*		*78 - 115*	*09/05/10 12:48*	*09/06/10 21:50*	*1*

Method: EPA 8270 mod. - Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	**1.31**		0.0983		ug/l		08/31/10 09:43	08/31/10 16:51	1
2-Methylnaphthalene	ND		0.0983		ug/l		08/31/10 09:43	08/31/10 16:51	1
1-Methylnapthalene	**3.01**		0.0983		ug/l		08/31/10 09:43	08/31/10 16:51	1
Acenaphthylene	ND		0.0983		ug/l		08/31/10 09:43	08/31/10 16:51	1
Acenaphthene	**0.143**		0.0983		ug/l		08/31/10 09:43	08/31/10 16:51	1
Fluorene	**0.275**		0.0983		ug/l		08/31/10 09:43	08/31/10 16:51	1
Phenanthrene	ND		0.0983		ug/l		08/31/10 09:43	08/31/10 16:51	1
Anthracene	ND		0.0983		ug/l		08/31/10 09:43	08/31/10 16:51	1
Fluoranthene	ND		0.0983		ug/l		08/31/10 09:43	08/31/10 16:51	1
Pyrene	ND		0.0983		ug/l		08/31/10 09:43	08/31/10 16:51	1
Benzo (a) anthracene	ND		0.0983		ug/l		08/31/10 09:43	08/31/10 16:51	1

Client Sample ID: 10JUNAAOFB14GW2

Lab Sample ID: ATH0081-14

Date Collected: 08/25/10 13:20

Matrix: Water

Date Received: 08/27/10 09:38

Method: EPA 8270 mod. - Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	ND		0.0983		ug/l		08/31/10 09:43	08/31/10 16:51	1
Benzo (b) fluoranthene	ND		0.0983		ug/l		08/31/10 09:43	08/31/10 16:51	1
Benzo (k) fluoranthene	ND		0.0983		ug/l		08/31/10 09:43	08/31/10 16:51	1
Benzo (a) pyrene	ND		0.0983		ug/l		08/31/10 09:43	08/31/10 16:51	1
Indeno (1,2,3-cd) pyrene	ND		0.0983		ug/l		08/31/10 09:43	08/31/10 16:51	1
Dibenzo (a,h) anthracene	ND		0.0983		ug/l		08/31/10 09:43	08/31/10 16:51	1
Benzo (ghi) perylene	ND		0.0983		ug/l		08/31/10 09:43	08/31/10 16:51	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*51.1*		*30 - 150*	*08/31/10 09:43*	*08/31/10 16:51*	*1*
2-FBP	*61.0*		*21 - 122*	*08/31/10 09:43*	*08/31/10 16:51*	*1*
p-Terphenyl-d14	*93.1*		*35 - 150*	*08/31/10 09:43*	*08/31/10 16:51*	*1*

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	**1.96**	**Q11**	0.400		mg/l		08/30/10 14:08	09/03/10 20:59	1
Residual Range Organics	ND		0.400		mg/l		08/30/10 14:08	09/03/10 20:59	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*96.0*		*50 - 150*	*08/30/10 14:08*	*09/03/10 20:59*	*1*
Triacontane	*94.4*		*50 - 150*	*08/30/10 14:08*	*09/03/10 20:59*	*1*

Client Sample ID: 10JUNAAOFSTB

Lab Sample ID: ATH0081-15

Date Collected: 08/25/10 12:00

Matrix: Soil

Date Received: 08/27/10 09:38

Percent Solids: 100

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		3.33		mg/kg dry	☼	09/05/10 07:00	09/05/10 21:22	33.3
Benzene	ND		0.0133		mg/kg dry	☼	09/05/10 07:00	09/05/10 21:22	33.3
Toluene	ND		0.0333		mg/kg dry	☼	09/05/10 07:00	09/05/10 21:22	33.3
Ethylbenzene	ND		0.0333		mg/kg dry	☼	09/05/10 07:00	09/05/10 21:22	33.3
Xylenes (total)	ND		0.0500		mg/kg dry	☼	09/05/10 07:00	09/05/10 21:22	33.3

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*98.0*	*C4*	*75 - 125*	*09/05/10 07:00*	*09/05/10 21:22*	*33.3*
a,a,a-TFT	*103*		*50 - 150*	*09/05/10 07:00*	*09/05/10 21:22*	*33.3*
Toluene-d8	*92.0*		*75 - 125*	*09/05/10 07:00*	*09/05/10 21:22*	*33.3*
4-BFB	*97.0*		*75 - 125*	*09/05/10 07:00*	*09/05/10 21:22*	*33.3*

Client Sample ID: 10JUNAAOFWTB1

Lab Sample ID: ATH0081-16

Date Collected: 08/25/10 12:00

Matrix: Water

Date Received: 08/27/10 09:38

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		50.0		ug/l		09/05/10 12:48	09/06/10 22:22	1
Benzene	ND		0.500		ug/l		09/05/10 12:48	09/06/10 22:22	1
Toluene	ND		1.00		ug/l		09/05/10 12:48	09/06/10 22:22	1
Ethylbenzene	ND		1.00		ug/l		09/05/10 12:48	09/06/10 22:22	1
Xylenes (total)	ND		3.00		ug/l		09/05/10 12:48	09/06/10 22:22	1

Client Sample ID: 10JUNAAOFWTB1
Date Collected: 08/25/10 12:00
Date Received: 08/27/10 09:38

Lab Sample ID: ATH0081-16
Matrix: Water

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-BFB	94.0		85 - 115	09/05/10 12:48	09/06/10 22:22	1
Dibromofluoromethane	46.8	Z6, C4	65 - 125	09/05/10 12:48	09/06/10 22:22	1
Toluene-d8	89.6		78 - 115	09/05/10 12:48	09/06/10 22:22	1

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B

Matrix: Soil **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)			
		DBFM	TFT	TOL	4-BFB
Lab Sample ID	Client Sample ID	(75-125)	(50-150)	(75-125)	(75-125)
10I0018-BLK1	10I0018-BLK1	97.8	98.2	93.8	99.3
10I0018-BS1	10I0018-BS1	99.9	96.1	94.5	101
10I0018-BS2	10I0018-BS2	98.5	97.5	94.0	95.0
10I0018-BSD1	10I0018-BSD1	97.7	96.1	95.1	99.5
10I0018-BSD2	10I0018-BSD2	97.6	91.1	95.2	95.5
10I0018-DUP1	10JUNAAOFB13S5	91.9	80.8	95.4	103
10I0018-MS1	10JUNAAOFB14S3	97.8	100	94.9	98.3
10I0018-MSD1	10JUNAAOFB14S3	94.1	98.5	93.5	97.9
10I0034-BLK1	10I0034-BLK1	102	106	84.3	95.7
10I0034-BS1	10I0034-BS1	102	103	86.6	93.1
10I0034-BS2	10I0034-BS2	104	106	86.2	92.3
10I0034-BSD1	10I0034-BSD1	104	104	87.4	95.9
10I0034-BSD2	10I0034-BSD2	106	104	85.0	93.8
10I0034-DUP1	ATH0082-05	88.8	115	85.5	91.8
10I0034-MS1	ATH0082-05	99.4	111	86.5	89.5
10I0034-MSD1	ATH0082-05	107	113	86.8	93.4
ATH0081-01	10JUNAAOFB13S3	106	84.2	97.3	100
ATH0081-02	10JUNAAOFB13S5	99.7	85.5	95.1	101
ATH0081-03	10JUNAAOFB14S3	91.1	100	96.0	100
ATH0081-04	10JUNAAOFB14S5	98.7	89.7	108	72.9 Z6
ATH0081-04 - RE1	10JUNAAOFB14S5	73.4 Z6, A-01	125 RL7, A-01	84.5 A-01	87.3 A-01
ATH0081-05	10JUNAAOFB14S8	98.0	85.6	94.7	97.6
ATH0081-07	10JUNAAOFB15S2	93.5	95.9	93.4	95.9
ATH0081-08	10JUNAAOFB15S4	99.3 C4	103	92.5	221 Z2
ATH0081-09	10JUNAAOFB16S1	44.7 Z6, C4	87.0	92.4	93.5
ATH0081-10	10JUNAAOFB16S4	105 C4	90.3	92.6	101
ATH0081-11	10JUNAAOFB17S2	97.9 C4	105	92.8	95.2
ATH0081-12	10JUNAAOFB17S3	97.1 C4	138	91.2	98.3
ATH0081-15	10JUNAAOFSTB	98.0 C4	103	92.0	97.0

Surrogate Legend

DBFM = Dibromofluoromethane

TFT = a,a,a-TFT

TOL = Toluene-d8

4-BFB = 4-BFB

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B

Matrix: Water **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)		
		4-BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(85-115)	(65-125)	(78-115)
10I0020-BLK1	10I0020-BLK1	93.9	33.0 Z6, C4	90.7
10I0020-BS1	10I0020-BS1	94.0	99.7 C4	96.1
10I0020-BS2	10I0020-BS2	106	104 C4	98.2
10I0020-BSD1	10I0020-BSD1	94.5	100 C4	96.4
10I0020-BSD2	10I0020-BSD2	94.2	98.3 C4	93.3

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B (Continued)

Matrix: Water **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)		
		4-BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(85-115)	(65-125)	(78-115)
10I0020-DUP1	ATH0090-01	92.8	1.42 Z6, C4	91.5
10I0020-MS1	ATH0090-03	93.9	32.7 Z6, C4	91.0
10I0020-MSD1	ATH0090-03	94.1	13.4 Z6, C4	92.1
ATH0081-13	10JUNAAOFB14GW1	94.4	29.1 Z6, C4	89.3
ATH0081-14	10JUNAAOFB14GW2	94.7	44.1 Z6, C4	90.1
ATH0081-16	10JUNAAOFWTB1	94.0	46.8 Z6, C4	89.6

Surrogate Legend

4-BFB = 4-BFB

DBFM = Dibromofluoromethane

TOL = Toluene-d8

Method: EPA 8270 mod. - Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

Matrix: Soil **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)		
		NBZ	2-FBP	TPH
Lab Sample ID	Client Sample ID	(30-140)	(30-140)	(30-150)
10I0015-BLK1	10I0015-BLK1	62.0	103	123
10I0015-BS1	10I0015-BS1	52.0	86.0	93.8
10I0015-MS1	10JUNAAOFB17S3	36.0	72.0	100
10I0015-MSD1	10JUNAAOFB17S3	52.0	88.0	96.0
ATH0081-04	10JUNAAOFB14S5		146 ZX	94.4
ATH0081-04	10JUNAAOFB14S5	105		
ATH0081-06	10JUNAAOFB14S9	178 ZX	114	98.0
ATH0081-12	10JUNAAOFB17S3	68.6	107	108

Surrogate Legend

NBZ = Nitrobenzene-d5

2-FBP = 2-FBP

TPH = p-Terphenyl-d14

Method: EPA 8270 mod. - Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

Matrix: Water **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)		
		NBZ	2-FBP	TPH
Lab Sample ID	Client Sample ID	(30-150)	(21-122)	(35-150)
10H0157-BLK1	10H0157-BLK1	85.9	104	97.1
10H0157-BS1	10H0157-BS1	78.2	99.6	89.7
10H0157-BSD1	10H0157-BSD1	74.4	97.7	87.8
ATH0081-13	10JUNAAOFB14GW1	53.9	68.1	99.6
ATH0081-14	10JUNAAOFB14GW2	51.1	61.0	93.1

Surrogate Legend

NBZ = Nitrobenzene-d5
2-FBP = 2-FBP
TPH = p-Terphenyl-d14

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Matrix: Soil **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)	
		1COD	TC
Lab Sample ID	Client Sample ID	(50-150)	(50-150)
10I0008-BLK1	10I0008-BLK1	87.3	87.3
10I0008-DUP1	10JUNAAOFB13S3	93.5	92.6
10I0008-MS1	ATH0072-22	97.1	93.6
10I0008-MSD1	ATH0072-22	108	91.5
ATH0081-01	10JUNAAOFB13S3	94.3	92.3
ATH0081-02	10JUNAAOFB13S5	76.0	83.8
ATH0081-03	10JUNAAOFB14S3	93.0	90.8
ATH0081-04	10JUNAAOFB14S5	83.5	81.5
ATH0081-05	10JUNAAOFB14S8	89.5	88.4
ATH0081-07	10JUNAAOFB15S2	84.5	84.7
ATH0081-08	10JUNAAOFB15S4	82.5	81.5
ATH0081-09	10JUNAAOFB16S1	97.3	94.4
ATH0081-10	10JUNAAOFB16S4	84.5	85.2
ATH0081-11	10JUNAAOFB17S2	77.5	77.1
ATH0081-12	10JUNAAOFB17S3	86.9	86.2

Surrogate Legend
1COD = 1-Chlorooctadecane
TC = Triacontane

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Matrix: Soil **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)	
		1COD	TC
Lab Sample ID	Client Sample ID	(60-120)	(60-120)
10I0008-BS1	10I0008-BS1	92.0	89.7
10I0008-BSD1	10I0008-BSD1	92.8	88.9

Surrogate Legend
1COD = 1-Chlorooctadecane
TC = Triacontane

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Matrix: Water **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)	
		1COD	TC
Lab Sample ID	Client Sample ID	(50-150)	(50-150)
10H0123-BLK1	10H0123-BLK1	90.5	100
10H0123-DUP1	ATH0064-02	83.7	94.0
ATH0081-13	10JUNAAOFB14GW1	74.3	73.2
ATH0081-14	10JUNAAOFB14GW2	96.0	94.4

Surrogate Legend

1COD = 1-Chlorooctadecane
TC = Triacontane

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Matrix: Water **Prep Type: total**

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	1COD (60-120)	TC (60-120)								
10H0123-BS1	10H0123-BS1	100	106								
10H0123-BSD1	10H0123-BSD1	101	105								

Surrogate Legend

1COD = 1-Chlorooctadecane
TC = Triacontane

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B

Lab Sample ID: 10I0018-BLK1
Matrix: Soil
Analysis Batch: T000456

Client Sample ID: 10I0018-BLK1
Prep Type: total
Prep Batch: 10I0018_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		3.33		mg/kg wet		09/05/10 07:00	09/05/10 09:11	33.3
Benzene	ND		0.0133		mg/kg wet		09/05/10 07:00	09/05/10 09:11	33.3
Toluene	ND		0.0333		mg/kg wet		09/05/10 07:00	09/05/10 09:11	33.3
Ethylbenzene	ND		0.0333		mg/kg wet		09/05/10 07:00	09/05/10 09:11	33.3
Xylenes (total)	ND		0.0500		mg/kg wet		09/05/10 07:00	09/05/10 09:11	33.3

Surrogate	*Blank % Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*97.8*		*75 - 125*	*09/05/10 07:00*	*09/05/10 09:11*	*33.3*
a,a,a-TFT	*98.2*		*50 - 150*	*09/05/10 07:00*	*09/05/10 09:11*	*33.3*
Toluene-d8	*93.8*		*75 - 125*	*09/05/10 07:00*	*09/05/10 09:11*	*33.3*
4-BFB	*99.3*		*75 - 125*	*09/05/10 07:00*	*09/05/10 09:11*	*33.3*

Lab Sample ID: 10I0018-BS1
Matrix: Soil
Analysis Batch: T000456

Client Sample ID: 10I0018-BS1
Prep Type: total
Prep Batch: 10I0018_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Benzene	0.800	0.815		mg/kg wet		102	70 - 130
Toluene	0.800	0.820		mg/kg wet		102	70 - 130
Ethylbenzene	0.800	0.790		mg/kg wet		98.7	70 - 130
Xylenes (total)	2.40	2.38		mg/kg wet		99.0	70 - 130

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane	*99.9*		*75 - 125*
a,a,a-TFT	*96.1*		*50 - 150*
Toluene-d8	*94.5*		*75 - 125*
4-BFB	*101*		*75 - 125*

Lab Sample ID: 10I0018-BS2
Matrix: Soil
Analysis Batch: T000456

Client Sample ID: 10I0018-BS2
Prep Type: total
Prep Batch: 10I0018_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Gasoline Range Organics	22.0	24.6		mg/kg wet		112	60 - 120

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane	*98.5*		*75 - 125*
a,a,a-TFT	*97.5*		*50 - 150*
Toluene-d8	*94.0*		*75 - 125*
4-BFB	*95.0*		*75 - 125*

Lab Sample ID: 10I0018-BSD1
Matrix: Soil
Analysis Batch: T000456

Client Sample ID: 10I0018-BSD1
Prep Type: total
Prep Batch: 10I0018_P

Analyte	Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Benzene	0.800	0.835		mg/kg wet		104	70 - 130	2.50	20
Toluene	0.800	0.839		mg/kg wet		105	70 - 130	2.37	20

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B (Continued)

Lab Sample ID: 10I0018-BSD1 — **Client Sample ID: 10I0018-BSD1**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000456 — **Prep Batch: 10I0018_P**

Analyte			Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Ethylbenzene			0.800	0.810		mg/kg wet		101	70 - 130	2.50	20
Xylenes (total)			2.40	2.44		mg/kg wet		102	70 - 130	2.55	20

Surrogate	*LCS Dup % Recovery*	*LCS Dup Qualifier*	*Limits*
Dibromofluoromethane	*97.7*		*75 - 125*
a,a,a-TFT	*96.1*		*50 - 150*
Toluene-d8	*95.1*		*75 - 125*
4-BFB	*99.5*		*75 - 125*

Lab Sample ID: 10I0018-BSD2 — **Client Sample ID: 10I0018-BSD2**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000456 — **Prep Batch: 10I0018_P**

Analyte			Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Gasoline Range Organics			22.0	23.1		mg/kg wet		105	60 - 120	5.88	20

Surrogate	*LCS Dup % Recovery*	*LCS Dup Qualifier*	*Limits*
Dibromofluoromethane	*97.6*		*75 - 125*
a,a,a-TFT	*91.1*		*50 - 150*
Toluene-d8	*95.2*		*75 - 125*
4-BFB	*95.5*		*75 - 125*

Lab Sample ID: 10I0018-MS1 — **Client Sample ID: 10JUNAAOFB14S3**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000456 — **Prep Batch: 10I0018_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits
Benzene	ND		0.267	0.295		mg/kg dry	☼	110	60 - 140
Toluene	ND		0.267	0.302		mg/kg dry	☼	113	60 - 140
Ethylbenzene	ND		0.267	0.289		mg/kg dry	☼	108	60 - 140
Xylenes (total)	ND		0.802	0.874		mg/kg dry	☼	109	60 - 140

Surrogate	*Matrix Spike % Recovery*	*Matrix Spike Qualifier*	*Limits*
Dibromofluoromethane	*97.8*		*75 - 125*
a,a,a-TFT	*100*		*50 - 150*
Toluene-d8	*94.9*		*75 - 125*
4-BFB	*98.3*		*75 - 125*

Lab Sample ID: 10I0018-MSD1 — **Client Sample ID: 10JUNAAOFB14S3**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000456 — **Prep Batch: 10I0018_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Benzene	ND		0.267	0.306		mg/kg dry	☼	114	60 - 140	3.75	25
Toluene	ND		0.267	0.309		mg/kg dry	☼	115	60 - 140	2.12	25
Ethylbenzene	ND		0.267	0.302		mg/kg dry	☼	113	60 - 140	4.39	25
Xylenes (total)	ND		0.802	0.905		mg/kg dry	☼	113	60 - 140	3.45	25

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B (Continued)

Lab Sample ID: 10I0018-MSD1
Matrix: Soil
Analysis Batch: T000456

Client Sample ID: 10JUNAAOFB14S3
Prep Type: total
Prep Batch: 10I0018_P

Surrogate	*Matrix Spike Dup % Recovery*	*Matrix Spike Dup Qualifier*	*Limits*
Dibromofluoromethane	*94.1*		*75 - 125*
a,a,a-TFT	*98.5*		*50 - 150*
Toluene-d8	*93.5*		*75 - 125*
4-BFB	*97.9*		*75 - 125*

Lab Sample ID: 10I0018-DUP1
Matrix: Soil
Analysis Batch: T000456

Client Sample ID: 10JUNAAOFB13S5
Prep Type: total
Prep Batch: 10I0018_P

Analyte	Sample Result	Sample Qualifier		Duplicate Result	Duplicate Qualifier	Unit	D			RPD	RPD Limit
Gasoline Range Organics	ND			ND		mg/kg dry	☼				35

Surrogate	*Duplicate % Recovery*	*Duplicate Qualifier*	*Limits*
Dibromofluoromethane	*91.9*		*75 - 125*
a,a,a-TFT	*80.8*		*50 - 150*
Toluene-d8	*95.4*		*75 - 125*
4-BFB	*103*		*75 - 125*

Lab Sample ID: 10I0020-BLK1
Matrix: Water
Analysis Batch: T000456

Client Sample ID: 10I0020-BLK1
Prep Type: total
Prep Batch: 10I0020_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		50.0		ug/l		09/05/10 12:48	09/06/10 18:33	1
Benzene	ND		0.500		ug/l		09/05/10 12:48	09/06/10 18:33	1
Toluene	ND		1.00		ug/l		09/05/10 12:48	09/06/10 18:33	1
Ethylbenzene	ND		1.00		ug/l		09/05/10 12:48	09/06/10 18:33	1
Xylenes (total)	ND		3.00		ug/l		09/05/10 12:48	09/06/10 18:33	1

Surrogate	*Blank % Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-BFB	*93.9*		*85 - 115*	*09/05/10 12:48*	*09/06/10 18:33*	*1*
Dibromofluoromethane	*33.0*	*Z6, C4*	*65 - 125*	*09/05/10 12:48*	*09/06/10 18:33*	*1*
Toluene-d8	*90.7*		*78 - 115*	*09/05/10 12:48*	*09/06/10 18:33*	*1*

Lab Sample ID: 10I0020-BS1
Matrix: Water
Analysis Batch: T000456

Client Sample ID: 10I0020-BS1
Prep Type: total
Prep Batch: 10I0020_P

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits		
Benzene			20.0	21.9		ug/l		110	67 - 125		
Toluene			20.0	21.0		ug/l		105	80 - 120		
Ethylbenzene			20.0	19.4		ug/l		96.9	80 - 120		
Xylenes (total)			60.0	59.8		ug/l		99.6	80 - 120		

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
4-BFB	*94.0*		*85 - 115*
Dibromofluoromethane	*99.7*	*C4*	*65 - 125*
Toluene-d8	*96.1*		*78 - 115*

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B (Continued)

Lab Sample ID: 10I0020-BS2
Matrix: Water
Analysis Batch: T000456

Client Sample ID: 10I0020-BS2
Prep Type: total
Prep Batch: 10I0020_P

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits		
Gasoline Range Organics			550	425		ug/l		77.2	60 - 120		

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
4-BFB	*106*		*85 - 115*
Dibromofluoromethane	*104*	*C4*	*65 - 125*
Toluene-d8	*98.2*		*78 - 115*

Lab Sample ID: 10I0020-BSD1
Matrix: Water
Analysis Batch: T000456

Client Sample ID: 10I0020-BSD1
Prep Type: total
Prep Batch: 10I0020_P

Analyte			Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Benzene			20.0	22.6		ug/l		113	67 - 125	3.10	20
Toluene			20.0	21.5		ug/l		108	80 - 120	2.54	20
Ethylbenzene			20.0	19.8		ug/l		99.2	80 - 120	2.35	20
Xylenes (total)			60.0	61.4		ug/l		102	80 - 120	2.79	20

Surrogate	*LCS Dup % Recovery*	*LCS Dup Qualifier*	*Limits*
4-BFB	*94.5*		*85 - 115*
Dibromofluoromethane	*100*	*C4*	*65 - 125*
Toluene-d8	*96.4*		*78 - 115*

Lab Sample ID: 10I0020-BSD2
Matrix: Water
Analysis Batch: T000456

Client Sample ID: 10I0020-BSD2
Prep Type: total
Prep Batch: 10I0020_P

Analyte			Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Gasoline Range Organics			550	415		ug/l		75.4	60 - 120	2.39	20

Surrogate	*LCS Dup % Recovery*	*LCS Dup Qualifier*	*Limits*
4-BFB	*94.2*		*85 - 115*
Dibromofluoromethane	*98.3*	*C4*	*65 - 125*
Toluene-d8	*93.3*		*78 - 115*

Lab Sample ID: 10I0020-MS1
Matrix: Water
Analysis Batch: T000456

Client Sample ID: ATH0090-03
Prep Type: total
Prep Batch: 10I0020_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits		
Benzene	2.95		20.0	24.1		ug/l		106	65 - 138		
Toluene	0.320		20.0	21.2		ug/l		104	80 - 120		
Ethylbenzene	13.6		20.0	30.5		ug/l		84.8	76 - 130		
Xylenes (total)	15.2		60.0	71.4		ug/l		93.8	65 - 140		

Surrogate	*Matrix Spike % Recovery*	*Matrix Spike Qualifier*	*Limits*
4-BFB	*93.9*		*85 - 115*
Dibromofluoromethane	*32.7*	*Z6, C4*	*65 - 125*
Toluene-d8	*91.0*		*78 - 115*

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B (Continued)

Lab Sample ID: 10I0020-MSD1 — **Client Sample ID: ATH0090-03**
Matrix: Water — **Prep Type: total**
Analysis Batch: T000456 — **Prep Batch: 10I0020_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Benzene	2.95		20.0	24.9		ug/l		110	65 - 138	3.35	20
Toluene	0.320		20.0	21.6		ug/l		107	80 - 120	2.29	20
Ethylbenzene	13.6		20.0	33.3		ug/l		98.8	76 - 130	8.80	20
Xylenes (total)	15.2		60.0	75.4		ug/l		100	65 - 140	5.34	20

Surrogate	*Matrix Spike Dup % Recovery*	*Matrix Spike Dup Qualifier*	*Limits*
4-BFB	*94.1*		*85 - 115*
Dibromofluoromethane	*13.4*	*Z6, C4*	*65 - 125*
Toluene-d8	*92.1*		*78 - 115*

Lab Sample ID: 10I0020-DUP1 — **Client Sample ID: ATH0090-01**
Matrix: Water — **Prep Type: total**
Analysis Batch: T000456 — **Prep Batch: 10I0020_P**

Analyte	Sample Result	Sample Qualifier		Duplicate Result	Duplicate Qualifier	Unit	D			RPD	RPD Limit
Gasoline Range Organics	354			317		ug/l				10.8	12

Surrogate	*Duplicate % Recovery*	*Duplicate Qualifier*	*Limits*
4-BFB	*92.8*		*85 - 115*
Dibromofluoromethane	*1.42*	*Z6, C4*	*65 - 125*
Toluene-d8	*91.5*		*78 - 115*

Lab Sample ID: 10I0034-BLK1 — **Client Sample ID: 10I0034-BLK1**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000464 — **Prep Batch: 10I0034_P**

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		3.33		mg/kg wet		09/08/10 11:40	09/08/10 14:20	33.3
Benzene	ND		0.0133		mg/kg wet		09/08/10 11:40	09/08/10 14:20	33.3
Toluene	ND		0.0333		mg/kg wet		09/08/10 11:40	09/08/10 14:20	33.3
Ethylbenzene	ND		0.0333		mg/kg wet		09/08/10 11:40	09/08/10 14:20	33.3
Xylenes (total)	ND		0.0500		mg/kg wet		09/08/10 11:40	09/08/10 14:20	33.3

Surrogate	*Blank % Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*102*		*75 - 125*	*09/08/10 11:40*	*09/08/10 14:20*	*33.3*
a,a,a-TFT	*106*		*50 - 150*	*09/08/10 11:40*	*09/08/10 14:20*	*33.3*
Toluene-d8	*84.3*		*75 - 125*	*09/08/10 11:40*	*09/08/10 14:20*	*33.3*
4-BFB	*95.7*		*75 - 125*	*09/08/10 11:40*	*09/08/10 14:20*	*33.3*

Lab Sample ID: 10I0034-BS1 — **Client Sample ID: 10I0034-BS1**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000464 — **Prep Batch: 10I0034_P**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits		
Benzene			0.800	0.902		mg/kg wet		113	70 - 130		
Toluene			0.800	0.766		mg/kg wet		95.7	70 - 130		
Ethylbenzene			0.800	0.719		mg/kg wet		89.8	70 - 130		
Xylenes (total)			2.40	2.15		mg/kg wet		89.8	70 - 130		

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B (Continued)

Lab Sample ID: 10I0034-BS1
Matrix: Soil
Analysis Batch: T000464

Client Sample ID: 10I0034-BS1
Prep Type: total
Prep Batch: 10I0034_P

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane	*102*		*75 - 125*
a,a,a-TFT	*103*		*50 - 150*
Toluene-d8	*86.6*		*75 - 125*
4-BFB	*93.1*		*75 - 125*

Lab Sample ID: 10I0034-BS2
Matrix: Soil
Analysis Batch: T000464

Client Sample ID: 10I0034-BS2
Prep Type: total
Prep Batch: 10I0034_P

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits		
Gasoline Range Organics			22.0	25.0		mg/kg wet		114	60 - 120		

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane	*104*		*75 - 125*
a,a,a-TFT	*106*		*50 - 150*
Toluene-d8	*86.2*		*75 - 125*
4-BFB	*92.3*		*75 - 125*

Lab Sample ID: 10I0034-BSD1
Matrix: Soil
Analysis Batch: T000464

Client Sample ID: 10I0034-BSD1
Prep Type: total
Prep Batch: 10I0034_P

Analyte			Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Benzene			0.800	0.913		mg/kg wet		114	70 - 130	1.28	20
Toluene			0.800	0.789		mg/kg wet		98.6	70 - 130	3.00	20
Ethylbenzene			0.800	0.743		mg/kg wet		92.9	70 - 130	3.37	20
Xylenes (total)			2.40	2.26		mg/kg wet		94.3	70 - 130	4.93	20

Surrogate	*LCS Dup % Recovery*	*LCS Dup Qualifier*	*Limits*
Dibromofluoromethane	*104*		*75 - 125*
a,a,a-TFT	*104*		*50 - 150*
Toluene-d8	*87.4*		*75 - 125*
4-BFB	*95.9*		*75 - 125*

Lab Sample ID: 10I0034-BSD2
Matrix: Soil
Analysis Batch: T000464

Client Sample ID: 10I0034-BSD2
Prep Type: total
Prep Batch: 10I0034_P

Analyte			Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Gasoline Range Organics			22.0	24.3		mg/kg wet		111	60 - 120	2.73	20

Surrogate	*LCS Dup % Recovery*	*LCS Dup Qualifier*	*Limits*
Dibromofluoromethane	*106*		*75 - 125*
a,a,a-TFT	*104*		*50 - 150*
Toluene-d8	*85.0*		*75 - 125*
4-BFB	*93.8*		*75 - 125*

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B (Continued)

Lab Sample ID: 10I0034-MS1 — **Client Sample ID: ATH0082-05**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000464 — **Prep Batch: 10I0034_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits
Benzene	ND		0.574	0.915	M7	mg/kg dry	☼	159	60 - 140
Toluene	ND		0.574	0.762		mg/kg dry	☼	133	60 - 140
Ethylbenzene	ND		0.574	0.711		mg/kg dry	☼	124	60 - 140
Xylenes (total)	ND		1.72	2.15		mg/kg dry	☼	125	60 - 140

Surrogate	*Matrix Spike % Recovery*	*Matrix Spike Qualifier*	*Limits*
Dibromofluoromethane	*99.4*		*75 - 125*
a,a,a-TFT	*111*		*50 - 150*
Toluene-d8	*86.5*		*75 - 125*
4-BFB	*89.5*		*75 - 125*

Lab Sample ID: 10I0034-MSD1 — **Client Sample ID: ATH0082-05**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000464 — **Prep Batch: 10I0034_P**

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Benzene	ND		0.574	1.24	M7, R2	mg/kg dry	☼	217	60 - 140	30.5	25
Toluene	ND		0.574	1.04	M7, R2	mg/kg dry	☼	182	60 - 140	31.3	25
Ethylbenzene	ND		0.574	0.990	M7, R2	mg/kg dry	☼	172	60 - 140	32.8	25
Xylenes (total)	ND		1.72	2.96	M7, R2	mg/kg dry	☼	172	60 - 140	31.7	25

Surrogate	*Matrix Spike Dup % Recovery*	*Matrix Spike Dup Qualifier*	*Limits*
Dibromofluoromethane	*107*		*75 - 125*
a,a,a-TFT	*113*		*50 - 150*
Toluene-d8	*86.8*		*75 - 125*
4-BFB	*93.4*		*75 - 125*

Lab Sample ID: 10I0034-DUP1 — **Client Sample ID: ATH0082-05**
Matrix: Soil — **Prep Type: total**
Analysis Batch: T000464 — **Prep Batch: 10I0034_P**

Analyte	Sample Result	Sample Qualifier		Duplicate Result	Duplicate Qualifier	Unit	D			RPD	RPD Limit
Gasoline Range Organics	1.54			0.634	R4	mg/kg dry	☼			83.3	35
Benzene	ND			ND		mg/kg dry	☼				25
Toluene	ND			ND		mg/kg dry	☼				25
Ethylbenzene	ND			ND		mg/kg dry	☼				25
Xylenes (total)	ND			ND		mg/kg dry	☼				25

Surrogate	*Duplicate % Recovery*	*Duplicate Qualifier*	*Limits*
Dibromofluoromethane	*88.8*		*75 - 125*
a,a,a-TFT	*115*		*50 - 150*
Toluene-d8	*85.5*		*75 - 125*
4-BFB	*91.8*		*75 - 125*

Method: EPA 8270 mod. - Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring

Lab Sample ID: 10H0157-BLK1
Matrix: Water
Analysis Batch: 10H0157

Client Sample ID: 10H0157-BLK1
Prep Type: total
Prep Batch: 10H0157_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.100		ug/l		08/31/10 09:43	08/31/10 15:12	1
2-Methylnaphthalene	ND		0.100		ug/l		08/31/10 09:43	08/31/10 15:12	1
1-Methylnapthalene	ND		0.100		ug/l		08/31/10 09:43	08/31/10 15:12	1
Acenaphthylene	ND		0.100		ug/l		08/31/10 09:43	08/31/10 15:12	1
Acenaphthene	ND		0.100		ug/l		08/31/10 09:43	08/31/10 15:12	1
Fluorene	ND		0.100		ug/l		08/31/10 09:43	08/31/10 15:12	1
Phenanthrene	ND		0.100		ug/l		08/31/10 09:43	08/31/10 15:12	1
Anthracene	ND		0.100		ug/l		08/31/10 09:43	08/31/10 15:12	1
Fluoranthene	ND		0.100		ug/l		08/31/10 09:43	08/31/10 15:12	1
Pyrene	ND		0.100		ug/l		08/31/10 09:43	08/31/10 15:12	1
Benzo (a) anthracene	ND		0.100		ug/l		08/31/10 09:43	08/31/10 15:12	1
Chrysene	ND		0.100		ug/l		08/31/10 09:43	08/31/10 15:12	1
Benzo (b) fluoranthene	ND		0.100		ug/l		08/31/10 09:43	08/31/10 15:12	1
Benzo (k) fluoranthene	ND		0.100		ug/l		08/31/10 09:43	08/31/10 15:12	1
Benzo (a) pyrene	ND		0.100		ug/l		08/31/10 09:43	08/31/10 15:12	1
Indeno (1,2,3-cd) pyrene	ND		0.100		ug/l		08/31/10 09:43	08/31/10 15:12	1
Dibenzo (a,h) anthracene	ND		0.100		ug/l		08/31/10 09:43	08/31/10 15:12	1
Benzo (ghi) perylene	ND		0.100		ug/l		08/31/10 09:43	08/31/10 15:12	1

Surrogate	*Blank % Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*85.9*		*30 - 150*	*08/31/10 09:43*	*08/31/10 15:12*	*1*
2-FBP	*104*		*21 - 122*	*08/31/10 09:43*	*08/31/10 15:12*	*1*
p-Terphenyl-d14	*97.1*		*35 - 150*	*08/31/10 09:43*	*08/31/10 15:12*	*1*

Lab Sample ID: 10H0157-BS1
Matrix: Water
Analysis Batch: 10H0157

Client Sample ID: 10H0157-BS1
Prep Type: total
Prep Batch: 10H0157_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Naphthalene	2.00	1.79		ug/l		89.5	40 - 130
Fluorene	2.00	1.92		ug/l		96.0	40 - 120
Chrysene	2.00	1.97		ug/l		98.5	40 - 120
Indeno (1,2,3-cd) pyrene	2.00	2.16		ug/l		108	40 - 120

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*78.2*		*30 - 150*
2-FBP	*99.6*		*21 - 122*
p-Terphenyl-d14	*89.7*		*35 - 150*

Lab Sample ID: 10H0157-BSD1
Matrix: Water
Analysis Batch: 10H0157

Client Sample ID: 10H0157-BSD1
Prep Type: total
Prep Batch: 10H0157_P

Analyte	Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Naphthalene	2.00	1.74		ug/l		86.8	40 - 130	3.12	30
Fluorene	2.00	1.84		ug/l		92.0	40 - 120	4.26	30
Chrysene	2.00	1.86		ug/l		92.8	40 - 120	6.01	30
Indeno (1,2,3-cd) pyrene	2.00	2.02		ug/l		101	40 - 120	7.18	30

Method: EPA 8270 mod. - Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring (Continued)

Lab Sample ID: 10H0157-BSD1
Matrix: Water
Analysis Batch: 10H0157

Client Sample ID: 10H0157-BSD1
Prep Type: total
Prep Batch: 10H0157_P

Surrogate	*LCS Dup % Recovery*	*LCS Dup Qualifier*	*Limits*
Nitrobenzene-d5	*74.4*		*30 - 150*
2-FBP	*97.7*		*21 - 122*
p-Terphenyl-d14	*87.8*		*35 - 150*

Lab Sample ID: 10I0015-BLK1
Matrix: Soil
Analysis Batch: 10I0015

Client Sample ID: 10I0015-BLK1
Prep Type: total
Prep Batch: 10I0015_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.0100		mg/kg wet		09/02/10 12:10	09/03/10 09:54	1
2-Methylnaphthalene	ND		0.0100		mg/kg wet		09/02/10 12:10	09/03/10 09:54	1
1-Methylnapthalene	ND		0.0100		mg/kg wet		09/02/10 12:10	09/03/10 09:54	1
Acenaphthylene	ND		0.0100		mg/kg wet		09/02/10 12:10	09/03/10 09:54	1
Acenaphthene	ND		0.0100		mg/kg wet		09/02/10 12:10	09/03/10 09:54	1
Fluorene	ND		0.0100		mg/kg wet		09/02/10 12:10	09/03/10 09:54	1
Phenanthrene	ND		0.0100		mg/kg wet		09/02/10 12:10	09/03/10 09:54	1
Anthracene	ND		0.0100		mg/kg wet		09/02/10 12:10	09/03/10 09:54	1
Fluoranthene	ND		0.0100		mg/kg wet		09/02/10 12:10	09/03/10 09:54	1
Pyrene	ND		0.0100		mg/kg wet		09/02/10 12:10	09/03/10 09:54	1
Benzo (a) anthracene	ND		0.0100		mg/kg wet		09/02/10 12:10	09/03/10 09:54	1
Chrysene	ND		0.0100		mg/kg wet		09/02/10 12:10	09/03/10 09:54	1
Benzo (b) fluoranthene	ND		0.0100		mg/kg wet		09/02/10 12:10	09/03/10 09:54	1
Benzo (k) fluoranthene	ND		0.0100		mg/kg wet		09/02/10 12:10	09/03/10 09:54	1
Benzo (a) pyrene	ND		0.0100		mg/kg wet		09/02/10 12:10	09/03/10 09:54	1
Indeno (1,2,3-cd) pyrene	ND		0.0100		mg/kg wet		09/02/10 12:10	09/03/10 09:54	1
Dibenzo (a,h) anthracene	ND		0.0100		mg/kg wet		09/02/10 12:10	09/03/10 09:54	1
Benzo (ghi) perylene	ND		0.0100		mg/kg wet		09/02/10 12:10	09/03/10 09:54	1

Surrogate	*Blank % Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*62.0*		*30 - 140*	*09/02/10 12:10*	*09/03/10 09:54*	*1*
2-FBP	*103*		*30 - 140*	*09/02/10 12:10*	*09/03/10 09:54*	*1*
p-Terphenyl-d14	*123*		*30 - 150*	*09/02/10 12:10*	*09/03/10 09:54*	*1*

Lab Sample ID: 10I0015-BS1
Matrix: Soil
Analysis Batch: 10I0015

Client Sample ID: 10I0015-BS1
Prep Type: total
Prep Batch: 10I0015_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Naphthalene	0.133	0.107		mg/kg wet		80.0	40 - 120
Fluorene	0.133	0.119		mg/kg wet		89.5	40 - 130
Chrysene	0.133	0.132		mg/kg wet		99.0	41 - 130
Indeno (1,2,3-cd) pyrene	0.133	0.119		mg/kg wet		89.0	40 - 130

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*52.0*		*30 - 140*
2-FBP	*86.0*		*30 - 140*
p-Terphenyl-d14	*93.8*		*30 - 150*

Method: EPA 8270 mod. - Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring (Continued)

Lab Sample ID: 10I0015-MS1
Matrix: Soil
Analysis Batch: 10I0015

Client Sample ID: 10JUNAAOFB17S3
Prep Type: total
Prep Batch: 10I0015_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits
Naphthalene	ND		0.142	0.0853		mg/kg dry	☼	60.0	30 - 120
Fluorene	ND		0.142	0.128		mg/kg dry	☼	90.0	30 - 140
Chrysene	ND		0.142	0.142		mg/kg dry	☼	100	30 - 133
Indeno (1,2,3-cd) pyrene	ND		0.142	0.142		mg/kg dry	☼	100	30 - 140

Surrogate	*Matrix Spike % Recovery*	*Matrix Spike Qualifier*	*Limits*
Nitrobenzene-d5	*36.0*		*30 - 140*
2-FBP	*72.0*		*30 - 140*
p-Terphenyl-d14	*100*		*30 - 150*

Lab Sample ID: 10I0015-MSD1
Matrix: Soil
Analysis Batch: 10I0015

Client Sample ID: 10JUNAAOFB17S3
Prep Type: total
Prep Batch: 10I0015_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Naphthalene	ND		0.142	0.0995		mg/kg dry	☼	70.0	30 - 120	15.4	35
Fluorene	ND		0.142	0.128		mg/kg dry	☼	90.0	30 - 140	0.00	35
Chrysene	ND		0.142	0.142		mg/kg dry	☼	100	30 - 133	0.00	35
Indeno (1,2,3-cd) pyrene	ND		0.142	0.142		mg/kg dry	☼	100	30 - 140	0.00	35

Surrogate	*Matrix Spike Dup % Recovery*	*Matrix Spike Dup Qualifier*	*Limits*
Nitrobenzene-d5	*52.0*		*30 - 140*
2-FBP	*88.0*		*30 - 140*
p-Terphenyl-d14	*96.0*		*30 - 150*

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO

Lab Sample ID: 10H0123-BLK1
Matrix: Water
Analysis Batch: T000446

Client Sample ID: 10H0123-BLK1
Prep Type: total
Prep Batch: 10H0123_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		0.500		mg/l		08/30/10 14:08	08/31/10 11:29	1
Residual Range Organics	ND		0.500		mg/l		08/30/10 14:08	08/31/10 11:29	1

Surrogate	*Blank % Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*90.5*		*50 - 150*	*08/30/10 14:08*	*08/31/10 11:29*	*1*
Triacontane	*100*		*50 - 150*	*08/30/10 14:08*	*08/31/10 11:29*	*1*

Lab Sample ID: 10H0123-BS1
Matrix: Water
Analysis Batch: T000446

Client Sample ID: 10H0123-BS1
Prep Type: total
Prep Batch: 10H0123_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Diesel Range Organics	11.1	10.4		mg/l		93.6	75 - 125
Residual Range Organics	10.3	10.3		mg/l		100	60 - 120

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO (Continued)

Lab Sample ID: 10H0123-BS1
Matrix: Water
Analysis Batch: T000446

Client Sample ID: 10H0123-BS1
Prep Type: total
Prep Batch: 10H0123_P

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctadecane	*100*		*60 - 120*
Triacontane	*106*		*60 - 120*

Lab Sample ID: 10H0123-BSD1
Matrix: Water
Analysis Batch: T000446

Client Sample ID: 10H0123-BSD1
Prep Type: total
Prep Batch: 10H0123_P

Analyte			Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Diesel Range Organics			11.1	10.3		mg/l		92.5	75 - 125	1.19	20
Residual Range Organics			10.3	9.94		mg/l		96.5	60 - 120	3.74	20

Surrogate	*LCS Dup % Recovery*	*LCS Dup Qualifier*	*Limits*
1-Chlorooctadecane	*101*		*60 - 120*
Triacontane	*105*		*60 - 120*

Lab Sample ID: 10H0123-DUP1
Matrix: Water
Analysis Batch: T000445

Client Sample ID: ATH0064-02
Prep Type: total
Prep Batch: 10H0123_P

Analyte	Sample Result	Sample Qualifier		Duplicate Result	Duplicate Qualifier	Unit	D			RPD	RPD Limit
Diesel Range Organics	0.0735			0.0818		mg/l				10.7	20
Residual Range Organics	ND			ND		mg/l					50

Surrogate	*Duplicate % Recovery*	*Duplicate Qualifier*	*Limits*
1-Chlorooctadecane	*83.7*		*50 - 150*
Triacontane	*94.0*		*50 - 150*

Lab Sample ID: 10I0008-BLK1
Matrix: Soil
Analysis Batch: T000452

Client Sample ID: 10I0008-BLK1
Prep Type: total
Prep Batch: 10I0008_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics	ND		20.0		mg/kg wet		09/02/10 08:44	09/02/10 19:02	1
Residual Range Organics	ND		50.0		mg/kg wet		09/02/10 08:44	09/02/10 19:02	1

Surrogate	*Blank % Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*87.3*		*50 - 150*	*09/02/10 08:44*	*09/02/10 19:02*	*1*
Triacontane	*87.3*		*50 - 150*	*09/02/10 08:44*	*09/02/10 19:02*	*1*

Lab Sample ID: 10I0008-BS1
Matrix: Soil
Analysis Batch: T000452

Client Sample ID: 10I0008-BS1
Prep Type: total
Prep Batch: 10I0008_P

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits		
Diesel Range Organics			139	149		mg/kg wet		108	75 - 125		
Residual Range Organics			129	124		mg/kg wet		96.2	60 - 120		

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctadecane	*92.0*		*60 - 120*

Method: AK102/103 - Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO (Continued)

Lab Sample ID: 10I0008-BS1
Matrix: Soil
Analysis Batch: T000452

Client Sample ID: 10I0008-BS1
Prep Type: total
Prep Batch: 10I0008_P

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
Triacontane	*89.7*		*60 - 120*

Lab Sample ID: 10I0008-BSD1
Matrix: Soil
Analysis Batch: T000452

Client Sample ID: 10I0008-BSD1
Prep Type: total
Prep Batch: 10I0008_P

Analyte			Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Diesel Range Organics			139	148		mg/kg wet		106	75 - 125	1.17	20
Residual Range Organics			129	122		mg/kg wet		95.1	60 - 120	1.11	20

Surrogate	*LCS Dup % Recovery*	*LCS Dup Qualifier*	*Limits*
1-Chlorooctadecane	*92.8*		*60 - 120*
Triacontane	*88.9*		*60 - 120*

Lab Sample ID: 10I0008-MS1
Matrix: Soil
Analysis Batch: T000452

Client Sample ID: ATH0072-22
Prep Type: total
Prep Batch: 10I0008_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	% Rec	% Rec. Limits
Diesel Range Organics	ND		153	174		mg/kg dry	☼	114	75 - 125
Residual Range Organics	ND		142	147		mg/kg dry	☼	103	60 - 120

Surrogate	*Matrix Spike % Recovery*	*Matrix Spike Qualifier*	*Limits*
1-Chlorooctadecane	*97.1*		*50 - 150*
Triacontane	*93.6*		*50 - 150*

Lab Sample ID: 10I0008-MSD1
Matrix: Soil
Analysis Batch: T000452

Client Sample ID: ATH0072-22
Prep Type: total
Prep Batch: 10I0008_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Diesel Range Organics	ND		149	162		mg/kg dry	☼	109	75 - 125	7.22	25
Residual Range Organics	ND		138	139		mg/kg dry	☼	101	60 - 120	5.12	25

Surrogate	*Matrix Spike Dup % Recovery*	*Matrix Spike Dup Qualifier*	*Limits*
1-Chlorooctadecane	*108*		*50 - 150*
Triacontane	*91.5*		*50 - 150*

Lab Sample ID: 10I0008-DUP1
Matrix: Soil
Analysis Batch: T000452

Client Sample ID: 10JUNAAOFB13S3
Prep Type: total
Prep Batch: 10I0008_P

Analyte	Sample Result	Sample Qualifier		Duplicate Result	Duplicate Qualifier	Unit	D			RPD	RPD Limit
Diesel Range Organics	53.1	Q11		55.5		mg/kg dry	☼			4.46	20
Residual Range Organics	ND			ND		mg/kg dry	☼				50

Surrogate	*Duplicate % Recovery*	*Duplicate Qualifier*	*Limits*
1-Chlorooctadecane	*93.5*		*50 - 150*
Triacontane	*92.6*		*50 - 150*

GCMS Volatiles

Prep Batch: 10I0018_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10I0018-BS1	10I0018-BS1	total	Soil	EPA 5030B	
10I0018-BSD1	10I0018-BSD1	total	Soil	EPA 5030B	
10I0018-BS2	10I0018-BS2	total	Soil	EPA 5030B	
10I0018-BSD2	10I0018-BSD2	total	Soil	EPA 5030B	
10I0018-BLK1	10I0018-BLK1	total	Soil	EPA 5030B	
ATH0081-01	10JUNAAOFB13S3	total	Soil	EPA 5030B	
ATH0081-02	10JUNAAOFB13S5	total	Soil	EPA 5030B	
10I0018-DUP1	10JUNAAOFB13S5	total	Soil	EPA 5030B	
ATH0081-03	10JUNAAOFB14S3	total	Soil	EPA 5030B	
10I0018-MS1	10JUNAAOFB14S3	total	Soil	EPA 5030B	
10I0018-MSD1	10JUNAAOFB14S3	total	Soil	EPA 5030B	
ATH0081-04	10JUNAAOFB14S5	total	Soil	EPA 5030B	
ATH0081-05	10JUNAAOFB14S8	total	Soil	EPA 5030B	
ATH0081-07	10JUNAAOFB15S2	total	Soil	EPA 5030B	
ATH0081-09	10JUNAAOFB16S1	total	Soil	EPA 5030B	
ATH0081-10	10JUNAAOFB16S4	total	Soil	EPA 5030B	
ATH0081-11	10JUNAAOFB17S2	total	Soil	EPA 5030B	
ATH0081-12	10JUNAAOFB17S3	total	Soil	EPA 5030B	
ATH0081-15	10JUNAAOFSTB	total	Soil	EPA 5030B	
ATH0081-08	10JUNAAOFB15S4	total	Soil	EPA 5030B	

Prep Batch: 10I0020_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10I0020-BS1	10I0020-BS1	total	Water	EPA 5030B	
10I0020-BSD1	10I0020-BSD1	total	Water	EPA 5030B	
10I0020-BS2	10I0020-BS2	total	Water	EPA 5030B	
10I0020-BSD2	10I0020-BSD2	total	Water	EPA 5030B	
10I0020-BLK1	10I0020-BLK1	total	Water	EPA 5030B	
ATH0081-13	10JUNAAOFB14GW1	total	Water	EPA 5030B	
ATH0081-14	10JUNAAOFB14GW2	total	Water	EPA 5030B	
ATH0081-16	10JUNAAOFWTB1	total	Water	EPA 5030B	
10I0020-DUP1	ATH0090-01	total	Water	EPA 5030B	
10I0020-MS1	ATH0090-03	total	Water	EPA 5030B	
10I0020-MSD1	ATH0090-03	total	Water	EPA 5030B	

Prep Batch: 10I0034_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10I0034-BS1	10I0034-BS1	total	Soil	EPA 5030B	
10I0034-BSD1	10I0034-BSD1	total	Soil	EPA 5030B	
10I0034-BS2	10I0034-BS2	total	Soil	EPA 5030B	
10I0034-BSD2	10I0034-BSD2	total	Soil	EPA 5030B	
10I0034-BLK1	10I0034-BLK1	total	Soil	EPA 5030B	
10I0034-DUP1	ATH0082-05	total	Soil	EPA 5030B	
10I0034-MS1	ATH0082-05	total	Soil	EPA 5030B	
10I0034-MSD1	ATH0082-05	total	Soil	EPA 5030B	
ATH0081-04 - RE1	10JUNAAOFB14S5	total	Soil	EPA 5030B	

Analysis Batch: T000456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10I0018-BS1	10I0018-BS1	total	Soil	AK101-MS/EPA 8260B	10I0018_P
10I0018-BSD1	10I0018-BSD1	total	Soil	AK101-MS/EPA 8260B	10I0018_P

GCMS Volatiles (Continued)

Analysis Batch: T000456 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10I0018-BS2	10I0018-BS2	total	Soil	AK101-MS/EPA 8260B	10I0018_P
10I0018-BSD2	10I0018-BSD2	total	Soil	AK101-MS/EPA 8260B	10I0018_P
10I0018-BLK1	10I0018-BLK1	total	Soil	AK101-MS/EPA 8260B	10I0018_P
ATH0081-01	10JUNAAOFB13S3	total	Soil	AK101-MS/EPA 8260B	10I0018_P
ATH0081-02	10JUNAAOFB13S5	total	Soil	AK101-MS/EPA 8260B	10I0018_P
10I0018-DUP1	10JUNAAOFB13S5	total	Soil	AK101-MS/EPA 8260B	10I0018_P
ATH0081-03	10JUNAAOFB14S3	total	Soil	AK101-MS/EPA 8260B	10I0018_P
10I0018-MS1	10JUNAAOFB14S3	total	Soil	AK101-MS/EPA 8260B	10I0018_P
10I0018-MSD1	10JUNAAOFB14S3	total	Soil	AK101-MS/EPA 8260B	10I0018_P
ATH0081-04	10JUNAAOFB14S5	total	Soil	AK101-MS/EPA 8260B	10I0018_P
ATH0081-05	10JUNAAOFB14S8	total	Soil	AK101-MS/EPA 8260B	10I0018_P
ATH0081-07	10JUNAAOFB15S2	total	Soil	AK101-MS/EPA 8260B	10I0018_P
ATH0081-09	10JUNAAOFB16S1	total	Soil	AK101-MS/EPA 8260B	10I0018_P
ATH0081-10	10JUNAAOFB16S4	total	Soil	AK101-MS/EPA 8260B	10I0018_P
ATH0081-11	10JUNAAOFB17S2	total	Soil	AK101-MS/EPA 8260B	10I0018_P
ATH0081-12	10JUNAAOFB17S3	total	Soil	AK101-MS/EPA 8260B	10I0018_P
ATH0081-15	10JUNAAOFSTB	total	Soil	AK101-MS/EPA 8260B	10I0018_P
ATH0081-08	10JUNAAOFB15S4	total	Soil	AK101-MS/EPA 8260B	10I0018_P
10I0020-BS1	10I0020-BS1	total	Water	AK101-MS/EPA 8260B	10I0020_P
10I0020-BSD1	10I0020-BSD1	total	Water	AK101-MS/EPA 8260B	10I0020_P
10I0020-BS2	10I0020-BS2	total	Water	AK101-MS/EPA 8260B	10I0020_P
10I0020-BSD2	10I0020-BSD2	total	Water	AK101-MS/EPA 8260B	10I0020_P
10I0020-BLK1	10I0020-BLK1	total	Water	AK101-MS/EPA 8260B	10I0020_P
ATH0081-13	10JUNAAOFB14GW1	total	Water	AK101-MS/EPA 8260B	10I0020_P
ATH0081-14	10JUNAAOFB14GW2	total	Water	AK101-MS/EPA 8260B	10I0020_P
ATH0081-16	10JUNAAOFWTB1	total	Water	AK101-MS/EPA 8260B	10I0020_P
10I0020-DUP1	ATH0090-01	total	Water	AK101-MS/EPA 8260B	10I0020_P
10I0020-MS1	ATH0090-03	total	Water	AK101-MS/EPA 8260B	10I0020_P
10I0020-MSD1	ATH0090-03	total	Water	AK101-MS/EPA 8260B	10I0020_P

Analysis Batch: T000464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10I0034-BS1	10I0034-BS1	total	Soil	AK101-MS/EPA 8260B	10I0034_P
10I0034-BSD1	10I0034-BSD1	total	Soil	AK101-MS/EPA 8260B	10I0034_P
10I0034-BS2	10I0034-BS2	total	Soil	AK101-MS/EPA 8260B	10I0034_P

GCMS Volatiles (Continued)

Analysis Batch: T000464 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10I0034-BSD2	10I0034-BSD2	total	Soil	AK101-MS/EPA 8260B	10I0034_P
10I0034-BLK1	10I0034-BLK1	total	Soil	AK101-MS/EPA 8260B	10I0034_P
10I0034-DUP1	ATH0082-05	total	Soil	AK101-MS/EPA 8260B	10I0034_P
10I0034-MS1	ATH0082-05	total	Soil	AK101-MS/EPA 8260B	10I0034_P
10I0034-MSD1	ATH0082-05	total	Soil	AK101-MS/EPA 8260B	10I0034_P
ATH0081-04 - RE1	10JUNAAOFB14S5	total	Soil	AK101-MS/EPA 8260B	10I0034_P

Semivolatiles

Analysis Batch: 10H0157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10H0157-BLK1	10H0157-BLK1	total	Water	EPA 8270 mod.	10H0157_P
10H0157-BS1	10H0157-BS1	total	Water	EPA 8270 mod.	10H0157_P
10H0157-BSD1	10H0157-BSD1	total	Water	EPA 8270 mod.	10H0157_P
ATH0081-13	10JUNAAOFB14GW1	total	Water	EPA 8270 mod.	10H0157_P
ATH0081-14	10JUNAAOFB14GW2	total	Water	EPA 8270 mod.	10H0157_P

Prep Batch: 10H0157_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10H0157-BLK1	10H0157-BLK1	total	Water	EPA 3510/600 Series	
10H0157-BS1	10H0157-BS1	total	Water	EPA 3510/600 Series	
10H0157-BSD1	10H0157-BSD1	total	Water	EPA 3510/600 Series	
ATH0081-13	10JUNAAOFB14GW1	total	Water	EPA 3510/600 Series	
ATH0081-14	10JUNAAOFB14GW2	total	Water	EPA 3510/600 Series	

Analysis Batch: 10I0015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10I0015-BLK1	10I0015-BLK1	total	Soil	EPA 8270 mod.	10I0015_P
10I0015-BS1	10I0015-BS1	total	Soil	EPA 8270 mod.	10I0015_P
ATH0081-06	10JUNAAOFB14S9	total	Soil	EPA 8270 mod.	10I0015_P
10I0015-MS1	10JUNAAOFB17S3	total	Soil	EPA 8270 mod.	10I0015_P
10I0015-MSD1	10JUNAAOFB17S3	total	Soil	EPA 8270 mod.	10I0015_P
ATH0081-12	10JUNAAOFB17S3	total	Soil	EPA 8270 mod.	10I0015_P
ATH0081-04	10JUNAAOFB14S5	total	Soil	EPA 8270 mod.	10I0015_P
ATH0081-04	10JUNAAOFB14S5	total	Soil	EPA 8270 mod.	10I0015_P

Prep Batch: 10I0015_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10I0015-BLK1	10I0015-BLK1	total	Soil	EPA 3550B	
10I0015-BS1	10I0015-BS1	total	Soil	EPA 3550B	
ATH0081-06	10JUNAAOFB14S9	total	Soil	EPA 3550B	
10I0015-MS1	10JUNAAOFB17S3	total	Soil	EPA 3550B	
10I0015-MSD1	10JUNAAOFB17S3	total	Soil	EPA 3550B	
ATH0081-12	10JUNAAOFB17S3	total	Soil	EPA 3550B	
ATH0081-04	10JUNAAOFB14S5	total	Soil	EPA 3550B	
ATH0081-04	10JUNAAOFB14S5	total	Soil	EPA 3550B	

Wet Chem

Analysis Batch: 10I0034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10I0034-DUP1	10JUNAAOFB17S3	total	Soil	TA SOP	10I0034_P
ATH0081-04	10JUNAAOFB14S5	total	Soil	TA SOP	10I0034_P
ATH0081-06	10JUNAAOFB14S9	total	Soil	TA SOP	10I0034_P
ATH0081-12	10JUNAAOFB17S3	total	Soil	TA SOP	10I0034_P

Prep Batch: 10I0034_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10I0034-DUP1	10JUNAAOFB17S3	total	Soil	Wet Chem	
ATH0081-04	10JUNAAOFB14S5	total	Soil	Wet Chem	
ATH0081-06	10JUNAAOFB14S9	total	Soil	Wet Chem	
ATH0081-12	10JUNAAOFB17S3	total	Soil	Wet Chem	

Fuels

Prep Batch: 10H0123_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10H0123-BLK1	10H0123-BLK1	total	Water	EPA 3510	
10H0123-DUP1	ATH0064-02	total	Water	EPA 3510	
10H0123-BS1	10H0123-BS1	total	Water	EPA 3510	
10H0123-BSD1	10H0123-BSD1	total	Water	EPA 3510	
ATH0081-13	10JUNAAOFB14GW1	total	Water	EPA 3510	
ATH0081-14	10JUNAAOFB14GW2	total	Water	EPA 3510	

Analysis Batch: 10I0007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10I0007-DUP1	ATH0072-22	total	Soil	TA-SOP	10I0007_P
ATH0081-10	10JUNAAOFB16S4	total	Soil	TA-SOP	10I0007_P
ATH0081-11	10JUNAAOFB17S2	total	Soil	TA-SOP	10I0007_P
ATH0081-12	10JUNAAOFB17S3	total	Soil	TA-SOP	10I0007_P
ATH0081-15	10JUNAAOFSTB	total	Soil	TA-SOP	10I0007_P

Prep Batch: 10I0007_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10I0007-DUP1	ATH0072-22	total	Soil	*** DEFAULT PREP ***	
ATH0081-10	10JUNAAOFB16S4	total	Soil	*** DEFAULT PREP ***	
ATH0081-11	10JUNAAOFB17S2	total	Soil	*** DEFAULT PREP ***	
ATH0081-12	10JUNAAOFB17S3	total	Soil	*** DEFAULT PREP ***	
ATH0081-15	10JUNAAOFSTB	total	Soil	*** DEFAULT PREP ***	

Prep Batch: 10I0008_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10I0008-BSD1	10I0008-BSD1	total	Soil	EPA 3545	
10I0008-BS1	10I0008-BS1	total	Soil	EPA 3545	
10I0008-BLK1	10I0008-BLK1	total	Soil	EPA 3545	
10I0008-DUP1	10JUNAAOFB13S3	total	Soil	EPA 3545	
10I0008-MS1	ATH0072-22	total	Soil	EPA 3545	
10I0008-MSD1	ATH0072-22	total	Soil	EPA 3545	
ATH0081-01	10JUNAAOFB13S3	total	Soil	EPA 3545	
ATH0081-07	10JUNAAOFB15S2	total	Soil	EPA 3545	

Fuels (Continued)

Prep Batch: 10I0008_P (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATH0081-02	10JUNAAOFB13S5	total	Soil	EPA 3545	
ATH0081-03	10JUNAAOFB14S3	total	Soil	EPA 3545	
ATH0081-04	10JUNAAOFB14S5	total	Soil	EPA 3545	
ATH0081-05	10JUNAAOFB14S8	total	Soil	EPA 3545	
ATH0081-08	10JUNAAOFB15S4	total	Soil	EPA 3545	
ATH0081-09	10JUNAAOFB16S1	total	Soil	EPA 3545	
ATH0081-10	10JUNAAOFB16S4	total	Soil	EPA 3545	
ATH0081-11	10JUNAAOFB17S2	total	Soil	EPA 3545	
ATH0081-12	10JUNAAOFB17S3	total	Soil	EPA 3545	

Analysis Batch: 10I0010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10I0010-DUP1	ATI0007-01	total	Soil	TA-SOP	10I0010_P
ATH0081-01	10JUNAAOFB13S3	total	Soil	TA-SOP	10I0010_P
ATH0081-02	10JUNAAOFB13S5	total	Soil	TA-SOP	10I0010_P
ATH0081-03	10JUNAAOFB14S3	total	Soil	TA-SOP	10I0010_P
ATH0081-04	10JUNAAOFB14S5	total	Soil	TA-SOP	10I0010_P
ATH0081-05	10JUNAAOFB14S8	total	Soil	TA-SOP	10I0010_P
ATH0081-07	10JUNAAOFB15S2	total	Soil	TA-SOP	10I0010_P
ATH0081-08	10JUNAAOFB15S4	total	Soil	TA-SOP	10I0010_P
ATH0081-09	10JUNAAOFB16S1	total	Soil	TA-SOP	10I0010_P

Prep Batch: 10I0010_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10I0010-DUP1	ATI0007-01	total	Soil	*** DEFAULT PREP ***	
ATH0081-01	10JUNAAOFB13S3	total	Soil	*** DEFAULT PREP ***	
ATH0081-02	10JUNAAOFB13S5	total	Soil	*** DEFAULT PREP ***	
ATH0081-03	10JUNAAOFB14S3	total	Soil	*** DEFAULT PREP ***	
ATH0081-04	10JUNAAOFB14S5	total	Soil	*** DEFAULT PREP ***	
ATH0081-05	10JUNAAOFB14S8	total	Soil	*** DEFAULT PREP ***	
ATH0081-07	10JUNAAOFB15S2	total	Soil	*** DEFAULT PREP ***	
ATH0081-08	10JUNAAOFB15S4	total	Soil	*** DEFAULT PREP ***	
ATH0081-09	10JUNAAOFB16S1	total	Soil	*** DEFAULT PREP ***	

Analysis Batch: T000445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10H0123-DUP1	ATH0064-02	total	Water	AK102/103	10H0123_P

Analysis Batch: T000446

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10H0123-BLK1	10H0123-BLK1	total	Water	AK102/103	10H0123_P
10H0123-BS1	10H0123-BS1	total	Water	AK102/103	10H0123_P
10H0123-BSD1	10H0123-BSD1	total	Water	AK102/103	10H0123_P

Analysis Batch: T000452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10I0008-BSD1	10I0008-BSD1	total	Soil	AK102/103	10I0008_P

Fuels (Continued)

Analysis Batch: T000452 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10I0008-BS1	10I0008-BS1	total	Soil	AK102/103	10I0008_P
10I0008-BLK1	10I0008-BLK1	total	Soil	AK102/103	10I0008_P
10I0008-DUP1	10JUNAAOFB13S3	total	Soil	AK102/103	10I0008_P
10I0008-MS1	ATH0072-22	total	Soil	AK102/103	10I0008_P
10I0008-MSD1	ATH0072-22	total	Soil	AK102/103	10I0008_P
ATH0081-01	10JUNAAOFB13S3	total	Soil	AK102/103	10I0008_P

Analysis Batch: T000453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATH0081-13	10JUNAAOFB14GW1	total	Water	AK102/103	10H0123_P

Analysis Batch: T000454

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATH0081-14	10JUNAAOFB14GW2	total	Water	AK102/103	10H0123_P

Analysis Batch: T000459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATH0081-07	10JUNAAOFB15S2	total	Soil	AK102/103	10I0008_P
ATH0081-02	10JUNAAOFB13S5	total	Soil	AK102/103	10I0008_P
ATH0081-04	10JUNAAOFB14S5	total	Soil	AK102/103	10I0008_P
ATH0081-08	10JUNAAOFB15S4	total	Soil	AK102/103	10I0008_P
ATH0081-10	10JUNAAOFB16S4	total	Soil	AK102/103	10I0008_P
ATH0081-12	10JUNAAOFB17S3	total	Soil	AK102/103	10I0008_P

Analysis Batch: T000460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATH0081-03	10JUNAAOFB14S3	total	Soil	AK102/103	10I0008_P
ATH0081-05	10JUNAAOFB14S8	total	Soil	AK102/103	10I0008_P
ATH0081-09	10JUNAAOFB16S1	total	Soil	AK102/103	10I0008_P
ATH0081-11	10JUNAAOFB17S2	total	Soil	AK102/103	10I0008_P

Client Sample ID: 10JUNAAOFB13S3

Lab Sample ID: ATH0081-01
Date Collected: 08/24/10 13:25
Matrix: Soil
Date Received: 08/27/10 09:38
Percent Solids: 97.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		0.4022	10I0018_P	09/05/10 07:00	JJB	TestAmerica Anchorage
total	Analysis	AK101-MS/EPA 8260B		33.3	T000456	09/05/10 11:48	JJB	TestAmerica Anchorage
total	Prep	EPA 3545		0.978	10I0008_P	09/02/10 08:44	rt	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000452	09/02/10 21:11	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10I0010_P	09/02/10 17:24	JPN	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10I0010	09/03/10 08:40	JN	TestAmerica Anchorage

Client Sample ID: 10JUNAAOFB13S5

Lab Sample ID: ATH0081-02
Date Collected: 08/24/10 13:50
Matrix: Soil
Date Received: 08/27/10 09:38
Percent Solids: 88.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		0.2465	10I0018_P	09/05/10 07:00	JJB	TestAmerica Anchorage
total	Analysis	AK101-MS/EPA 8260B		33.3	T000456	09/05/10 12:20	JJB	TestAmerica Anchorage
total	Prep	EPA 3545		0.9965	10I0008_P	09/02/10 08:44	rt	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000459	09/07/10 19:22	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10I0010_P	09/02/10 17:24	JPN	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10I0010	09/03/10 08:40	JN	TestAmerica Anchorage

Client Sample ID: 10JUNAAOFB14S3

Lab Sample ID: ATH0081-03
Date Collected: 08/24/10 15:55
Matrix: Soil
Date Received: 08/27/10 09:38
Percent Solids: 94.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		0.3797	10I0018_P	09/05/10 07:00	JJB	TestAmerica Anchorage
total	Analysis	AK101-MS/EPA 8260B		33.3	T000456	09/05/10 13:23	JJB	TestAmerica Anchorage
total	Prep	EPA 3545		0.9955	10I0008_P	09/02/10 08:44	rt	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000460	09/07/10 19:22	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10I0010_P	09/02/10 17:24	JPN	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10I0010	09/03/10 08:40	JN	TestAmerica Anchorage

Client Sample ID: 10JUNAAOFB14S5

Lab Sample ID: ATH0081-04
Date Collected: 08/24/10 16:20
Matrix: Soil
Date Received: 08/27/10 09:38
Percent Solids: 86

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		0.3117	10I0018_P	09/05/10 07:00	JJB	TestAmerica Anchorage
total	Analysis	AK101-MS/EPA 8260B		33.3	T000456	09/05/10 14:58	JJB	TestAmerica Anchorage
total	Prep	EPA 5030B	RE1	0.3117	10I0034_P	09/08/10 11:39	JJB	TestAmerica Anchorage
total	Analysis	AK101-MS/EPA 8260B	RE1	300	T000464	09/09/10 00:51	JJB	TestAmerica Anchorage
total	Prep	EPA 3550B		1	10I0015_P	09/02/10 12:10	MS	TestAmerica Spokane
total	Analysis	EPA 8270 mod.		2	10I0015	09/07/10 20:52	ZZZ	TestAmerica Spokane

Client Sample ID: 10JUNAAOFB14S5

Lab Sample ID: ATH0081-04
Date Collected: 08/24/10 16:20
Matrix: Soil
Date Received: 08/27/10 09:38
Percent Solids: 90.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Analysis	EPA 8270 mod.		5	10I0015	09/08/10 17:38	MS	TestAmerica Spokane
total	Prep	Wet Chem		1	10I0034_P	09/02/10 16:45	MS	TestAmerica Spokane
total	Analysis	TA SOP		1	10I0034	09/03/10 15:15	HB	TestAmerica Spokane
total	Prep	EPA 3545		1.36	10I0008_P	09/02/10 08:44	rt	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000459	09/07/10 20:25	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10I0010_P	09/02/10 17:24	JPN	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10I0010	09/03/10 08:40	JN	TestAmerica Anchorage

Client Sample ID: 10JUNAAOFB14S8

Lab Sample ID: ATH0081-05
Date Collected: 08/24/10 16:00
Matrix: Soil
Date Received: 08/27/10 09:38
Percent Solids: 95.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		0.3896	10I0018_P	09/05/10 07:00	JJB	TestAmerica Anchorage
total	Analysis	AK101-MS/EPA 8260B		33.3	T000456	09/05/10 15:30	JJB	TestAmerica Anchorage
total	Prep	EPA 3545		0.9809	10I0008_P	09/02/10 08:44	rt	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000460	09/07/10 20:25	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10I0010_P	09/02/10 17:24	JPN	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10I0010	09/03/10 08:40	JN	TestAmerica Anchorage

Client Sample ID: 10JUNAAOFB14S9

Lab Sample ID: ATH0081-06
Date Collected: 08/24/10 16:25
Matrix: Soil
Date Received: 08/27/10 09:38
Percent Solids: 91.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 3550B		1	10I0015_P	09/02/10 12:10	MS	TestAmerica Spokane
total	Analysis	EPA 8270 mod.		10	10I0015	09/03/10 13:36	ZZZ	TestAmerica Spokane
total	Prep	Wet Chem		1	10I0034_P	09/02/10 16:45	MS	TestAmerica Spokane
total	Analysis	TA SOP		1	10I0034	09/03/10 15:15	HB	TestAmerica Spokane

Client Sample ID: 10JUNAAOFB15S2

Lab Sample ID: ATH0081-07
Date Collected: 08/24/10 18:30
Matrix: Soil
Date Received: 08/27/10 09:38
Percent Solids: 96.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		0.3655	10I0018_P	09/05/10 07:00	JJB	TestAmerica Anchorage
total	Analysis	AK101-MS/EPA 8260B		33.3	T000456	09/05/10 16:01	JJB	TestAmerica Anchorage
total	Prep	EPA 3545		0.9756	10I0008_P	09/02/10 08:44	rt	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000459	09/07/10 15:09	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10I0010_P	09/02/10 17:24	JPN	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10I0010	09/03/10 08:40	JN	TestAmerica Anchorage

Client Sample ID: 10JUNAAOFB15S4

Lab Sample ID: ATH0081-08
Date Collected: 08/24/10 18:50
Matrix: Soil
Date Received: 08/27/10 09:38
Percent Solids: 97.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		0.2586	10I0018_P	09/05/10 07:00	JJB	TestAmerica Anchorage
total	Analysis	AK101-MS/EPA 8260B		33.3	T000456	09/05/10 21:54	JJB	TestAmerica Anchorage
total	Prep	EPA 3545		0.9298	10I0008_P	09/02/10 08:44	rt	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000459	09/07/10 20:57	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10I0010_P	09/02/10 17:24	JPN	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10I0010	09/03/10 08:40	JN	TestAmerica Anchorage

Client Sample ID: 10JUNAAOFB16S1

Lab Sample ID: ATH0081-09
Date Collected: 08/25/10 14:50
Matrix: Soil
Date Received: 08/27/10 09:38
Percent Solids: 96.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		0.37	10I0018_P	09/05/10 07:00	JJB	TestAmerica Anchorage
total	Analysis	AK101-MS/EPA 8260B		33.3	T000456	09/05/10 19:16	JJB	TestAmerica Anchorage
total	Prep	EPA 3545		0.9945	10I0008_P	09/02/10 08:44	rt	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000460	09/07/10 20:57	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10I0010_P	09/02/10 17:24	JPN	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10I0010	09/03/10 08:40	JN	TestAmerica Anchorage

Client Sample ID: 10JUNAAOFB16S4

Lab Sample ID: ATH0081-10
Date Collected: 08/25/10 14:35
Matrix: Soil
Date Received: 08/27/10 09:38
Percent Solids: 95.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		0.2635	10I0018_P	09/05/10 07:00	JJB	TestAmerica Anchorage
total	Analysis	AK101-MS/EPA 8260B		33.3	T000456	09/05/10 19:47	JJB	TestAmerica Anchorage
total	Prep	EPA 3545		0.9794	10I0008_P	09/02/10 08:44	rt	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000459	09/07/10 21:29	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10I0007_P	09/01/10 18:43	sl	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10I0007	09/02/10 08:00	JN	TestAmerica Anchorage

Client Sample ID: 10JUNAAOFB17S2

Lab Sample ID: ATH0081-11
Date Collected: 08/25/10 11:20
Matrix: Soil
Date Received: 08/27/10 09:38
Percent Solids: 94.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		0.3554	10I0018_P	09/05/10 07:00	JJB	TestAmerica Anchorage
total	Analysis	AK101-MS/EPA 8260B		33.3	T000456	09/05/10 20:19	JJB	TestAmerica Anchorage
total	Prep	EPA 3545		0.9794	10I0008_P	09/02/10 08:44	rt	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000460	09/07/10 21:29	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10I0007_P	09/01/10 18:43	sl	TestAmerica Anchorage

Client Sample ID: 10JUNAAOFB17S2

Lab Sample ID: ATH0081-11
Date Collected: 08/25/10 11:20
Matrix: Soil
Date Received: 08/27/10 09:38
Percent Solids: 94.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Analysis	TA-SOP		1	10I0007	09/02/10 08:00	JN	TestAmerica Anchorage

Client Sample ID: 10JUNAAOFB17S3

Lab Sample ID: ATH0081-12
Date Collected: 08/25/10 11:34
Matrix: Soil
Date Received: 08/27/10 09:38
Percent Solids: 76.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		0.2969	10I0018_P	09/05/10 07:00	JJB	TestAmerica Anchorage
total	Analysis	AK101-MS/EPA 8260B		33.3	T000456	09/05/10 20:50	JJB	TestAmerica Anchorage
total	Prep	EPA 3550B		1	10I0015_P	09/02/10 12:10	MS	TestAmerica Spokane
total	Analysis	EPA 8270 mod.		1	10I0015	09/03/10 21:00	ZZZ	TestAmerica Spokane
total	Prep	Wet Chem		1	10I0034_P	09/02/10 16:45	MS	TestAmerica Spokane
total	Analysis	TA SOP		1	10I0034	09/03/10 15:15	HB	TestAmerica Spokane
total	Prep	EPA 3545		0.9857	10I0008_P	09/02/10 08:44	rt	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000459	09/07/10 22:01	JN	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10I0007_P	09/01/10 18:43	sl	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10I0007	09/02/10 08:00	JN	TestAmerica Anchorage

Client Sample ID: 10JUNAAOFB14GW1

Lab Sample ID: ATH0081-13
Date Collected: 08/25/10 13:15
Matrix: Water
Date Received: 08/27/10 09:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		1	10I0020_P	09/05/10 12:48	JJB	TestAmerica Anchorage
total	Analysis	AK101-MS/EPA 8260B		1	T000456	09/06/10 21:18	JJB	TestAmerica Anchorage
total	Prep	EPA 3510/600 Series		0.9926	10H0157_P	08/31/10 09:43	MS	TestAmerica Spokane
total	Analysis	EPA 8270 mod.		1	10H0157	08/31/10 16:26	ZZZ	TestAmerica Spokane
total	Prep	EPA 3510		0.813	10H0123_P	08/30/10 14:08	tje	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000453	09/03/10 20:59	JN	TestAmerica Anchorage

Client Sample ID: 10JUNAAOFB14GW2

Lab Sample ID: ATH0081-14
Date Collected: 08/25/10 13:20
Matrix: Water
Date Received: 08/27/10 09:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		1	10I0020_P	09/05/10 12:48	JJB	TestAmerica Anchorage
total	Analysis	AK101-MS/EPA 8260B		1	T000456	09/06/10 21:50	JJB	TestAmerica Anchorage
total	Prep	EPA 3510/600 Series		0.9828	10H0157_P	08/31/10 09:43	MS	TestAmerica Spokane
total	Analysis	EPA 8270 mod.		1	10H0157	08/31/10 16:51	ZZZ	TestAmerica Spokane
total	Prep	EPA 3510		0.8	10H0123_P	08/30/10 14:08	tje	TestAmerica Anchorage
total	Analysis	AK102/103		1	T000454	09/03/10 20:59	JN	TestAmerica Anchorage

Client Sample ID: 10JUNAAOFSTB

Lab Sample ID: ATH0081-15

Date Collected: 08/25/10 12:00

Matrix: Soil

Date Received: 08/27/10 09:38

Percent Solids: 100

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		1	10I0018_P	09/05/10 07:00	JJB	TestAmerica Anchorage
total	Analysis	AK101-MS/EPA 8260B		33.3	T000456	09/05/10 21:22	JJB	TestAmerica Anchorage
total	Prep	*** DEFAULT PREP ***		1	10I0007_P	09/01/10 18:43	sl	TestAmerica Anchorage
total	Analysis	TA-SOP		1	10I0007	09/02/10 08:00	JN	TestAmerica Anchorage

Client Sample ID: 10JUNAAOFWTB1

Lab Sample ID: ATH0081-16

Date Collected: 08/25/10 12:00

Matrix: Water

Date Received: 08/27/10 09:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		1	10I0020_P	09/05/10 12:48	JJB	TestAmerica Anchorage
total	Analysis	AK101-MS/EPA 8260B		1	T000456	09/06/10 22:22	JJB	TestAmerica Anchorage

Certification Summary

Client: Bethel Services Incorporated
Project/Site: 2010116

TestAmerica Job ID: ATH0081
SDG: ATH0081

Laboratory	Authority	Program	EPA Region	Certification ID	Expiration Date
TestAmerica Anchorage	Alaska	Alaska UST	10	UST-067	06/16/11
TestAmerica Anchorage	Alaska	State Program	10	AK00975	06/30/11
TestAmerica Spokane	Alaska	Alaska UST	10	UST-071	10/31/10
TestAmerica Spokane	Washington	State Program	10	C569	01/06/11

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method Summary

Client: Bethel Services Incorporated
Project/Site: 2010116

TestAmerica Job ID: ATH0081
SDG: ATH0081

Method	Method Description	Protocol	Laboratory
AK101-MS/EPA 8260B	Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B		TAL ANC
EPA 8270 mod.	Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring		TAL SPK
TA SOP	Conventional Chemistry Parameters by APHA/EPA Methods		TAL SPK
AK102/103	Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO		TAL ANC
TA-SOP	Physical Parameters by APHA/ASTM/EPA Methods		TAL ANC

Protocol References:

=

Laboratory References:

TAL ANC = TestAmerica Anchorage, 2000 West International Airport Road Suite A10, Anchorage, AK 99502-1119, TEL (907) 563-9200

TAL SPK = TestAmerica Spokane, 11922 E. 1st Ave., Spokane, WA/USA 99206, TEL (509) 924-9200

Sample Summary

Client: Bethel Services Incorporated
Project/Site: 2010116

TestAmerica Job ID: ATH0081
SDG: ATH0081

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
ATH0081-01	10JUNAAOFB13S3	Soil	08/24/10 13:25	08/27/10 09:38
ATH0081-02	10JUNAAOFB13S5	Soil	08/24/10 13:50	08/27/10 09:38
ATH0081-03	10JUNAAOFB14S3	Soil	08/24/10 15:55	08/27/10 09:38
ATH0081-04	10JUNAAOFB14S5	Soil	08/24/10 16:20	08/27/10 09:38
ATH0081-05	10JUNAAOFB14S8	Soil	08/24/10 16:00	08/27/10 09:38
ATH0081-06	10JUNAAOFB14S9	Soil	08/24/10 16:25	08/27/10 09:38
ATH0081-07	10JUNAAOFB15S2	Soil	08/24/10 18:30	08/27/10 09:38
ATH0081-08	10JUNAAOFB15S4	Soil	08/24/10 18:50	08/27/10 09:38
ATH0081-09	10JUNAAOFB16S1	Soil	08/25/10 14:50	08/27/10 09:38
ATH0081-10	10JUNAAOFB16S4	Soil	08/25/10 14:35	08/27/10 09:38
ATH0081-11	10JUNAAOFB17S2	Soil	08/25/10 11:20	08/27/10 09:38
ATH0081-12	10JUNAAOFB17S3	Soil	08/25/10 11:34	08/27/10 09:38
ATH0081-13	10JUNAAOFB14GW1	Water	08/25/10 13:15	08/27/10 09:38
ATH0081-14	10JUNAAOFB14GW2	Water	08/25/10 13:20	08/27/10 09:38
ATH0081-15	10JUNAAOFSTB	Soil	08/25/10 12:00	08/27/10 09:38
ATH0081-16	10JUNAAOFWTB1	Water	08/25/10 12:00	08/27/10 09:38

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

11720 North Creek Pkwy N Suite 400, Bothell, WA 98011-8244 425-420-9200 FAX 420-9210
11922 E. First Ave, Spokane, WA 99206-5302 509-924-9200 FAX 924-9290
9405 SW Nimbus Ave,Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210 ✓

CHAIN OF CUSTODY REPORT

Work Order #: ATH0081

CLIENT: BSI

INVOICE TO: BSI (Aemon Wetmore)

REPORT TO: Aemon Wetmore
ADDRESS: 2605 Denali St. Ste 100
Anchorage, AK 99503
PHONE: 907-644-1704 FAX:

P.O. NUMBER: 2010116

PROJECT NAME: JNU/FBX Decision Docs
PROJECT NUMBER: 2010116
SAMPLED BY: A. Wetmore & J Thomas

TURNAROUND REQUEST in Business Days *

Organic & Inorganic Analyses: [10 STD.] [7] [5] [4] [3] [2] [1] [<1]
Petroleum Hydrocarbon Analyses: [5 STD.] [4] [3] [2] [1] [<1]
[OTHER] Specify:

* Turnaround Requests less than standard may incur Rush Charges.

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	PRESERVATIVE: MeOH	REQUESTED ANALYSES: GRO/BTEX AK101/AK103	DRO/RRO AK102/103	PAH 8270 SIM	MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1	10JUNAAOFB1353	6-24-10/1325		1	1		S	2		-01
2	10JUNAAOFB1355	/1350								-02
3	10JUNAAOFB1453	/1555								-03
4	10JUNAAOFB1455	/1620				1		3		-04
5	10JUNAAOFB1458	/1600						2		-05
6	10JUNAAOFB1459	/1625				1		1		-06
7	10JUNAAOFB1552	/1430		1	1			2		-07
8	10JUNAAOFB1554	/1450								-08
9	10JUNAAOFB1651	6-25-10/1450								-09
10	10JUNAAOFB1654	6-25-10/1435								-10

RELEASED BY: Aemon Wetmore
PRINT NAME: FIRM: BSI
DATE: 6-26-10 TIME: 1200

RECEIVED BY:
PRINT NAME: Joe Thomas FIRM: BSI
DATE: 6/27/10 TIME: 0915

RELEASED BY:
PRINT NAME: Joe Thomas FIRM: BSI
DATE: 6/27/10 TIME: 0938

RECEIVED BY:
PRINT NAME: Robert Tsin FIRM: TA-AK
DATE: 6/27/10 TIME: 9:38

ADDITIONAL REMARKS:
Please Dispose of Samples with an "X" on the Lids. Level II Data Deliverables

TEMP: 4.3°C

TAL-1000(0408)

09/28/2010

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

11720 North Creek Pkwy N Suite 400, Bothell, WA 98011-8244 425-420-9200 FAX 420-9210
11922 E. First Ave, Spokane, WA 99206-5302 509-924-9200 FAX 924-9290
9405 SW Nimbus Ave,Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210

CHAIN OF CUSTODY REPORT

Work Order #: ATH0081

CLIENT: BSI

INVOICE TO: BSI (Aemon Wetmore)

REPORT TO: Aemon Wetmore
ADDRESS: 2605 Denali St. Ste. 100
Anchorage, AK 99503
PHONE: 907-644-1704 FAX:

P.O. NUMBER: 2010116

PROJECT NAME: JNU/FBX Decision Docs

PROJECT NUMBER: 2010116

SAMPLED BY: A. Wetmore / J. Thomas

TURNAROUND REQUEST in Business Days *

Organic & Inorganic Analyses: ~~10~~ STD. | 7 | 5 | 4 | 3 | 2 | 1 | <1

Petroleum Hydrocarbon Analyses: ~~5~~ STD. | 4 | 3 | 2 | 1 | <1

OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges.

CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	PRESERVATIVE													MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
		MeOH			HCl	HCl												
		GRO/BTEX 8260B	DRO/RRO 8015B	PAH 8270SIM	GRO/BTEX 8260B	DRO/RRO 8015B	PAH 8270SIM											
1 10JUNAAOFB1752	8-25-10 / 1120	1	1												S	2		-11
2 10JUNAAOFB1753	/ 1134	1	1	1											S	3		-12
3 10JUNAAOFB14GW1	/ 1315				3	2	2								W	7		-13
4 10JUNAAOFB14GW2	/ 1320				3	2	2								W	7		-14
5 10JUNAAOF-STB	" / 1200	1													S	1	Soil Trip Blank	-15
6 10JUNAAOFWTB1	8-25-10 / 1200				3										W	3	Water Trip Blank	-16
7																		
8																		
9																		
10																		

RELEASED BY: Aemon Wetmore DATE: 8-26-10
PRINT NAME: FIRM: BSI TIME: 1200
RECEIVED BY: PRINT NAME: Joe Thomas FIRM: BSI DATE: 8/27/10 TIME: 0915

RELEASED BY: DATE: 8/27/10
PRINT NAME: Joe Thomas FIRM: BSI TIME: 0938
RECEIVED BY: PRINT NAME: Robert Tsin FIRM: TA-AK DATE: 8/27/10 TIME: 9:38

ADDITIONAL REMARKS:
Please Dispose of Samples with an "X" on the Lid. Level II Data

TEMP: 4.3°C PAGE 2 OF 2

TAL-1000(0408)

Test America Anchorage Cooler Receipt Form

(Army Corps. Compliant)

WORK ORDER # ATH0081 CLIENT: Bethel PROJECT: TNV/PBX Decision Docs

Date /Time Cooler Arrived 8 / 27 / 10 9 : 15 Cooler signed for by: Robert Tsin
(Print name)

Preliminary Examination Phase:

Date cooler opened: ☑ same as date received *or* ____/____/____

Cooler opened by (print) Robert Tsin (sign) Robert Tsin

1. Delivered by ☐ ALASKA AIRLINES ☐ Fed-Ex ☐ UPS ☐ NAC ☐ LYNDEN ☒ CLIENT ☐ Other: ____

Shipment Tracking # if applicable ____ (include copy of shipping papers in file)

2. Number of Custody Seals 2 Signed by See back Date ___/___/___

Were custody seals unbroken and intact on arrival? ☒ Yes ☐ No

3. Were custody papers sealed in a plastic bag? ☐ Yes ☒ No

4. Were custody papers filled out properly (ink, signed, etc.)? ☒ Yes ☐ No

5. Did you sign the custody papers in the appropriate place? ☒ Yes ☐ No

6. Was ice used? ☒ Yes ☐ No Type of ice: ☐ blue ice ☒ gel ice ☐ real ice ☐ dry ice Condition of Ice: solid

Temperature by Digi-Thermo Probe 4.3 °C Thermometer # 5
Acceptance Criteria: 0 - 6°C

7. Packing in Cooler: ☒ bubble wrap ☐ styrofoam ☐ cardboard ☐ Other: ____

8. Did samples arrive in plastic bags? ☒ Yes ☐ No

9. Did all bottles arrive unbroken, and with labels in good condition? ☒ Yes ☐ No

10. Are all bottle labels complete (ID, date, time, etc.) ☒ Yes ☐ No

11. Do bottle labels and Chain of Custody agree? ☒ Yes ☐ No

12. Are the containers and preservatives correct for the tests indicated? ☒ Yes ☐ No

13. Conoco Phillips, Alyeska, BP H2O samples only: pH < 2? ☐ Yes ☐ No ☒ N/A

14. Is there adequate volume for the tests requested? ☒ Yes ☐ No

15. Were VOA vials free of bubbles? ☐ N/A ☒ Yes ☐ No

If "NO" which containers contained "head space" or bubbles? ____

Log-in Phase:

Date of sample log-in 8 / 27 / 10

Samples logged in by (print) Robert Tsin (sign) Robert Tsin

1. Was project identifiable from custody papers? ☒ Yes ☐ No
2. Do Turn Around Times and Due Dates agree? ☒ Yes ☐ No
3. Was the Project Manager notified of status? ☒ Yes ☐ No
4. Was the Lab notified of status? ☒ Yes ☐ No
5. Was the COC scanned and copied? ☒ Yes ☐ No

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
463824

Custody Seal
DATE 9-28-10
SIGNATURE

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
463823

Custody Seal
DATE 9-28-10
SIGNATURE

ATH0081

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
463824

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
463823

APPENDIX E

DATA QUALITY REPORT AND
ADEC DATA REVIEW CHECK LIST

DATA VALIDATION REPORT

Date October 8, 2010

Project: AK Army National Guard Juneau AAOF Site Investigation
Site: Juneau, AK
Laboratory: TestAmerica, Anchorage, AK and Spokane, WA
SDG#: ATH0081
Receipt date: August 27, 2010
Analysis: GRO, BTEX, DRO/RRO, PAH

The following tables list the field sample numbers, corresponding laboratory numbers, and requested analyses:

Field Sample ID	Lab Sample ID	Analyses requested	Matrix	QC
10JUNAAOFB13S3	ATH0081-01	GRO/BTEX, DRO/RRO	Soil	
10JUNAAOFB13S5	ATH0081-02	GRO/BTEX, DRO/RRO	Soil	
10JUNAAOFB14S3	ATH0081-03	GRO/BTEX, DRO/RRO	Soil	
10JUNAAOFB14S5	ATH0081-04	GRO/BTEX, DRO/RRO, PAH	Soil	
10JUNAAOFB14S8	ATH0081-05	GRO/BTEX, DRO/RRO	Soil	Dup of 10JUNAAOFB14S3
10JUNAAOFB14S9	ATH0081-06	GRO/BTEX, DRO/RRO, PAH	Soil	Dup of 10JUNAAOFB14S5
10JUNAAOFB15S2	ATH0081-07	GRO/BTEX, DRO/RRO	Soil	
10JUNAAOFB15S4	ATH0081-08	GRO/BTEX, DRO/RRO	Soil	
10JUNAAOFB16S1	ATH0081-09	GRO/BTEX, DRO/RRO	Soil	
10JUNAAOFB16S4	ATH0081-10	GRO/BTEX, DRO/RRO	Soil	
10JUNAAOFB17S2	ATH0081-11	GRO/BTEX, DRO/RRO	Soil	
10JUNAAOFB17S3	ATH0081-12	GRO/BTEX, DRO/RRO, PAH	Soil	
10JUNAAOFB14GW1	ATH0081-13	GRO/BTEX, DRO/RRO, PAH	Water	
10JUNAAOFB14GW2	ATH0081-14	GRO/BTEX, DRO/RRO, PAH	Water	Dup of 10JUNAAOFB14GW1
10JUNAAOFSTB	ATH0081-15	GRO/BTEX	Soil	Trip Blank
10JUNAAOFWTB1	ATH0081-16	GRO/BTEX	Water	Trip Blank

This QA summary includes a review, where appropriate, of the following parameters:

Data Completeness
Chain of Custody (COC) and Cooler Receipt Forms (CRF)
Holding Times and Preservation
Analytical reporting limits and method detection limits
Blank Analysis Results
Surrogate Recoveries *(Organics only)*
Field Duplicates

Laboratory Control Sample (LCS) Results
Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Results
Overall Assessment

Each analysis that was performed is evaluated in the following subsections. Validation was conducted in accordance with the USEPA document "Test Methods for Evaluating Solid Wastes, SW-846, revision 6" (February, 2007 and updates), USEPA Contract Laboratory Program National Functional Guidelines for Organic (October, 1999) Review, Department of Defense Quality Systems Manual for Environmental Laboratories, Version 3 (DoD QSM) (January, 2006), where applicable.

DATA QUALIFIER DEFINITIONS

For the purpose of Data Validation, the following code letters and associated definitions are provided for use by the data validator to summarize the data quality.

R	Reported value is "rejected." Resampling or reanalysis may be necessary to verify the presence or absence of the compound.
J	The associated numerical value is an estimated quantity because the Quality Control criteria were not met.
UJ	The reported quantitation limit is estimated because Quality Control criteria were not met. Element or compound was not detected.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.
NR	Result was not used from a particular sample analysis. This typically occurs when more than one result for an element is reported due to dilutions and reanalysis.

Data Completeness:

All data necessary to complete a level II data validation on this Sample Delivery Group (SDG) was provided upon request.

Chain of Custody (COC) and Cooler Receipt Forms (CRF)

Samples were submitted to TestAmerica in Anchorage, AK. Thirteen (13) soil and three (3) water samples, including three duplicate samples and two trip blanks, were submitted in one SDG on August 28, 2010. Soil sample 10JUNAAOFB14S8 was collected as a duplicate of sample 10JUNAAOFB14S3. Soil sample 10JUNAAOFB14S9 was collected as a duplicate of sample

10JUNAAOFB14S5. Water sample 10JUNAAOFB14GW2 was collected as a duplicate of sample 10JUNAAOFB14GW1. A matrix spike/matrix spike duplicate (MS/MSD) sample was not designated for this SDG.

Samples requiring PAH analyses were forwarded to TestAmerica in Spokane, WA (job number STH0141).

The sample results are reported under TestAmerica job number ATH0081, and all samples were received at the respective laboratories properly preserved and within temperature (4 ± 2°C), in good condition.

Holding Times and Preservation:

All holding time criteria were met (see Table 1 below). Samples were received in Anchorage cool at 4.3°C. The subcontracted samples were received in Spokane cool at 3.2° C. These temperatures are within the recommended preservation range of 4 ± 2°C.

Table 1: Holding times and preservation

		Water			Soil		
	Method	Days to Extraction	Days to Analysis	Pres	Days to Extraction	Days to Analysis	Pres
BTEX	8260B	-	14	4±2°C; HCl	-	14	4±2°C, MeOH
Gasoline Range Organics	AK101	-	14	4±2°C; HCl	-	28	4±2°C, MeOH
Diesel Range Organics	AK102	14	40	4±2°C; HCl	14	40	4±2°C
PAH	8270C Sim	14	40	4±2°C; HCl	14	40	4±2°C

Analytical reporting limits and method detection limits:

All sample results were evaluated to the PQL.

Soil limits are adjusted for moisture content. Soil reporting limits for DRO and RRO exceed DQOs outlined in Table 8-1 of the workplan, but are well below the most stringent 18AAC75 Table B2/Method Two Cleanup Levels.

Water limits are well below the most stringent 18AAC75 Table C Groundwater Cleanup Levels.

Blank Analysis Results:

The method blanks (MBs) and Trip Blanks (TBs) were analyzed at the required frequencies. No analytes were detected at levels above the Practical Quantitation Limit (PQL).

Surrogate Recoveries:

Soil:

ATH0081-04 (10JUNAAOFB14S5):

- GRO/BTEX: 4-BFB surrogate recovery (72.9%) is below QC limits (75-125%). The positive results for GRO and Xylenes are qualified as estimated (J), and the non-detect (ND) PQLs for Benzene, Ethylbenzene and Toluene are qualified as estimated (UJ).
- PAH: 2-FBP surrogate recovery (145%) is above QC Limits (30-140%). Positive 1-methylnaphthalene, 2-methylnaphthalene, and Acenaphthene results are qualified as estimated (J).
- GRO/BTEX reanalysis: Dibromofluoromethane (DBFM) surrogate recovery (73.4%) is below QC limits (75-125%). The positive result for GRO is qualified as estimated (J).

ATH0081-08 (10JUNAAOFB15S4):

- GRO/BTEX: 4-BFB surrogate recovery (221%) is above QC limits (75-125%). All results are ND; therefore, no qualifications were made.

ATH0081-09 (10JUNAAOFB16S1):

- GRO/BTEX: DBFM surrogate recovery (44.7%) is below QC limits (75-125%). All results are ND; therefore, the PQLs are qualified as estimated (UJ).

Water:

ATH0081-13 (10JUNAAOFB14GW1):

- GRO/BTEX: DBFM surrogate recovery (29.1%) is below QC limits (75-125%). The positive GRO results is qualified as estimated (J), and the non-detect BTEX PQLs are qualified as estimated (UJ).

ATH0081-14 (10JUNAAOFB14GW2):

- GRO/BTEX: DBFM surrogate recovery (44.1%) is below QC limits (75-125%). The positive GRO results is qualified as estimated (J), and the non-detect BTEX PQLs are qualified as estimated (UJ).

ATH0081-16 (10JUNAAOFWTB1):

- GRO/BTEX: DBFM surrogate recovery (46.8%) is below QC limits (75-125%). All results are ND; therefore, the PQLs are qualified as estimated (UJ).

Field Duplicates:

Three field duplicate QC samples were collected and analyzed. Soil sample 10JUNAAOFB14S8 was collected as a duplicate of sample 10JUNAAOFB14S3. Soil sample 10JUNAAOFB14S9 was collected as a duplicate of sample 10JUNAAOFB14S%. Water sample

10JUNAAOFB14GW2 was collected as a duplicate of sample 10JUNAAOFB14GW1. The results are listed in Table E-1 at the end of this report.

Field QC duplicate sample results were within guidelines (water RPDs ≤ 30%, soil RPDs ≤ 50%) with the following exceptions:

- The RPDs for 1-Methylnaphthalene, 2-Methylnaphthalene and Acenaphthene in the soil duplicate pair ATH0081-04/-06 (10JUNAAOFB14S5/10JUNAAOFB14S9) are above RPD guidelines. The positive results in both samples are qualified as estimated (J).
- The RPDs for Fluorene and Naphthalene in the soil duplicate pair ATH0081-04/-06 (10JUNAAOFB14S5/10JUNAAOFB14S9) cannot be calculated. The primary sample is ND and the duplicate has a positive result greater than two times the PQL. Therefore, the results for both analytes are qualified as estimated (UJ/J).
- The RPDs for DRO, 1-methylnaphthalene and Naphthalene in the water duplicate pair ATH0081-13/-14 (10JUNAAOFB14GW1/10JUNAAOFB14GW2) are above RPD guidelines. The positive results in both samples are qualified as estimated (J).

Laboratory Control Sample (LCS) Results:

All LCS recoveries were within the project QC limits specified in the DQO Table 8-1 of the workplan.

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Results:

An MS/MSD sample was not designated for this SDG.

An MS/MSD for BTEX was performed on soil sample ATH0081-03 (10JUNAAOFB14S3) with acceptable results.

An MS/MSD for PAH was performed on soil sample ATH0081-12 (10JUNAAOFB17S3) with acceptable results.

All other MS/MSD analyses were performed samples from another project; no qualifications were made.

OVERALL ASSESSMENT

Soils:

The positive results for GRO and Xylene in soil sample ATH0081-4 (10JUNAAOFB14S5) are qualified as estimated (J), and Benzene, Ethylbenzene and Toluene PQLs are qualified as estimated (UJ), due to low 4-BFB surrogate recovery.

The positive results for 1-methylnaphthalene, 2-methylnaphthalene and Acenaphthene in soil sample ATH0081-4 (10JUNAAOFB14S5) are qualified as estimated (J) due to high 2-FBP surrogate recovery.

The positive reanalysis result for GRO in soil sample ATH0081-4 (10JUNAAOFB14S5) is qualified as estimated (J) due to low DBFM surrogate recovery.

The non-detect PQLs for GRO in soil sample ATH0081-9 (10JUNAAOFB16S1) are qualified as estimated (UJ) due to low DBFM surrogate recovery.

1-Methylnaphthalene, 2-Methylnaphthalene, and Acenaphthene results for the soil field duplicate pair ATH0081-04/-06 (10JUNAAOFB14S5/10JUNAAOFB14S9) are qualified as estimated (J), and Fluorene and Naphthalene are qualified as estimated (UJ/J), due to high RPD.

Waters:

The positive result for GRO in water sample ATH0081-13 (10JUNAAOFB14GW1) is qualified as estimated (J), and the non-detect PQLs for Benzene, Toluene, Ethylbenzene and Xylenes are qualified as estimated (UJ), due to low DBFM surrogate recovery.

The positive result for GRO in water sample ATH0081-14 (10JUNAAOFB14GW2) is qualified as estimated (J), and the non-detect PQLs for Benzene, Toluene, Ethylbenzene and Xylenes are qualified as estimated (UJ), due to low DBFM surrogate recovery.

The non-detect PQLs for GRO and Benzene, Toluene, Ethylbenzene and Xylenes in water sample ATH0081-16 (10JUNAAOFWTB1) are qualified as estimated (UJ) due to low DBFM surrogate recovery.

Note: GRO/BTEX: DBFM surrogate recovery for all water samples, including QC, associated with analytical batch 10I0020 is below QC limits. There is no evidence of reanalysis. All associated results are already qualified as estimated; no further qualifications were made.

DRO, 1-Methylnaphthalene and Naphthalene results for the water field duplicate pair ATH0081-13/-14 (10JUNAAOFB14GW1/10JUNAAOFB14GW2) are qualified as estimated (J) due to high RPD.

All other sample results are considered to be valid with no data qualifiers assigned.

Victoria Yancey
Project Chemist
Bethel Services, Inc.
Attachments:
ADEC Data Validation Checklist

Table E-1: Field Duplicate results

Analyte	Method	Sample ATH0081-03 10JUNAAOFB14S3	Duplicate ATH0081-05 10JUNAAOFB14S8	Reporting Limit	RPD	Units	Flag
Benzene	AK101/8260B	ND	ND	0.00618	NC	mg/kg	
Ethylbenzene	AK101/8260B	ND	ND	0.0154	NC	mg/kg	
Gasoline Range Organics	AK101/8260B	ND	ND	1.54	NC	mg/kg	
Toluene	AK101/8260B	ND	ND	0.0154	NC	mg/kg	
Xylenes (total)	AK101/8260B	ND	ND	0.0232	NC	mg/kg	
Diesel Range Organics	AK101/8260B	ND	ND	21.1	NC	mg/kg	
Residual Range Organics	AK101/8260B	ND	ND	52.8	NC	mg/kg	

Analyte	Method	Sample ATH0081-04 10JUNAAOFB14S5	Duplicate ATH0081-06 10JUNAAOFB14S9	Reporting Limit	RPD	Units	Flag
1-Methylnapthalene	EPA 8270 mod.	0.224	2.61	0.0550	168	mg/kg	J
2-Methylnaphthalene	EPA 8270 mod.	0.238	3.27	0.0550	173	mg/kg	J
Acenaphthene	EPA 8270 mod.	0.0323	0.160	0.0220	133	mg/kg	J
Acenaphthylene	EPA 8270 mod.	ND	ND	0.0220	NC	mg/kg	
Anthracene	EPA 8270 mod.	ND	ND	0.0220	NC	mg/kg	
Benzo (a) anthracene	EPA 8270 mod.	ND	ND	0.0220	NC	mg/kg	
Benzo (a) pyrene	EPA 8270 mod.	ND	ND	0.0220	NC	mg/kg	
Benzo (b) fluoranthene	EPA 8270 mod.	ND	ND	0.0220	NC	mg/kg	
Benzo (ghi) perylene	EPA 8270 mod.	ND	ND	0.0220	NC	mg/kg	
Benzo (k) fluoranthene	EPA 8270 mod.	ND	ND	0.0220	NC	mg/kg	
Chrysene	EPA 8270 mod.	ND	ND	0.0220	NC	mg/kg	
Dibenzo (a,h) anthracene	EPA 8270 mod.	ND	ND	0.0220	NC	mg/kg	
Fluoranthene	EPA 8270 mod.	ND	ND	0.0220	NC	mg/kg	
Fluorene	EPA 8270 mod.	ND	0.116	0.0220	NC	mg/kg	UJ/J
Indeno (1,2,3-cd) pyrene	EPA 8270 mod.	ND	ND	0.0220	NC	mg/kg	
Naphthalene	EPA 8270 mod.	ND	0.341	0.0550	NC	mg/kg	UJ/J
Phenanthrene	EPA 8270 mod.	ND	ND	0.0220	NC	mg/kg	
Pyrene	EPA 8270 mod.	ND	ND	0.0220	NC	mg/kg	

Analyte	Method	Sample ATH0081-13 10JUNAAOFB14GW1	Duplicate ATH0081-14 10JUNAAOFB14GW2	Reporting Limit	RPD	Units	Flag
Benzene	AK101/8260B	ND	ND	0.500	NC	µg/l	
Ethylbenzene	AK101/8260B	ND	ND	1.00	NC	µg/l	
Gasoline Range Organics	AK101/8260B	81.4	78.3	50.0	4	µg/l	
Toluene	AK101/8260B	ND	ND	1.00	NC	µg/l	
Xylenes (total)	AK101/8260B	ND	ND	3.00	NC	µg/l	
Diesel Range Organics	AK102/103	1.43	1.96	0.407	31	mg/l	J
Residual Range Organics	AK102/103	ND	ND	0.407	NC	mg/l	
1-Methylnapthalene	EPA 8270 mod.	0.948	3.01	0.0993	104	µg/l	J
2-Methylnaphthalene	EPA 8270 mod.	ND	ND	0.0993	NC	µg/l	
Acenaphthene	EPA 8270 mod.	0.129	0.143	0.0993	10	µg/l	
Acenaphthylene	EPA 8270 mod.	ND	ND	0.0993	NC	µg/l	
Anthracene	EPA 8270 mod.	ND	ND	0.0993	NC	µg/l	

Table E-1: Field Duplicate results, cont.

Analyte	Method	Sample ATH0081-13 10JUNAAOFB14GW1	Duplicate ATH0081-14 10JUNAAOFB14GW2	Reporting Limit	RPD	Units	Flag
Benzo (a) anthracene	EPA 8270 mod.	ND	ND	0.0993	NC	µg/l	
Benzo (a) pyrene	EPA 8270 mod.	ND	ND	0.0993	NC	µg/l	
Benzo (b) fluoranthene	EPA 8270 mod.	ND	ND	0.0993	NC	µg/l	
Benzo (ghi) perylene	EPA 8270 mod.	ND	ND	0.0993	NC	µg/l	
Benzo (k) fluoranthene	EPA 8270 mod.	ND	ND	0.0993	NC	µg/l	
Chrysene	EPA 8270 mod.	ND	ND	0.0993	NC	µg/l	
Dibenzo (a,h) anthracene	EPA 8270 mod.	ND	ND	0.0993	NC	µg/l	
Fluoranthene	EPA 8270 mod.	ND	ND	0.0993	NC	µg/l	
Fluorene	EPA 8270 mod.	0.233	0.275	0.0993	17	µg/l	
Indeno (1,2,3-cd) pyrene	EPA 8270 mod.	ND	ND	0.0993	NC	µg/l	
Naphthalene	EPA 8270 mod.	0.958	1.31	0.0993	31	µg/l	J
Phenanthrene	EPA 8270 mod.	ND	ND	0.0993	NC	µg/l	
Pyrene	EPA 8270 mod.	ND	ND	0.0993	NC	µg/l	

Laboratory Data Review Checklist

Completed by:	Victoria Yancey		
Title:	Environmental Scientist	Date:	Oct 8, 2010
CS Report Name:	AKANG Juneau AAOF SI	Report Date:	Sep 28, 2010
Consultant Firm:	Bethel Services, Inc. (BSI)		
Laboratory Name:	TestAmerica	Laboratory Report Number:	ATH0081
ADEC File Number:		ADEC RecKey Number:	

1. Laboratory

a. Did an ADEC CS approved laboratory receive and perform all of the submitted sample analyses?

(●) Yes ( ) No ( ) NA (Please explain.) Comments:

TA-Anchorage, AK

b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses ADEC CS approved?

(●) Yes ( ) No ( ) NA (Please explain) Comments:

TA-Spokane, WA (PAHs)

2. Chain of Custody (COC)

a. COC information completed, signed, and dated (including released/received by)?

(●) Yes ( ) No ( ) NA (Please explain) Comments:

custody chain is unclear between Wetmore and Dobson on 7/19

b. Correct analyses requested?

(●) Yes ( ) No ( ) NA (Please explain) Comments:

3. Laboratory Sample Receipt Documentation

a. Sample/cooler temperature documented and within range at receipt (4° ± 2° C)?

(●) Yes ( ) No ( ) NA (Please explain) Comments:

4.3°C in Anch; 3.2°C in Spokane

b. Sample preservation acceptable - acidified waters, Methanol preserved VOC soil (GRO, BTEX, Volatile Chlorinated Solvents, etc.)?

(•) Yes ( ) No ( ) NA (Please explain) Comments:

c. Sample condition documented - broken, leaking (Methanol), zero headspace (VOC vials)?

(•) Yes ( ) No ( ) NA (Please explain) Comments:

d. If there were any discrepancies, were they documented? - For example, incorrect sample containers/ preservation, sample temperature outside of acceptance range, insufficient or missing samples, etc.?

(•) Yes ( ) No ( ) NA (Please explain) Comments:

e. Data quality or usability affected? (Please explain)

Comments:

no

4. Case Narrative

a. Present and understandable?

( ) Yes (•) No ( ) NA (Please explain) Comments:

No CN, only data flags

b. Discrepancies, errors or QC failures identified by the lab?

( ) Yes ( ) No ( ) NA (Please explain) Comments:

c. Were all corrective actions documented?

(•) Yes ( ) No ( ) NA (Please explain) Comments:

d. What is the effect on data quality/usability according to the case narrative?

Comments:

usable as qualified

5. Samples Results

a. Correct analyses performed/reported as requested on COC?

(•) Yes ( ) No ( ) NA (Please explain) Comments:

b. All applicable holding times met?

(•) Yes ( ) No ( ) NA (Please explain) Comments:

-4 GRO reanalyzed at 14.8 days... OK up to 28 days with MeOH preservative

c. All soils reported on a dry weight basis?

(•) Yes ( ) No ( ) NA (Please explain) Comments:

d. Are the reported PQLs less than the Cleanup Level or the minimum required detection level for the project?

(•) Yes ( ) No ( ) NA (Please explain) Comments:

DRO/RRO RLs > DQOs listed in WP; well below CL

e. Data quality or usability affected? (Please explain)

Comments:

No

6. QC Samples

a. Method Blank

i. One method blank reported per matrix, analysis and 20 samples?

( ) Yes ( ) No ( ) NA (Please explain) Comments:

Yes

ii. All method blank results less than PQL?

(•) Yes ( ) No ( ) NA (Please explain) Comments:

iii. If above PQL, what samples are affected? Comments:

NA

iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

○ Yes ○ No ◉ NA (Please explain) Comments:

v. Data quality or usability affected? (Please explain) Comments:

No

b. Laboratory Control Sample/Duplicate (LCS/LCSD)

i. Organics - One LCS/LCSD reported per matrix, analysis and 20 samples? (LCS/LCSD required per AK methods, LCS required per SW846)

◉ Yes ○ No ○ NA (Please explain) Comments:

ii. Metals/Inorganics - One LCS and one sample duplicate reported per matrix, analysis and 20 samples?

○ Yes ○ No ◉ NA (Please explain) Comments:

iii. Accuracy - All percent recoveries (%R) reported and within method or laboratory limits? And project specified DQOs, if applicable. (AK Petroleum methods: AK101 60%-120%, AK102 75%-125%, AK103 60%-120%; all other analyses see the laboratory QC pages)

◉ Yes ○ No ○ NA (Please explain) Comments:

iv. Precision - All relative percent differences (RPD) reported and less than method or laboratory limits? And project specified DQOs, if applicable. RPD reported from LCS/LCSD, MS/DMSD, and or sample/sample duplicate. (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)

○ Yes ◉ No ○ NA (Please explain) Comments:

Yes for LCS/D; no for non-site-specific MS/MSD. No qual.

v. If %R or RPD is outside of acceptable limits, what samples are affected?

Comments:

none

vi. Do the affected samples(s) have data flags? If so, are the data flags clearly defined?

(•) Yes ( ) No ( ) NA (Please explain) Comments:

vii. Data quality or usability affected? (Please explain) Comments:

No

c. Surrogates - Organics Only

i. Are surrogate recoveries reported for organic analyses - field, QC and laboratory samples?

(•) Yes ( ) No ( ) NA (Please explain) Comments:

ii. Accuracy - All percent recoveries (%R) reported and within method or laboratory limits? And project specified DQOs, if applicable. (AK Petroleum methods 50-150 %R; all other analyses see the laboratory report pages)

( ) Yes (•) No ( ) NA (Please explain) Comments:

GRO/BTEX - DBFM, BFB ; PAH - 2-FBP - see DQA for list

iii. Do the sample results with failed surrogate recoveries have data flags? If so, are the data flags clearly defined?

(•) Yes ( ) No ( ) NA (Please explain) Comments:

iv. Data quality or usability affected? (Use the comment box to explain.). Comments:

Usable as qualified

d. Trip Blank - Volatile analyses only (GRO, BTEX, Volatile Chlorinated Solvents, etc.): Water and Soil

i. One trip blank reported per matrix, analysis and for each cooler containing volatile samples? (If not, enter explanation below.)

(•) Yes ( ) No ( ) NA (Please explain.) Comments:

1 soil, 1 water

ii. Is the cooler used to transport the trip blank and VOA samples clearly indicated on the COC? (If not, a comment explaining why must be entered below)

( ) Yes ( ) No (•) NA (Please explain.) Comments:

only one cooler

iii. All results less than PQL?

◉ Yes ○ No ○ NA (Please explain.) Comments:

iv. If above PQL, what samples are affected?

Comments:

NA

v. Data quality or usability affected? (Please explain.)

Comments:

No

e. Field Duplicate

i. One field duplicate submitted per matrix, analysis and 10 project samples?

◉ Yes ○ No ○ NA (Please explain) Comments:

2 soil, 1 water (-3/-5, -4/-6, -12/-13)

ii. Submitted blind to lab?

◉ Yes ○ No ○ NA (Please explain.) Comments:

iii. Precision - All relative percent differences (RPD) less than specified DQOs?
(Recommended: 30% water, 50% soil)

$$\text{RPD (\%)} = \text{Absolute Value of: } \frac{(R_1 - R_2)}{((R_1 + R_2)/2)} \times 100$$

Where R_1 = Sample Concentration

R_2 = Field Duplicate Concentration

○ Yes ◉ No ○ NA (Please explain) Comments:

See table E-1 at end of DQA

iv. Data quality or usability affected? (Use the comment box to explain why or why not.)

○ Yes ◉ No ○ NA (Please explain) Comments:

Usable as qualified.

f. Decontamination or Equipment Blank (if applicable)

○ Yes ○ No ○ NA (Please explain) Comments:

No EB submitted

i. All results less than PQL?

○ Yes ○ No ◉ NA (Please explain) Comments:

ii. If above PQL, what samples are affected?

Comments:

NA

iii. Data quality or usability affected? (Please explain.)

Comments:

NA

7. Other Data Flags/Qualifiers (ACOE, AFCEE, Lab Specific, etc.)

a. Defined and appropriate?

◉ Yes ○ No ○ NA (Please explain) Comments:

Reset Form

APPENDIX F

AIRPORT FIRE STATION DRILLING REPORT

8445

DAILY DRILLING REPORT
Hearron 43 BOX 600 TULSA OK 74101

CONTRACTOR: Wallace Drilling Co
DATE: 5-24-77
COMPANY: Fire Station airport
LEASE:
WELL NO.:
RIG NO.:
DISTRICT: Juneau
COUNTY:
STATE:
D. P. STRING NO.:
SIZE:

FROM	TO	FORMATION	ROTARY SPEED	WEIGHT ON BIT	PUMP PRES.
0	20	Sand fine			
20	23	Ground Course			

	NAME	HRS.
DM		
EM		
H		
H		
DRLR		

SLOPE TEST
@ FT.
DEG. OFF

ACCIDENT:— (GIVE NAME)

BIT AND COREHEAD RECORD			MUD RECORD		TIME RECORD		DRILL STEM RECORD	
RUN NO.			WEIGHT		DRILLING		SIZE D. P.	
SIZE			VISC.		CORING		SIZE COLL.	
MAKE			WTR. LOSS-C.C.		OTHER		JTS. D. P.	FT.
SERIAL NO.			FILTER CAKE		REPAIRS		KELLY DOWN	FT.
DEPTH IN			PH.		TRIP		COLLARS	FT.
HOURS RUN			MTL. ADDED (REMARKS)				TOTAL	FT.

REMARKS:

FROM	TO	FORMATION	ROTARY SPEED	WEIGHT ON BIT	PUMP PRES.
23	46	White Sand			
46	78	Course Sand small Rock			

	NAME	HRS.
DM		
EM		
H		
H		
DRLR	Carl Wallace	

SLOPE TEST
@ FT.
DEG. OFF

ACCIDENT:— (GIVE NAME)

BIT AND COREHEAD RECORD			MUD RECORD		TIME RECORD		DRILL STEM RECORD	
RUN NO.			WEIGHT		DRILLING		SIZE D. P.	
SIZE			VISC.		CORING		SIZE COLL.	
MAKE			WTR. LOSS-C.C.		OTHER		JTS. D. P.	FT.
SERIAL NO.			FILTER CAKE		REPAIRS		KELLY DOWN	FT.
DEPTH IN			PH.		TRIP		COLLARS	FT.
HOURS RUN			MTL. ADDED (REMARKS)				TOTAL	FT.

REMARKS: Casing To 100'

FROM	TO	FORMATION	ROTARY SPEED	WEIGHT ON BIT	PUMP PRES.
78	100	Course Rock w/ White Sand			

		HRS.
DM		

SLOPE TEST
@ FT.
DEG. OFF

ACCIDENT:— (GIVE NAME)

BIT AND COREHEAD RECORD			MUD RECORD			DRILL STEM RECORD	
RUN NO.			WEIGHT		DRILLING	SIZE D. P.	
SIZE			VISC.		CORING	SIZE COLL.	
MAKE			WTR. LOSS-C.C.		OTHER	JTS. D. P.	FT.
SERIAL NO.			FILTER CAKE		REPAIRS	KELLY DOWN	FT.
DEPTH IN			PH.		TRIP	COLLARS	FT.
HOURS RUN			MTL. ADDED (REMARKS)			TOTAL	FT.

REMARKS: Set 10' S/ # 8 slot Johnson Stainless steel screen @ 96' Reeled Casing back To 87 @ Approx 75 Gals per min Salt Water.

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APPROVED

TOOL PUSHER

CD 40-66-31

Site Investigation Report for Juneau AAOF

Alaska Army National Guard
Environmental Section
Fort Richardson, Alaska

Contract No. DAHA90-94-D-0006
Delivery Order 5

Prepared by

CH2M HILL

January 1996

106462.B0.20 Juneau AAOF Cov 10/27/95

Contents

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(Continued)

Tables

Figures

Abbreviations

AAC	*Alaska Administrative Code*
AAOF	Army Aviation Operating Facility
ADCRA	Alaska Department of Community and Regional Affairs
ADEC	Alaska Department of Environmental Conservation
ADOT&PF	Alaska Department of Transportation and Public Facilities
AEIDC	Arctic Environmental Information and Data Center
AK ARNG	Alaska Army National Guard
AST	aboveground storage tank
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and xylenes
CFR	*Code of Federal Regulations*
CSL	Close Support Laboratory
DRO	diesel-range organic
ECAS	Environmental Compliance Assessment System
EPA	U.S. Environmental Protection Agency
°F	degree Fahrenheit
FSA	Federal Scout Armory
gpm	gallons per minute
GRO	gasoline-range organic
IR	infrared
MCL	maximum contaminant level
mg/kg	milligrams per kilogram
PA	preliminary assessment
POL	petroleum, oil, and lubricants
PMP	project management plan
QA	quality assurance
QC	quality control
QAPP	quality assurance program plan
SAP	sampling and analysis plan
SI	site inspection
TPH	total petroleum hydrocarbons
USGS	U.S. Geological Survey
UST	underground storage tank
VOC	volatile organic compound

Executive Summary

The scope of this task order was to conduct a records search and interviews to determine potential contamination at the Juneau Army Aviation Operating Facility National Guard facility. This preliminary assessment was followed by a site inspection and investigation to collect soil samples. The vertical extent of the soil sampling was limited to a 5-foot depth. A field screening technique that used a portable infrared unit facilitated site characterization and identified appropriate samples for laboratory confirmation. At the Juneau facility, one area around the fuel dispenser showed soil contamination of JP-5 above Alaska Department of Environmental Conservation guidelines for non-underground storage tanks (5 to 472 milligrams per kilogram [mg/kg] of gasoline-range organic compounds, 10 to 1,020 mg/kg of diesel-range organic compounds, and 0.2 to 16.4 mg/kg of benzene, toluene, ethylbenzene, and xylenes [BTEX]) to a depth of 5 feet.

Because most of the area is paved and BTEX levels are relatively low, and the nearest production well is 1,200 feet away, groundwater contamination is not yet seen as a major concern; however, no groundwater samples have been taken to verify similar results in soil samples.

The soil contaminated around the fuel dispenser that is not covered by concrete is approximately 200 cubic yards. CH2M HILL recommends remedial treatment of this soil. Recommended remedial options are presented in a related focused feasibility study report.

Section 1

Introduction

This report presents the results and recommendations of CH2M HILL's preliminary assessment (PA) and release investigation of aboveground storage tanks (ASTs) for the Alaska Army National Guard (AK ARNG) at the Juneau Army Aviation Operation Facility (AAOF), shown in Figure 1-1.

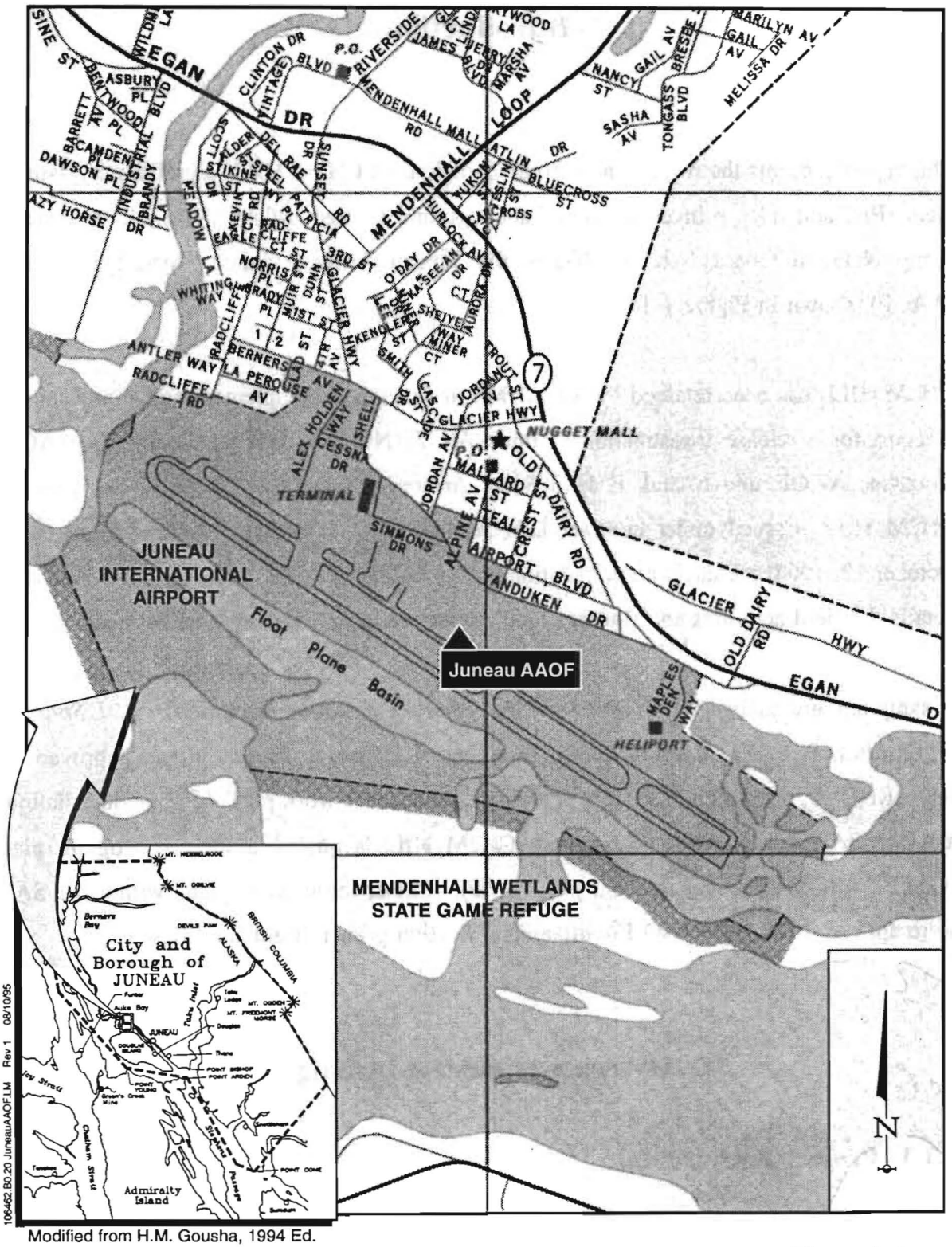
CH2M HILL has been retained by AK ARNG to develop and implement a plan and submit a report for a release investigation of three AK ARNG installations: the Juneau AAOF, Kotzebue AAOF, and Noatak Federal Scout Armory (FSA). The Scope of Services for CH2M HILL (issued under contract DAHA90-94-D-0006, Delivery Order 5, and dated October 12, 1994) includes the preparation and submittal of a final investigation report that details the field activities and findings, and recommends appropriate remedial actions.

A sampling and analysis plan (SAP) entitled *Sampling and Analysis Plan for POL Spills at Three Sites, Delivery Order 5, Fort Richardson, Alaska*, was submitted and approved by AK ARNG in June 1995. The SAP contained site-specific work plans for each installation, and the SAP was attached, along with CH2M HILL's quality assurance program plan (QAPP), to a project management plan (PMP). Site-specific work plans within the SAP were approved by AK ARNG Environmental Section prior to field activities.

1.1 Overview of Release Investigation

1.1.1 Project Background

Since its formation during World War II, the AK ARNG's federal scouts have been tasked with providing defense for Alaska. In the late 1950s, the scout mission was expanded to



Modified from H.M. Gousha, 1994 Ed.

Figure 1-1
Location Map
Juneau AAOF

include search and rescue operations. With the expansion has come the construction and operation of FSAs and AAOFs, including the three sites covered under this delivery order.

A review of records and personal interviews indicates that operation of the facilities has resulted in accidental releases of contaminants. These potential contaminants of concern have generally been limited to surface releases of petroleum products such as heating fuel, diesel fuel, gasoline, and oil. The volumes of the surface releases have ranged from de minimis (usually reported as less than 5 gallons) to 3,000 gallons. CH2M HILL's field effort focused on investigating and characterizing these petroleum releases to a depth of 5 feet or groundwater, whichever is reached first. Descriptions of known releases are also included in Section 3.

1.1.2 Scope of Services

The scope of services undertaken by CH2M HILL for this project is described below as tasks.

Task A: Research available site information to determine areas suspected of being contaminated by petroleum products and to identify data gaps requiring information to allow a site recommendation.

Task B: On the basis of site research and data gaps, conduct a field investigation to (1) determine the presence or absence of suspected petroleum contamination; (2) characterize its extent, degree, and type to a depth of 5 feet; and (3) evaluate the potential for offsite migration.

Task C: Compare results of the field investigation to Alaska Department of Environmental Conservation (ADEC) cleanup standards for a non-underground storage tank petroleum release, and then recommend future action required at each site, based on the four categories described in the SAP.

Task D: Provide information on feasible remedial technologies that can help eliminate or reduce petroleum contaminants to acceptable levels and provide a preliminary recommendation.

Section 2

Approach

The release investigation included site research and a field program. The field program consisted of a site inspection, soil field screening, and confirmation soil sampling.

2.1 Site Research

Prior to the field program, CH2M HILL researched and gathered information on each installation. Much of the information was obtained from other AK ARNG departments, and from federal, state, municipal, and private agencies. Site research allowed CH2M HILL to prepare PA reports for each site and develop site-specific work plans that were followed in the field. The work plans identified areas possibly contaminated by petroleum products as well as essential information that was missing (data gaps) and had to be collected during the field investigation to allow CH2M HILL to recommend a remedial action. These data gaps generally fell into two categories: missing site-specific information or missing general information common to all sites. Both types of data gap information gathered during research and the field investigation have been included in the site description in Section 3.

2.2 Field Program

2.2.1 Site Inspection

The site inspection focused on the AK ARNG facility and property, but also included the surrounding area. The inspection allowed CH2M HILL to collect essential site information.

The inspection also confirmed the presence of known releases discovered during research and identified new areas of concern or unknown releases.

The site was divided into four quadrants for inspection. To facilitate the inspection of each quadrant and maintain consistency among the field teams, CH2M HILL followed a checklist. Checklist results and observations have been incorporated into the site description in Section 2. Checklist information obtained from the site included the following (at a minimum):

- Confirm the dimensions of existing onsite facilities, and document those that have been demolished or abandoned
- Confirm the presence of known releases and identify new spills and releases
- Provide information on the release sources (such as leaking valves or pipe) and subsequent measures undertaken to repair the problems
- Identify general or obvious site operations and processes that may result in a future release
- Provide information on the presence of onsite sumps or drains
- Document types and conditions of ASTs found at each site and the types and conditions of AST piping and dispensing systems
- Describe general site vegetation and distressed vegetation that have resulted from a release
- Describe hydrology as expressed by surface drainage and standing water found onsite

- Describe site terrain, especially features that would control release paths

- Identify areas used for waste disposal and waste storage (such as tanks, drums, and pits)

- Describe surrounding offsite conditions, including apparent contamination or potential contamination sources

2.2.2 Field Sampling Program

As described in Section 1, field sampling was done to characterize and delineate the extent of hydrocarbon contamination caused by surface releases. The initial approach to sampling was based on release size and is outlined in the SAP. A small release was indicated by a surface stain smaller than 10 feet in diameter; a large release was indicated by a surface stain greater than 10 feet in diameter or was an area without a stain, but believed to have subsurface contamination.

At most sites, however, it was found that most small releases with limited surface staining generally had subsurface contamination far beyond surface expression. Therefore, the sampling approach was modified. CH2M HILL's modified approach, which basically consisted of two rounds of sampling, is described below, shown in Figure 2-1, and outlined as a flowchart in Figure 2-2. A portable infrared (IR) unit was used in the field to cost-effectively characterize the contamination and assist in determining appropriate samples for laboratory confirmation.

2.2.3 Modified Sampling Approach

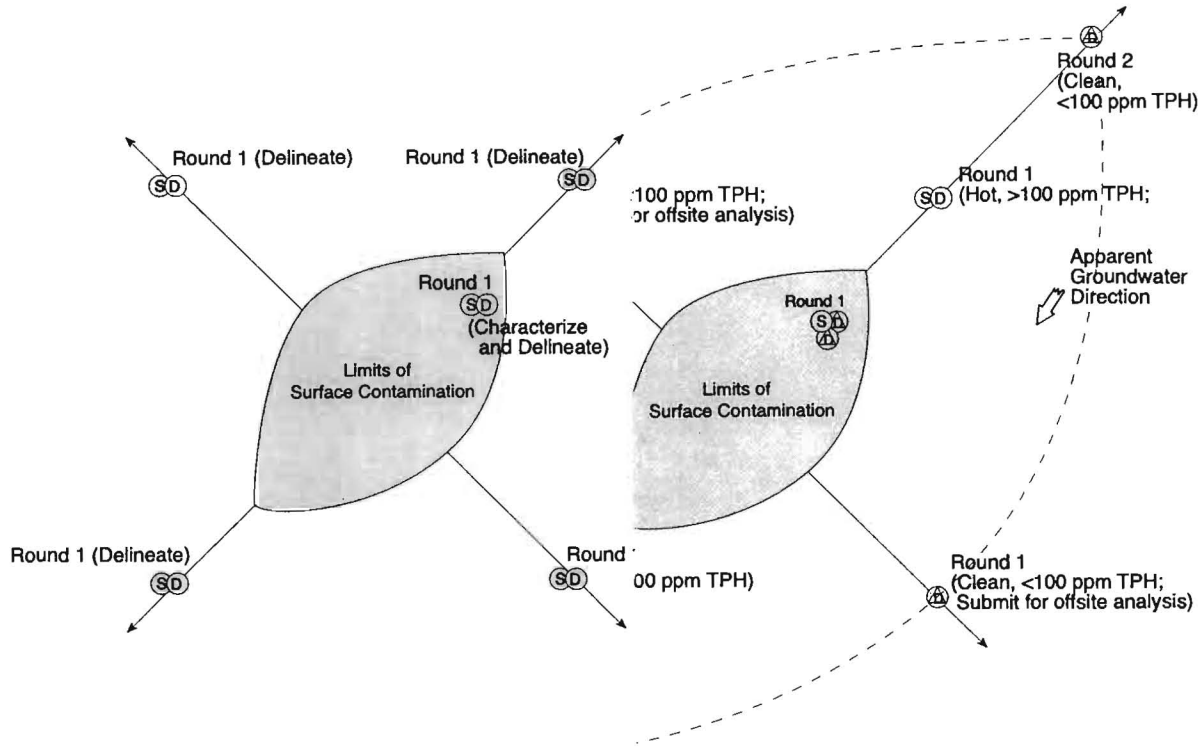
At least three preliminary (Round 1) initial sampling locations were staked in each release area:

- In the middle of the most apparent contamination in an area of concern
- About 30 feet from the contamination, along a ray parallel to the apparent downgradient flow direction
- About 15 feet from the contamination, along a side-gradient ray oriented at an angle of 45 degrees to flow direction

At most sites, however, time permitted CH2M HILL to stake and sample five preliminary (Round 1) locations:

- In the middle of most apparent contamination or the "hot spot"
- About 15 feet out on a downgradient ray
- About 15 feet out along a ray upgradient of flow direction
- About 15 feet out along two side-gradient rays, both perpendicular to flow direction

Site-specific features such as buildings and property limits had to be considered. Therefore, while CH2M HILL strived to sample 15 feet out along a ray, sampling locations and spacing had to be adjusted for conditions.



Round 1 - Begin Delineating and Characterizing Release by:

- Collecting samples for TPH screening from hot spot and along four rays (for delineation)
- Submitting sample split for offsite analysis from a subsu hot spot with high TPH field screening results (for chara

und 2 Sampling:

d by hot spot sample submitted for offsite analysis

delineated along north and south rays (Round 2) and ound 1)

ineated in hot spot (Round 2) and along rays (Round 1

LEGEND	
Ⓓ	Subsurface sample collected for TPH screening
Ⓢ	Surface sample collected for TPH screening)
Ⓐ	Subsurface sample split submitted for offsite analysis
←—	Sampling ray
- - -	Apparent extent of subsurface contamination

Figure 2-1
Sampling Strategy

106462.B0.20 Sampling3.up 08/25/95

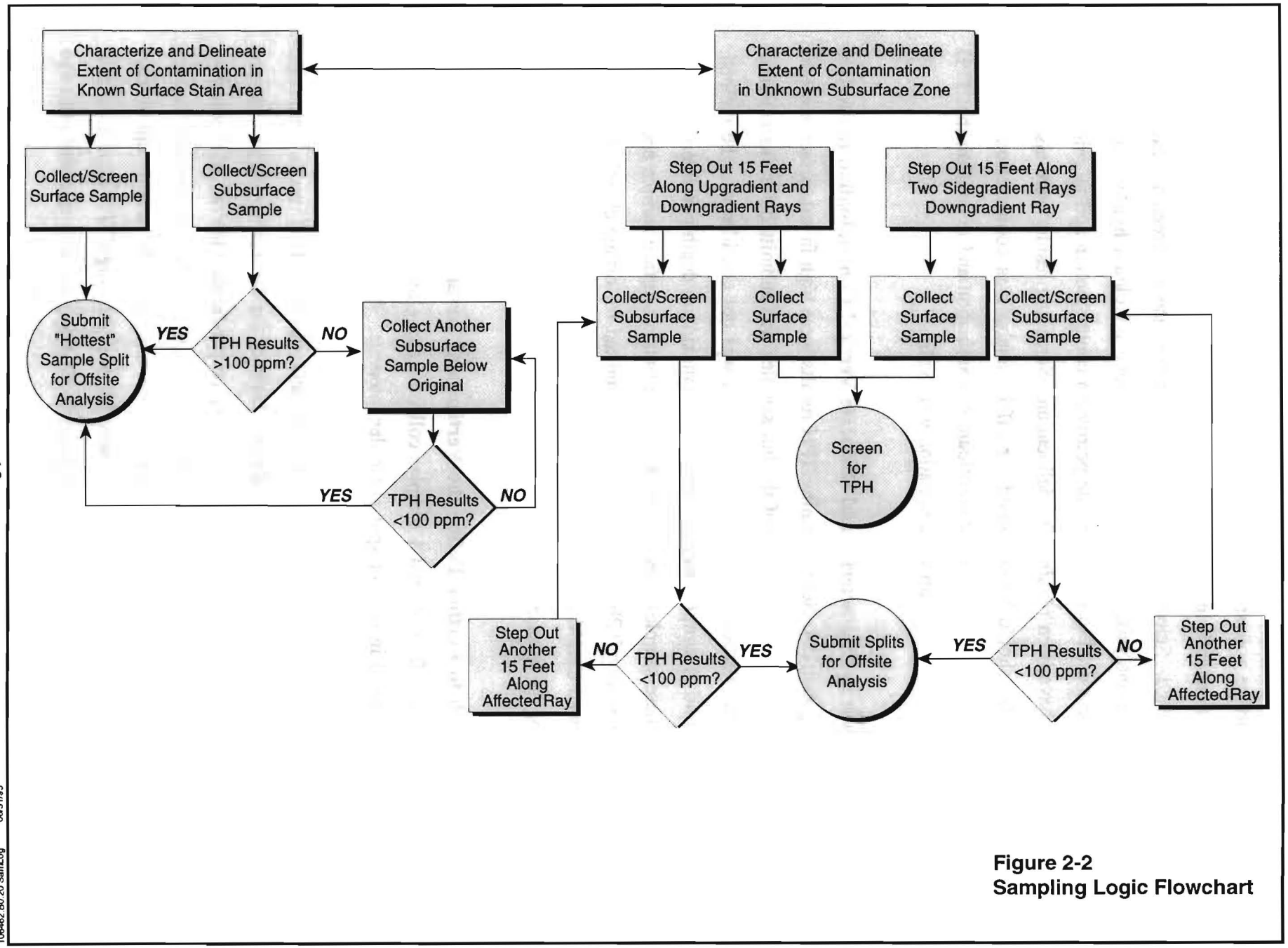


Figure 2-2
Sampling Logic Flowchart

Surface and subsurface soil samples were collected at each location described above at similar depths and were split into two unequal portions. The smaller portion, or split, was generally field screened. Select larger splits, chosen on the basis of screening results, were submitted for offsite analysis. Screening results for total petroleum hydrocarbon (TPH), with the IR unit, were used to help delineate petroleum contamination and to guide further sampling that may have been required for delineation. Screening results were also used to decide which samples should be submitted for offsite analysis as confirmation samples. Offsite analysis was used to characterize petroleum contamination and to confirm that TPH results used to delineate petroleum contamination were valid.

Sampling Approach to Characterize and Delineate Vertical Contamination in the Hot Spot. If the initial, Round 1, field screening TPH results were high in subsurface samples collected from within the hot spot, one of the hot samples was submitted for characterization. In addition, the vertical extent of contamination was not considered to be defined, and additional (Round 2) samples were collected to the maximum depth possible (5 feet) or to groundwater. These samples were screened, and the first subsurface sample encountered with a low field-screening TPH concentration was submitted for offsite chemical analysis. This approach allowed CH2M HILL to confirm the vertical extent of petroleum contamination in the center of the release.

Sampling Approach to Further Define the Vertical and Areal Extent of Contamination. Screening results from Round 1 samples collected along the rays were compared to results of those collected in the hot spot at similar intervals. If they contained low field-screening TPH concentrations, they were submitted for offsite chemical analysis to confirm the vertical and horizontal zone of contamination. If field screening TPH results were high, the splits were not submitted for offsite analysis. Instead, the field crew either "stepped out" along the ray another 15 feet, or stepped out on a perpendicular side ray, and collected additional Round 2 samples at the same sampling intervals. If these additional samples contained low TPH concentrations in the affected soil intervals, the sample splits were submitted for offsite chemical analysis. If the samples contained high TPH concentrations, the screening and stepping out process was repeated. This process was repeated until low

TPH concentrations were encountered or the property boundary was reached. Sample splits were submitted for chemical analysis to confirm the vertical and horizontal extent of contamination.

2.3 Project Organization and Personnel Responsibilities

The overall organization of this project, along with the key project personnel for AK ARNG and CH2M HILL, are shown in Figure 2-3. The responsibilities of key personnel are described in Table 2-1.

The field crews and supervisors who worked on this project met the training requirements for hazardous waste operations and emergency response defined in Title 29 of the *Code of Federal Regulations*, Section 1910.120 (29 CFR 1910.120). Additional training given to the field crew in the field or to laboratory personnel during the course of the project is documented in field training files.

Quality assurance (QA) and quality control (QC) requirements for the field and analytical laboratory procedures are discussed in the CH2M HILL QAPP on file with the ADEC. Problems or deficiencies in QA/QC that were identified by the CH2M HILL project team members during review, monitoring, and auditing were brought to the attention of the CH2M HILL Project Manager. The CH2M HILL Project Manager informed the AK ARNG Project Manager of corrective actions needed as a result of the problems and deficiencies.

Subcontractors were retained by CH2M HILL to perform specialized project work. CH2M HILL was responsible for the administration of subcontracts for equipment leasing, offsite laboratory analyses, air transportation, and data validation services.

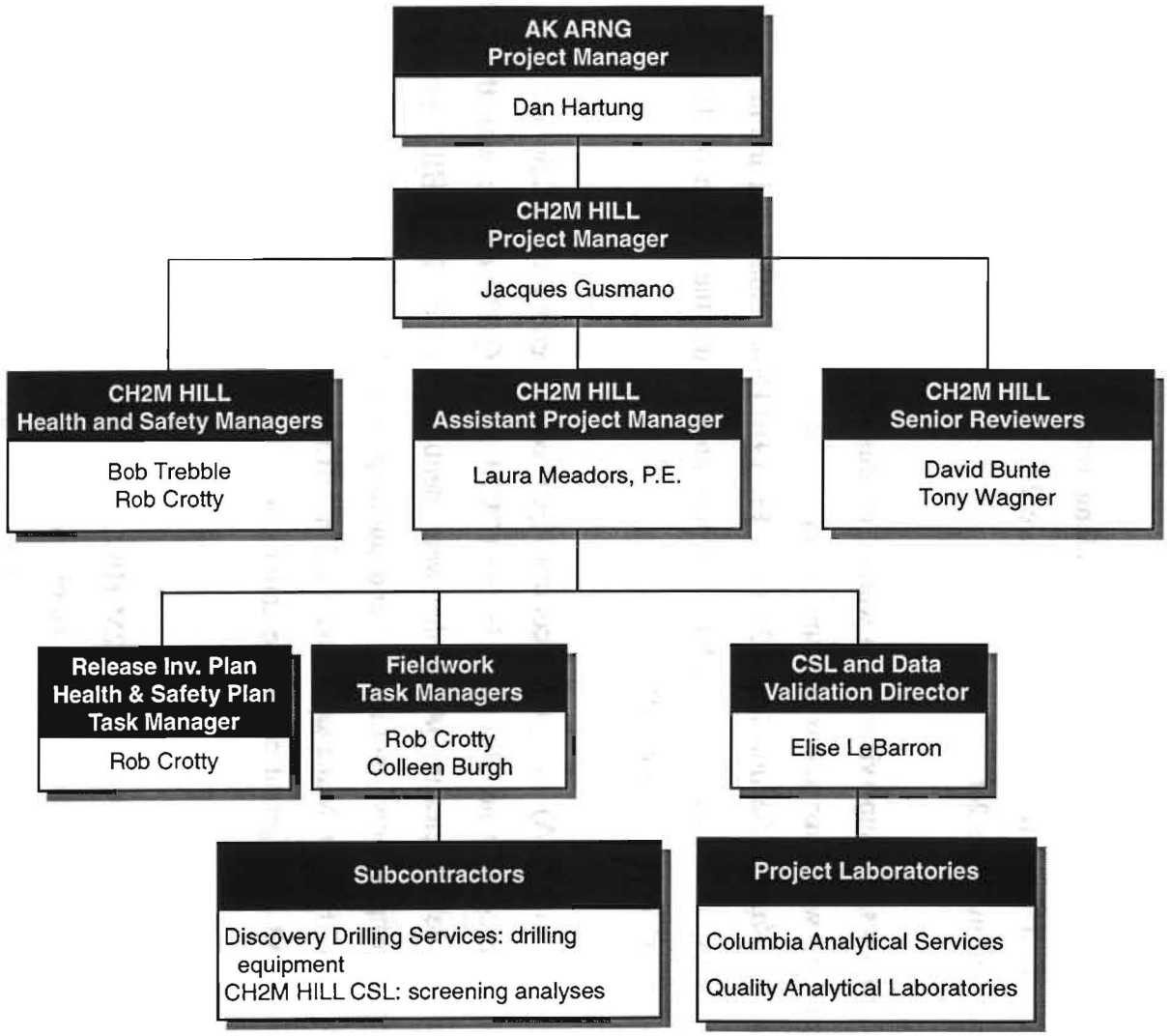


Figure 2-3
Project Organization Chart

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Table 2-1
Responsibilities of Key Personnel

Personnel	Responsibilities
Dan Hartung *AK ARNG Project Manager*	The AK ARNG project manager has overall responsibility for work performed under this contract. Responsibilities include project coordination between the AK ARNG and consultants, and consultant oversight and direction.
Jacques Gusmano *CH2M HILL Project Manager*	The CH2M HILL project manager is responsible for the work specified in the delivery order. Responsibilities include reviewing deliverables for quality, assigning resources, and monitoring budgets and schedules for compliance with project goals. The CH2M HILL project manager also serves as liaison with the AK ARNG project manager.
Laura Meadors *CH2M HILL Assistant Project Manager* *IR Operator*	The CH2M HILL assistant project manager oversees the day-to-day activities necessary to accomplish the tasks specified in the delivery order, and serves as alternate liaison with AK ARNG project manager.
Dave Bunte and Tony Wagner *CH2M HILL Senior Reviewers*	The CH2M HILL senior reviewers are responsible for reviewing the technical quality of project deliverables and providing guidance to the project team.
Rob Crotty and Bob Trebble *CH2M HILL Health and Safety Managers*	The CH2M HILL health and safety managers are responsible for reviewing and approving health and safety plans and performing site safety audits, if necessary.
Rob Crotty *CH2M HILL Task Manager* Colleen Burgh *CH2M NILL Task Manager* *IR Operator*	The CH2M HILL task managers are responsible for accomplishing the scope of work for the various tasks specified in the delivery order, and for coordinating the project team to produce deliverables and perform field activities.
Elise LeBarron *Close Support Laboratory Director* *Data Validator* *IR Operator and Trainer*	The CSL director is responsible for oversight of all tasks associated with the laboratory (chemical and physical) analysis and the quality assurance review of the data. She was also responsible for developing and implementing an IR training program for CH2M HILL's field team.

Sampling equipment was leased from Discovery Drilling of Anchorage, Alaska. Field screening IR equipment was provided by CH2M HILL's Close Support Laboratory (CSL) group of Corvallis, Oregon. Laboratory services for soil and surface water samples were provided by Columbia Analytical Services of Anchorage, Alaska, and Quality Analytical Laboratories, Inc., of Redding, California.

Section 3

Site Characterization

3.1 General Site Characteristics

This section describes the physical environment of the Juneau area. General areawide information on the facility, climate, geology, hydrogeology, and surface water hydrology are presented and related to the release investigation. The information is provided as a basis for understanding and evaluating site-specific information and developing a conceptual site model.

3.1.1 Location

Map coordinates for the Juneau AAOF are Copper River Meridian, Township 4 South, Range 66 East, Section 31, of the U.S. Geological Survey (USGS) Juneau B-2 Quadrangle. Longitude and latitude coordinates are 134°35′ minutes west by 58°22′ north, respectively.

The Juneau AAOF is within the City and Borough of Juneau, at the Juneau International Airport, approximately 7 miles northwest of the downtown area. The AAOF is on a taxiway off the main runway of the Juneau International Airport (Figure 3-1). To the west of the AAOF is a large maintenance building occupied by Silver Bay Aviation that has miscellaneous equipment stored in the open yard around the building. The area east of the AAOF site was formerly a pond, but sand has been placed as fill to construct a pad. Tidal mud flats and Gastineau Channel are found about 500 feet south and southeast of airport runway.

3.1.2 Geographical, Cultural, and Ecological Setting

Juneau is on the mainland in southeast Alaska on the eastern side of Gastineau Channel, opposite Douglas Island. Juneau is the capital city of Alaska and the state's third largest city with a population of 29,078 (Alaska Department of Community and Regional Affairs [ADCRA], 1995).

Most schools and outdoor recreational facilities are near Juneau's residential areas, which are at least 3 miles from the site. The Juneau AAOF is on the periphery of the light industrial/service area. Access to the Juneau AAOF is restricted. Most individuals entering the facility are either AK ARNG or U.S. Coast Guard personnel

Juneau lies within a diverse coastal ecosystem that ranges from beach grass along the coast to sedge grass meadows to coastal western hemlock and Sitka spruce forests on the surrounding mountains. The area encompassed by the AAOF has been developed from wetlands and is built up on pad fill. Wetlands are still found south and east of the facility.

Both the airport and the AAOF are within the Mendenhall Wetlands State Game Refuge. A large number of terrestrial and marine animal and bird species can be found in the area, but are generally restricted from gaining access to the site. Mendenhall River and Gastineau Channel provide habitat for anadromous fish; seals and whales can also often be found in the channel. Because of the restricted access to the Juneau AAOF, wildlife and vegetation are not expected to be affected by contaminants from the surface releases, unless the contaminant plumes discharge into nearby surface water bodies.

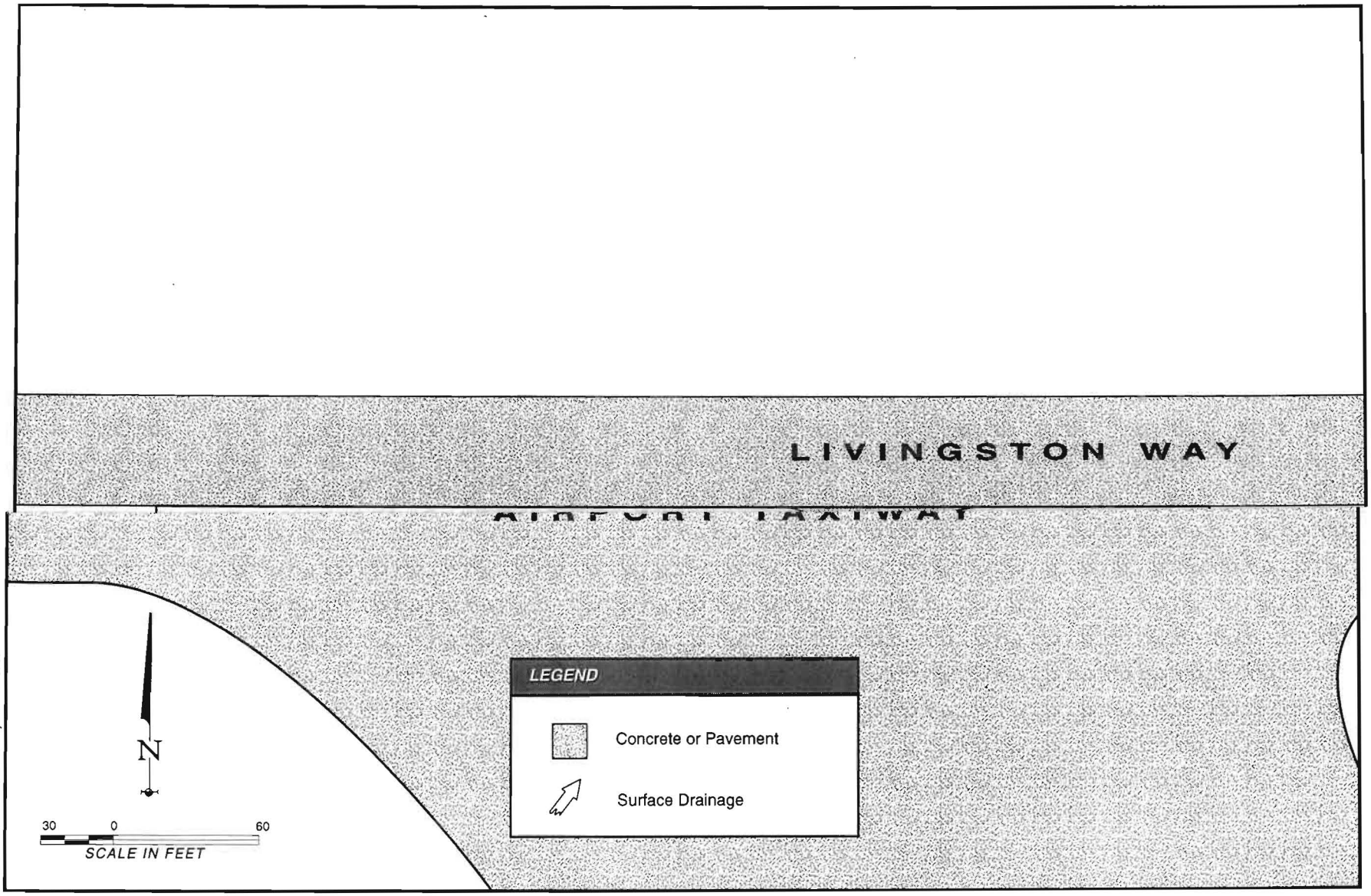

Figure 3-1
Juneau AAOF
Site Layout

3.1.3 Climate

Climatological factors can influence the rate of chemical transport to the groundwater, surface water, soil, and air. Some of these factors for the Juneau area are summarized below.

Precipitation

Average annual precipitation (rain and snowfall) at the airport is 55 inches. Slight variations in temperature in the area determine whether precipitation will fall as snow or rain. Heavy rains occur in September and October with the advent of heavy fall storm systems. Snow is prevalent from October through April. Average snowfall during this time is approximately 107 inches. Snowfall accounts for about 40 percent of the annual precipitation (Arctic Environmental Information and Data Center [AEIDC], 1977, 1995).

Precipitation can affect contaminant transport through surface water runoff and through infiltration of water into the soil and subsequent leaching of soil contaminants into the groundwater. Runoff is considered a transport concern when surface contamination from a surface release is present. Surface water runoff from snow is highest during spring breakup when the ground is still seasonally frozen and from rain during the fall months. The frozen ground will retard movement of soil contaminants through both the surface water pathway and leaching.

Because of the moist air associated with the maritime climate and heavy precipitation, evapotranspiration is limited to about 20 inches per year and rarely exceeds precipitation rates. The result is a minimal net loss to the water resources of the area during the summer (USGS, 1971).

Rainfall intensity during storms can indicate the potential for precipitation to cause contaminant releases into a surface water body as a result of runoff. Rainfall and storms occur

most frequently in October and November. The 2-year, 24-hour rainfall, a measure of rainfall intensity, is 3 inches at Juneau (U.S. Department of Commerce, 1963). A value in the range of 2 to 4 inches indicates a relatively low to moderate potential for precipitation to cause contaminant releases.

Temperature

Because the change in the amount of daylight from summer to winter is not as great in southeast Alaska as the rest of the state, there is a relatively small mean temperature change for summer to winter (AEIDC, 1977 and 1987). Temperature extremes, recorded at the airport, for the period 1949 to 1987 range from 90°F in July 1975 to -22°F in February 1968 and January 1972. January is the coldest month, with a mean temperature of 17.6°F; July is the hottest month, with a mean temperature of 64°F. The mean annual daily temperature is 40.3°F.

Wind

Juneau is in an area of upward air motion. This rising air combines with the colder, more dense air in winter and causes a low-pressure area over southeast Alaska. In summer, the land becomes warmer than the adjacent waters, the low-pressure area decreases over land, and high pressure dominates. This blocking high-pressure area causes winds along the Aleutian chain, the coastal areas, and southeast Alaska (AEIDC, 1977 and 1987).

Under certain conditions of temperature and pressure gradient in winter, cold air can cascade out of Canada, bringing winds gusting to greater than 100 miles per hour through passes and channels.

Wind directions at the Juneau airport are generally east to southeast, with an average speed of 7.4 knots.

3.1.4 Geology

This subsection describes the regional setting and structural features. It also discusses the geology of the unconsolidated deposits.

Regional Geologic Setting

Juneau is underlain by metamorphic and sedimentary rocks with subordinate volcanic and granitic igneous intrusives (USGS, 1973).

In general, the bedrock geology and faults do not influence shallow groundwater movement or contaminant transport in the Juneau area. Bedrock is buried under a clay and silt mantle in the Juneau AAOF area.

Regional Geomorphology and Related Surficial Deposits

Surficial deposits within the region consist mainly of Pleistocene-age glacial drift that includes extensive areas of moraine deposit, as well as related glacioalluvial and glacioestuarine deposits. Although covering less area than other deposits, nonglacial deposits are widely distributed. They include volcanic, intertidal, colluvial, alluvial, bog, and man-made fill deposits.

Glacial Deposits. Moraines are generally composed of material directly laid down by the ice in the front and sides of the glaciers as they receded. Morainal deposits consist of glacial till that is composed of poorly sorted clay, silts, sand and gravel with occasional boulders. The poor sorting and compaction often observed in till limits shallow groundwater movement and contaminant transport by causing low hydraulic permeability.

Outwash plains are composed of glacioalluvial deposits that consist of stratified sands and gravel with trace silts and clays. In contrast to the till, well-sorted, loosely compacted

glacioalluvial material does not limit shallow groundwater movement and contaminant transport; it may actually provide preferential pathways of high permeability.

Glacioestuarine deposits typically consist of clays and silts; deltaic deposits generally include silts interbedded with scattered coarser material, including sand and gravel. Grain size and orientation often observed in these deposits limits shallow groundwater movement and contaminant transport by causing low hydraulic permeability.

Nonglacial Deposits. Marine deposits are divided into two zones: older intertidal deposits whose surface now lie above the modern tidal range and newer intertidal deposits whose surface lies within the tidal range and where the land-water interface shifts continuously with the tides. Both deposit types are related to glacial activity and glacier-fed streams. Both types are composed of silts and fine sand; coarser sand may be found where river and creek channels cut through estuaries and deltas. Grain size and orientation often observed in these soils generally limit shallow groundwater movement and contaminant transport by causing low hydraulic permeability.

Other surficial deposits include alluvial deposits (alluvium), colluvial deposits (colluvium), volcanic deposits, bog deposits, and fill. In contrast to the silts and clays associated with till and intertidal deposits, alluvium and colluvium do not limit shallow groundwater movement and contaminant transport; they may actually provide preferential pathways of high permeability.

Bog deposits are scattered throughout the irregular terrain behind moraines and consist mostly of peat, with varying amounts of silts and sands. Fill is found throughout the Juneau area. Fill types range from reworked mine tailings, as seen in the downtown area, to sand, as seen at the Juneau AAOF.

3.1.5 Hydrogeology

This subsection describes groundwater and surface water hydrology in the Juneau area.

Groundwater Hydrology

Groundwater in the Juneau area is found within bedrock fractures and in the overlying surficial deposits (USGS, 1971). Well yields from fractured bedrock are generally limited to only a few gallons per minute (gpm) and are not considered a viable source of public-supply water (USGS, 1969 and 1971). Well yields from surficial deposits range up to 1,800 gpm and are the source of Juneau's public- and domestic-water supplies.

Groundwater is considered to be hydraulically connected throughout the surficial deposits in the Juneau area. Away from the coastal areas, groundwater is generally fresh, but becomes progressively more saline downstream. The groundwater also becomes more saline both downstream and with depth, depending on the hydraulics of freshwater-saltwater contact. At the mouth of the major river valleys within the city and at the airport, fresh groundwater and seawater are hydraulically interconnected. The aquifer underlying the Juneau AAOF does not supply potable water for the facility and may be brackish.

Groundwater either flows south-southeast directly into the Gastineau Channel or into streams that discharge directly into the channel. The groundwater table in the area under investigation is typically encountered at 6 to 12 feet below ground surface (bgs) (USGS, 1984). Groundwater-level data indicate that this change in the water table by is caused by heavy rains related to the fall storms that occur from about September through November and by runoff of the melting of glaciers during the summer. Precipitation is very light or frozen during late summer and throughout winter. The minimal contribution to the water table causes a drop in the water table elevation which generally reaches a minimum during the late winter months. This drop in water table elevation, however, is offset in the

Mendenhall Valley, where the Juneau AAOF is located, by an increase in glacier meltwater during the summer.

Fifteen wells are located within the same legal section as the Juneau AAOF: five wells are public-supply water wells; six wells are domestic-supply wells; three wells are commercial wells; eight wells are observation wells only used in studies; and the use of one well is unknown. Wells closest to the Juneau AAOF include an abandoned water supply well at the Airport Fire and Crash Site Station, 1,200 feet to the west, and an unused, standby city water supply well, about 2,000 feet northwest of the AAOF (USGS, 1995; Personal communication, City and Borough of Juneau, August 1995).

Surface Water Hydrology

The two main surface water bodies present in the Juneau AAOF area are Mendenhall River and Duck Creek. A third surface water body, Jordan Creek, ran through the site, but was diverted in 1988 during construction of the gravel pad. The Mendenhall River is a glacial stream that drains an area of approximately 85 square miles, with an average discharge of 1,114 cubic feet per second. Duck Creek is a clear, nonglacial stream that drains an area of approximately 3.4 square miles, with an average discharge of 0.1 cubic feet per second. Jordan Creek is a clear, nonglacial stream that drains an area of approximately 1 square mile, with an average discharge of 5.1 cubic feet per second.

For most of its course, the Mendenhall River generally appears to be a gaining stream, with groundwater flowing into it. At its lower reaches near the airport and at high stages during the spring (when rainfall is augmented by the melting snow and ice) and fall (heavy rains), the river is presumed to be a losing stream, however. Under these conditions, the river discharges into the groundwater and produces changes in local groundwater flow direction, water level tables, and velocities (USGS, 1971).

The AAOF pad was constructed at a 1 percent slope in all directions from the hangar. Consequently, surface water runoff drains away from the hangar in all directions, either onto adjoining lots on the east and west sides, into a ditch along the north side, or onto the taxiway along the south side.

3.2 Site Background Information and History

This subsection provides background information on land use, describes the Juneau AAOF grounds and structures, and discusses areas of contamination or concern investigated during the field program. Photographs of the Juneau AAOF are included with this report in Appendix A. Rob Crotty and Elise LeBarron conducted the field investigation for the Juneau AAOF on May 30, 1995.

3.2.1 Background

The Juneau International Airport and the Juneau AAOF are built on a glacial delta and drowned glacial moraine called the Mendenhall Peninsula. The Juneau AAOF is built on wetlands composed of intertidal mud-flat deposits north of the airport's main runway. Land use surrounding the Juneau AAOF is primarily commercial and industrial. Egan Drive, the main highway connecting downtown Juneau to the airport, is east and north of the facility. Construction in the area has occurred primarily on filled wetlands of intertidal deposits above the tidal range. Gastineau Channel, to the south, is a busy navigation route for commercial and recreational watercraft.

The AAOF covers about 2.5 acres (about 105,000 square feet) on a 350-foot by 300-foot sand pad placed as fill over wetlands and a pond. About 2 acres of the facility is covered by the hangar and either concrete or asphalt. The tie-down area south of the hangar building is topped with concrete. The parking and driveway areas north and east of the hangar

are topped with asphalt. The ASTs and associated fueling equipment are contained within concrete cells described in more detail below.

The AAOF hangar is used for maintenance and fueling support operations for the AK ARNG. The AAOF consists of a hangar, an apron with aircraft tie-downs, two ASTs, a Jet A50 (JP-5) fuel dispenser, and a metal, locked shed used to store petroleum, oil, and lubricants (POL) products.

The AAOF is a steel-framed building 140 feet by 110 feet in plan. The building frame and concrete slab are supported at grade on a sand pad. Hangar bays and a maintenance shop are located on the main floor of the hangar, with offices and a stand-down area on the second floor. Sumps and drain systems in the bays and in the machine shop are connected to an oil-water separator. The separator is connected to a 2-inch outfall pipe that drains directly into a ditch on the north side of the facility, along Livingston Way.

Both ASTs are contained within concrete cells (complete with sumps) that are capable of handling all fluids stored if a catastrophic release should occur. One tank is a 5,000-gallon, double-walled AST used to store diesel fuel oil for heating. A buried, 1-inch-diameter pipeline runs from the tank to a day tank in the furnace room within the hangar. The other tank is a 15,000-gallon, double-walled tank used to store JP-5 fuel. This tank is connected to the fuel dispenser by fuel supply and fuel return lines that are 2 inches in diameter. The fuel dispenser and all associated valves and pipe joints are within concrete structures that appear to be capable of containing minor spills and leaks (see photographs in Appendix A).

A 1987 design study by the Alaska Department of Transportation and Public Facilities (ADOT&PF) recommended construction of a pad by placing sand over native soils that ranged in thickness from 8 to 9 feet. According to an onsite interview with CW4 Jacob Yearty, suitable material was dredged from the bottom of the airport floatplane lagoon and placed in 1988. Shortly after the hangar was built, and the AK ARNG took up residence in 1990.

3.2.2 Areas of Contamination and Concern

During a record search by CH2M HILL, reports were found describing surface releases of hydrocarbon products that have occurred in the past. Known areas of concern that have been investigated include the following (Figure 3-2):

- **Area 1–JP-5 Fuel Dispenser:** Surface fuel stains were found under a leaking valve near the JP-5 fuel dispenser in December 1991. Dispenser use was suspended until repairs were completed in July 1993. The JP-5 fuel contains both diesel-range organic (DRO) and gasoline-range organic (GRO) compounds with limited benzene, toluene, ethylbenzene and xylenes (BTEX).

- **Area 2–JP-5 Piping:** A 1994 Environmental Compliance Assessment System (ECAS) report indicates that "several joints" were leaking along the JP-5 piping that runs from the tank to the dispenser.

Several areas have also been investigated to determine if hydrocarbon contamination from surface releases exists. These areas of concern include the following:

- **Area 3–Oil-Water Separator Ditch:** The oil-water separator in the hangar discharges to a ditch north of the facility. This ditch is not connected to the municipal sewer. A previsit questionnaire for the 1994 ECAS report lists several hazardous materials that are present at the Juneau AAOF. The oil-water separator drain was believed to be a potential contaminant source if any of the hazardous materials onsite was disposed of through this drain.

- **Area 4–Area Between AAOF Hanger and Adjacent Silver Bay Aviation Maintenance Building:** Surface drainage runs south-southeast. If there has been a large release by AAOF neighbors to the west, contamination would be found in the gravel area between the two buildings.

- **Area 5–Gravel East of Apron:** Fueling operations may have resulted in surface releases that could run along the top of the concrete apron before seeping into the gravel immediately east of the apron.

- **Area 6–Gravel East of Hangar:** According to AK ARNG personnel, in 1994, a hydraulic hose burst on the front-end loader operating between the tanks and the hangar in an area not covered by concrete or asphalt (Yearty, 1995). AK ARNG personnel immediately cleaned up the release with absorbent napkins and then excavated what appeared to be hydraulic fluid-contaminated pad to a depth of about 6 inches.

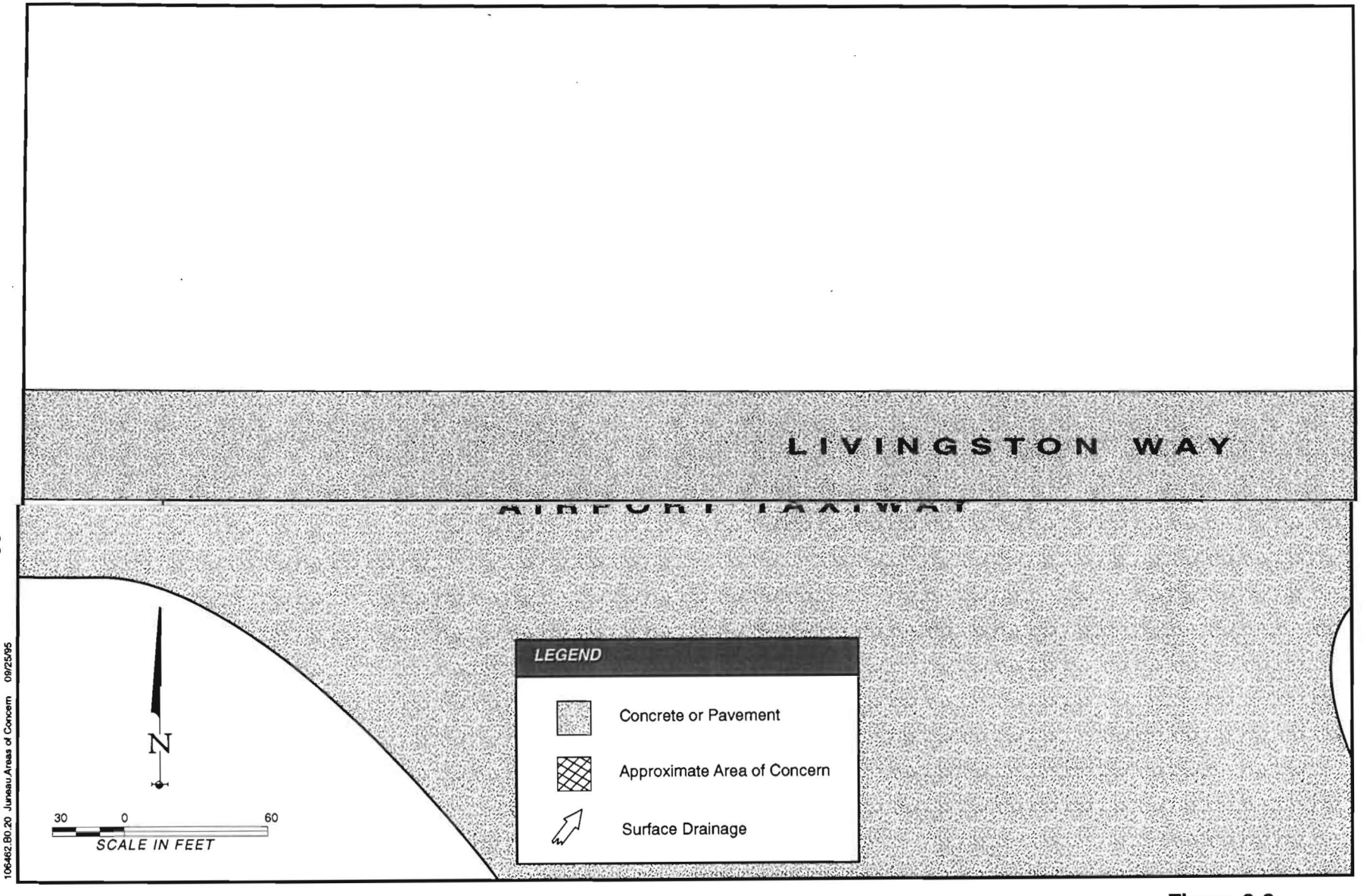

Figure 3-2
Juneau AAOF
Areas of Concern

Section 4

Investigation Results

This section summarizes information from investigations conducted in the Juneau AAOF area, presents results of CH2M HILL's release investigation, and presents a conceptual model of the site that is based on contaminant distribution and assessment of need for remediation or closure.

4.1 Previous Area Investigations

Existing subsurface information in the site area was obtained from the following sources:

- 1989 civil as-builts of the AAOF property based on site survey information
- Boring logs drilled during the installation of water-supply wells from 1959 to 1971
- Topographic maps, aerial photographs, and geologic reports published by the USGS in 1969, 1971, and 1985

The as-builts provide elevations before and after pad construction. These elevations provide a cross-sectional template that delineates pad thickness across the footprint of the hangar and the surrounding tarmac. Sand fill is found to depths ranging from 7 to 11 feet.

Six water well borings from within the same section as the Juneau AAOF were reviewed by CH2M HILL. All borings consisted of sand and gravel fill to depths ranging from 3 to 10 feet, which was underlain by fine soils consisting of organic material, silts, clays, and

sands ranging in thickness from 5 to 20 feet. Granular material consisting of sands and gravels followed to depth. Groundwater levels in these borings ranged in depth from 5 to 10 feet.

A review of aerial photographs, topographic and geologic maps, and findings of the site inspection suggests that the Juneau AAOF is situated on older intertidal deposits (surface above the tidal range) in what can be considered wetlands. A generalized hydrogeolgic map of the Juneau area published by the USGS in 1971 identifies the AAOF area as impermeable, unconsolidated materials consisting of clay and silt. These clays and silts, according to the USGS, transmit water very slowly; consequently, water supply wells are impractical and the water is generally of poor quality (brackish).

4.2 Release Investigation Results

CH2M HILL conducted a field exploration at the Juneau AAOF on May 30 and 31, 1995. The exploration included drilling soil borings and collecting surface samples. A total of 12 borings were drilled throughout four of the six areas of concern (Areas 1, 3, 4, and 5) by using an electric jackhammer to drive SPT split-barrel samplers. The jackhammer and associated drilling equipment were provided by Discovery Drilling of Anchorage. A composite surface sample was collected at Area 2, and four discrete surface samples were collected at Area 6. Boring and surface sampling locations are shown in Figure 4-1.

Boring and surface sampling locations were selected to provide information on contamination type and extent at each area of concern, and to avoid conflicts with existing utilities. Approximate boring and sampling locations were measured from existing site reference

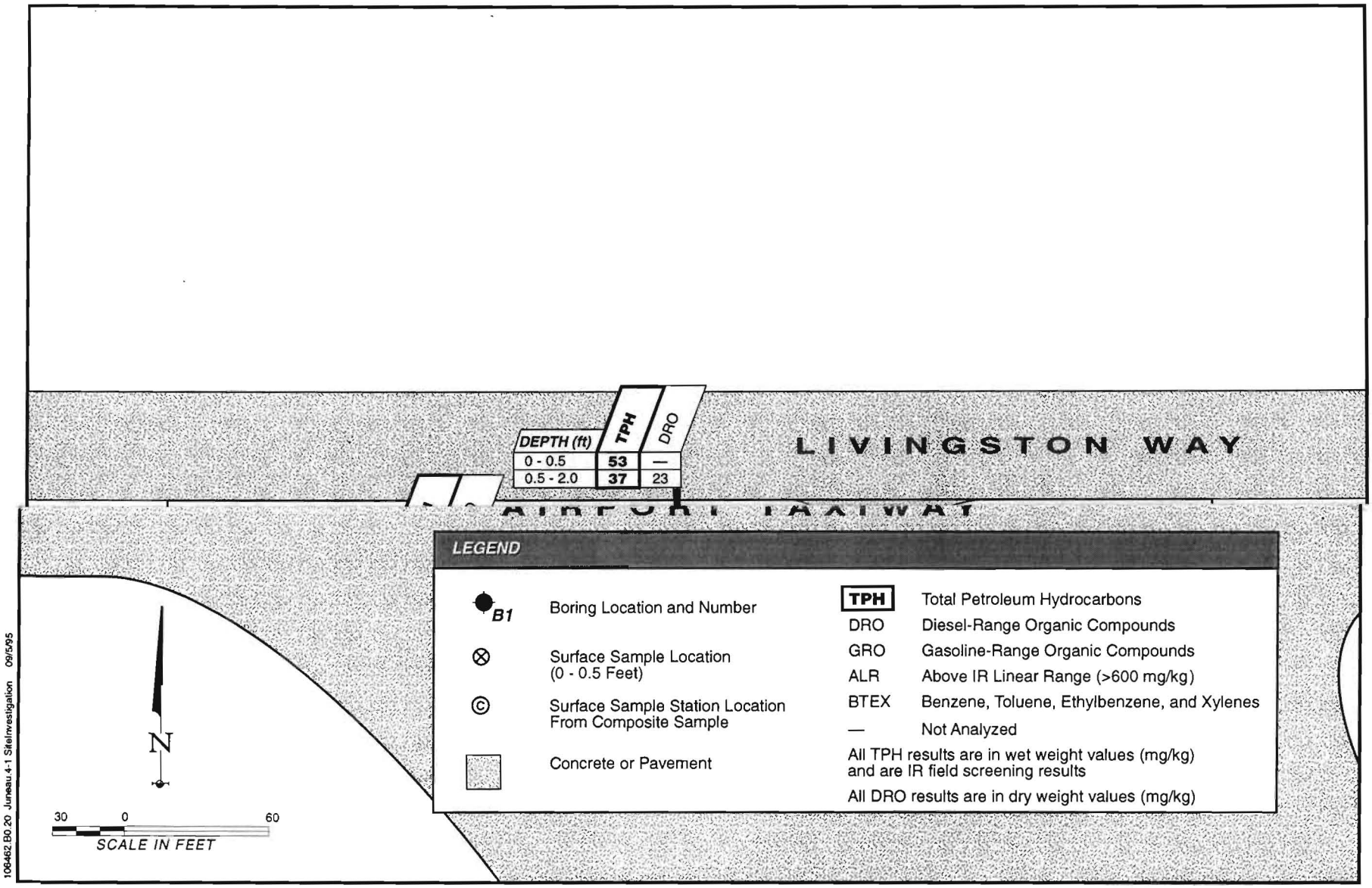

Figure 4-1
Juneau AAOF
Site Investigation Results

features and marked before the utility site meeting. The following describes sampling activities:

- In Areas 1 and 5, Borings B1 through B5 and B12 were drilled to 5 feet. Samples were collected to help characterize and define contamination

- In Area 2, a composite surface sample of material from three stations was taken to characterize and determine if contamination exists

- In Area 3, Borings B6, B7, and B8 were drilled to depths ranging from 0.5 to 2 feet. Samples were collected to help characterize and define contamination.

- In Area 4, Borings B9, B10, and B11 were drilled to 5 feet. Samples were collected to help characterize and define contamination.

- In Area 6, four discrete surface samples were collected to determine if contamination had been excavated in the area of the hydraulic fluid release.

4.2.1 Site Conditions

This subsection describes soil and groundwater conditions encountered during the investigation. It further describes overall site conditions by consolidating this information with information collected during previous area investigations.

Soil

Borings drilled to a depth of 5 feet during this investigation encountered similar conditions throughout. Soils consisted of poorly sorted, fine to coarse sand with trace surround gravel to 2 inches. From borings drilled during this site investigation and previous area

investigations, soils consist primarily of sand fill placed over intertidal deposits consisting of silts, sands, and clay. Moisture content of the soils collected during the CH2M HILL investigation generally ranged from 5.5 to 9.5 percent, with one result of 13.9 percent.

Groundwater

Groundwater was not encountered in any boring during drilling. On the basis of past investigations in the area and for purposes of estimating soil volumes, a conservative approach of groundwater at a depth of 12 feet is assumed. Groundwater levels may be much higher, however, because of seasonal precipitation, runoff, and tidal fluctuations. Site groundwater flow direction is probably toward the tidal mud flats and the Gastineau Channel south and southeast of the site.

4.2.2 TPH Screening and Offsite Analytical Results

The locations and sampling results for the borings and excavation are shown in Figure 4-1. Table 4-1 provides screening and offsite analytical results for Juneau AAOF. Laboratory data are included in Appendix B.

The method used for field screening with the IR unit for TPH provided results as wet-weight values. Methods used in offsite chemical analysis of DRO, GRO, and concentrations of BTEX provided results as dry-weight values.

Specific screening and offsite analytical results include the following:

- **Area 1** contains soil with TPH concentrations varying from less than 30 to greater than 600 milligrams per kilogram (mg/kg). Area 1 soil also contains DRO compounds ranging from less than 10 to 1,020 mg/kg; GRO compounds of less than 5 to 472 mg/kg; benzene of less than 0.05 to less than 0.25 mg/kg; and BTEX of less than 0.2 to 16.4 mg/kg.

Table 4-1
Screening and Offsite Analytical Results
Juneau AAOF
May 30 and 31, 1995

Location				Petroleum Hydrocarbon Concentrations					
Area of Concern	Sample No.	Boring Number	Sample Depth (feet)	TPH (IR) (mg/kg)	DRO (mg/kg)	GRO (mg/kg)	Benzene (mg/kg)	Total BTEX (mg/kg)	Moisture Content (%)
Area 1	JUNEA-01	B1	0-0.5	< 30					
Area 1	JUNEA-101	B1	0.5-1.5	< 30	< 10				5.5
Area 1	JUNEA-102	B1	1.5-2.5	< 30					
Area 1	JUNEA-301	B1	0.5-1.5	NA	< 10				
Area 1	JUNEA-111	B1	3.0-4.0	< 30					
Area 1	JUNEA-112	B1	4.0-5.0	< 30					
Area 1	JUNEA-02	B2	0-0.5	> 600					
Area 1	JUNEA-103	B2	0.5-1.5	NA					
Area 1	JUNEA-104	B2	1.5-2.5	> 600					
Area 1	JUNEA-105	B2	3.0-3.5	NA					
Area 1	JUNEA-106	B2	3.5-5.0	> 600	557	380	< 0.25	7.3	7.8
Area 1	JUNEA-03	B3	0-0.8	149					
Area 1	JUNEA-107	B3	0.8-1.4	> 600	1020	472	<0.05	16.4	13.9
Area 1	JUNEA-108	B3	1.8-3.0	NA					
Area 1	JUNEA-109	B3	3.0-3.5	> 600					
Area 1	JUNEA-110	B3	4.5-5.0	> 600					
Area 1	JUNEA-04	B4	0-0.5	57					
Area 1	JUNEA-113	B4	0.5-3.0	< 30					
Area 1	JUNEA-114	B4	3.0-4.0	NA					
Area 1	JUNEA-115	B4	4.0-5.0	33	46	< 5	< 0.05	< 0.20	4
Area 1	JUNEA-05	B5	0-0.5	59					
Area 1	JUNEA-116	B5	0.5-2.0	< 30					
Area 1	JUNEA-117	B5	2.0-3.5	NA					
Area 1	JUNEA-118	B5	3.5-5.5	< 30	18	< 5	< 0.05	< 0.20	3.9
Area 1	JUNEA-18	B12	0-0.5	< 30		< 5	< 0.05	< 0.20	5
Area 1	JUNEA-302	B12	0-0.5	NA		< 5	< 0.05	< 0.20	11.2
Area 1	JUNEA-127	B12	0.5-2.0	< 30					100
Area 1	JUNEA-129	B12	3.5-5.0	< 30	10	< 5	< 0.05	< 0.20	9.5
Area 2	JUNEA-06	Composite	0-0.5	< 30					
Area 3	JUNEA-12	B6	0-0.5	53					
Area 3	JUNEA-119	B6	0.5-2	37	23				6.8
Area 3	JUNEA-13	B7	0-0.5	< 30					
Area 3	JUNEA-14	B8	0-0.5	< 30					
Area 4	JUNEA-15	B9	0-0.5	< 30					
Area 4	COMP. A*	B9	0.5-5.0	< 30					
Area 4	JUNEA-16	B10	0-0.5	< 30					
Area 4	COMP. B*	B10	0.5-5.0	< 30					
Area 4	JUNEA-17	B11	0-0.5	39					
Area 4	COMP. C*	B11	0.5-5.0	< 30					
Area 5	JUNEA-04	B4	0-0.5	57					
Area 5	JUNEA-113	B4	0.5-3.0	< 30					
Area 5	JUNEA-114	B4	3.0-4.0	NA					
Area 5	JUNEA-115	B4	4.0-5.0	33	46	< 5	< 0.05	< 0.20	4
Area 5	JUNEA-18	B12	0-0.5	< 30		< 5	< 0.05	< 0.20	5
Area 5	JUNEA-302	B12	0-0.5	NA		< 5	< 0.05	< 0.20	11.2
Area 5	JUNEA-127	B12	0.5-2.0	< 30					100
Area 5	JUNEA-129	B12	3.5-5.0	< 30	10	< 5	< 0.05	< 0.20	9.5
Area 6	JUNEA-07	Discrete	0-0.5	< 30					
Area 6	JUNEA-08	Discrete	0-0.5	56					
Area 6	JUNEA-09	Discrete	0-0.5	200					
Area 6	JUNEA-10	Discrete	0-0.5	80					
Area 6	JUNEA-11	Discrete	0-0.5	71					
ADEC Cleanup Guidelines				NA	100	50	0.1	10	

1 NA = Not analyzed
2 COMP* A = Composite sample made up of soil from Samples JUNEA-120, JUNEA-121 and JUNEA-122
COMP* C = Composite sample made up of soil from Samples JUNEA-123, JUNEA-124
COMP* C = Composite sample made up of soil from Samples JUNEA-125, JUNEA-126
3 Sample JUNEA-06 is a composite surface sample collected from three stations along fuel transfer lines
4 Samples JUNEA-07, JUNEA-08, JUNEA-09, JUNEA-10 and JUNEA-11 are discrete surface samples
5 JUNEA-301 is a field duplicate of JUNEA-101
6 JUNEA-302 is a field duplicate of JUNEA-18

- **Area 2** contains soil with less than 30 mg/kg of TPH. The composite surface sample collected at Area 2 was not submitted for chemical analysis of DRO, GRO, or BTEX compounds.

- **Area 3** contains soil with low TPH levels ranging from less than 30 to 57 mg/kg. Area 3 soil also contains 23 mg/kg of DRO compounds.

- **Area 4** contains soil with less than 30 mg/kg of TPH. Samples collected at Area 4 were not submitted for chemical analysis of DRO, GRO, or BTEX compounds.

- **Area 5** contains soil with low TPH levels ranging from less than 30 to 57 mg/kg. Area 5 soil also contains low levels of DRO and GRO compounds, benzene, and BTEX. Results indicated 10 to 46 mg/kg of DRO compounds, less than 5 mg/kg of GRO compounds, less than 0.05 mg/kg of benzene, and less than 0.2 mg/kg of BTEX.

- **Area 6** contains soil with low TPH levels ranging from less than 30 to 200 mg/kg. Samples collected at Area 6 were not submitted for chemical analysis of DRO, GRO or BTEX compounds.

4.2.3 Data Validation Results

Elise LeBarron performed the data review and validation for this project for CH2M HILL. A chemical quality assurance report for the Juneau AAOF is included in Appendix C. Overall, the data for Juneau AAOF are acceptable; no problems were encountered. Comparison between TPH field screening results and DRO analytical results were found to be generally acceptable, with a 1-to-1 correlation.

4.3 Conceptual Evaluation

4.3.1 Contaminant Distribution

The soil results indicate that at least one type of petroleum contaminant is present at the Juneau AAOF: JP-5.

Petroleum hydrocarbon contamination is centered around the dispenser in Area 1. The source of the contamination could be the result of the leaking valve in 1991, fuel draining off the concrete tarmac during fueling operations, or spills and drippings from maintenance operations. The constituents of this contamination show DRO compounds, moderate GRO compounds, and low levels of BTEX (up to 1,020, 380, and 7.3 mg/kg, respectively).

Other borings in the other five areas of concern also contained detectable amounts of TPH and DRO compounds, but no detectable amounts of GRO compounds or BTEX. Area 6 results show evidence of minimul hydraulic oil contamination at one surface sample screening at 200 ppm of TPH.

The following are features of the contaminated soil in Area 1:

- The contaminated soil generally appears to be in a continuous lens-like layer.

- At Boring B2, the layer starts at surface and extends at least 5 feet below grade. As a conservative estimate, the layer stretches from about Borings B5 to B12 (west to east) and from Borings B1 to B4 (north to south) in an area 60 feet by 35 feet in plan.

- The layer seems to be thickest in the area around Borings B2 and B3.

Figure 4-2 shows a conceptual model of the potential fate and transport of JP-5 at the site. Figure 4-2 also shows the relative probability of hazard concerning sources, transport mechanisms, and receptors. Contamination is known to exist to 5 feet and may have reached groundwater. Because most of the area is paved and public access is limited, the ingestion of soil is considered to have a low hazard probability. Because relatively low BTEX levels are found in the soil, the air transport mechanism by inhalation is also considered to have a low hazard probability. Percolation to groundwater is a possibility; however, because of distance to viable drinking water wells (2,000 ft) and low BTEX, potential exposure to humans is ranked as moderate. In addition, because of higher tolerance to BTEX of wetland biota, the probability of hazard for wildlife is considered to be low.

4.3.2 Assessment of Need for Remediation or Closure

There are currently no numeric cleanup levels in the ADEC regulations for soil, surface water, or groundwater contamination resulting from sources other than USTs. The regulations in Title 18, Chapter 75, of the *Alaska Administrative Code* (18 AAC 75) state that individual cleanups will be conducted by using methods approved by the department. The degree of cleanup and cleanup levels for specific contaminants are determined on a site-specific basis by ADEC (18 AAC 75.327).

ADEC has published guidelines for soil cleanup levels that might apply to the Juneau AAOF hangar, however. These guidelines, which include levels of petroleum contamination that might be acceptable to leave in place at a site, are contained in the July 17, 1991, *Interim Guidance for Non-UST Contaminated Soil Cleanup Levels,* and the September 26, 1990, *Interim Guidance for Surface and Groundwater Cleanup Levels.*

The ADEC Matrix Score Sheet from 18 AAC 78.315 was used to determine preliminary petroleum-contaminated soil cleanup goals for the Juneau AAOF. The completed score sheet is presented in Table 4-2. By using the selected parameters, a score of 48 was obtained, indicating that the Level A cleanup goals would apply. The nearest potable water

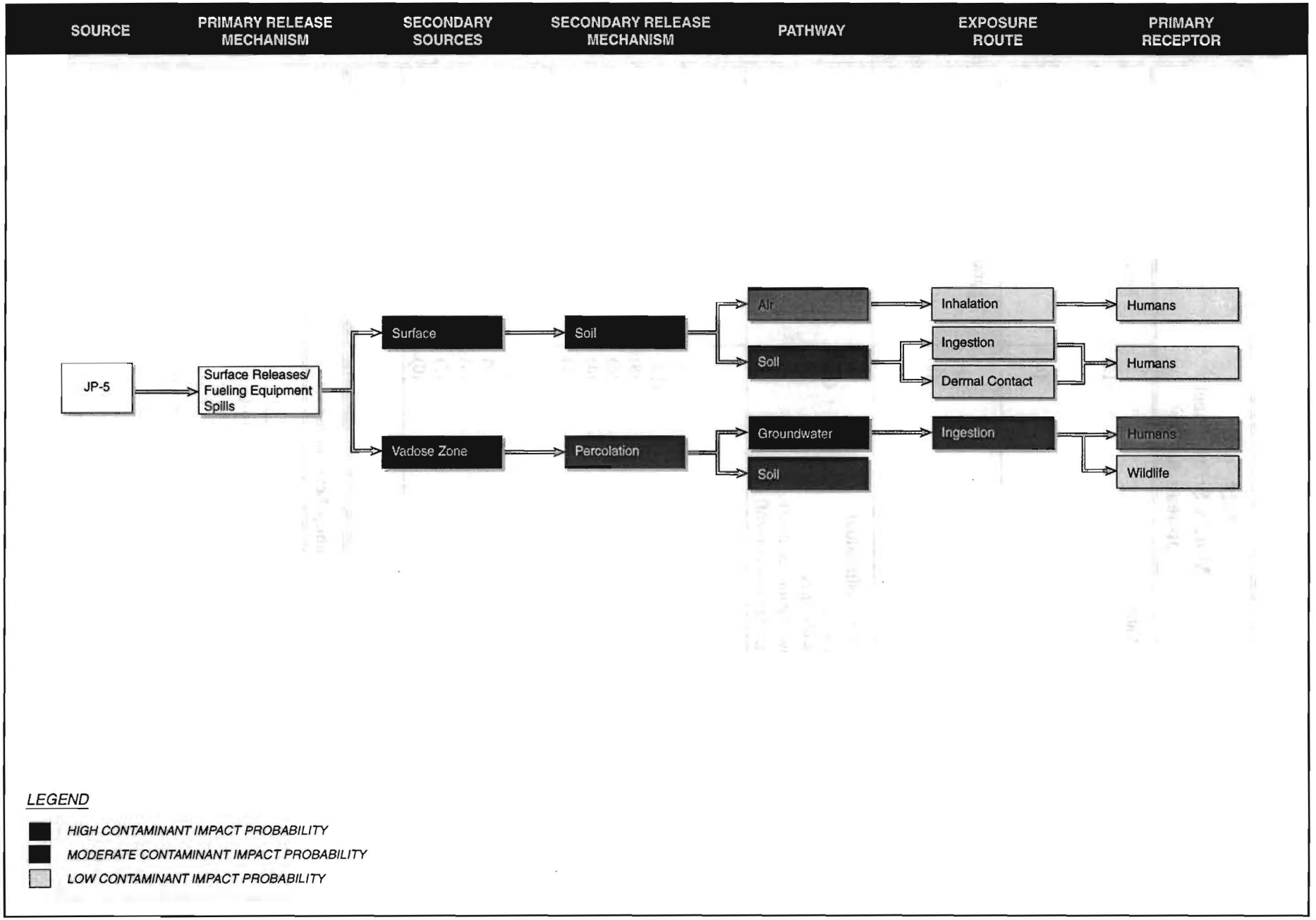

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Figure 4-2
Conceptual Site Model

Table 4-2
Matrix Score Sheet
Juneau AAOF

1.	Depth to Subsurface Water		Parameter Matrix Score
	<5 feet	(10)	
	5-15 feet	(8)	
	15-25 feet	(6)	8
	25-50 feet	(4)	
	>50 feet	(1)	
2.	Mean Annual Precipitation		Parameter Matrix Score
	>40 inches	(10)	
	25-40 inches	(5)	10
	15-25 inches	(3)	
	<15 inches	(1)	
3.	Soil Type (Unified Soil Classification)		Parameter Matrix Score
	Clean, coarse-grained soils	(10)	
	Coarse-grained soils with fines	(8)	
	Fine-grained soils (low organic content)	(3)	10
	Fine-grained soils (high organic content)	(1)	
4.	Potential Receptors		Parameter Matrix Score
	Public well within 1,000 feet, or		
	Private well(s) within 500 feet	(15)	
	Municipal/private well within 1/2 mile	(12)	12
	Municipal/private well within 1 mile	(8)	
	No known well within 1/2 mile	(6)	
	No known well within 1 mile	(4)	
	Non-potable groundwater	(1)	
5.	Volume of Contaminated Soil		Parameter Matrix Score
	>500 cubic yards	(10)	
	100-500 cubic yards	(8)	
	25-100 cubic yards	(5)	8
	>De Minimis-25 cubic yards	(2)	
	De Minimis	(0)	
Total Matrix Score			48

Cleanup Level in mg/kg

		Diesel	Gasoline/Unknown		
atrix Score		**Diesel-Range Petroleum Hydrocarbon**	**Gasoline-Range Petroleum Hydrocarbon**	**Benzene**	**BTEX**
Level A	>40	100	50	0.1	10
Level B	27-40	200	100	0.5	15
Level C	21-26	1,000	500	0.5	50
Level D	<20	2,000	1,000	0.5	100

supply well is at the Airport Crash Site and Fire Station, which is approximately 2,500 feet cross-gradient west of the Juneau AAOF. Because it is unlikely that contamination from the AAOF would travel toward this well, a lower matrix score under Item 4, Potential Receptors, may be appropriate. If a lower score is used for Item 4, however, the overall matrix score would be 44 and Level A cleanup goals would still apply.

4.3.3 Extent of Contamination

Site research and interviews with onsite AK ARNG personnel suggest that the major source of contamination may be JP-5 fuel, which contains both diesel and gasoline constituents. In the July 17, 1991, guidance document, ADEC specifies the most stringent numeric soil cleanup levels for non-UST releases as follows:

- 100 mg/kg of DRO compounds
- 50 mg/kg of GRO compounds
- 0.1 mg/kg of benzene
- 10 mg/kg of total BTEX

By applying the most stringent ADEC cleanup levels to the limited, preliminary TPH sampling results, it is possible to estimate that a 2,100 square-foot area in Area 1 around the fuel dispenser contains hydrocarbon-laden soil above soil guidelines to an assumed depth of 12 feet. This would result in about 930 cubic yards of soil that could require remedial treatment.

Approximately 75 percent of the affected area, however, is covered either by a concrete tarmac or facility structures. This means that 75 percent of the estimated volume would be under these structures and, according to ADEC guidelines, would not have to be removed if contaminated soil is scheduled for excavation. Therefore, about 200 cubic yards would require removal if excavation is included in remedial efforts.

Section 5

Conclusions and Recommendations

This section summarizes the results and provides recommendations for action for the six areas of concern under investigation at the Juneau AAOF in this delivery order. Table 5-1 summarizes the findings and recommendations for the six areas of concern. Table 5-1 also summarizes the maximum detected contaminant concentrations at the Juneau AAOF and compares them with corresponding preliminary cleanup goals promulgated by ADEC.

5.1 Soil

No further action is recommended for Areas 2, 3, 4, 5 and 6. Results of screening and sampling show that either no contaminated soil is present or contaminants are below applicable ADEC cleanup levels.

Petroleum-contaminated soil exceeds Level A cleanup goals in Area 1 around the fuel dispenser. Elevated DRO, GRO, and BTEX concentrations were detected near the fuel dispenser (up to 1,020 mg/kg of DRO compounds, 472 mg/kg of GRO compounds, and 16.4 mg/kg of BTEX). The GRO compounds and BTEX were detected only in soil with high DRO concentrations, indicating both are JP-5 fuel components.

CH2M HILL recommends follow-up remedial action for Area 1 in the area surrounding the fuel dispenser. This should include preparation of a corrective action plan to guide remedial cleanup actions. A recommended remedial technology to treat soil in Area 1 is presented in a related, follow-up feasibility study.

Table 5-1
Summary of Findings and Recommendations

Area No.	Soil Investigation: Analytes/ Maximum Concentrations	Soil Investigation: Location of Maximum Concentration	Soil Investigation: Proposed Cleanup Level (ADEC)	Soil Investigation: Comments and Recommendations	Groundwater Investigation: Analytes/ Maximum Concentrations (ADEC)	Groundwater Investigation: Proposed Cleanup Level (ADEC)
Area 1	DRO 1,020 mg/kg GRO 472 mg/kg Benzene <0.25 mg/kg BTEX 16.4 mg/kg TPH >650 mg/kg	Boring B3: 0.8 to 1.4 ft Boring B3: 0.8 to 1.4 ft Boring B3: 0.8 to 1.4 ft Boring B3: 0.8 to 1.4 ft Boring B2: 3.5 to 5 ft	100 mg/kg 50 mg/kg 0.1 mg/kg 10 mg/kg NA	Recommend Remedial action.	DRO NA GRO NA TPH NA Benzene NA	No sheen/odor ND 5 µg/L
Area 2	DRO NA GRO NA Benzene NA BTEX NA TPH <30 mg/kg	Composite surface sample taken from three stations along AST fuel transfer lines.	100 mg/kg 50 mg/kg 0.1 mg/kg 10 mg/kg NA	No action.	DRO NA GRO NA TPH NA Benzene NA	NA
Area 3	DRO 23 mg/kg GRO NA Benzene NA BTEX NA TPH 53 mg/kg	Boring B6: 0.5 to 2 ft NA NA NA Boring B6: 0 to 0.5 ft	100 mg/kg 50 mg/kg 0.1 mg/kg 10 mg/kg NA	No action.	DRO NA GRO NA TPH NA Benzene NA	NA
Area 4	DRO 10 mg/kg GRO <5 mg/kg Benzene <0.05 mg/kg BTEX <0.2 mg/kg TPH 39 mg/kg	Boring B12: 3.5 to 5 ft Boring B12: 3.5 to 5 ft Boring B12: 3.5 to 5 ft Boring B12: 3.5 to 5 ft Boring B11: 0 to 0.5 ft	100 mg/kg 50 mg/kg 0.1 mg/kg 10 mg/kg NA	No action.	DRO NA GRO NA TPH NA Benzene NA	NA
Area 5	DRO 46 mg/kg GRO <5 mg/kg Benzene <0.05 mg/kg BTEX <0.2 mg/kg TPH 57 mg/kg	Boring B4: 4 to 5 ft Boring B4: 4 to 5 ft Boring B4: 4 to 5 ft Boring B4: 4 to 5 ft Boring B4: 0 to 0.5 ft	100 mg/kg 50 mg/kg 0.1 mg/kg 10 mg/kg NA	No action.	DRO NA GRO NA TPH NA Benzene NA	NA
Area 6	TPH 200 mg/kg DRO NA GRO NA Benzene NA BTEX NA	Juneau-09 taken from center of Excavation 1 (AK ARNG hydraulic fluid cleanup)	NA	No action.	DRO NA GRO NA TPH NA Benzene NA	NA

Notes: NA = Not applicable.
ND = Not detected.

5.2 Groundwater

Although groundwater was not encountered during the release investigation, preliminary groundwater cleanup goals have been developed if groundwater is encountered during remedial cleanup activities at Area 1. Cleanup goals are based on the Alaska Water Quality Standards (18 AAC 70), state and federal drinking water regulations (18 AAC 80 and 40 CFR 141, respectively), and ADEC *Interim Guidance for Surface and Groundwater Cleanup Levels* (September 26, 1990).

CH2M HILL recommends that, based on guidance specified above, groundwater should be cleaned up to final state or federal maximum contaminant levels (MCLs) for organic and inorganic chemicals, or to proposed federal MCLs if final levels have not been promulgated. In addition, ADEC specifies that TPH should be cleaned up to non-detectable levels, as measured by EPA Method 418.1. These levels are also summarized in Table 5-1. A recommended remedial technology to treat groundwater in Area 1 is also presented in the feasibility study.

Section 6
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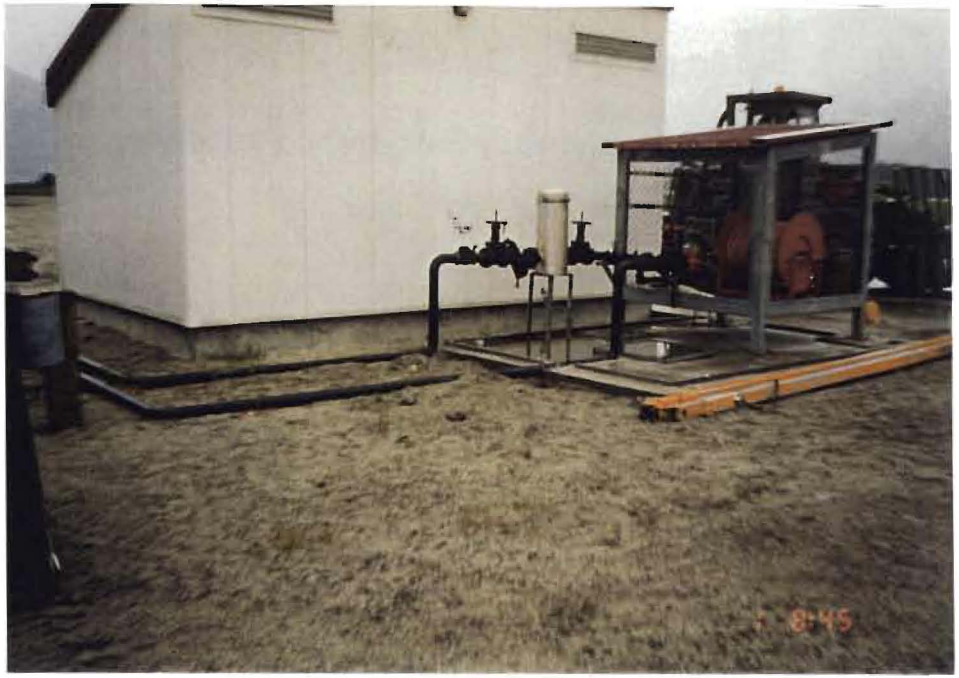
Appendix A
Photographs

Juneau AAOF

1. East side of Juneau AAOF, looking west. Area 5 is in photo foreground, Area 1 is in photo center right (behind loader), and Area 2 is photo right.



2 View of Area 1, JP-5 Fuel Dispenser, looking south-southeast.

Juneau AAOF

3. East and north sides of Juneau AAOF, looking southwest.

4. West side of Juneau AAOF, looking north.

Appendix B
Quality Assurance Review Memorandums
and
Laboratory Analytical Data Reports

MEMORANDUM CH2MHILL

TO: Jacques Gusmano

COPIES: Project Notebook

FROM: Elise LeBarron

DATE: January 16, 1996

SUBJECT: Review of Quality Assurance/Quality Control (QA/QC) Data for Army Aviation Operations Facility (AAOF), Juneau, Alaska

PROJECT: 106463.B0.10

Summary

Overall, the data have met the acceptance criteria as outlined in the context of this memorandum. The data are usable for the purposes of the site investigation outlined in the Sampling and Analysis Plan (SAP). Nonconformances are identified and discussed in this report.

Introduction

A review has been conducted on data submitted for the Army Aviation Operations Facility (AAOF) investigation in Juneau, Alaska. This report summarizes the results of the QA/QC data associated with the analysis of extractable petroleum hydrocarbons (diesel range organic [DRO] compounds), volatile petroleum hydrocarbons (gasoline range organic [GRO] compounds), and benzene, toluene, ethylbenzene, and total xylenes (BTEX). The samples were collected May 30, 31, and June 1, 1995.

The review focuses on criteria for the following QA/QC parameters and their overall effect on the data.

- Holding times
- Proper handling and sample condition (chain-of-custody)
- Method blanks
- Surrogate spikes
- Spike/Spike duplicate
- Field QA/QC

Samples submitted for laboratory analysis were collected from seven soil borings. Laboratory QA/QC data were evaluated from analyses associated with these soil samples. The following analyses were performed on the soil samples submitted to the laboratory:

- Seven soil samples and one field duplicate were analyzed for DRO compounds by gas chromatography (GC) (U.S. Environmental Protection Agency [EPA] Modified Method 8100)
- Six soil samples and one field duplicate were analyzed for GRO compounds by GC (EPA Modified Method 8015)
- Six soil samples and one field duplicate were analyzed for BTEX by GC (EPA Method 8020)

Analyses were performed by Columbia Analytical Services (CAS), Inc., in Anchorage, Alaska.

Samples were analyzed in accordance with the EPA *Test Methods for Evaluating Solid Waste,* EPA SW-846, September 1986, Third Edition, Update 1, July 1992. The QA/QC criteria were taken from SW-846 and the Quality Assurance Program Plan (QAPP) for the investigation of non-underground (non-UST) storage tank sites prepared by CH2M HILL (dated May 1993 and on file at the Alaska Department of Environmental Conservation [ADEC]).

The level of reporting from the laboratory was CAS's Tier II. Chromatograms and quantitation reports were not required in the data deliverables and were not requested. Consequently, calculations from the raw data were not verified.

The laboratory report also did not include instrument performance check results or initial and continuing calibration check data. These data also were not required for the deliverable. Without these data an evaluation of instrument performance could not be made. The laboratory case narrative does not indicate any instrument related problems with the analysis of these samples.

Holding Times

Holding time criteria monitors sample integrity that may be compromised over time.

All samples were extracted and analyzed within their respective holding time requirements.

Sample Handling

Proper sample handling and chain-of-custody procedures ensure the integrity of the samples.

The chain of custodies and the laboratory case narratives were reviewed to determine if any sample handling procedures might affect the integrity of the samples and the quality of the resulting data.

The Cooler Receipt and Preservation Form used by CAS indicated that the cooler temperature was 0.6°C, below the recommended range of 4°C ± 2°C. All sample containers were received intact by the laboratory. Since none of the containers were broken because of near-freezing storage conditions, the analytical data are not considered to be compromised.

Blanks

Method blank criteria monitor the existence and magnitude of contamination resulting from sample handling processes and/or instrument carry-over.

No analytes of interest were detected in the method blank analyzed with these samples.

Sensitivity

Sensitivity criteria monitor achievement of method reporting limits (MRLs).

The MRL for DRO soil analysis is 10 milligrams per kilogram (mg/kg) wet weight. All samples analyzed for DRO met this MRL.

The MRL for GRO soil analysis is 5 mg/kg wet weight. Six of seven samples met the MRL. Sample JUNEA-106 required a five-fold dilution to bring the target analyte concentration within the linear range of the instrument.

The MRL for BTEX analysis is 0.05 mg/kg wet weight for each analyte. Six of seven samples met the MRL. Sample JUNEA-106 required a five-fold dilution to bring the target analyte concentration within the linear range of the instrument.

Surrogate Spike Recovery

Surrogate spike recovery monitors instrument specificity and accuracy.

Surrogate recoveries of all samples were within control limits listed in the non-UST QAPP.

Precision and Accuracy

Precision criteria monitor analytical reproducibility (relative percent difference [RPD]) and accuracy criteria monitor agreement with "true values" as determined by analytical spike recovery. Analytical spikes can be prepared with site-specific samples (matrix spikes) or from "blank" matrix (laboratory control sample with use of "reagent grade" sand).

Matrix spikes (MS) and matrix spike duplicates (MSDs) are prepared by the laboratory at frequencies defined by the method. The frequency is usually 1 in every 20 samples, or with each sample batch if fewer than 20 samples. Matrix spike recoveries and RPDs for this project should be within the control limits listed in the non-UST QAPP.

Precision and accuracy data reported for BTEX and GRO analyses were within the recom-mended limits.

The MSD spike recovery for DRO analysis was 49 percent. The control limit range is 50-140 percent. The MS recovery was 91 percent. The laboratory states that the MSD recovery was low because of matrix interference. A laboratory control sample/duplicate laboratory control sample (LCS/DLCS) was also analyzed with this sample set. The percent recovery and RPD of the LCS/DLCS were within control limits, indicating that the laboratory was in control for GRPH analysis. No data from this sample set are qualified based on the low MSD recovery.

Field QA/QC

Field QA/QC monitor for sample contamination and overall sampling precision.

Trip blanks and field blanks were the field QA/QC samples outlined in the Sampling and Analysis Plan (SAP).

Trip Blanks

As outlined in the SAP, trip blanks were to be submitted for laboratory analysis only if water samples were submitted for BTEX analysis. No water samples were submitted for BTEX analysis, therefore a trip blank was not required.

Field Duplicate

Two field duplicate soil samples were submitted for laboratory analysis from this site. Table 1 below shows the duplicate results for samples JUNEA-101 and JUNEA-18:

Table 1
Duplicate Results
JUNEA-101 and JUNEA-18

Sample ID	DRO (mg/kg)	GRO (mg/kg)	BTEX (mg/kg)
JUNEA-101	< 10	not analyzed	not analyzed
JUNEA-301 (JUNEA-101 Dup)	< 10	not analyzed	not analyzed
Relative Percent Difference	---	not analyzed	not analyzed
JUNEA-18	not analyzed	< 5	< 0.20
JUNEA-302 (JUNEA-18 Dup)	not analyzed	< 5	< 0.20
Relative Percent Difference	not analyzed	---	---

Relative percent difference cannot be calculated when analytes are not detected.

MEMORANDUM

CH2MHILL

TO: Jacques Gusmano

COPIES: Project Notebooks

FROM: Elise LeBarron and Colleen Burgh

DATE: October 26, 1995

SUBJECT: Quality Assurance Review of Infrared Spectrophotometry Field Screening Procedures Used for Site Investigations of POL Spills for the Alaska Army National Guard Environmental Section (Delivery Orders 5 and 6)

PROJECT: 106462.B0.20, 106463.C0.20

Field screening for total petroleum hydrocarbons was performed onsite at each National Guard facility listed in Delivery Orders 5 and 6. The method used, contained in "Procedures for Total Petroleum Hydrocarbons by IR Spectrophotometry," is included as Appendix A to the sampling and analysis plan (SAP) for each delivery order.

Analysis equipment and hydrocarbon standards for calibration were provided by Close Support Laboratory/CH2M HILL/Applied Sciences Group in Corvallis, Oregon. The method used for this investigation effort was developed by Elise LeBarron and is a modification of U.S. Environmental Protection Agency (EPA) Method 418.1. The method includes procedures for calibration (performed before field visits), instrument setup (onsite), sample extraction and analysis, and a limited number of quality assurance samples.

Before the first site visit, Elise LeBarron prepared five calibration standards and derived the correlation coefficient comparing "known" standard concentration to the infrared (IR) response. The correlation coefficient was greater than 0.995, indicating a linear response of the instrument to the calibration standards.

Elise LeBarron trained Colleen Burgh and Laura Meadors in instrument operation, calibration check procedures, sample extraction and analysis, and proper quality assurance sample analysis. Training was completed before the site investigations.

As part of each day's operation of the IR in the field, the operator must do the following:

- "Zero" the instrument
- Check an equipment blank, and manually set the instrument reading to zero with the equipment blank

- Check the IR response of the most concentrated standard (300 parts per million) and adjust the IR response if necessary

- Check two other standards of lower concentration and record the response. Adequate response is ±15 percent of the known concentration.

- Check an additional equipment blank after the calibration standards have been checked and after every 10 samples

- Extract and analyze an extraction blank before the first sample of the day is analyzed and after every 20 samples if more than 20 are analyzed in a day

- Check a single calibration standard after every 10 samples and at the end of each day's completed analysis

- Analyze a sample in duplicate, 1 duplicate for every 20 samples

A review of field analysis for total petroleum hydrocarbon (TPH) notes for each site shows that, in general, the quality assurance procedures listed above were performed adequately.

Correlation of Field TPH Data With Laboratory Data

Samples were screened in the field for TPH to delineate the horizontal and vertical extent of suspected diesel fuel contamination. Field data were expected to show correlation with results from EPA Modified Method 8100 for diesel-range organic (DRO) compound analysis. In general, the following comparisons between field TPH results and laboratory DRO results are noted:

- Samples with TPH results of less than 100 milligrams per kilogram (mg/kg) in the field also had results of less than 100 mg/kg of DRO compounds from the laboratory. These samples were used to delineate contamination in the field.

- Samples with TPH results of greater than 600 mg/kg had results of greater than 600 mg/kg of DRO compounds from the laboratory. These samples were used to characterize the diesel contamination.

These observed correlations between field screening data and laboratory data indicate that vertical and horizontal extent of contamination was delineated at most sites by using the field screening technique.

For site investigations where the correlation was poor, the general observation was that the TPH screening results were low (less than 100 mg/kg or below the IR detection limit of 30 mg/kg) and the laboratory DRO results were very high (10 times or more the TPH result). In nearly all of these cases, the laboratory cites matrix interferences or poor pattern match between the sample chromatogram and the chromatogram of the calibration standard. Recommendations and conclusions for sites for which IR and laboratory data correlation are poor are discussed in the individual site investigation reports in Section 4.1.3, Data Validation Results.

RECEIVED BY
CH2M HILL AK
JUL 03 1995

Columbia Analytical Services inc.

June 29, 1995

Jacques Gusmano
CH2M Hill, Inc.
301 W. Northern Lights Blvd.
Suite 601
Anchorage, AK 99503

Service Request No: A9500248

Re: **AKARNG/Project No. NPE 72222.B0.10**

Dear Jacques:

Attached are the results of the samples submitted to our lab on June 2, 1995. Preliminary results were transmitted via facsimile on June 28, 1995. For your reference, our service request number for this work is A9500248.

All analyses were performed consistent with generally accepted analytical laboratory principles and practices. All results are intended to be considered in their entirety, and CAS is not responsible for use of less than the complete report. Results apply only to the samples analyzed.

Along with these results, we have enclosed a copy of our invoice. This is only a copy. The invoice you will submit payment for will be mailed to your accounting office in a week to ten days. Please do not submit payment at this time.

Please call if you have any questions.

Respectfully submitted,
Columbia Analytical Services, Inc.

Jane F. Whitsett

Jane F. Whitsett
Laboratory Manager

JFW/eaz

4684 Business Park Blvd., Bldg. D • Anchorage, AK 99503 • (907) 563-0846 • FAX (907) 563-2973

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	CH2M Hill, Inc.	**Date Received:**	6/2/95
Project:	AKARNG/NPE 72222.B0.10	**Work Order No:**	A9500248
Sample Matrix:	Soil		

CASE NARRATIVE

All analyses were performed consistent with generally accepted analytical principles and practices.

Where indicated, MRLs are elevated because the samples required diluting. MRLs are 5 times that shown.

-Acronyms-

MRL Method Reporting Limit
ND None Detected at or above the method reporting limit

Approved by JFW June 28, 1995

02

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: CH2M Hill
Project: JUNEAU AAOF/Project No. NPE72222.BO.10
Sample Matrix: Soil

Service Request: A9500248
Date Collected: 5/30/95
Date Received: 6/2/95

Total Solids (%)

Prep Method: NONE
Analysis Method: TS AK
Test Notes:

Units: PERCENT
Basis: Dry

Sample Name	Lab Code	Date Analyzed	Result	Result Notes
JUNEA-101	A9500248-1	6/6/95	94.5	
JUNEA-301	A9500248-2	6/6/95	95.0	
JUNEA-106	A9500248-3	6/6/95	92.2	
JUNEA-107	A9500248-4	6/6/95	86.1	
JUNEA-115	A9500248-5	6/6/95	96.0	
JUNEA-118	A9500248-6	6/6/95	96.1	
JUNEA-119	A9500248-7	6/6/95	93.2	
JUNEA-129	A9500248-8	6/6/95	90.5	
JUNEA-18	A9500248-9	6/6/95	95.0	
JUNEA-302	A9500248-10	6/6/95	88.8	

Approved By: Michael L Ackstine Date: 15JUN95

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	CH2M Hill	**Service Request:**	A9500248
Project:	JUNEAU AAOF/Project No. NPE72222.BO.10	**Date Collected:**	5/31/95
Sample Matrix:	Soil	**Date Received:**	6/2/95

Aromatic Volatile Organics

Sample Name:	JUNEA-106	Units:	mg/Kg (ppm)
Lab Code:	A9500248-3	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Benzene	5030	8020	0.05	0.01	5	6/5/95	6/8/95	ND	A
Toluene	5030	8020	0.05	0.01	5	6/5/95	6/8/95	ND	A
Ethylbenzene	5030	8020	0.05	0.01	5	6/5/95	6/8/95	2.1	A
Xylenes, Total	5030	8020	0.05	0.03	5	6/5/95	6/8/95	5.2	A

A The MRL is elevated because the sample required diluting. The actual MRL is 5 times that listed.

Approved By: _____ Date: 6·13·95

1S22/042895

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	CH2M Hill	**Service Request:**	A9500248
Project:	JUNEAU AAOF/Project No. NPE72222.BO.10	**Date Collected:**	5/31/95
Sample Matrix:	Soil	**Date Received:**	6/2/95

Aromatic Volatile Organics

Sample Name:	JUNEA-107	Units:	mg/Kg (ppm)
Lab Code:	A9500248-4	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Benzene	5030	8020	0.05	0.01	1	6/5/95	6/7/95	ND	
Toluene	5030	8020	0.05	0.01	1	6/5/95	6/7/95	ND	
Ethylbenzene	5030	8020	0.05	0.01	1	6/5/95	6/7/95	1.82	
Xylenes, Total	5030	8020	0.05	0.03	1	6/5/95	6/7/95	14.6	

Approved By: _____ Date: 6 13 95

1S22/042895

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	CH2M Hill	**Service Request:**	A9500248
Project:	JUNEAU AAOF/Project No. NPE72222.BO.10	**Date Collected:**	5/31/95
Sample Matrix:	Soil	**Date Received:**	6/2/95

Aromatic Volatile Organics

Sample Name:	JUNEA-115	Units:	mg/Kg (ppm)
Lab Code:	A9500248-5	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Benzene	5030	8020	0.05	0.01	1	6/5/95	6/5/95	ND	
Toluene	5030	8020	0.05	0.01	1	6/5/95	6/5/95	ND	
Ethylbenzene	5030	8020	0.05	0.01	1	6/5/95	6/5/95	ND	
Xylenes, Total	5030	8020	0.05	0.03	1	6/5/95	6/5/95	ND	

Approved By: hs Date: 6.13.95

1S22/042895

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	CH2M Hill	**Service Request:**	A9500248
Project:	JUNEAU AAOF/Project No. NPE72222.BO.10	**Date Collected:**	5/31/95
Sample Matrix:	Soil	**Date Received:**	6/2/95

Aromatic Volatile Organics

Sample Name:	JUNEA-118	Units:	mg/Kg (ppm)
Lab Code:	A9500248-6	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Benzene	5030	8020	0.05	0.01	1	6/5/95	6/5/95	ND	
Toluene	5030	8020	0.05	0.01	1	6/5/95	6/5/95	ND	
Ethylbenzene	5030	8020	0.05	0.01	1	6/5/95	6/5/95	ND	
Xylenes, Total	5030	8020	0.05	0.03	1	6/5/95	6/5/95	ND	

Approved By: hs Date: 6.13.95

1S22/042895

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	CH2M Hill	**Service Request:**	A9500248
Project:	JUNEAU AAOF/Project No. NPE72222.BO.10	**Date Collected:**	5/31/95
Sample Matrix:	Soil	**Date Received:**	6/2/95

Aromatic Volatile Organics

Sample Name:	JUNEA-129	Units:	mg/Kg (ppm)
Lab Code:	A9500248-8	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Benzene	5030	8020	0.05	0.01	1	6/5/95	6/5/95	ND	
Toluene	5030	8020	0.05	0.01	1	6/5/95	6/5/95	ND	
Ethylbenzene	5030	8020	0.05	0.01	1	6/5/95	6/5/95	ND	
Xylenes, Total	5030	8020	0.05	0.03	1	6/5/95	6/5/95	ND	

Approved By: hs Date: 6·13·95

1S22/042895

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	CH2M Hill	**Service Request:**	A9500248
Project:	JUNEAU AAOF/Project No. NPE72222.BO.10	**Date Collected:**	5/31/95
Sample Matrix:	Soil	**Date Received:**	6/2/95

Aromatic Volatile Organics

Sample Name:	JUNEA-18	Units:	mg/Kg (ppm)
Lab Code:	A9500248-9	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Benzene	5030	8020	0.05	0.01	1	6/5/95	6/5/95	ND	
Toluene	5030	8020	0.05	0.01	1	6/5/95	6/5/95	ND	
Ethylbenzene	5030	8020	0.05	0.01	1	6/5/95	6/5/95	ND	
Xylenes, Total	5030	8020	0.05	0.03	1	6/5/95	6/5/95	ND	

Approved By: hs Date: 6·13·95

1S22/042895

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	CH2M Hill	**Service Request:**	A9500248
Project:	JUNEAU AAOF/Project No. NPE72222.BO.10	**Date Collected:**	6/1/95
Sample Matrix:	Soil	**Date Received:**	6/2/95

Aromatic Volatile Organics

Sample Name:	JUNEA-302	Units:	mg/Kg (ppm)
Lab Code:	A9500248-10	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Benzene	5030	8020	0.05	0.01	1	6/5/95	6/5/95	ND	
Toluene	5030	8020	0.05	0.01	1	6/5/95	6/5/95	ND	
Ethylbenzene	5030	8020	0.05	0.01	1	6/5/95	6/5/95	ND	
Xylenes, Total	5030	8020	0.05	0.03	1	6/5/95	6/5/95	ND	

Approved By: _____ Date: 6-13-95

1S22/042895

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	CH2M Hill	**Service Request:**	A9500248
Project:	JUNEAU AAOF/Project No. NPE72222.BO.10	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA

Aromatic Volatile Organics

Sample Name:	Method Blank	Units:	mg/Kg (ppm)
Lab Code:	A950605-SB1	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Benzene	5030	8020	0.05	0.01	1	6/5/95	6/5/95	ND	
Toluene	5030	8020	0.05	0.01	1	6/5/95	6/5/95	ND	
Ethylbenzene	5030	8020	0.05	0.01	1	6/5/95	6/5/95	ND	
Xylenes, Total	5030	8020	0.05	0.03	1	6/5/95	6/5/95	ND	

Approved By: hs Date: 6.13.95

1S22/042895

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: CH2M Hill
Project: JUNEAU AAOF/Project No. NPE72222.BO.10
Sample Matrix: Soil

Service Request: A9500248
Date Collected: 5/31/95
Date Received: 6/2/95

Volatile Petroleum Hydrocarbons (8015)

Prep Method: 5030
Analysis Method: 8015-VPH
Test Notes:

Units: mg/Kg (ppm)
Basis: Dry

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Method Blank	A950605-SB1	5	0.3	1	6/5/95	6/5/95	ND	
JUNEA-106	A9500248-3	5	0.3	5	6/5/95	6/8/95	380	B
JUNEA-107	A9500248-4	5	0.3	1	6/5/95	6/7/95	472	
JUNEA-115	A9500248-5	5	0.3	1	6/5/95	6/5/95	ND	
JUNEA-118	A9500248-6	5	0.3	1	6/5/95	6/5/95	ND	
JUNEA-129	A9500248-8	5	0.3	1	6/5/95	6/5/95	ND	
JUNEA-18	A9500248-9	5	0.3	1	6/5/95	6/5/95	ND	
JUNEA-302	A9500248-10	5	0.3	1	6/5/95	6/5/95	ND	A

A Sample was collected on 6/1/95.
B The MRL is elevated because the sample required diluting. The actual MRL is 5 times that listed.

Approved By: hs Date: 6.13.95

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: CH2M Hill
Project: JUNEAU AAOF/Project No. NPE72222.BO.10
Sample Matrix: Soil

Service Request: A9500248
Date Collected: 5/30/95
Date Received: 6/2/95

Diesel Range Organics

Test Notes:

Units: mg/Kg
Basis: Dry

Sample Name	Lab Code	Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Method Blank	A950606SB3	3540/8100M	10		1	6/6/95	6/20/95	ND	
JUNEA-101	A9500248-1	3540/8100M	10		1	6/6/95	6/22/95	ND	
JUNEA-301	A9500248-2	3540/8100M	10		1	6/6/95	6/22/95	ND	
JUNEA-106	A9500248-3	3540/8100M	10		1	6/6/95	6/18/95	557	
JUNEA-107	A9500248-4	3540/8100M	10		1	6/6/95	6/18/95	1020	
JUNEA-115	A9500248-5	3540/8100M	10		1	6/6/95	6/17/95	46	
JUNEA-118	A9500248-6	3540/8100M	10		1	6/6/95	6/17/95	18	
JUNEA-119	A9500248-7	3540/8100M	10		1	6/6/95	6/17/95	23	
JUNEA-129	A9500248-8	3540/8100M	10		1	6/6/95	6/17/95	10	

Approved By: Martha E. Maki Date: 6-28-95

1Amc/012395

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: CH2M Hill
Project: JUNEAU AAOF/Project No. NPE72222.BO.10
Sample Matrix: Soil

Service Request: A9500248
Date Collected: 5/31/95
Date Received: 6/2/95
Date Extracted: 6/5/95
Date Analyzed: 6/5/95

Surrogate Recovery Summary
Aromatic Volatile Organics

Prep Method: 5030
AnalysisMethod: 8020

Units: PERCENT
Basis: Dry

Sample Name	Lab Code	Test Notes	Percent Recovery 1,4-Difluorobenzene
Method Blank	A950605-SB1		106
JUNEA-106	A9500248-3	B	108
JUNEA-107	A9500248-4	C	95
JUNEA-115	A9500248-5		97
JUNEA-118	A9500248-6		94
JUNEA-129	A9500248-8		89
JUNEA-18	A9500248-9		95
JUNEA-302	A9500248-10	A	96
Batch QC Matrix Spike	A9500247-1 MS		99
Batch QC Dup Matrix Spike	A9500247-1DMS		99

CAS Acceptance Limits: 69 - 120

A	Sample was collected on 6/1/95.
B	Result is from an analysis performed on 6/8/95.
C	Result is from an analysis performed on 6/7/95.

Approved By: JFW Date: 6/29/95

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	CH2M Hill	**Service Request:**	A9500248
Project:	JUNEAU AAOF/Project No. NPE72222.BO.10	**Date Collected:**	5/30/95
Sample Matrix:	Soil	**Date Received:**	6/2/95
		Date Extracted:	6/5/95
		Date Analyzed:	6/5/95

Matrix Spike/Duplicate Matrix Spike Summary
Aromatic Volatile Organics

Sample Name:	Batch QC Matrix Spike	Units:	mg/Kg (ppm)
Lab Code:	A9500247-1DMS	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Percent Recovery MS	Percent Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Benzene	5030	8020	0.05	1.4	1.39	ND	1.2	1.18	88	85	60-140	3	
Toluene	5030	8020	0.05	4.03	4.01	ND	3.8	3.7	94	92	60-140	2	
Ethylbenzene	5030	8020	0.05	0.848	0.844	ND	0.8	0.779	92	92	60-140	<1	

Approved By: JFW Date: 6/29/95
DMS/042895

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: CH2M Hill
Project: JUNEAU AAOF/Project No. NPE72222.BO.10
Sample Matrix: Soil

Service Request: A9500248
Date Collected: 5/31/95
Date Received: 6/2/95
Date Extracted: 6/5/95
Date Analyzed: 6/5/95

Surrogate Recovery Summary
Volatile Petroleum Hydrocarbons (8015)

Prep Method: 5030
AnalysisMethod: 8015-VPH

Units: PERCENT
Basis: Dry

Sample Name	Lab Code	Test Notes	Percent Recovery 1,4-Difluorobenzene
Method Blank	A950605-SB1		107
JUNEA-106	A9500248-3	B	103
JUNEA-107	A9500248-4	C	98
JUNEA-115	A9500248-5		95
JUNEA-118	A9500248-6		92
JUNEA-129	A9500248-8		86
JUNEA-18	A9500248-9		92
JUNEA-302	A9500248-10	A	94
Batch QC Matrix Spike	A9500247-1MS		100
Batch QC Dup Matrix SPike	A9500247-1DMS		98

CAS Acceptance Limits: 57 - 137

A Sample was collected on 6/1/95.
B Result is from an analysis performed on 6/8/95.
C Result is from an analysis performed on 6/7/95.

Approved By: JTW Date: 6/29/95

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	CH2M Hill	**Service Request:**	A9500248
Project:	JUNEAU AAOF/Project No. NPE72222.BO.10	**Date Collected:**	5/30/95
Sample Matrix:	Soil	**Date Received:**	6/2/95
		Date Extracted:	6/5/95
		Date Analyzed:	6/5/95

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Petroleum Hydrocarbons (8015)

Sample Name:	Batch QC Dup Matrix Spike	Units:	mg/Kg (ppm)
Lab Code:	A9500247-1DMS	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Percent Recovery MS	Percent Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Gasoline Range Organics	5030	8015-VPH	5	27	26.3	ND	26	24.3	98	92	60-140	6	

Approved By: JFW Date: 6/29/95
DMS/042895

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: CH2M Hill
Project: JUNEAU AAOF/Project No. NPE72222.BO.10
Sample Matrix: Soil

Service Request: A9500248
Date Collected: 5/30/95
Date Received: 6/2/95
Date Extracted: 6/6/95
Date Analyzed: 6/15/95

Surrogate Recovery Summary
Semivolatile Petroleum Hydrocarbons

Method: 3540/8100M

Sample Name	Lab Code	Test Notes	Percent Recovery p-Terphenyl
Method Blank	A950606SB3		117
Lab Control Sample	A950606SL5		77
Dup Lab Control Sample	A950606SL6		74
JUNEA-101	A9500248-1		71
JUNEA-301	A9500248-2		88
JUNEA-106	A9500248-3		127
JUNEA-107	A9500248-4		86
JUNEA-115	A9500248-5		89
JUNEA-118	A9500248-6		88
JUNEA-119	A9500248-7		111
JUNEA-129	A9500248-8		85
JUNEA-101	A9500248-1MS		83
JUNEA-101	A9500248-1DMS		76

CAS Acceptance Limits: 54 - 133

Approved By Martin E. Hurd Date: 6-28-95

SUR1/012095

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	CH2M Hill	**Service Request:**	A9500248
Project:	JUNEAU AAOF/Project No. NPE72222.BO.10	**Date Collected:**	5/30/95
Sample Matrix:	Soil	**Date Received:**	6/2/95
		Date Extracted:	6/6/95
		Date Analyzed:	6/15/95

Matrix Spike/Duplicate Matrix Spike Summary
Semivolatile Petroleum Hydrocarbons

Sample Name:	JUNEA-101	Units:	mg/Kg
Lab Code:	A9500248-1DMS	Basis:	Dry
Test Notes:			

							Percent Recovery				
			Spike	Sample	Spike Result				CAS Acceptance	Relative Percent	Result
Analyte	**Method**	**MRL**	**Level**	**Result**	MS	DMS	MS	DMS	Limits	**Difference**	**Notes**
Diesel Range Organics	3540/8100M	10	683	ND	638	334	91	49	50 - 140	60	A,B

A Outside of acceptance limits because of matrix effects. This sample was analyzed a second time, and again produced unacceptable recovery values. The results from the reanalysis are reported.

B MS/DMS were not in control, the LCS/DLCS were in agreement with CAS acceptance criteria.

Approved By: Monte E. Hurd Date: 6.28.95

DMS/012095

CHAIN OF CUSTODY/LABORATORY ANALYSIS REPORT FORM

Columbia Analytical Services, Inc.
4600 Business Park Blvd., SUITE 32 • Anchorage, AK 99503 • (907) 563-0846 • FAX (907) 563-2973

DATE 6/1/95 PAGE 1 OF 1

PROJECT NAME JUNEAU AAOF # NPE 72222.B0.10
PROJECT MGR. JL GUSMANO
COMPANY/ADDRESS CH2M HILL
301 W NORTHERN LIGHTS
ANCHORAGE PHONE 278 2551
FAX 277 9736
SAMPLERS SIGNATURE

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX	NUMBER OF CONTAINERS	ANALYSIS REQUESTED: DRO/8100M	REMARKS
JUNEA-101	05/30	1517	AI500248 -1	SOIL	1	X	
Junea-301	05/30	1518	-2	Soil	1	X	
Junea-106	05/31	0950	-3	Soil	2	X	
Junea-107	05/31	1002	-4	Soil	2	X	
Junea-115	5/31	14:17	-5	Soil	2	X	
Junea-118	5/31	15:50	-6	Soil	2	X	
Junea-119	5/31	17:05	-7	Soil	1	X	
Junea-129	5/31	19:14	-8	Soil	2	X	
Junea-118	5/31	18:58	-9	Soil	1	X	*Bottle marked 18
Junea-302	6/1	15:25	-10	Soil	1	X	

RELINQUISHED BY:
Signature
Elise LeBarron
Printed Name
CH2M Hill
Firm
6/1/95 17:10
Date/Time

RECEIVED BY:
Signature
Mala Kalyan
Printed Name
CAS/AK
Firm
6/2/95 9:00 am
Date/Time

RELINQUISHED BY:
Signature
Printed Name
Firm
Date/Time

RECEIVED BY:
Signature
Printed Name
Firm
Date/Time

TURNAROUND REQUIREMENTS
___ 24 hr ___ 48 hr. ___ 3-5 day
X Standard (10-15 working days)
___ Provide Verbal Preliminary Results
X Provide FAX preliminary Results
Requested Report Date ___

REPORT REQUIREMENTS
___ I. Routine Report
___ II. Report (includes DUP.MAS. MSD, as required, may be charged as samples)
___ III. Data Validation Report (includes All Raw Data)
___ IV. CLP Deliverable Report
___ ADEC Deliverables
___ ACOE Deliverables

INVOICE INFORMATION:
P.O.#
Bill To

SAMPLE RECEIPT:
Temp: 0.6°C
Airbill #:
Shipping VIA:
Shipping to:
Condition:
COC Seals:
Lab No:

SPECIAL INSTRUCTIONS/COMMENTS:
* Use bottle ID as per E. LeBaron verbal to J.W.

DISTRIBUTION: WHITE - return to originator; YELLOW - lab; PINK - retained by originator

420-5

Cooler Receipt And Preservation Form

Project/Client CH2M Hill / Juneau AAQF Work Order A9500248.

Cooler received on 6/2 and opened on 6/2/95 by Rula Kalyan

1.	Were custody seals on outside of cooler? If yes, how many and where? 3, front, back, left side	(YES) NO
2.	Were signature & date correct?	(YES) NO
3.	Were custody papers properly filled out (ink, signed, etc)?	(YES) NO
4.	Did all bottles arrive in good condition (unbroken)?	(YES) NO
5.	Were all bottle labels complete (*i.e.* analysis, preservation, etc)?	(YES) NO
6.	Did all bottle labels and tags agree with custody papers? ✗	YES (NO)
7.	Were correct bottles used for the tests indicated?	(YES) NO
8.	Were VOA vials checked for absence of air bubbles, and noted if so?	YES NO
9.	Did the bottles originate from CAS/Kelso or a branch laboratory?	(YES) NO

10.	Temperature of cooler(s) upon receipt:	0.6 C	____	____	____	____
	Identification number of thermometer:	24	____	____	____	____
	Is the temperature within 4 ± 2° C?:	Yes ☐ No ☒	Yes ☐ No ☐	Yes ☐ No ☐	Yes ☐ No ☐	Yes ☐ No ☐

Explain any discrepancies Juneau 18 marked as 118 on COC
Juneau 302 marked 15:20 on bottle for time

		YES	NO
pH	Reagent		
12	NaOH		
2	HNO_3		
2	H_2SO_4		

YES = All samples OK
NO = Samples were preserved at lab as listed

VOC Vial pH Verification (Tested after Analysis) ☐ All Samples pH ≤ 2 ☐ Following Samples Exhibited pH > 2		

Sample I.D.	Reagent	Vol. Added

Comments:_____

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Appendix C
Preliminary Assessment

AK ARNG Site Assessment Summary Form
Juneau Army Aviation Operating Facility

Date: January 19, 1996
Preparer Name: Rob Crotty
Title: Geologist
Employer: CH2M HILL
Address: 301 West Northern Lights Boulevard
Suite 601
Anchorage, Alaska 99503
Phone number: (907) 278-2551
Signature:

General Information

Purpose of site assessment: Provide Alaska Army National Guard (AK ARNG) with information concerning nature and extent of onsite contamination from past unpermitted releases of petroleum products and to assess facility environmental regulatory compliance.

Operator of site: AK ARNG

Location of site: within the City and Borough of Juneau
Latitude 58°22' N, Longitude 134°35' W

Name of site: Juneau Army Aviation Operations Facility (AAOF)

Physical address of site: 8425 Livingston Way
Juneau, Alaska

Legal description of site: Township 40S, Range 66 E, Section 31, Copper River Meridian

Present and past mission statement(s) of AK ARNG activities: The military mission of the Juneau AAOF is to provide maintenance, support, and storage for AK ARNG aircraft. The facility may also be used in the support of civilian search and rescue operations.

Map of state with town identified: See location map at back of this form.

Map of site: See site layout figures from the site investigation report, which are included at the end of this form. The figures provide the following requested details.

Site features
Sampling locations identified
North arrow
Scale (feet or meters)
Surface water
Surface drainage on site

Surface drainage for the area: Surface drainage from the facility generally flows away from the building in all directions. North of the hangar, surface runoff is directed to a ditch that runs parallel to Livingston Way. South of the hangar, the surface runoff is directed toward the taxiway. East and west, surface runoff is directed onto adjacent lots. Direction of subsurface drainage is unknown.

Water supply wells:

On site: The Juneau AAOF does not have any onsite water supply wells. The facility is connected to the City and Borough of Juneau public water supply system.

Within 1/4 mile and 2 miles of site: Twenty three wells are located within the same legal section as Juneau AAOF: five are public-supply water wells, six are domestic-supply wells, three are commercial wells, eight are observation wells used only in studies, and the use of one well is unknown. Wells closest to the Juneau AAOF include an abandoned water supply well at the Airport Fire and Crash Site Station, 1,200 feet to the west, and an unused, standby city water supply well, about 2,000 feet northwest of the AAOF (USGS, 1995; Personal communication between R.Crotty/CH2M HILL and City and Borough of Juneau, August, 1995).

Oil/water separator systems: An oil-water separator is located at the wash rack area in the maintenance bay of the AAOF. Two trench drains in the hangar floor

drain into the oil-water separator. Waste oil is accumulated in a UST outside the east side of the building. Separated water drains to a ditch that runs parallel to Livingston Way. The ditch is not connected to the City sewer system.

AST/UST systems - tanks & piping - tank inventory and compliance actions:

- 6,000-gallon, steel, double-walled AST used for heating oil storage. Fuel is transferred to the AAOF via underground piping. The piping is insulated, but there is no secondary containment.
- 12,000-gallon, steel, double-walled AST used for Jet A-50 fuel storage. Fuel is transferred from the AST via aboveground piping to a dispensing stand southeast of the hangar.
- 300-gallon, steel, double-walled UST used to accumulate waste oil from the oil-water separator.

A Spill Prevention, Control, and Countermeasure/Installation Spill Contingency Plan was drafted by CH2M HILL for the Juneau AAOF in December, 1995.

Area(s) of obvious contamination: In December 1991, fuel stains were observed on the ground under the Jet A-50 (JP-5) fuel transfer stand. The piping from the Jet A tank to the fuel dispenser had leaked in several joint locations along the line. Operations at the fuel stand were suspended until repairs were completed in 1993. The soil contamination at this location was also documented in an ECAS Finding Sheet (AK ARNG, 1992). Information on the size of areas with observed soil contamination was not discovered during this audit. The quantity of fuel that was released from the piping is unknown.

In August 1992, about 35 gallons of hydraulic fluid leaked from a forklift in an unpaved area of the yard adjacent to the hangar. The contaminated soil was excavated and shipped to Anchorage for disposal through the Defense Reutilization and Marketing Office.

Point of contact on site: Major Gretchen Brand (907) 789-3366

Description and drawing of site: Juneau is the capital city of Alaska and the state's third largest city. It is on the mainland in southeast Alaska on the eastern side of

Gastineau Channel, opposite Douglas Island, and is approximately 650 miles from Anchorage. The Juneau AAOF is within the City and Borough of Juneau, approximately 8 miles northwest of the downtown area. The AAOF facility is located on a taxiway off the main runway of Juneau International Airport.

The AAOF facility consists primarily of a hangar building, aircraft tie-down area, two ASTs, and a fuel dispenser.

Annual climatic data: Climatological summary data from 1965-1974 and 1976-1987 recorded a mean annual maximum temperature of 48°F and a mean annual minimum temperature of 37°F. The mean annual precipitation at the Juneau airport is 55 inches.

Site geology and hydrogeology: The Juneau AAOF is built on a sand pad placed as fill over wetlands and a pond. The facility is adjacent to the tidally affected Gastineau Channel. Groundwater flow for the area is unknown, but is assumed to flow toward the Channel.

General biological data:

- **Of site:** The Juneau AAOF is built on filled wetlands. The majority of the facility is paved. Unpaved area are covered by sparse to thick grasses growing in sandy soil.

- **Within 1 mile or within areawide drainage:** The land area surrounding the AAOF is primarily commercial. Gastineau Channel is a marine environment supporting diverse populations of fish, invertebrates, marine mammals, and birds.

Surface cover: Surface cover at the AAOF consists of concrete at the aircraft tie-down area and taxiway south of the hangar and gravel on the east, north, and west sides of the hangar.

Surrounding vegetation: Vegetation surrounding the Juneau area varies widely, depending on elevation and proximity to the shore. The area is generally characterized as coastal western hemlock-Sitka spruce forest.

Surrounding land use: Land use surrounding the Juneau AAOF is primarily commercial and industrial. The facility is located within the Juneau airport property. Egan Drive, the main highway connecting downtown Juneau and the airport, is east of the facility. Construction in the area has been primarily on filled wetlands. Gastineau Channel is a busy navigation route for commercial and recreational watercraft.

Identify and locate fresh or marine waters or wetlands within 1/4 mile and within 2 miles of the site: The main freshwater bodies around the site are the Mendenhall River, Duck Creek, and Jordan Creek. Wetlands are located throughout the area surrounding the Juneau AAOF; commercial and industrial development has filled in much of the wetlands. The airport facility is built on fill immediately adjacent to the Gastineau Channel.

Does (or has) this facility requested or been granted a discharge permit to navigable waterways: A 1994 ECAS Previsit Questionnaire notes that the site has a wastewater discharge permit. The information did not indicate discharge point or the type of permit (AK ARNG, 1994).

Are there any relevant master plans, NEPA documents (EIS, EA, etc.): None found in files.

Is there any historical photogrammetry: **Location(s):**

Aerial photos are kept on file at the FMD.

Surrounding populations: 29,228 (ADCRA, 1995)

Approximate population within 1 mile of the site:

Approximate population within 5 miles of the site:

Water quality: A municipal water system provides water to over 90 percent of Juneau households. There are no known problems.

Location of wells at or near site: There are no wells at the site. The wells closest to the Juneau AAOF include an abandoned water supply well at the Airport Fire and Crash Site Station, 1,200 feet to the west, and an unused, standby city water supply well, about 2,000 feet northwest of the AAOF.

Population of town: 29,228

Source and location of all public water supplies: The City and Borough of Juneau has two public water supply sources: the Salmon Creek Reservoir (surface supply) and a well field in the lower Gold Creek watershed.

Number of people on public water supply: A municipal water system provides water to more than 90 percent of Juneau households.

Identify and locate all known area contamination to surface and or groundwater: None identified.

Document all known occurrences of contamination at the tap exceeding MCLs: None known

Document all known occurrences of contamination at the tap that do not exceed MCLs: None known

Number of households and people with private wells (and depth of well): Within Section 31 of the Juneau B-2 Quadrangle, the GWSI data base lists four domestic use wells. The drilled depth of three of the wells ranges from 46 feet to 100 feet. The depth of the well owned by Thunderbird Terrace was not listed; however, the water level of this well was listed as 7.26 feet.

List other businesses/operations within 1 mile of the site: Several retail/commercial businesses/operations are located within 1 mile of the Juneau AAOF, including Fred Meyer, the Juneau International Airport, and a fire station.

List and location of petroleum and hazardous materials stored on site: A September 1995 inventory, prepared by CH2M HILL as part of the Draft SPCC Plan. Major hazardous materials include:

- 6,000 gallons heating fuel in AST east of hangar
- 12,000 gallons Jet A-50 fuel in AST east of hangar
- PD-680 in 55-gallon drums
- 300 gallons used oil in UST north of GSE shop

- Jet A-50 fuel in aircraft fuel tanks
- Various containers from 1 quart to 55 gallons of synthetic engine oil, lubricants, antifreeze, degreasers, corrosion inhibitors, adhesives, and paints
- Various lithium and sulfur dioxide batteries

Does this facility have a current Hazardous Waste Management Plan? An ECAS Finding Sheet report indicates the facility has a plan (AK ARNG, 1992); however, a copy of a plan was not discovered during this audit. An ECAS Previsit Questionnaire documented that the facility is classified as a RCRA (Resource Conservation and Recovery Act) Small Quantity Generator of hazardous waste (AK ARNG, 1994). In addition, CH2M HILL prepared an updated SPCC Plan (draft) in 1995.

Location and description of AST/UST systems:

Are there piping systems which are pressurized by pump or by gravity at the station? Both ASTs utilize suction pump systems.

Are there piping systems which are pressurized by pump or by gravity within 1 mile of the station? There are numerous public fuel filling stations within 1 mile of the AAOF. In addition, the airport operates aircraft refueling stations.

Firm Conducting the Site Assessment

Name of firm: CH2M HILL

Mailing address: 301 West Northern Lights Blvd. Suite 601, Anchorage, Alaska 99503

Name, title, and responsibilities of each site assessment team member:
Rob Crotty-sample collector
Elise LeBarron-IR operator

ADEC office and point of contact for approval plans: ADEC, Anchorage

Site History

Based on the best available knowledge, check the appropriate condition:

YES	NO	
X		**Was soil contamination observed or identified?**
	X	**Was groundwater contamination observed or identified?**
X		**Have recorded/unrecorded releases occurred at the site?**
	X	**Have any of the facility's UST/AST ever failed?**
	X	**Have there been any previous site assessments performed at this site?**
X		**Are multiple sources or contamination present at the site?**
X		**Do previous site assessments indicate any contamination has occurred?** Contamination has been noted in ECAS reports.
X		**Have releases been reported to AK ARNG 207th Group, or the AK ARNG Environmental Office?** Soil contamination from fuel transfer stand was documented on the ECAS Finding Sheet (AK ARNG, 1992).
	X	**Was an AK ARNG Spill Notification Data Sheet completed?** No Spill Notification Data Sheet was discovered during this audit.
	X	**Was an AK ARNG Site Assessment Summary Form completed for previous SI(s) for this site?**

Field Screening Analysis

Date(s) of field screening: May 30, and 31 and June 1, 1995
Temperature during screening: 40 to 50°F
Estimated wind speed: Calm

Weather (clear, raining, etc.): Sunny and cloudy/rainy

Type of field detection instrument used: Infrared Spectrophotometer

- **Brand:** Buck Scientific
- **Model:** HC-404
- **Date calibrated:** Daily, before use
- **Number of tests:** 40 (plus additional QC checks)
- **Range of results:** < 30 mg/kg to > 600 mg/kg (wet weight)

Collection of Soil Samples

Check the appropriate response:

YES	NO	
X		**Were any areas of obvious contamination identified or observed?**
X		**Were samples taken from areas of obvious contamination?**
	X	**Were there deviations from the approved QAPP?**
X		**Were field duplicate samples collected and analyzed?**
X		**Were all samples immediately cooled and refrigerated?**
X		**Were all samples extracted and analyzed within recommended holding times?**
X		**Did chain-of-custody/transfer logs accompany samples to laboratory?**

Laboratory Analysis of Soil Samples

Identify the possible contaminants (gasoline, diesel, fuel oil, BTEX, etc.):
Diesel Fuel, gasoline, hydraulic oil, BTEX

List the analytical methods used to detect these contaminants in the soil samples:
See table below.

List the number of samples analyzed by each method, and the range of results for each method:

Possible Product	Analytical Method	Number of Samples	Range of Result(s) (ppm)	Location(s) of Sample Point(s) with Highest Level of Contamination
diesel	8100 M	10	<10 to 1,020	Boring B3, 0.8-1.4 feet
gasoline	8015 M	11	< 5 to 472	Boring B3, 0.8-1.4 feet
BTEX	8020	11	<0.20 to 16.4	Boring B3, 0.8-1.4 feet

Groundwater Investigation

No groundwater samples were collected

Check the appropriate response:

YES NO

X **Is groundwater known? State depth and expected fluctuation.**
Groundwater in area is at 6-12 feet bgs and is influenced by rainfall and runoff. The aquifer beneath the AAOF does not supply potable water for the facility.

X **Is permafrost a site/area geologic condition? State depth and thickness.**

X **Was groundwater encountered during excavation or drilling work?**

X **Is groundwater or seasonal high water table known or suspected to exist within 5 feet of the surface?**

Were samples taken from borings drilled or test pits dug to this level? N/A
Were there deviations from the approved QAPP? N/A

How many groundwater/saturated-soil samples were collected and analyzed? N/A

How many of these samples were taken from the top 6" of the water table? N/A

How many QC samples were analyzed?

- **Trip blanks:** N/A
- **Duplicates:** N/A
- **Decon blanks:** N/A

Laboratory Analysis of Water Samples

No water samples were collected.

Identify the possible contaminants at the site:

Identify the analytical methods used to detect these contaminants in the water samples:

Identify the number of samples analyzed by each method:

Identify the range of results for each method:

Analytical Method	Number of Samples	Range of Result(s) (ppm)	Location(s) of Sample Point(s) with Highest Level of Contamination

Stockpiles

Are there any soils stockpiled at the site: No

Are soils stockpiled properly:

Are the stockpiled soils maintained in a satisfactory manner:

Recommendations

Recommend Data Quality Objectives for this site: See the discussion in the *Project Management Plan,* which is submitted under separate cover.

Summary of applicable or relevant and appropriate regulations of state and federal laws, corresponding requirements and guidelines: See the discussion in the *Project Management Plan,* which is submitted under separate cover. The primary requirements for investigation and cleanup of this site are contained in ADEC regulations 18 AAC 75 for releases from non-UST sources.

Certification

The following certification is to be signed by the assessment firm's principal investigator.

I certify that all statements and data appearing in this summary are valid and accurate.

Rob Crotty
(Print name)

Geologist
(Title)

(Signature)

01/19/96
(Date)

clarus

Figure 1. 2002 Aerial Photo of Juneau

Photo copyrighted by AeroMap U.S., Juneau 3-6, August 2002

ALASKA ARMY NATIONAL GUARD

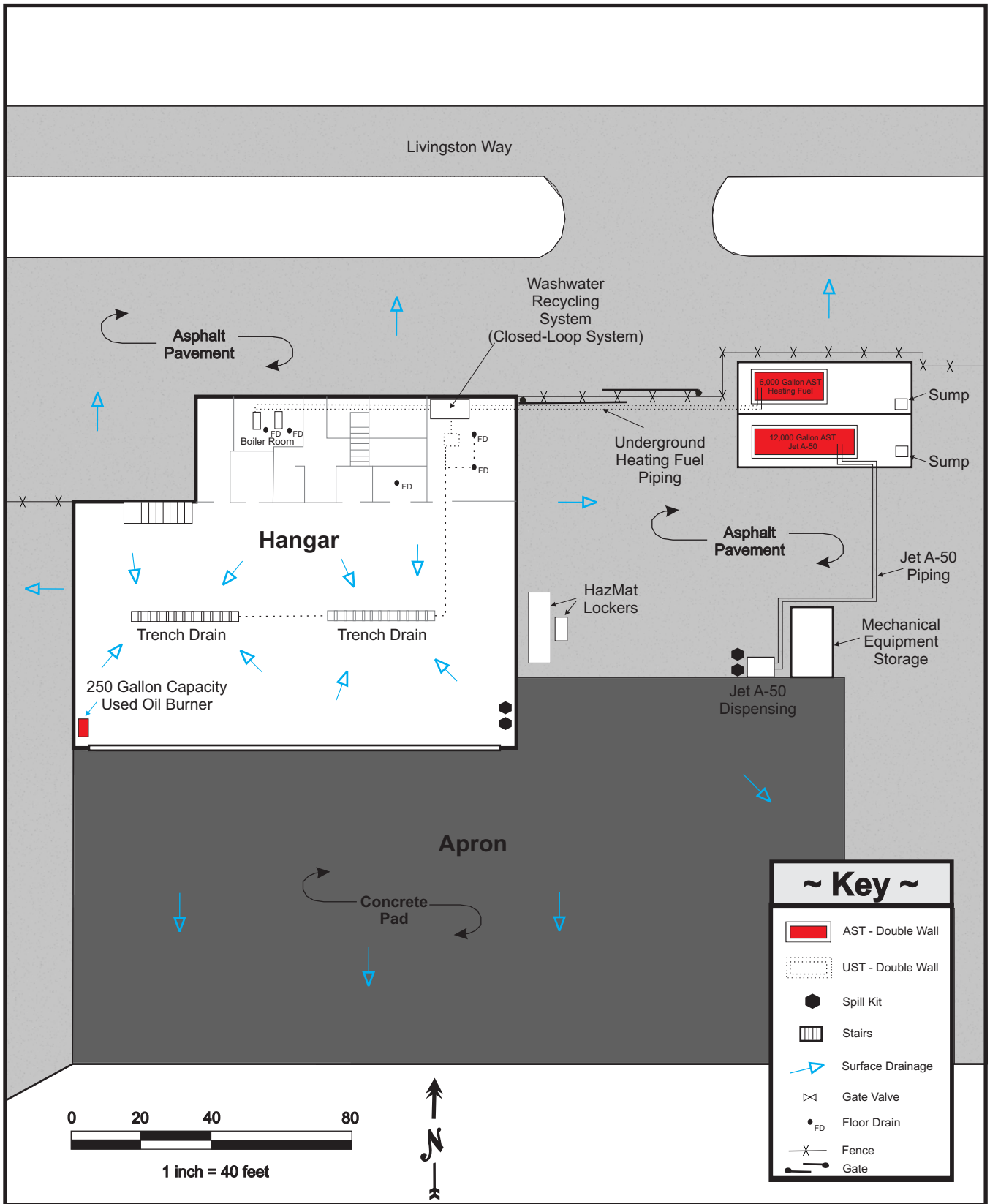
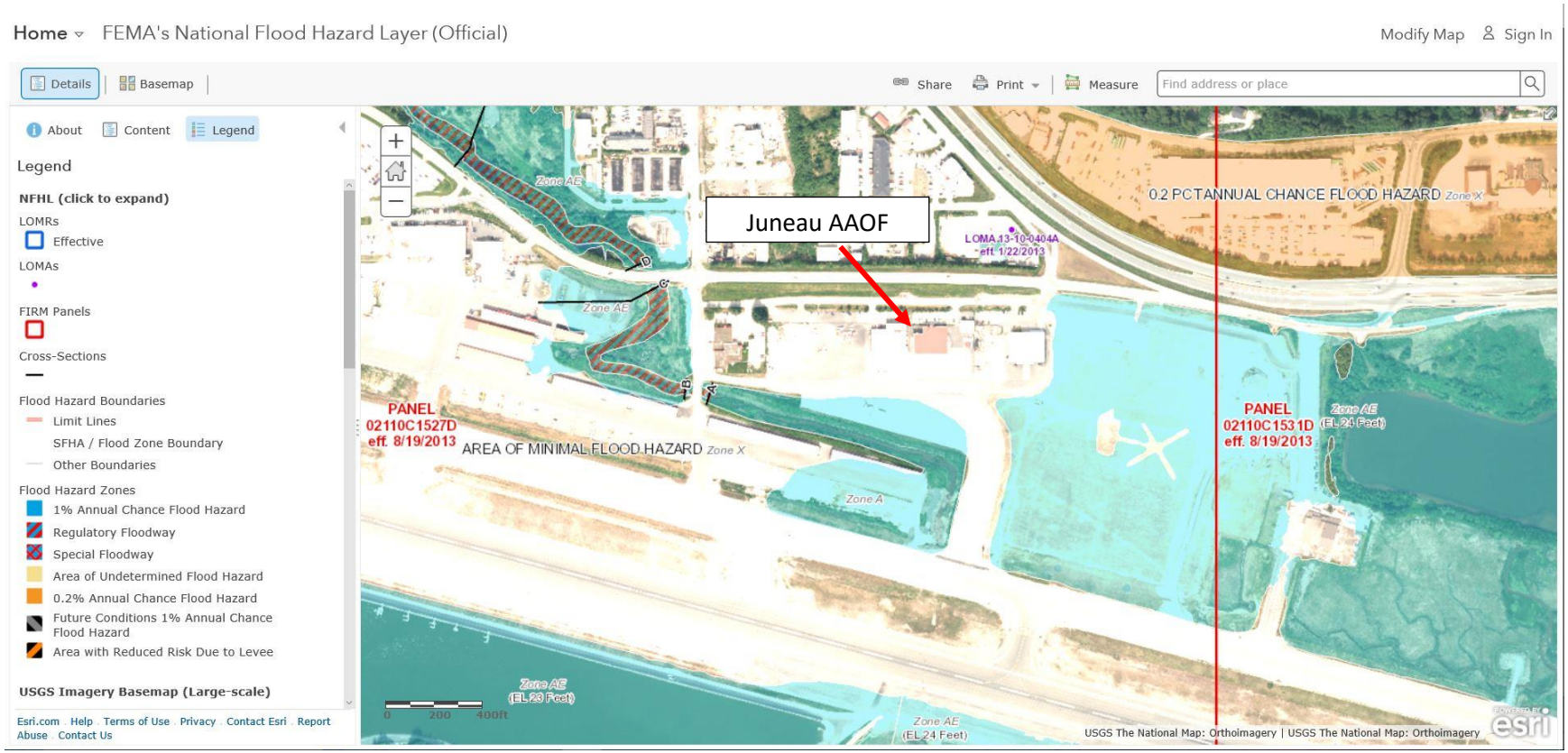


Figure 2. Juneau AAOF Site Plan


Home
FEMA's National Flood Hazard Layer (Official)
Modify Map
Sign In
Details
Basemap
Share
Print
Measure
Find address or place
About
Content
Legend
Legend
NFHL (click to expand)
LOMRs
Effective
LOMAs
FIRM Panels
Cross-Sections
Flood Hazard Boundaries
Limit Lines
SFHA / Flood Zone Boundary
Other Boundaries
Flood Hazard Zones
1% Annual Chance Flood Hazard
Regulatory Floodway
Special Floodway
Area of Undetermined Flood Hazard
0.2% Annual Chance Flood Hazard
Future Conditions 1% Annual Chance Flood Hazard
Area with Reduced Risk Due to Levee
USGS Imagery Basemap (Large-scale)
Esri.com . Help . Terms of Use . Privacy . Contact Esri . Report Abuse . Contact Us
Juneau AAOF
0.2 PCTANNUAL CHANCE FLOOD HAZARD Zone X
LOMA 13-10-0404A
eff. 1/22/2013
Zone AE
PANEL
02110C1527D
eff. 8/19/2013
AREA OF MINIMAL FLOOD HAZARD Zone X
Zone A
PANEL
02110C1531D
eff. 8/19/2013
Zone AE
(EL 24 Feet)
Zone AE
(EL 23 Feet)
Zone AE
(EL 24 Feet)
0
200
400ft
USGS The National Map: Orthoimagery | USGS The National Map: Orthoimagery
esri

Location Map
Juneau AAOF

Borough: Juneau City/Borough Date: 8/15/2017

Scale 1:900	1 inch = 75 feet

0 55 110 220 Feet

- Town
- Fence
- Gate
- Tower
- Canopy and Slab Area
- Building
- Fuel Tank
- Installation Area

The information on this map is for planning purposes only. This information is not adequate for legal boundary definition, regulatory interpretation, or parcel-level analysis. The exact boundaries depicted on this map are based on the best available information existing at this time. This map is a "living document", in that it is intended to change as new data becomes available and is incorporated into the Enterprise GIS database. No warranty is made by the State of Alaska and the Alaska Army National Guard as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data." Cartographic license has been used on the base aerial.

Location Map
Juneau AAOF

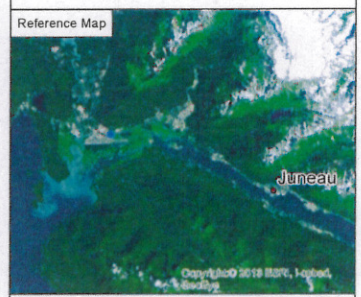
Borough: Juneau City/Borough Date: 3/1/2017

Scale 1:300 1 inch = 25 feet

0 15 30 60 Feet

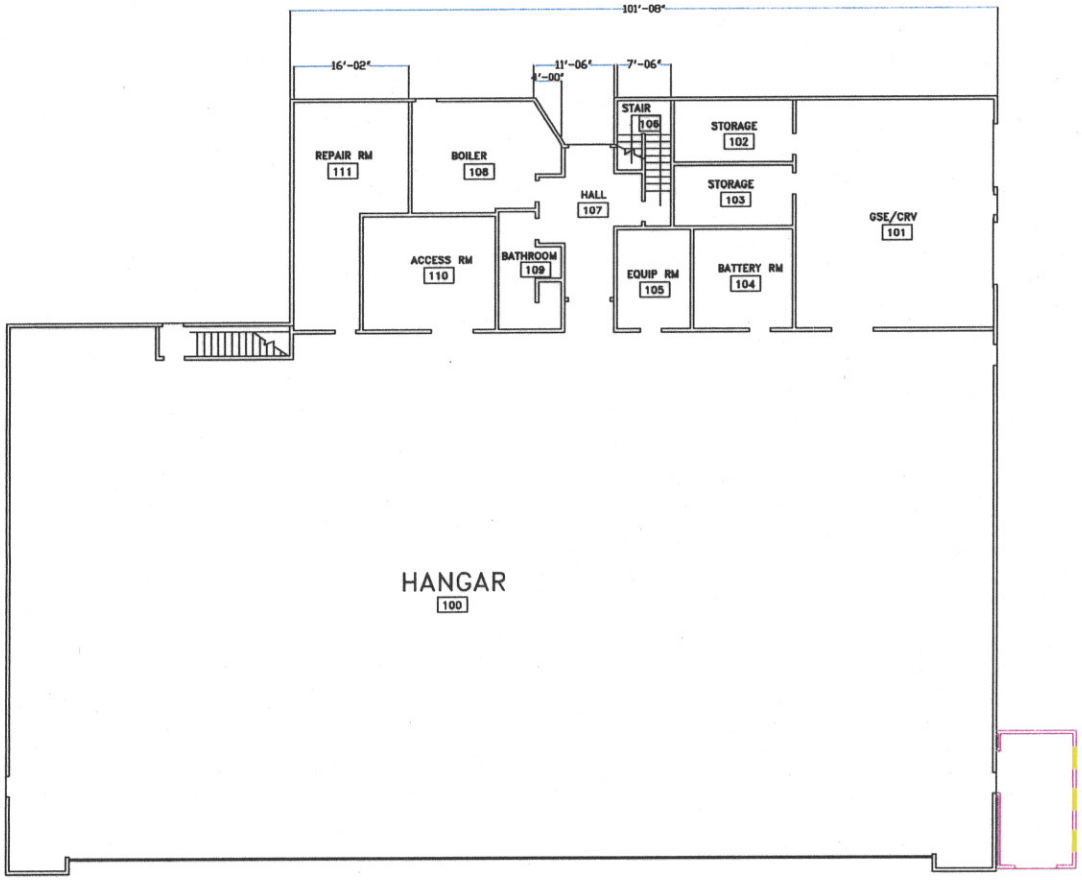
- Town
- Fence
- Gate
- Tower
- Building
- Fuel Tank
- Canopy and Slab Area
- Installation Area

Reference Map

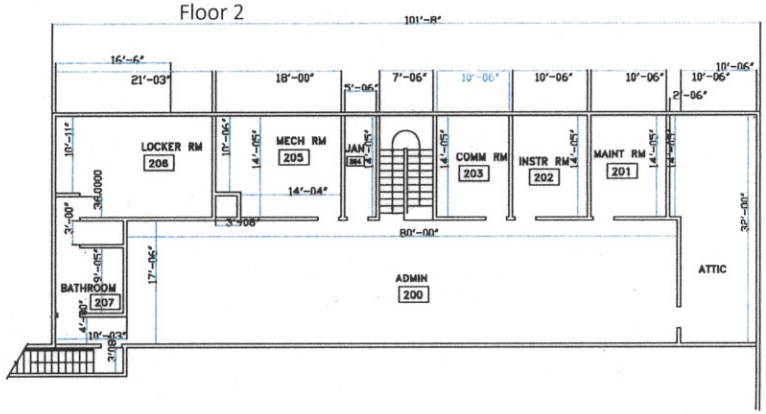


The information on this map is for planning purposes only. This information is not adequate for legal boundary definition, regulatory interpretation, or parcel-level analysis. The exact boundaries depicted on this map are based on the best available information existing at this time. This map is a "living document", in that it is intended to change as new data becomes available and is incorporated into the Enterprise GIS database. No warranty is made by the State of Alaska and the Alaska Army National Guard as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data." Cartographic license has been used on the base aerial.

Floor 1

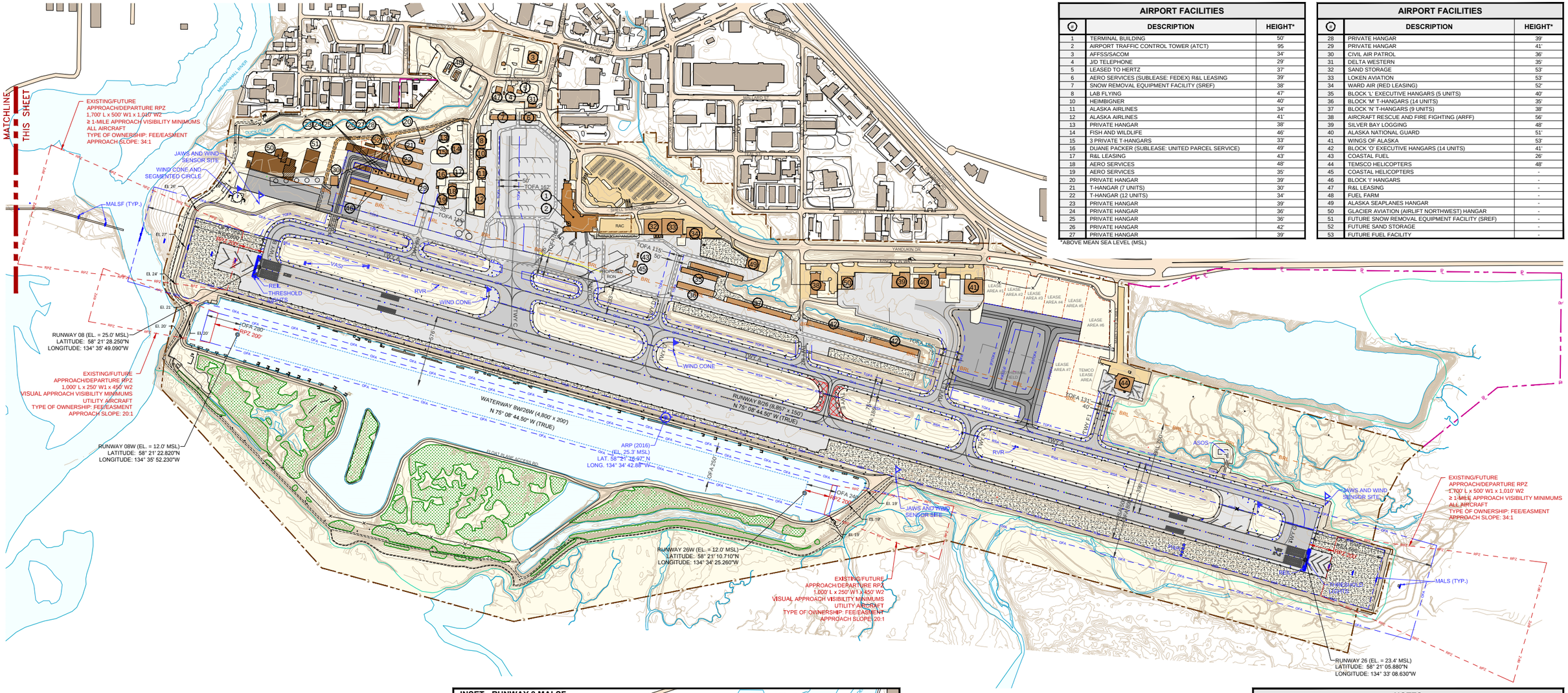


Floor 2



18,600 Square Footage Building Footprint

STATE OF ALASKA	JUNEAU AAOF FLOOR PLANS	DRAWING A1
DEPARTMENT OF MILITARY AND VETERANS AFFAIRS	–	of 1
DMVA/FMO FACILITIES MANAGEMENT OFFICE	JUNEAU ALASKA	6/12/17



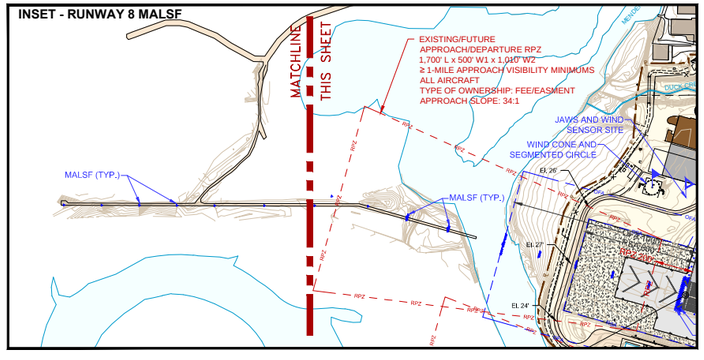
AIRPORT FACILITIES		
#	DESCRIPTION	HEIGHT*
1	TERMINAL BUILDING	50'
2	AIRPORT TRAFFIC CONTROL TOWER (ATCT)	95
3	AFFSS/SACOM	34'
4	J/D TELEPHONE	29'
5	LEASED TO HERTZ	37'
6	AERO SERVICES (SUBLEASE: FEDEX) R&L LEASING	39'
7	SNOW REMOVAL EQUIPMENT FACILITY (SREF)	38'
8	LAB FLYING	47'
10	HEIMBIGNER	40'
11	ALASKA AIRLINES	34'
12	ALASKA AIRLINES	41'
13	PRIVATE HANGAR	38'
14	FISH AND WILDLIFE	46'
15	3 PRIVATE T-HANGARS	33'
16	DUANE PACKER (SUBLEASE: UNITED PARCEL SERVICE)	49'
17	R&L LEASING	43'
18	AERO SERVICES	48'
19	AERO SERVICES	35'
20	PRIVATE HANGAR	39'
21	T-HANGAR (7 UNITS)	30'
22	T-HANGAR (12 UNITS)	34'
23	PRIVATE HANGAR	39'
24	PRIVATE HANGAR	36'
25	PRIVATE HANGAR	36'
26	PRIVATE HANGAR	42'
27	PRIVATE HANGAR	39'

*ABOVE MEAN SEA LEVEL (MSL)

AIRPORT FACILITIES		
#	DESCRIPTION	HEIGHT*
28	PRIVATE HANGAR	39'
29	PRIVATE HANGAR	41'
30	CIVIL AIR PATROL	36'
31	DELTA WESTERN	35'
32	SAND STORAGE	53'
33	LOKEN AVIATION	53'
34	WARD AIR (RED LEASING)	52'
35	BLOCK 'L' EXECUTIVE HANGARS (5 UNITS)	40'
36	BLOCK 'M' T-HANGARS (14 UNITS)	35'
37	BLOCK 'N' T-HANGARS (9 UNITS)	38'
38	AIRCRAFT RESCUE AND FIRE FIGHTING (ARFF)	56'
39	SILVER BAY LOGGING	48'
40	ALASKA NATIONAL GUARD	51'
41	WINGS OF ALASKA	53'
42	BLOCK 'O' EXECUTIVE HANGARS (14 UNITS)	41'
43	COASTAL FUEL	26'
44	TEMSCO HELICOPTERS	48'
45	COASTAL HELICOPTERS	-
46	BLOCK 'I' HANGARS	-
47	R&L LEASING	-
48	FUEL FARM	-
49	ALASKA SEAPLANES HANGAR	-
50	GLACIER AVIATION (AIRLIFT NORTHWEST) HANGAR	-
51	FUTURE SNOW REMOVAL EQUIPMENT FACILITY (SREF)	-
52	FUTURE SAND STORAGE	-
53	FUTURE FUEL FACILITY	-

LEGEND		
DESCRIPTION	EXISTING	PROPOSED
AIRFIELD UNPAVED APRON		NO CHANGE
AIRFIELD PAVEMENT		
AIRPORT PROPERTY		
AIRPORT REFERENCE POINT (ARP)		NO CHANGE
AUTOMOBILE PARKING - ON AIRPORT		
BUILDING - OFF AIRPORT		NOT APPLICABLE
BUILDING - ON AIRPORT		
BUILDING RESTRICTION LINE (BRL)	BRL	NO CHANGE
FENCE		NO CHANGE
HOLDING POSITION MARKING		NO CHANGE
JUNEAU AIRPORT WIND SYSTEM (JAWS)		NO CHANGE
PRECISION APPROACH PATH INDICATOR	PAPI	NO CHANGE
ROADWAY		
RUNWAY END IDENTIFIER LIGHTS (REIL)		NO CHANGE
RUNWAY OBJECT FREE AREA (OFA)	OFA	NO CHANGE
RUNWAY OBJECT FREE ZONE (OFZ)	OFZ	NO CHANGE
RUNWAY PROTECTION ZONE (RPZ)	RPZ	NO CHANGE
RUNWAY SAFETY AREA (RSA)	RSA	NO CHANGE
TAXIWAY OBJECT FREE AREA (TOFA)	TOFA	
TO BE REMOVED	NA	
TOPOGRAPHIC CONTOUR		NO CHANGE
TREES		NO CHANGE
VISUAL APPROACH SLOPE INDICATOR (VASI)	VASI	**NO CHANGE**
WIND SOCK		NO CHANGE

INSET - RUNWAY 8 MALSF



APPROVAL:

FEDERAL AVIATION ADMINISTRATION APPROVAL
AIRPORTS DIVISION ALASKAN REGION

NOTES

1. SEE SHEET 9 OF 11 FOR DETAILS ON LANDSIDE DEVELOPMENT.
2. THE BUILDING RESTRICTION LINE (BRL) IS BASED ON A MAXIMUM BUILDING HEIGHT OF 36 FEET AT A 250' DISTANCE FROM THE PRIMARY SURFACE. MAXIMUM ALLOWABLE BUILDING HEIGHT FROM THE BRL INCREASES AT A 7:1 HORIZONTAL TO VERTICAL SLOPE UPWARD AND AWAY FROM THE PRIMARY SURFACE IN CONFORMANCE WITH FAR PART 77 SURFACES.
3. RUNWAY PROTECTION ZONE CONTROL IS VIA OWNERSHIP AND EASEMENT BOTH RUNWAY ENDS.
4. TAXIWAY A IS NOT PARALLEL TO RUNWAY 8-26

ONE INCH
AT FULL SIZE. IF NOT ONE INCH SCALE ACCORDINGLY

AECOM
1501 4TH AVENUE, SUITE 1400
SEATTLE, WA 98101
PHONE: 206-438-2700

PROJECT MANAGER:	JJY	DRAFTED BY:	RLO
DESIGNED BY:	RLO	CHECKED BY:	JJY

#	REVISION	COMPANY	BY	DATE

THE PREPARATION OF THIS AIRPORT LAYOUT PLAN (ALP) WAS FINANCED IN PART THROUGH A PLANNING GRANT FROM THE FEDERAL AVIATION ADMINISTRATION (FAA) AS PROVIDED UNDER SECTION 505 OF THE AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982. THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICIES OF THE FAA. ACCEPTANCE OF THIS ALP BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT IMPLY THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

APPROVAL: FEDERAL AVIATION ADMINISTRATION APPROVAL
AIRPORTS DIVISION ALASKAN REGION

Name / Title _____ Date _____

APPROVAL: CITY/BOROUGH OF JUNEAU

Name / Title _____ Date _____

JUNEAU INTERNATIONAL AIRPORT
ALASKA'S CAPITAL CITY

JUNEAU INTERNATIONAL AIRPORT
AIRPORT MASTER PLAN

AIRPORT LAYOUT PLAN

DRAFT

SCALE:	1" = 400'
DATE:	NOVEMBER 2016

AIP NUMBER: 3-02-0133-059-2013

SHEET NUMBER: 3 OF 11

JNU - Sheet 03 (ALP).dwg

Fax To: AECOM
Contact: Brittany Kirchmann
Fax : 000-000-0000
Date: 12/12/2018

Fax From: Sean McLaughlin
EDR
Phone: 1-800-352-0050

EDR PUR-IQ® Report

"the intelligent way to conduct historical research"

for
Juneau
8425 Livingston Way
Juneau, AK 99801
Lat./Long. 58.35764 / 134.568524
EDR Inquiry # 5509586.2s

The EDR PUR-IQ report facilitates historical research planning required to complete the Phase I ESA process. The report identifies the *likelihood* of prior use coverage by searching proprietary EDR-Prior Use Reports® comprising nationwide information on: city directories, fire insurance maps, aerial photographs, historical topographic maps, flood maps and National Wetland Inventory maps.

Potential for EDR Historical (Prior Use) Coverage - Coverage in the following historical information sources may be used as a guide to develop your historical research strategy:

1. Building Permits: Building Permits are available for 'JUNEAU', AK (1985 - 2017).

2. City Directory: Coverage may exist for portions of Juneau Borough, AK.

3. Fire Insurance Map: When you order online any EDR Package or the EDR Radius Map with EDR Sanborn Map Search/Print, you receive site specific Sanborn Map coverage information at no charge.

4. Aerial Photograph: Aerial photography coverage may exist for portions of Juneau Borough. Please contact your EDR Account Executive for information about USGS photos available through EDR.

5. Topographic Map: The USGS 7.5 min. quad topo sheet(s) associated with this site:

Historical: Coverage exists for JUNEAU County

Current: Target Property: N/A

EDR's network of professional researchers, located throughout the United States, accesses the most extensive national collections of city directory, fire insurance maps, aerial photographs and historical topographic map resources available for Juneau, AK. These collections may be located in multiple libraries throughout the country. To ensure maximum coverage, EDR will often assign researchers at these multiple locations on your behalf. Please call or fax your EDR representative to authorize a search.

EDR - HISTORICAL SOURCE(S) ORDER FORM

AECOM
Brittany Kirchmann
Account # 1861179

Juneau
8425 Livingston Way
Juneau, AK 99801
JUNEAU County
Lat./Long. 58.35764 / 134.568524
EDR Inquiry # 5509586.2s

Should you wish to change or add to your order, fax this form to your EDR account executive:

Sean McLaughlin
Ph: 1-800-352-0050 Fax: 1-800-231-6802

Reports

___ EDR Sanborn Map® Search/Print

___ EDR Fire Insurance Map Abstract

___ EDR Multi-Tenant Retail Facility® Report

___ EDR City Directory Abstract

___ EDR Aerial Photo Decade Package

___ USGS Aerial 5 Package

___ USGS Aerial 3 Package

___ EDR Historical Topographic Maps

___ Paper Current USGS Topo (7.5 min.)

___ Environmental Lien Search

___ Chain of Title Search

___ NJ MacRaes Industrial Directory Report

___ EDR Telephone Interview

Shipping:

___ Email
___ Express, Next Day Delivery — RUSH SERVICE IS AVAILABLE
___ Express, Second Day Delivery
___ Express, Next day Delivery — Customer Account — Acct # _____
___ Express, Second Day Delivery — Customer Account — Acct # _____
___ U.S. Mail

Thank you

Juneau

8425 Livingston Way

Juneau, AK 99801

Inquiry Number: 5509586.3

December 12, 2018

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

12/12/18

Site Name:

Juneau
8425 Livingston Way
Juneau, AK 99801
EDR Inquiry # 5509586.3

Client Name:

AECOM
12120 Shamrock Plaza
Omaha, NE 68154
Contact: Brittany Kirchmann

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by AECOM were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # 4928-4C72-9AE0

PO # NA

Project Juneau

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 #: 4928-4C72-9AE0

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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Juneau

8425 Livingston Way

Juneau, AK 99801

Inquiry Number: 5509586.5

December 14, 2018

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

12/14/18

Site Name:

Juneau
8425 Livingston Way
Juneau, AK 99801
EDR Inquiry # 5509586.5

Client Name:

AECOM
12120 Shamrock Plaza
Omaha, NE 68154
Contact: Brittany Kirchmann

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	*Scale*	*Details*	*Source*
2006	1"=875'	Flight Date: July 11, 2006	USGS
1982	1"=875'	Flight Date: July 26, 1982	USGS
1979	1"=875'	Flight Date: August 11, 1979	USGS
1973	1"=875'	Flight Date: August 21, 1973	USGS
1948	1"=875'	Flight Date: August 14, 1948	USGS

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INQUIRY #: 5509586.5

YEAR: 2006

= 875'

N

EDR

Subject boundary not shown because it exceeds image extent or image is not georeferenced.

INQUIRY #: 5509586.5

YEAR: 1982

= 875'

N

EDR

Subject boundary not shown because it exceeds image extent or image is not georeferenced.

INQUIRY #: 5509586.5

YEAR: 1979

= 875'

N

EDR

Subject boundary not shown because it exceeds image extent or image is not georeferenced.

INQUIRY #: 5509586.5

YEAR: 1973

= 875'

N

EDR

Subject boundary not shown because it exceeds image extent or image is not georeferenced.

INQUIRY #: 5509586.5

YEAR: 1948

= 875'

N

EDR

Subject boundary not shown because it exceeds image extent or image is not georeferenced.

Juneau
8425 Livingston Way
Juneau, AK 99801

Inquiry Number: 5509586.2s
December 12, 2018

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

8425 LIVINGSTON WAY
JUNEAU, AK 99801

COORDINATES

Latitude (North):	58.3576400 - 58° 21' 27.50''
Longitude (West):	134.5685240 - 134° 34' 6.68''
Universal Tranverse Mercator:	Zone 8
UTM X (Meters):	525250.2
UTM Y (Meters):	6468399.5
Elevation:	11 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	N/A
Source:	U.S. Geological Survey

MAPPED SITES SUMMARY

Target Property Address:
8425 LIVINGSTON WAY
JUNEAU, AK 99801

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	JUNEAU AAOF 300-GAL	8425 LIVINGSTON DR	AK RGA LUST		TP
A2	JUNEAU AAOF 300-GAL	8425 LIVINGSTON DR.	AK RGA LUST		TP
A3	ALASKA AIR NATIONAL	8425 LIVINGSTON WAY	RCRA-CESQG, FINDS, ECHO		TP
A4	JUNEAU AAOF 300-GAL	8425 LIVINGSTON DR.	AK SHWS		TP
A5	JUNEAU ARMY AVIATION	8425 LIVINGSTON WAY	AK UST		TP
A6	JUNEAU AAOF 300-GAL	8425 LIVINGSTON DR.,	AK RGA LUST		TP
A7	JUNEAU AAOF 300-GAL	8425 LIVINGSTON DR.	AK LUST		TP
B8	MENDENHALL CHRYSLER	8345 OLD DAIRY RD	AK UST	Higher	1 ft.
C9	CBJ GLACIER VALLEY F	1700 CREST DRIVE	AK LUST	Higher	1 ft.
D10	L A B FLYING SVC	JUNEAU INTL ARPRT BL	RCRA-CESQG	Higher	1 ft.
B11	LOVE BROS	8345 OLD DAIRY RD	RCRA NonGen / NLR, FINDS, ECHO	Higher	1 ft.
E12	JAKE'S INC. (HONDA H	8602 TEAL ST	AK UST	Higher	1 ft.
F13	CHANNEL FLYING	8995 YANDUKIN DR	RCRA-CESQG, FINDS, ECHO	Higher	1 ft.
G14	FAA JUNEAU STATION	JUNEAU AIRPORT	AK SHWS	Higher	1 ft.
H15	DOUGLAS TRUCKING INC	8400 AIRPORT BLVD	AK LUST, AK UST	Higher	1 ft.
F16	CHANNEL FLYING JUNEA	8995 YANDUKIN DRIVE,	AK SHWS	Higher	1 ft.
C17	CBJ GLACIER VALLEY F	1700 CREST DRIVE	AK SHWS	Higher	1 ft.
I18	HALS BODY SHOP	1990 ALPINE AVE	RCRA NonGen / NLR, FINDS, ECHO	Higher	1 ft.
C19	GLACIER FIRE STATION	1700 CREST DR	AK UST	Higher	1 ft.
20	HALS BODY SHOP	P. O. BOX 2177, 1990	AK UST	Higher	1 ft.
J21	FORMER CAPITAL CITY	2092 JORDAN AVE. SUI	AK SHWS	Higher	1 ft.
J22	CAPITAL CITY CLEANER	2092 JORDAN AVE STE	EDR Hist Cleaner	Higher	1 ft.
K23	CBJ - LEMON CREEK LI	ADJ. TO TIA INSURANC	AK LUST	Higher	1 ft.
K24	CBJ - LEMON CREEK LI	ADJ. TO TIA INSURANC	AK SHWS	Higher	1 ft.
L25	VALLEY LUMBER	8525 OLD DAIRY RD	RCRA-CESQG, FINDS, ECHO	Higher	1 ft.
M26	CAPITAL CITY CLEANER	8745 GLACIER HWY STE	RCRA NonGen / NLR, FINDS, ECHO	Higher	1 ft.
M27	RITZ CAMERA CENTERS	8745 GLACIER HWY #43	RCRA NonGen / NLR, FINDS, ECHO	Higher	1 ft.
M28	STARHILL ENTERPRISES	8745 GLACIER HWY STE	EDR Hist Cleaner	Higher	1 ft.
L29	USDA FS OLD DAIRY RD	8465 OLD DAIRY RD	RCRA-CESQG, FINDS, ECHO, CA HAZNET	Higher	1 ft.
L30	USFS JUNEAU RANGER D	8465 OLD DAIRY ROAD	AK SHWS	Higher	1 ft.
J31	YUKON OFFICE SUPPLY	2075 JORDAN AVE	RCRA NonGen / NLR, FINDS, ECHO	Higher	1 ft.
D32	CIVIL AIR PATROL HAN	JUNEAU AIRPORT, W RA	AK UST	Higher	1 ft.
I33	MENDENHALL AUTO CENT	8725 MALLARD ST	AK UST	Higher	1 ft.
B34	T & S WELDING INC.	8355 OLD DAIRY RD	AK UST	Higher	1 ft.
I35	MENDENHALL AUTO CTR	8725 MALLARD ST	RCRA-CESQG, FINDS, ECHO	Higher	1 ft.
G36	ALASKA AIRLINES - JU	1873 SHELL SIMMONS D	AK UST	Higher	1 ft.
G37	JUNEAU AIRFIELD AND	1873 SHELL-SIMMONS D	SEMS-ARCHIVE	Higher	1 ft.
G38	JUNEAU INTL ARPRT MA	1873 SHELL SIMMONS D	RCRA-CESQG	Higher	1 ft.
D39	DELTA AIR LINES JUNE	JUNEAU INTL ARPRT	RCRA NonGen / NLR	Higher	1 ft.

MAPPED SITES SUMMARY

Target Property Address:
8425 LIVINGSTON WAY
JUNEAU, AK 99801

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
J40	PACIFIC TELECOM, INC	2075 JORDAN AVE	AK UST	Higher	1 ft.
E41	CAMERON PLUMBING AND	1850 CREST STREET, N	AK SHWS, AK LUST, AK INST CONTROL	Higher	1 ft.
42	N C MACHINERY CO JUN	8850 AIRPORT BLVD	RCRA-CESQG, AK LUST, AK UST, FINDS, ECHO	Higher	1 ft.
H43	PETROLEUM SVCS INC	8401 AIRPORT BLVD	RCRA NonGen / NLR, FINDS, ECHO	Higher	1 ft.
44	JUNEAU AIRPORT	SHELL SIMMONS DR AT	AK LUST, AK UST	Higher	1 ft.
H45	NC MACHINERY COMPANY	8550 AIRPORT BLVD;	AK SHWS	Higher	1 ft.
H46	JUNEAU DAIRIES DISTR	8403 AIRPORT BLVD.,	AK SHWS	Higher	1 ft.
E47	CAMERON PLUMBING & H	1850 CREST ST	AK UST	Higher	1 ft.
H48	DOUGLAS TRUCKING	8400 AIRPORT BLVD	AK SHWS	Higher	1 ft.
F49	WARD AIR	WARD AIR	AK SHWS	Higher	1 ft.
F50	WARD AIR INC	8991 YANDUKIN DR	RCRA-CESQG, AK LUST, AK UST, FINDS, ECHO	Higher	1 ft.
51	SILVER BAY AVIATION	8892 YANDUKIN DR	RCRA-CESQG, FINDS, ECHO	Higher	1 ft.
H52	JUNEAU DAIRIES DISTR	8403 AIRPORT BLVD.	AK LUST	Higher	1 ft.
H53	JUNEAU DAIRIES DISTR	8403 AIRPORT BLVD	AK UST	Higher	1 ft.
N54	CBJ JUNEAU AIRPORT M	SHELL SIMMONS DRIVE	AK SHWS, AK INST CONTROL	Higher	52, 0.010, West
55	FRED MEYER #158 FUEL	8181 GLACIER HWY	AK UST, AK Financial Assurance, AK NPDES	Higher	55, 0.010, NE
O56	DELTA AIR CARGO	JUNEAU INTERNATIONAL	AK LUST	Higher	75, 0.014, West
O57	DELTA AIR CARGO	JUNEAU INTERNATIONAL	AK SHWS	Higher	82, 0.016, West
P58	CHEVRON - AIRPORT (P	9151 GLACIER HWY	AK LUST	Higher	116, 0.022, WNW
P59	PAUL'S CHEVRON	9151 GLACIER HWY	AK UST	Higher	116, 0.022, WNW
P60	CHEVRON - AIRPORT (P	9151 GLACIER HWY;	AK SHWS, AK ENG CONTROLS, AK INST CONTROL	Higher	116, 0.022, WNW
P61	EMIGS CHEVRON	9151 GLACIER HWY	EDR Hist Auto	Higher	116, 0.022, WNW
Q62	FAA JUNEAU	9230 CESSNA DR	AK UST	Higher	119, 0.023, WNW
Q63	DELTA WESTERN JUNEAU	9203 CESSNA DRIVE; J	AK SHWS, AK LUST	Higher	141, 0.027, West
R64	TEMSCO HELICOPTERS -	1650 MAPLESDEN WAY	AK VCP	Lower	175, 0.033, East
R65	TEMSCO HELICOPTERS	1650 MAPLEADEN WAY	AK LUST	Lower	175, 0.033, East
R66	TEMSCO HELICOPTERS,	1650 MAPLESDEN WAY	AK UST, AK Financial Assurance	Lower	175, 0.033, East
R67	TEMSCO HELICOPTERS	1650 MAPLEADEN WAY;	AK SHWS	Lower	175, 0.033, East
R68	TEMSCO HELICOPTERS -	1650 MAPLESDEN WAY	AK LUST	Lower	175, 0.033, East
R69	TEMSCO HELICOPTERS -	1650 MAPLESDEN WAY	AK SHWS, AK INST CONTROL	Lower	175, 0.033, East
N70	AERO SERVICES, JUNEA	"F"GATE 9203 SHELL S	AK SHWS, AK LUST	Higher	189, 0.036, West
Q71	JUNEAU & DOUGLAS TEL	9229 CESSNA DR	AK UST	Higher	191, 0.036, West
Q72	PTI- JUNEAU CESSNA D	9225 CESSNA DRIVE	AK SHWS, AK INST CONTROL, AK VCP	Higher	342, 0.065, West
Q73	PTI- JUNEAU CESSNA D	9225 CESSNA DRIVE	AK LUST	Higher	342, 0.065, West
S74	MIKE'S AIRPORT EXPRE	9190 GLACIER HWY	AK UST, AK Financial Assurance	Higher	399, 0.076, WNW
S75	MIKES AIRPORT UNION	9190 GLACIER HWY	EDR Hist Auto	Higher	399, 0.076, WNW
S76	UNOCAL - #5785- AIRP	9190 GLACIER HIGHWAY	AK SHWS, AK LUST, AK INST CONTROL	Higher	399, 0.076, WNW
S77	JUNEAU AIRPORT TRAVE	9200 GLACIER HIGHWAY	AK SHWS, AK INST CONTROL	Higher	594, 0.112, WNW
T78	ALASKA AIRLINES - JU	1915 ALEX HOLDEN WAY	AK SHWS, AK LUST	Higher	636, 0.120, West

MAPPED SITES SUMMARY

Target Property Address:
8425 LIVINGSTON WAY
JUNEAU, AK 99801

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
T79	ALASKA AIRLINES - JU	1915 ALEX HOLDEN WAY	AK LUST	Higher	636, 0.120, West
80	JUNEAU AIRPORT FUELI	2085 ALEX HOLDEN WAY	AK SHWS	Higher	670, 0.127, West
U81	MILLER CONSTRUCTION	2207 NORTH JORDAN AV	ABANDONED MINES	Higher	691, 0.131, WNW
82	ALASKA COASTAL AIRLI	JUNEAU INTL ARPRT BL	RCRA-CESQG	Lower	716, 0.136, WSW
T83	AERO SERVICES, INC.	1890 RENSHAW WAY	AK UST	Higher	721, 0.137, West
T84	NORTHSTAR TREKKING D	1910 RENSHAW WAY	RCRA NonGen / NLR	Higher	730, 0.138, West
U85	CHANNEL CONSTRUCTION	2223 NORTH JORDAN AV	RCRA NonGen / NLR, PADS	Higher	909, 0.172, NW
U86	PORTABLE 191	2223 N. JORDAN AVE.	ABANDONED MINES	Higher	909, 0.172, NW
U87	CHANNEL CONSTRUCTION		US MINES	Higher	922, 0.175, NW
88	T W HALL	9393 LA PEROUSE AVE	RCRA NonGen / NLR, FINDS, ECHO	Higher	1013, 0.192, West
V89	CHANNEL CONSTRUCTION		US MINES	Higher	1025, 0.194, NW
V90	MILLER CONSTRUCTION		US MINES	Higher	1025, 0.194, NW
W91	FAA JUNEAU SFOP	9341 GLACIER HIGHWAY	AK SHWS, AK LUST	Higher	1458, 0.276, WNW
W92	USDOT FAA JUNEAU	9341 GLACIER HWY NAV	SEMS-ARCHIVE, RCRA NonGen / NLR, PADS, FINDS, ECHO	Higher	1458, 0.276, WNW
93	COMMERCIAL PROPERTY	9351 GLACIER HIGHWAY	AK SHWS, AK INST CONTROL	Higher	1839, 0.348, WNW
94	MENDENHALL WW TREATM	2009 RADCLIFFE ROAD,	AK SHWS	Lower	2007, 0.380, West
95	SKATEBOARD PARK	MENDENHALL LOOP ROAD	AK SHWS, AK INST CONTROL, AK VCP	Higher	2071, 0.392, WNW
96	GLACIER GARDENS RAIN	7600 GLACIER HIGHWAY	AK SHWS	Higher	2430, 0.460, ENE
X97	BRUCE D. MORLEY, INC	9128 N. DOUGLAS HIGH	AK LUST	Higher	2475, 0.469, SE
X98	BRUCE D. MORLEY, INC	9128 N. DOUGLAS HIGH	AK SHWS	Higher	2475, 0.469, SE
99	USFS DUCK CREEK ADMI	NW CORNER OF ATLIN D	AK SHWS	Higher	3466, 0.656, NW
100	BICKNELL	2275 BRANDY LANE	AK SHWS, AK SPILLS	Higher	3488, 0.661, West
Y101	VALLEY TESORO	9102 MENDENHALL MALL	AK SHWS, AK LUST	Higher	3649, 0.691, NW
Y102	VALLEY TESORO	9102 MENDENHALL MALL	AK SHWS, AK UST, AK Financial Assurance	Higher	3649, 0.691, NW
103	MENDENHALL MALL HOTS	9105 MENDENHALL MALL	AK SHWS	Higher	3755, 0.711, NW
104	RESIDENCE - MISTY LA	10648 MISTY LANE, DO	AK SHWS, AK INST CONTROL	Lower	4112, 0.779, SSW
105	E&L AUTO	10005 CRAZY HORSE DR	AK SHWS, AK ENG CONTROLS, AK INST CONTROL	Higher	4261, 0.807, West
106	RESIDENCE - NANCY ST	8905 NANCY STREET	AK SHWS	Higher	4535, 0.859, NNW
107	RIVERBEND / DIMOND P	2900 RIVERSIDE DRIVE	AK SHWS, AK INST CONTROL	Higher	4590, 0.869, NW
108	RESIDENCE - 2822 MAR	2822 MARSHA AVENUE	AK SHWS	Higher	4762, 0.902, NW
109	RESIDENCE - 2921 GLA	2921 GLACIERWOOD COU	AK SHWS	Higher	4925, 0.933, NW

EXECUTIVE SUMMARY

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
JUNEAU AAOF 300-GAL 8425 LIVINGSTON DR JUNEAU, AK	AK RGA LUST	N/A
JUNEAU AAOF 300-GAL 8425 LIVINGSTON DR. JUNEAU, AK	AK RGA LUST	N/A
ALASKA AIR NATIONAL 8425 LIVINGSTON WAY JUNEAU, AK 99801	RCRA-CESQG EPA ID:: AKD983073321 FINDS Registry ID:: 110003039809 ECHO Registry ID: 110003039809	AKD983073321
JUNEAU AAOF 300-GAL 8425 LIVINGSTON DR. JUNEAU, AK 99801	AK SHWS Facility Status: Cleanup Complete Hazard ID: 2534 Hazard ID: 23037	N/A
JUNEAU ARMY AVIATION 8425 LIVINGSTON WAY JUNEAU, AK 99801	AK UST Facility Id: 3223 Tank Status: Permanently Out of Use	N/A
JUNEAU AAOF 300-GAL 8425 LIVINGSTON DR., JUNEAU, AK	AK RGA LUST	N/A
JUNEAU AAOF 300-GAL 8425 LIVINGSTON DR. JUNEAU, AK 99801	AK LUST eventid: 23037 Facility Status: Cleanup Complete	N/A

EXECUTIVE SUMMARY

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

Federal RCRA CORRACTS facilities list

CORRACTS ---------- Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG ---------- RCRA - Large Quantity Generators
RCRA-SQG ---------- RCRA - Small Quantity Generators

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System
US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROL ---------- Sites with Institutional Controls

Federal ERNS list

ERNS ---------- Emergency Response Notification System

State and tribal landfill and/or solid waste disposal site lists

AK SWF/LF ---------- Solid Waste Facilities

State and tribal leaking storage tank lists

INDIAN LUST ---------- Leaking Underground Storage Tanks on Indian Land

EXECUTIVE SUMMARY

State and tribal registered storage tank lists

FEMA UST ---- Underground Storage Tank Listing
AK AST ---- Regulated Aboveground Storage Tanks
INDIAN UST ---- Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

INDIAN VCP ---- Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

AK BROWNFIELDS ---- Identified and/or Proposed Brownfields Sites

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ---- A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

AK SWRCY ---- Recycling Facilities
INDIAN ODI ---- Report on the Status of Open Dumps on Indian Lands
ODI ---- Open Dump Inventory
DEBRIS REGION 9 ---- Torres Martinez Reservation Illegal Dump Site Locations
IHS OPEN DUMPS ---- Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ---- Delisted National Clandestine Laboratory Register
AK CDL ---- Illegal Drug Manufacturing Sites
US CDL ---- National Clandestine Laboratory Register

Local Land Records

LIENS 2 ---- CERCLA Lien Information

Records of Emergency Release Reports

HMIRS ---- Hazardous Materials Information Reporting System
AK SPILLS 90 ---- SPILLS 90 data from FirstSearch

Other Ascertainable Records

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
ICIS Integrated Compliance Information System
FTTS FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS Material Licensing Tracking System
COAL ASH DOE Steam-Electric Plant Operation Data
COAL ASH EPA Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER PCB Transformer Registration Database
RADINFO Radiation Information Database
HIST FTTS FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS Incident and Accident Data
CONSENT Superfund (CERCLA) Consent Decrees
INDIAN RESERV Indian Reservations
FUSRAP Formerly Utilized Sites Remedial Action Program
UMTRA Uranium Mill Tailings Sites
LEAD SMELTERS Lead Smelter Sites
US AIRS Aerometric Information Retrieval System Facility Subsystem
DOCKET HWC Hazardous Waste Compliance Docket Listing
UXO Unexploded Ordnance Sites
FUELS PROGRAM EPA Fuels Program Registered Listing
AK AIRS AIRS Facility Listing
AK COAL ASH Coal Ash Disposal Sites
AK DRYCLEANERS Drycleaner Facility Listing
AK UIC UIC Information

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP EDR Proprietary Manufactured Gas Plants

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

AK RGA LF Recovered Government Archive Solid Waste Facilities List

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.

EXECUTIVE SUMMARY

STANDARD ENVIRONMENTAL RECORDS

Federal CERCLIS NFRAP site list

SEMS-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.

A review of the SEMS-ARCHIVE list, as provided by EDR, and dated 11/14/2018 has revealed that there are 2 SEMS-ARCHIVE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
JUNEAU AIRFIELD AND Site ID: 1002180 EPA Id: AKSFN1002180	1873 SHELL-SIMMONS D	0 - 1/8 (0.000 mi.)	G37	62
USDOT FAA JUNEAU Site ID: 1001753 EPA Id: AK9690500179	***9341 GLACIER HWY NAV***	***WNW 1/4 - 1/2 (0.276 mi.)***	***W92***	***184***

Federal RCRA generators list

RCRA-CESQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-CESQG list, as provided by EDR, and dated 03/01/2018 has revealed that there are 10 RCRA-CESQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
L A B FLYING SVC EPA ID:: AK0000385609	JUNEAU INTL ARPRT BL	0 - 1/8 (0.000 mi.)	D10	16
CHANNEL FLYING EPA ID:: AK0000385583	***8995 YANDUKIN DR***	***0 - 1/8 (0.000 mi.)***	***F13***	***19***
VALLEY LUMBER EPA ID:: AKR000002238	***8525 OLD DAIRY RD***	***0 - 1/8 (0.000 mi.)***	***L25***	***45***
USDA FS OLD DAIRY RD EPA ID:: AK4122300151	***8465 OLD DAIRY RD***	***0 - 1/8 (0.000 mi.)***	***L29***	***51***
MENDENHALL AUTO CTR	***8725 MALLARD ST***	***0 - 1/8 (0.000 mi.)***	***I35***	***59***

EPA ID:: AK0000001115				
JUNEAU INTL ARPRT MA EPA ID:: AK0000084020	1873 SHELL SIMMONS D	0 - 1/8 (0.000 mi.)	G38	63
N C MACHINERY CO JUN EPA ID:: AKD035418979	***8850 AIRPORT BLVD***	***0 - 1/8 (0.000 mi.)***	***42***	***72***
WARD AIR INC EPA ID:: AK0000385625	***8991 YANDUKIN DR***	***0 - 1/8 (0.000 mi.)***	***F50***	***81***
SILVER BAY AVIATION EPA ID:: AK0000385617	***8892 YANDUKIN DR***	***0 - 1/8 (0.000 mi.)***	***51***	***84***

Lower Elevation	Address	Direction / Distance	Map ID	Page
ALASKA COASTAL AIRLI EPA ID:: AK0000444174	JUNEAU INTL ARPRT BL	WSW 1/8 - 1/4 (0.136 mi.)	82	160

State- and tribal - equivalent CERCLIS

AK SHWS: State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with where cleanup will be paid for by potentially responsible parties.

A review of the AK SHWS list, as provided by EDR, and dated 09/25/2018 has revealed that there are 40 AK SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FAA JUNEAU STATION Facility Status: Cleanup Complete Facility Status: Active Hazard ID: 2975 Hazard ID: 1450	JUNEAU AIRPORT	0 - 1/8 (0.000 mi.)	G14	21
CHANNEL FLYING JUNEA Facility Status: Active Hazard ID: 26362	8995 YANDUKIN DRIVE,	0 - 1/8 (0.000 mi.)	F16	30
CBJ GLACIER VALLEY F Facility Status: Cleanup Complete Hazard ID: 25160	1700 CREST DRIVE	0 - 1/8 (0.000 mi.)	C17	32
FORMER CAPITAL CITY Facility Status: Active Hazard ID: 26537	2092 JORDAN AVE. SUI	0 - 1/8 (0.000 mi.)	J21	38
CBJ - LEMON CREEK LI Facility Status: Cleanup Complete Hazard ID: 24631	ADJ. TO TIA INSURANC	0 - 1/8 (0.000 mi.)	K24	43
USFS JUNEAU RANGER D Facility Status: Cleanup Complete Hazard ID: 4391	8465 OLD DAIRY ROAD	0 - 1/8 (0.000 mi.)	L30	54
CAMERON PLUMBING AND Facility Status: Cleanup Complete - Institutional Controls	***1850 CREST STREET, N***	***0 - 1/8 (0.000 mi.)***	***E41***	***68***

Facility Status: Cleanup Complete Hazard ID: 1755 Hazard ID: 24385				
NC MACHINERY COMPANY Facility Status: Cleanup Complete Hazard ID: 24505	8550 AIRPORT BLVD;	0 - 1/8 (0.000 mi.)	H45	77
JUNEAU DAIRIES DISTR Facility Status: Cleanup Complete Hazard ID: 24490	8403 AIRPORT BLVD.,	0 - 1/8 (0.000 mi.)	H46	78
DOUGLAS TRUCKING Facility Status: Cleanup Complete Hazard ID: 24917	8400 AIRPORT BLVD	0 - 1/8 (0.000 mi.)	H48	80
WARD AIR Facility Status: Cleanup Complete Hazard ID: 24697	WARD AIR	0 - 1/8 (0.000 mi.)	F49	80
CBJ JUNEAU AIRPORT M Facility Status: Cleanup Complete - Institutional Controls Hazard ID: 25156	***SHELL SIMMONS DRIVE***	***W 0 - 1/8 (0.010 mi.)***	***N54***	***86***
DELTA AIR CARGO Facility Status: Cleanup Complete Hazard ID: 24902	JUNEAU INTERNATIONAL	W 0 - 1/8 (0.016 mi.)	O57	90
CHEVRON - AIRPORT (P Facility Status: Cleanup Complete - Institutional Controls Hazard ID: 24532	***9151 GLACIER HWY;***	***WNW 0 - 1/8 (0.022 mi.)***	***P60***	***93***
DELTA WESTERN JUNEAU Facility Status: Cleanup Complete Hazard ID: 23308	***9203 CESSNA DRIVE; J***	***W 0 - 1/8 (0.027 mi.)***	***Q63***	***103***
AERO SERVICES, JUNEA Facility Status: Cleanup Complete Hazard ID: 23170	***"F"GATE 9203 SHELL S***	***W 0 - 1/8 (0.036 mi.)***	***N70***	***113***
PTI- JUNEAU CESSNA D Facility Status: Cleanup Complete - Institutional Controls Hazard ID: 24743	***9225 CESSNA DRIVE***	***W 0 - 1/8 (0.065 mi.)***	***Q72***	***114***
UNOCAL - #5785- AIRP Facility Status: Cleanup Complete - Institutional Controls Hazard ID: 2984 Hazard ID: 23568	***9190 GLACIER HIGHWAY***	***WNW 0 - 1/8 (0.076 mi.)***	***S76***	***119***
JUNEAU AIRPORT TRAVE Facility Status: Cleanup Complete - Institutional Controls Hazard ID: 4517	***9200 GLACIER HIGHWAY***	***WNW 0 - 1/8 (0.112 mi.)***	***S77***	***129***
ALASKA AIRLINES - JU Facility Status: Active Facility Status: Cleanup Complete Hazard ID: 22996 Hazard ID: 24525	***1915 ALEX HOLDEN WAY***	***W 0 - 1/8 (0.120 mi.)***	***T78***	***137***
JUNEAU AIRPORT FUELI Facility Status: Active Hazard ID: 2987	2085 ALEX HOLDEN WAY	W 1/8 - 1/4 (0.127 mi.)	80	149
FAA JUNEAU SFOP	***9341 GLACIER HIGHWAY***	***WNW 1/4 - 1/2 (0.276 mi.)***	***W91***	***180***

Facility Status: Active
Hazard ID: 24941

COMMERCIAL PROPERTY	***9351 GLACIER HIGHWAY***	***WNW 1/4 - 1/2 (0.348 mi.)***	***93***	***187***
Facility Status: Cleanup Complete Hazard ID: 25608				
SKATEBOARD PARK	***MENDENHALL LOOP ROAD***	***WNW 1/4 - 1/2 (0.392 mi.)***	***95***	***200***
Facility Status: Cleanup Complete Facility Status: Cleanup Complete - Institutional Controls Hazard ID: 2696 Hazard ID: 2697				
GLACIER GARDENS RAIN	7600 GLACIER HIGHWAY	ENE 1/4 - 1/2 (0.460 mi.)	96	204
Facility Status: Cleanup Complete Hazard ID: 3709				
BRUCE D. MORLEY, INC	9128 N. DOUGLAS HIGH	SE 1/4 - 1/2 (0.469 mi.)	X98	207
Facility Status: Cleanup Complete Hazard ID: 24560				
USFS DUCK CREEK ADMI	NW CORNER OF ATLIN D	NW 1/2 - 1 (0.656 mi.)	99	207
Facility Status: Cleanup Complete Hazard ID: 4389				
BICKNELL	***2275 BRANDY LANE***	***W 1/2 - 1 (0.661 mi.)***	***100***	***209***
Facility Status: Active Hazard ID: 26908				
VALLEY TESORO	***9102 MENDENHALL MALL***	***NW 1/2 - 1 (0.691 mi.)***	***Y101***	***211***
Facility Status: Active Hazard ID: 26640				
VALLEY TESORO	***9102 MENDENHALL MALL***	***NW 1/2 - 1 (0.691 mi.)***	***Y102***	***213***
Facility Status: Cleanup Complete Hazard ID: 24906				
MENDENHALL MALL HOTS	9105 MENDENHALL MALL	NW 1/2 - 1 (0.711 mi.)	103	216
Facility Status: Cleanup Complete Hazard ID: 4448				
E&L AUTO	***10005 CRAZY HORSE DR***	***W 1/2 - 1 (0.807 mi.)***	***105***	***228***
Facility Status: Cleanup Complete - Institutional Controls Hazard ID: 1183				
RESIDENCE - NANCY ST	8905 NANCY STREET	NNW 1/2 - 1 (0.859 mi.)	106	249
Facility Status: Cleanup Complete Hazard ID: 3710				
RIVERBEND / DIMOND P	***2900 RIVERSIDE DRIVE***	***NW 1/2 - 1 (0.869 mi.)***	***107***	***250***
Facility Status: Cleanup Complete Hazard ID: 299				
RESIDENCE - 2822 MAR	2822 MARSHA AVENUE	NW 1/2 - 1 (0.902 mi.)	108	258
Facility Status: Active Hazard ID: 26468				
RESIDENCE - 2921 GLA	2921 GLACIERWOOD COU	NW 1/2 - 1 (0.933 mi.)	109	260
Facility Status: Active Hazard ID: 26331				

Lower Elevation	Address	Direction / Distance	Map ID	Page
TEMSCO HELICOPTERS	1650 MAPLEADEN WAY;	E 0 - 1/8 (0.033 mi.)	R67	109

Facility Status: Cleanup Complete Hazard ID: 24507				
TEMSCO HELICOPTERS - Facility Status: Cleanup Complete - Institutional Controls Hazard ID: 24511	***1650 MAPLESDEN WAY***	***E 0 - 1/8 (0.033 mi.)***	***R69***	***110***
MENDENHALL WW TREATM Facility Status: Active Hazard ID: 3863	2009 RADCLIFFE ROAD,	W 1/4 - 1/2 (0.380 mi.)	94	189
RESIDENCE - MISTY LA Facility Status: Cleanup Complete - Institutional Controls Hazard ID: 4063	***10648 MISTY LANE, DO***	***SSW 1/2 - 1 (0.779 mi.)***	***104***	***219***

State and tribal leaking storage tank lists

AK LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Pollution Control & Ecology's LUST Notice Information.

A review of the AK LUST list, as provided by EDR, and dated 08/09/2018 has revealed that there are 20 AK LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CBJ GLACIER VALLEY F eventid: 25160 Facility Status: Cleanup Complete	1700 CREST DRIVE	0 - 1/8 (0.000 mi.)	C9	16
DOUGLAS TRUCKING INC eventid: 24917 Facility Status: Cleanup Complete	***8400 AIRPORT BLVD***	***0 - 1/8 (0.000 mi.)***	***H15***	***29***
CBJ - LEMON CREEK LI eventid: 24631 Facility Status: Cleanup Complete	ADJ. TO TIA INSURANC	0 - 1/8 (0.000 mi.)	K23	42
CAMERON PLUMBING AND eventid: 24385 Facility Status: Cleanup Complete	***1850 CREST STREET, N***	***0 - 1/8 (0.000 mi.)***	***E41***	***68***
N C MACHINERY CO JUN eventid: 24505 Facility Status: Cleanup Complete	***8850 AIRPORT BLVD***	***0 - 1/8 (0.000 mi.)***	***42***	***72***
JUNEAU AIRPORT eventid: 25156 Facility Status: Cleanup Complete - Institutional Controls	***SHELL SIMMONS DR AT***	***0 - 1/8 (0.000 mi.)***	***44***	***76***
WARD AIR INC eventid: 24697 Facility Status: Cleanup Complete	***8991 YANDUKIN DR***	***0 - 1/8 (0.000 mi.)***	***F50***	***81***
JUNEAU DAIRIES DISTR eventid: 24490 Facility Status: Cleanup Complete	8403 AIRPORT BLVD.	0 - 1/8 (0.000 mi.)	H52	85
DELTA AIR CARGO eventid: 24902	JUNEAU INTERNATIONAL	W 0 - 1/8 (0.014 mi.)	O56	90

Facility Status: Cleanup Complete

CHEVRON - AIRPORT (P eventid: 24532 Facility Status: Cleanup Complete - Institutional Controls	9151 GLACIER HWY	WNW 0 - 1/8 (0.022 mi.)	P58	91
DELTA WESTERN JUNEAU eventid: 23308 Facility Status: Cleanup Complete	***9203 CESSNA DRIVE; J***	***W 0 - 1/8 (0.027 mi.)***	***Q63***	***103***
AERO SERVICES, JUNEA eventid: 23170 Facility Status: Cleanup Complete	***"F"GATE 9203 SHELL S***	***W 0 - 1/8 (0.036 mi.)***	***N70***	***113***
PTI- JUNEAU CESSNA D eventid: 24743 Facility Status: Cleanup Complete - Institutional Controls	9225 CESSNA DRIVE	W 0 - 1/8 (0.065 mi.)	Q73	117
UNOCAL - #5785- AIRP eventid: 23568 Facility Status: Cleanup Complete - Institutional Controls	***9190 GLACIER HIGHWAY***	***WNW 0 - 1/8 (0.076 mi.)***	***S76***	***119***
ALASKA AIRLINES - JU eventid: 22996 Facility Status: Open	***1915 ALEX HOLDEN WAY***	***W 0 - 1/8 (0.120 mi.)***	***T78***	***137***
ALASKA AIRLINES - JU eventid: 24525 Facility Status: Cleanup Complete	1915 ALEX HOLDEN WAY	W 0 - 1/8 (0.120 mi.)	T79	148
FAA JUNEAU SFOP eventid: 24941 Facility Status: Open	***9341 GLACIER HIGHWAY***	***WNW 1/4 - 1/2 (0.276 mi.)***	***W91***	***180***
BRUCE D. MORLEY, INC eventid: 24560 Facility Status: Cleanup Complete	9128 N. DOUGLAS HIGH	SE 1/4 - 1/2 (0.469 mi.)	X97	206

Lower Elevation	Address	Direction / Distance	Map ID	Page
TEMSCO HELICOPTERS eventid: 24507 Facility Status: Cleanup Complete	1650 MAPLEADEN WAY	E 0 - 1/8 (0.033 mi.)	R65	107
TEMSCO HELICOPTERS - eventid: 24511 Facility Status: Cleanup Complete - Institutional Controls	1650 MAPLESDEN WAY	E 0 - 1/8 (0.033 mi.)	R68	110

State and tribal registered storage tank lists

AK UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Pollution Control & Ecology's RST Owner & Facilities database.

A review of the AK UST list, as provided by EDR, and dated 11/12/2018 has revealed that there are 22 AK UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MENDENHALL CHRYSLER	8345 OLD DAIRY RD	0 - 1/8 (0.000 mi.)	B8	15

Facility Id: 2711 Tank Status: Permanently Out of Use				
JAKE'S INC. (HONDA H Facility Id: 1533 Tank Status: Permanently Out of Use	8602 TEAL ST	0 - 1/8 (0.000 mi.)	E12	19
DOUGLAS TRUCKING INC Facility Id: 1266 Tank Status: Permanently Out of Use	***8400 AIRPORT BLVD***	***0 - 1/8 (0.000 mi.)***	***H15***	***29***
GLACIER FIRE STATION Facility Id: 2167 Tank Status: Permanently Out of Use	1700 CREST DR	0 - 1/8 (0.000 mi.)	C19	37
HALS BODY SHOP Facility Id: 944 Tank Status: Permanently Out of Use	P. O. BOX 2177, 1990	0 - 1/8 (0.000 mi.)	20	37
CIVIL AIR PATROL HAN Facility Id: 2891 Tank Status: Permanently Out of Use	JUNEAU AIRPORT, W RA	0 - 1/8 (0.000 mi.)	D32	57
MENDENHALL AUTO CENT Facility Id: 2146 Tank Status: Permanently Out of Use	8725 MALLARD ST	0 - 1/8 (0.000 mi.)	I33	58
T & S WELDING INC. Facility Id: 1192 Tank Status: Permanently Out of Use	8355 OLD DAIRY RD	0 - 1/8 (0.000 mi.)	B34	59
ALASKA AIRLINES - JU Facility Id: 1570 Tank Status: Permanently Out of Use	1873 SHELL SIMMONS D	0 - 1/8 (0.000 mi.)	G36	61
PACIFIC TELECOM, INC Facility Id: 2687 Tank Status: Permanently Out of Use	2075 JORDAN AVE	0 - 1/8 (0.000 mi.)	J40	67
N C MACHINERY CO JUN Facility Id: 828 Tank Status: Permanently Out of Use	***8850 AIRPORT BLVD***	***0 - 1/8 (0.000 mi.)***	***42***	***72***
JUNEAU AIRPORT Facility Id: 2157 Tank Status: Permanently Out of Use	***SHELL SIMMONS DR AT***	***0 - 1/8 (0.000 mi.)***	***44***	***76***
CAMERON PLUMBING & H Facility Id: 2726 Tank Status: Permanently Out of Use	1850 CREST ST	0 - 1/8 (0.000 mi.)	E47	79
WARD AIR INC Facility Id: 2725 Tank Status: Permanently Out of Use	***8991 YANDUKIN DR***	***0 - 1/8 (0.000 mi.)***	***F50***	***81***
JUNEAU DAIRIES DISTR Facility Id: 51 Tank Status: Permanently Out of Use	8403 AIRPORT BLVD	0 - 1/8 (0.000 mi.)	H53	86
FRED MEYER #158 FUEL Facility Id: 716 Tank Status: Permanently Out of Use Tank Status: Currently in Use	***8181 GLACIER HWY***	***NE 0 - 1/8 (0.010 mi.)***	***55***	***88***
PAUL'S CHEVRON	9151 GLACIER HWY	WNW 0 - 1/8 (0.022 mi.)	P59	92

Facility Id: 928
Tank Status: Permanently Out of Use

FAA JUNEAU Facility Id: 1020 Tank Status: Permanently Out of Use	9230 CESSNA DR	WNW 0 - 1/8 (0.023 mi.)	Q62	101
JUNEAU & DOUGLAS TEL Facility Id: 143 Tank Status: Permanently Out of Use	9229 CESSNA DR	W 0 - 1/8 (0.036 mi.)	Q71	114
MIKE'S AIRPORT EXPRE Facility Id: 816 Tank Status: Permanently Out of Use Tank Status: Currently in Use	***9190 GLACIER HWY***	***WNW 0 - 1/8 (0.076 mi.)***	***S74***	***117***
AERO SERVICES, INC. Facility Id: 1375 Tank Status: Permanently Out of Use	1890 RENSHAW WAY	W 1/8 - 1/4 (0.137 mi.)	T83	161

Lower Elevation	Address	Direction / Distance	Map ID	Page
TEMSCO HELICOPTERS, Facility Id: 270 Tank Status: Permanently Out of Use Tank Status: Currently in Use	***1650 MAPLESDEN WAY***	***E 0 - 1/8 (0.033 mi.)***	***R66***	***108***

State and tribal institutional control / engineering control registries

A listing of sites with engineering controls in place included in the Contaminated Sites.

A review of the AK ENG CONTROLS list, as provided by EDR, and dated 09/25/2018 has revealed that there is 1 AK ENG CONTROLS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CHEVRON - AIRPORT (P Facility Status: Cleanup Complete - Institutional Controls Hazard ID: 24532	***9151 GLACIER HWY;***	***WNW 0 - 1/8 (0.022 mi.)***	***P60***	***93***

AK INST CONTROL: Contaminated sites that have institutional controls.

A review of the AK INST CONTROL list, as provided by EDR, and dated 09/25/2018 has revealed that there are 9 AK INST CONTROL sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CAMERON PLUMBING AND Facility Status: Cleanup Complete - Institutional Controls Hazard ID: 1755	***1850 CREST STREET, N***	***0 - 1/8 (0.000 mi.)***	***E41***	***68***
CBJ JUNEAU AIRPORT M Facility Status: Cleanup Complete - Institutional Controls Hazard ID: 25156	***SHELL SIMMONS DRIVE***	***W 0 - 1/8 (0.010 mi.)***	***N54***	***86***
CHEVRON - AIRPORT (P	***9151 GLACIER HWY;***	***WNW 0 - 1/8 (0.022 mi.)***	***P60***	***93***

Facility Status: Cleanup Complete - Institutional Controls
Hazard ID: 24532

PTI- JUNEAU CESSNA D	***9225 CESSNA DRIVE***	***W 0 - 1/8 (0.065 mi.)***	***Q72***	***114***

Facility Status: Cleanup Complete - Institutional Controls
Hazard ID: 24743

UNOCAL - #5785- AIRP	***9190 GLACIER HIGHWAY***	***WNW 0 - 1/8 (0.076 mi.)***	***S76***	***119***

Facility Status: Cleanup Complete - Institutional Controls
Hazard ID: 2984
Hazard ID: 23568

JUNEAU AIRPORT TRAVE	***9200 GLACIER HIGHWAY***	***WNW 0 - 1/8 (0.112 mi.)***	***S77***	***129***

Facility Status: Cleanup Complete - Institutional Controls
Hazard ID: 4517

COMMERCIAL PROPERTY	***9351 GLACIER HIGHWAY***	***WNW 1/4 - 1/2 (0.348 mi.)***	***93***	***187***

Facility Status: Cleanup Complete
Hazard ID: 25608

SKATEBOARD PARK	***MENDENHALL LOOP ROAD***	***WNW 1/4 - 1/2 (0.392 mi.)***	***95***	***200***

Facility Status: Cleanup Complete - Institutional Controls
Hazard ID: 2697

Lower Elevation	Address	Direction / Distance	Map ID	Page
TEMSCO HELICOPTERS -	***1650 MAPLESDEN WAY***	***E 0 - 1/8 (0.033 mi.)***	***R69***	***110***

Facility Status: Cleanup Complete - Institutional Controls
Hazard ID: 24511

State and tribal voluntary cleanup sites

AK VCP: The Alaska Cleanup Program Inventory database.

A review of the AK VCP list, as provided by EDR, and dated 11/26/2018 has revealed that there are 3 AK VCP sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PTI- JUNEAU CESSNA D	***9225 CESSNA DRIVE***	***W 0 - 1/8 (0.065 mi.)***	***Q72***	***114***

DEC File Number: 1513.26.056
Facility Status: Cleanup Complete - Institutional Controls
Hazard Id: 24743

SKATEBOARD PARK	***MENDENHALL LOOP ROAD***	***WNW 1/4 - 1/2 (0.392 mi.)***	***95***	***200***

DEC File Number: 1513.38.038
Facility Status: Cleanup Complete
Hazard Id: 2696

Lower Elevation	Address	Direction / Distance	Map ID	Page
TEMSCO HELICOPTERS -	1650 MAPLESDEN WAY	E 0 - 1/8 (0.033 mi.)	R64	107

DEC File Number: 1513.26.053
Facility Status: Cleanup Complete - Institutional Controls
Hazard Id: 24511

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 03/01/2018 has revealed that there are 10 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LOVE BROS EPA ID:: AKD983068669	***8345 OLD DAIRY RD***	***0 - 1/8 (0.000 mi.)***	***B11***	***17***
HALS BODY SHOP EPA ID:: AKR000000919	***1990 ALPINE AVE***	***0 - 1/8 (0.000 mi.)***	***I18***	***35***
CAPITAL CITY CLEANER EPA ID:: AKD983071887	***8745 GLACIER HWY STE***	***0 - 1/8 (0.000 mi.)***	***M26***	***47***
RITZ CAMERA CENTERS EPA ID:: AKR000003186	***8745 GLACIER HWY #43***	***0 - 1/8 (0.000 mi.)***	***M27***	***49***
YUKON OFFICE SUPPLY EPA ID:: AKD983075037	***2075 JORDAN AVE***	***0 - 1/8 (0.000 mi.)***	***J31***	***56***
DELTA AIR LINES JUNE EPA ID:: AKD152465670	JUNEAU INTL ARPRT	0 - 1/8 (0.000 mi.)	D39	66
PETROLEUM SVCS INC EPA ID:: AKD983069121	***8401 AIRPORT BLVD***	***0 - 1/8 (0.000 mi.)***	***H43***	***75***
NORTHSTAR TREKKING D EPA ID:: AKR000201368	1910 RENSHAW WAY	W 1/8 - 1/4 (0.138 mi.)	T84	162
CHANNEL CONSTRUCTION EPA ID:: AKR000002378	***2223 NORTH JORDAN AV***	***NW 1/8 - 1/4 (0.172 mi.)***	***U85***	***163***
T W HALL EPA ID:: AKR000004283	***9393 LA PEROUSE AVE***	***W 1/8 - 1/4 (0.192 mi.)***	***88***	***167***

US MINES: Mines Master Index File. The source of this database is the Dept. of Labor, Mine Safety and Health Administration.

A review of the US MINES list, as provided by EDR, has revealed that there are 3 US MINES sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CHANNEL CONSTRUCTION Database: US MINES, Date of Government Version: 08/01/2018 Mine ID:: 5001723		NW 1/8 - 1/4 (0.175 mi.)	U87	165
CHANNEL CONSTRUCTION Database: US MINES, Date of Government Version: 08/01/2018		NW 1/8 - 1/4 (0.194 mi.)	V89	168

Mine ID:: 5001722

MILLER CONSTRUCTION — NW 1/8 - 1/4 (0.194 mi.) — V90 — 174
Database: US MINES, Date of Government Version: 08/01/2018
Mine ID:: 5001746

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.

A review of the ABANDONED MINES list, as provided by EDR, and dated 09/10/2018 has revealed that there are 2 ABANDONED MINES sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MILLER CONSTRUCTION	2207 NORTH JORDAN AV	WNW 1/8 - 1/4 (0.131 mi.)	U81	159
PORTABLE 191	2223 N. JORDAN AVE.	NW 1/8 - 1/4 (0.172 mi.)	U86	165

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 are 2 EDR Hist Auto sites within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EMIGS CHEVRON	9151 GLACIER HWY	WNW 0 - 1/8 (0.022 mi.)	P61	101
MIKES AIRPORT UNION	9190 GLACIER HWY	WNW 0 - 1/8 (0.076 mi.)	S75	118

EDR Hist Cleaner: 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.

A review of the EDR Hist Cleaner list, as provided by EDR, has revealed that there are 2 EDR Hist

EXECUTIVE SUMMARY

Cleaner sites within approximately 0.125 miles of the target property.

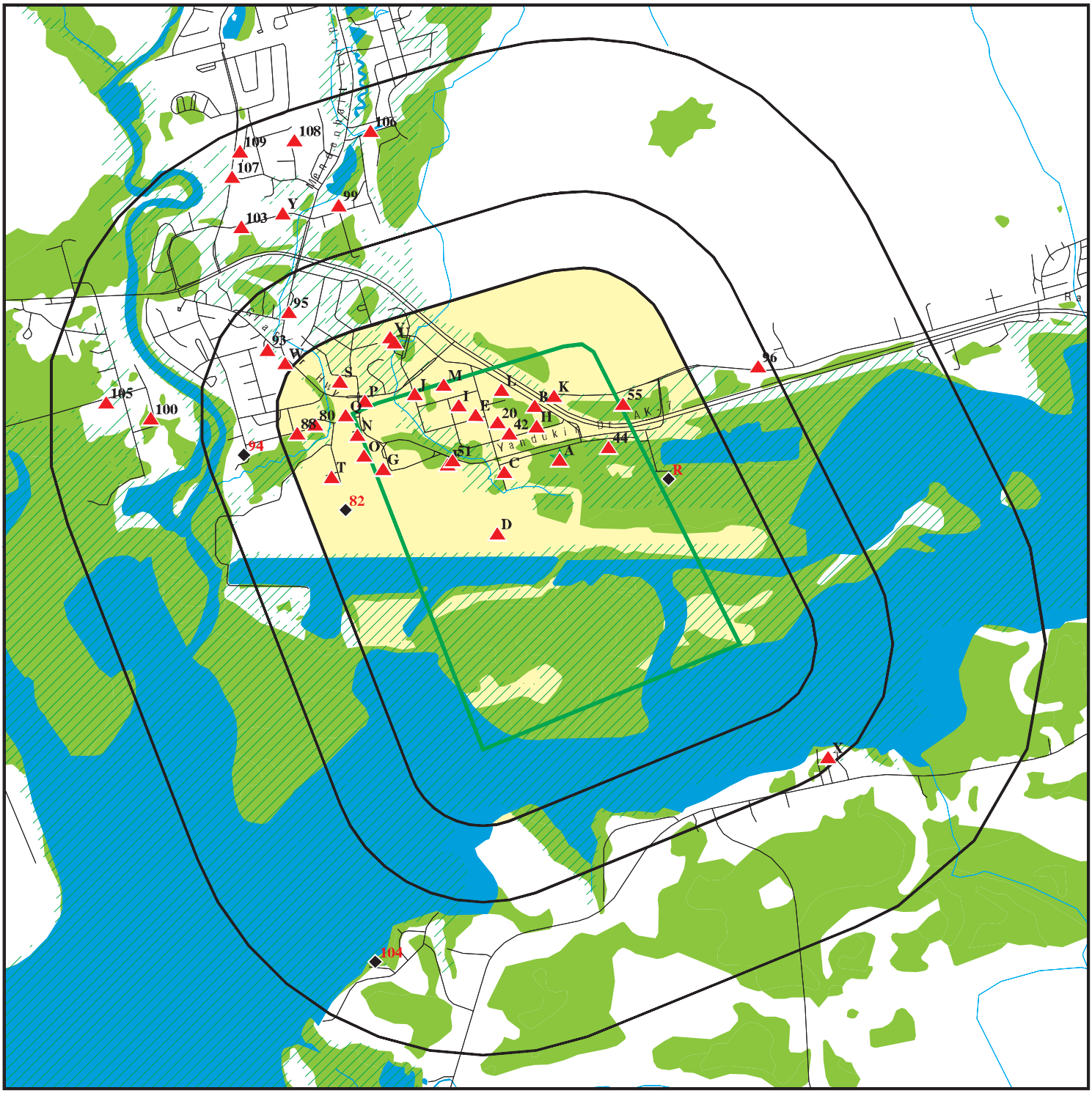
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CAPITAL CITY CLEANER	2092 JORDAN AVE STE	0 - 1/8 (0.000 mi.)	J22	42
STARHILL ENTERPRISES	8745 GLACIER HWY STE	0 - 1/8 (0.000 mi.)	M28	51

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 24 records.

Site Name	Database(s)
JUNEAU LDFL	SEMS-ARCHIVE
AT&T - JUNEAU TOLL CENTER	AK UST
JUNEAU AIRPORT	HMIRS
JUNEAU -JIA- TAXIWAY REHABILITATIO	AK NPDES
JUNEAU EGAN DRIVE-10TH STREET INTE	AK NPDES
JUNEAU - OLD DAIRY ROAD SHOULDER W	AK NPDES
DELTA WESTERN JUNEAU AIRPORT FUEL	AK RGA LUST
DELTA WESTERN JUNEAU AIRPORT FUEL	AK RGA LUST
AERO SERVICES, JUNEAU AIRPORT	AK RGA LUST
AERO SERVICES, JUNEAU AIRPORT	AK RGA LUST
JUNEAU READY MIX INCORPORATED	AK RGA LUST
JUNEAU READY MIX INCORPORATED	AK RGA LUST
JUNEAU READY MIX INCORPORATED	AK RGA LUST
ALASKA LAUNDRY AND CLEANERS - JUNE	AK RGA LUST
ALASKA LAUNDRY AND CLEANERS - JUNE	AK RGA LUST
DELTA WESTERN JUNEAU AIRPORT FUEL	AK RGA LUST
AUKE BAY HARBOR - JUNEAU	AK RGA LUST
AUKE BAY HARBOR - JUNEAU	AK RGA LUST
FAA - JUNEAU	AK RGA LUST
JUNEAU AIRPORT	AK RGA LUST
CBJ JUNEAU AIRPORT MAINTENANCE FAC	AK RGA LUST
CBJ JUNEAU AIRPORT MAINTENANCE FAC	AK RGA LUST
CBJ JUNEAU AIRPORT MAINTENANCE FAC	AK RGA LUST
CBJ JUNEAU AIRPORT MAINTENANCE FAC	AK RGA LUST

OVERVIEW MAP - 5509586.2S



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: Juneau	CLIENT: AECOM
ADDRESS: 8425 Livingston Way Juneau AK 99801	CONTACT: Brittany Kirchmann INQUIRY #: 5509586.2s
LAT/LONG: 58.35764 / 134.568524	DATE: December 12, 2018 9:59 am

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DETAIL MAP - 5509586.2S

Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

0 1/8 1/4 1/2 Miles

Indian Reservations BIA

100-year flood zone

500-year flood zone

National Wetland Inventory

State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Juneau	CLIENT: AECOM
ADDRESS: 8425 Livingston Way Juneau AK 99801	CONTACT: Brittany Kirchmann
LAT/LONG: 58.35764 / 134.568524	INQUIRY #: 5509586.2s DATE: December 12, 2018 9:59 am

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		1	0	1	NR	NR	2
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250	1	9	1	NR	NR	NR	11
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
AK SHWS	1.000	1	22	1	6	11	NR	41
State and tribal landfill and/or solid waste disposal site lists								
AK SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
AK LUST	0.500	1	18	0	2	NR	NR	21
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
AK UST	0.250	1	21	1	NR	NR	NR	23
AK AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
AK ENG CONTROLS	0.500		1	0	0	NR	NR	1
AK INST CONTROL	0.500		7	0	2	NR	NR	9
State and tribal voluntary cleanup sites								
AK VCP	0.500		2	0	1	NR	NR	3
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
AK BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
AK SWRCY	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
AK CDL	TP		NR	NR	NR	NR	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
AK SPILLS	TP		NR	NR	NR	NR	NR	0
AK SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		7	3	NR	NR	NR	10
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
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

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
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	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
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	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	3	NR	NR	NR	3
ABANDONED MINES	0.250		0	2	NR	NR	NR	2
FINDS	TP	1	NR	NR	NR	NR	NR	1
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
ECHO	TP	1	NR	NR	NR	NR	NR	1
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
AK AIRS	TP		NR	NR	NR	NR	NR	0
AK COAL ASH	0.500		0	0	0	NR	NR	0
AK DRYCLEANERS	0.250		0	0	NR	NR	NR	0
AK Financial Assurance	TP		NR	NR	NR	NR	NR	0
CA HAZNET	TP		NR	NR	NR	NR	NR	0
AK NPDES	TP		NR	NR	NR	NR	NR	0
AK UIC	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		2	NR	NR	NR	NR	2
EDR Hist Cleaner	0.125		2	NR	NR	NR	NR	2
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
AK RGA LF	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
AK RGA LUST	TP	3	NR	NR	NR	NR	NR	3
- Totals --		9	92	11	12	11	0	135

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 **JUNEAU AAOF 300-GAL USED OIL TANK** **AK RGA LUST** **S116469408**
Target **8425 LIVINGSTON DR** **N/A**
Property **JUNEAU, AK**

Site 1 of 7 in cluster A

Actual: **11 ft.**

RGA LUST:

2003	JUNEAU AAOF 300-GAL USED OIL TANK	8425 LIVINGSTON DR
2002	JUNEAU AAOF 300-GAL USED OIL TANK	8425 LIVINGSTON DR
2001	JUNEAU AAOF 300-GAL USED OIL TANK	8425 LIVINGSTON DR

A2 **JUNEAU AAOF 300-GAL USED OIL TANK** **AK RGA LUST** **S116469407**
Target **8425 LIVINGSTON DR.** **N/A**
Property **JUNEAU, AK**

Site 2 of 7 in cluster A

Actual: **11 ft.**

RGA LUST:

2008	JUNEAU AAOF 300-GAL USED OIL TANK	8425 LIVINGSTON DR.
2007	JUNEAU AAOF 300-GAL USED OIL TANK	8425 LIVINGSTON DR.
2006	JUNEAU AAOF 300-GAL USED OIL TANK	8425 LIVINGSTON DR.
2005	JUNEAU AAOF 300-GAL USED OIL TANK	8425 LIVINGSTON DR.
2004	JUNEAU AAOF 300-GAL USED OIL TANK	8425 LIVINGSTON DR.

A3 **ALASKA AIR NATIONAL GUARD AAOF JUNEAU** **RCRA-CESQG** **1000586263**
Target **8425 LIVINGSTON WAY** **FINDS** **AKD983073321**
Property **JUNEAU, AK 99801** **ECHO**

Site 3 of 7 in cluster A

Actual: **11 ft.**

RCRA-CESQG:

Date form received by agency:	12/19/1997
Facility name:	AKARNG AAOF JUNEAU
Facility address:	8425 LIVINGSTON WAY JUNEAU, AK 99801
EPA ID:	AKD983073321
Mailing address:	LIVINGSTON WAY JUNEAU, AK 99801
Contact:	GRETCHEN A BRAND
Contact address:	8425 LIVINGSTON WAY JUNEAU, AK 99801
Contact country:	US
Contact telephone:	907-789-3366
Contact email:	Not reported
EPA Region:	10
Land type:	Municipal
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely

ALASKA AIR NATIONAL GUARD AAOF JUNEAU (Continued) **1000586263**

hazardous waste

Owner/Operator Summary:
- Owner/operator name: AKARNG MAJ LARRY BECK
- Owner/operator address: 8425 LIVINGSTON WAY JUNEAU, AK 99801
- Owner/operator country: Not reported
- Owner/operator telephone: 907-428-6765
- Owner/operator email: Not reported
- Owner/operator fax: Not reported
- Owner/operator extension: Not reported
- Legal status: State
- Owner/Operator Type: Owner
- Owner/Op start date: Not reported
- Owner/Op end date: Not reported

Handler Activities Summary:
- U.S. importer of hazardous waste: No
- Mixed waste (haz. and radioactive): No
- Recycler of hazardous waste: No
- Transporter of hazardous waste: Yes
- Treater, storer or disposer of HW: No
- Underground injection activity: No
- On-site burner exemption: No
- Furnace exemption: No
- Used oil fuel burner: No
- Used oil processor: No
- User oil refiner: No
- Used oil fuel marketer to burner: No
- Used oil Specification marketer: No
- Used oil transfer facility: No
- Used oil transporter: No

. Waste code: NONE
. Waste name: None

Facility Has Received Notices of Violations:
- Regulation violated: Not reported
- Area of violation: Generators - General
- Date violation determined: 05/02/1994
- Date achieved compliance: 06/19/1994
- Violation lead agency: State
  - Enforcement action: WRITTEN INFORMAL
  - Enforcement action date: 06/23/1994
  - Enf. disposition status: Not reported
  - Enf. disp. status date: Not reported
  - Enforcement lead agency: State
  - Proposed penalty amount: Not reported
  - Final penalty amount: Not reported
  - Paid penalty amount: Not reported

Evaluation Action Summary:
- Evaluation date: 05/02/1994
- Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
- Area of violation: Generators - General

ALASKA AIR NATIONAL GUARD AAOF JUNEAU (Continued) **1000586263**

Date achieved compliance: 06/19/1994
Evaluation lead agency: State

FINDS:

Registry ID: 110003039809

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000586263
Registry ID: 110003039809
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110003039809

A4 **JUNEAU AAOF 300-GAL USED OIL TANK** **AK SHWS** **S109255556**
Target **8425 LIVINGSTON DR.** **N/A**
Property **JUNEAU, AK 99801**

Site 4 of 7 in cluster A

Actual: 11 ft.

SHWS:
File Number: 1513.38.060
Staff: Not reported
Facility Status: Cleanup Complete
Latitude: 58.357540
Longitude: -134.568192
Hazard ID: 2534
Problem: Petroleum contaminated soil. Site Investigation Report dated January 1996 prepared by CH2MHill. Matrix score sheet indicated Level A cleanup level for site. DRO detected at 1,020 and GRO at 472 mg/kg in soil at 0.8 to 1.4 foot depth. Last staff assigned was Pexton.

Actions:
Action Date: 9/27/2013
Action: Cleanup Complete Determination Issued
DEC Staff: Debra Caillouet
Action Description: Final well decommissioning and ROD approved.

Action Date: 9/24/1997
Action: Site Added to Database
DEC Staff: Scott Pexton
Action Description: Petroleum contamination.

Action Date: 9/24/1997
Action: Site Ranked Using the AHRM
DEC Staff: Scott Pexton
Action Description: Site reranked by staff. Changed GW Usage Value from 0.8 to 0.4; SW Exposure Index Value from 0 to 0.4; SW Environments from 0 to 2; and,

JUNEAU AAOF 300-GAL USED OIL TANK (Continued) **S109255556**

Environment/Recreation Value from 0 to 2. Former score was 18.

Action Date: 9/21/2012
Action: Site Characterization Workplan Approved
DEC Staff: Debra Caillouet
Action Description: Work Plan, Alaska Army National Guard, Monitoring Natural Attenuation for Juneau Alaska Army Aviation Operations Facility, September 2012

Action Date: 8/27/2012
Action: Report or Workplan Review - Other
DEC Staff: Debra Caillouet
Action Description: Draft Work Plan, Alaska Army National Guard, Monitoring Natural Attenuation for Juneau Alaska Army Aviation Operations Facility, August 2012. ADEC requests that the groundwater monitoring include sampling and analysis for iron, manganese and sulfate. Reporting should include an evaluation of how the groundwater results indicate natural attenuation is occurring.Please provide documentation that the field sampling personnel are qualified persons per 18 AAC 75.990(100).

Action Date: 7/19/2010
Action: Site Characterization Workplan Approved
DEC Staff: Debra Caillouet
Action Description: Final Work Plan Site Investigation, Alaska Army National Guard Juneau AAOF, July 2010While the plan failed to address all comments provided by DEC, sufficient detail was provided so that DEC has no objection to the implementation of the work.

Action Date: 6/7/2010
Action: Report or Workplan Review - Other
DEC Staff: Debra Caillouet
Action Description: Significant comment was sent to the AKARNG on the draft Site Investigation work plan.

Action Date: 5/17/2005
Action: Update or Other Action
DEC Staff: Debra Caillouet
Action Description: Staff reviewed the IAP and sent the following letter: There were six areas of concern identified: the area around the jet fuel dispenser stand, the corridor along the jet fuel transfer line, the surface water discharge point for the former oil-water separator, the equipment storage area between the AAOF and the neighboring property to the west, the gravel area on the east side of the concrete ramp, and gravel area on the east side of the AAOF structure.TPH samples were evaluated at all sites and limited samples were sent for laboratory analysis. The deepest samples were taken at 5 feet below ground surface and groundwater was not encountered.The Alaska Department of Environmental Conservation concurs with the conclusions of the IAP, that the SI report contains dated and incomplete information. The nature of the contamination was not completely characterized. In addition, the proposed cleanup levels do not consider the current regulatory standards. Additional investigation is needed to define the site conditions, delineate the nature and extent of contamination, and identify potential groundwater impacts.

Action Date: 4/1/1996
Action: Update or Other Action

JUNEAU AAOF 300-GAL USED OIL TANK (Continued) **S109255556**

DEC Staff:	Bill Wright
Action Description:	(Old R:Base Action Code = SA1A - Phase I Site Assessment Approval). Reviewed and approved a Phase I site Assessment.
Action Date:	3/18/2004
Action:	Update or Other Action
DEC Staff:	Sarah Cunningham
Action Description:	File number assigned: 1513.38.060.
Action Date:	3/17/2008
Action:	Exposure Tracking Model Ranking
DEC Staff:	Debra Caillouet
Action Description:	Initial ranking with ETM completed.
Action Date:	3/1/1996
Action:	Site Ranked Using the AHRM
DEC Staff:	Bill Wright
Action Description:	Site ranked by staff.
Action Date:	2/3/2010
Action:	Meeting or Teleconference Held
DEC Staff:	Debra Caillouet
Action Description:	Staff participated in the Installation Action Plan meeting.
Action Date:	12/28/2012
Action:	Report or Workplan Review - Other
DEC Staff:	Debra Caillouet
Action Description:	Draft Alaska Army National Guard, Monitoring Natural Attenuation Report for Juneau Alaska Army Aviation Operation Facility, December 2012The report is deficient and does not support the request for a cleanup complete determination. The Guard is requested to properly abandoned the improper well and provide additional site characterization in compliance with regulations and guidance.
Action Date:	12/28/2010
Action:	CERCLA SI
DEC Staff:	Debra Caillouet
Action Description:	Final Site Investigation Report for AKARNG Juneau AAOF, December 2010The report accurately describes the results of the site investigation that occurred during the summer of 2010 at the Juneau Army Aviation Operating Facility. ADEC does not concur that the groundwater at the site meets the requirements of 18 AAC 75.350 to be determined not a potential drinking water source. The conductivity is low according to the groundwater sampling data sheet, as well as, the salinity. This data does not support the argument that the groundwater is not suitable for drinking water.Please review the guidance on site closure and institutional controls at: http://dec.alaska.gov/spar/csp/guidance/ Closure20memorandum20720242009-final.pdf for the requirements to obtain site closure, with or without institutional controls.
Action Date:	12/17/2012
Action:	Report or Workplan Review - Other
DEC Staff:	Debra Caillouet
Action Description:	Comment was sent on Draft Alaska Army National Guard, Monitoring Natural Attenuation Report for Juneau Alaska Army Aviation Operation Facility, December 2012

JUNEAU AAOF 300-GAL USED OIL TANK (Continued) **S109255556**

Action Date:	11/17/2010
Action:	Report or Workplan Review - Other
DEC Staff:	Debra Caillouet
Action Description:	Staff reviewed the draft Site Investigaion Report October 2010. The CSM should show the potentially complete pathways. These would be the ingestion/inhalation of DRO contaminated soil in the subsurface and the ingestion of groundwater. There is nothing permanently preventing exposure to the subsurface soil or the groundwater. To petition for an exemption under 18 AAC 75.350 the criteria for an incomplete pathway must be demonstrated to be met.
Action Date:	10/11/2000
Action:	Update or Other Action
DEC Staff:	Scott Pexton
Action Description:	Letter sent to Norman Straub suggesting the ADEC Voluntary Cleanup Program as a cost-effective cleanup approach for this site.
Action Date:	1/24/2013
Action:	Final Cleanup Report Reviewed
DEC Staff:	Debra Caillouet
Action Description:	Response to Outstanding Comments and Request for ADEC Quality Control Manager Review, Project Number PR 091-1571-12 Monitoring Natural Attenuation for Juneau, Alaska AAOFThe referenced letter, the report and the field work that occurred do not support a site status decision for the Juneau AAOF. ADEC requests the AKARNG abandon the well installed at the Juneau AAOF following the procedures outlined in the Monitoring Well Guidance dated November 2011.The AKARNG will need to provide site characterization, sampling and analysis, and a final report, in compliance with the regulations to support a request for a cleanup complete determination.The Site Cleanup Rules (18 AAC 75.325-75.390) establish administrative processes and standards to determine the necessity for and degree of cleanup required to protect human health, safety, and welfare, and the environment at a site where a hazardous substance is located. Under 18 AAC 75.355, a responsible person shall submit a sampling and analysis plan for approval under 18 AAC 75.360, which requires a responsible person to submit work plans for approval before work begins, and for additional approval if a modification is anticipated. The Final reporting requirements and site closure (18 AAC 75.380), require a demonstration that cleanup was conducted in accordance with the elements, including modifications to the elements, approved under 18 AAC 75.360.The Work Plan that was approved was not followed by your contractor. Therefore, the AKARNG is not in compliance with the Final reporting requirements and a cleanup determination can not be made.

Contaminants:

Staff:	Not reported
Contaminate Name1:	AKARNG Juneau AAOF
Contaminate Level Description1:	< Method 2 Most Stringent
Contaminate Media1:	Soil
Control Type:	No ICs Required
Control Details Description1:	Not reported
Contaminant CTD:	Not reported
Contaminant CDR:	Not reported
Comments:	Not reported

JUNEAU AAOF 300-GAL USED OIL TANK (Continued) **S109255556**

File Number: 1513.26.072
Staff: Not reported
Facility Status: Cleanup Complete
Latitude: 58.357891
Longitude: -134.568703
Hazard ID: 23037
Problem: Petroleum contamination (RRO 17.3 mg/kg) found below ADEC Method 1 Category A. No metals sampling required due to low petroleum levels.

Actions:

Action Date: 8/27/1999
Action: Leaking Underground Storage Tank Cleanup Initiated - Petroleum
DEC Staff: Sharon Sadlon
Action Description: Tank removed

Action Date: 8/27/1999
Action: Site Added to Database
DEC Staff: * Not Assigned
Action Description: Not reported

Action Date: 8/15/2001
Action: Site Closure Approved
DEC Staff: Sharon Sadlon
Action Description: Letter sent to RP

A5 **JUNEAU ARMY AVIATION OPERATING FACILTY** **AK UST** **U004116156**
Target **8425 LIVINGSTON WAY** **N/A**
Property **JUNEAU, AK 99801**

Site 5 of 7 in cluster A

Actual: **11 ft.**

UST:
Facility ID: 3223
Facility Type: Unknown
Owner ID: 1332
Owner Name: Alaska Army National Guard Attn AKNG ARE
Owner Address: PO Box 5-549
Owner City,St,Zip: JBER-EAFB, AK 99506

Tank ID: 1
Tank Status: **Permanently Out of Use**
Tack Capacity: 300
Tank Product: Used Oil
Installed Date: 07/01/1988
Regulated Tank: Yes

A6 **JUNEAU AAOF 300-GAL USED OIL TANK** **AK RGA LUST** **S116469406**
Target Property **8425 LIVINGSTON DR.,** **N/A**
JUNEAU, AK

Site 6 of 7 in cluster A

Actual: 11 ft.

RGA LUST:

2012	JUNEAU AAOF 300-GAL USED OIL TANK	8425 LIVINGSTON DR.,
2011	JUNEAU AAOF 300-GAL USED OIL TANK	8425 LIVINGSTON DR.,
2010	JUNEAU AAOF 300-GAL USED OIL TANK	8425 LIVINGSTON DR.,
2009	JUNEAU AAOF 300-GAL USED OIL TANK	8425 LIVINGSTON DR.,

A7 **JUNEAU AAOF 300-GAL USED OIL TANK** **AK LUST** **S105096403**
Target Property **8425 LIVINGSTON DR.** **N/A**
JUNEAU, AK 99801

Site 7 of 7 in cluster A

Actual: 11 ft.

LUST:

Facility Name:	JUNEAU AAOF 300-GAL USED OIL TANK
Facility Status:	Cleanup Complete
Record Key:	1999110023901
File ID:	1513.26.072
Oname:	Alaska Army National Guard Attn AKNG ARE
Lat/Lon:	58.35789 -134.5687
Lust Event ID:	2777
CS or Lust:	LUST
Borough:	Juneau
Staff:	No Longer Assigned
Site Type:	Unknown
Horizontal Datum:	WGS84

B8 **MENDENHALL CHRYSLER (OLD SITE)** **AK UST** **U003951987**
8345 OLD DAIRY RD **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Site 1 of 3 in cluster B

Relative: Higher
Actual: 45 ft.

UST:

Facility ID:	2711
Facility Type:	Auto Dealership
Owner ID:	1821
Owner Name:	Vern Hardin
Owner Address:	9621 Glacier HWY
Owner City,St,Zip:	Juneau, AK 99801
Tank ID:	1
Tank Status:	**Permanently Out of Use**
Tack Capacity:	1000
Tank Product:	Diesel
Installed Date:	01/01/1981
Regulated Tank:	Yes
Tank ID:	2
Tank Status:	**Permanently Out of Use**
Tack Capacity:	1000
Tank Product:	Gasoline
Installed Date:	01/01/1981

MENDENHALL CHRYSLER (OLD SITE) (Continued) **U003951987**

Regulated Tank: Yes

C9 **CBJ GLACIER VALLEY FIRE STATION** **AK LUST** **S105096375**
1700 CREST DRIVE **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Site 1 of 3 in cluster C

Relative: Higher
Actual: 29 ft.

LUST:

Facility Name:	CBJ GLACIER VALLEY FIRE STATION
Facility Status:	Cleanup Complete
Record Key:	1999110029501
File ID:	1513.26.065
Oname:	City & Borough of Juneau
Lat/Lon:	58.35777 -134.5733
Lust Event ID:	2735
CS or Lust:	LUST
Borough:	Juneau
Staff:	No Longer Assigned
Site Type:	Other
Horizontal Datum:	WGS84

D10 **L A B FLYING SVC** **RCRA-CESQG** **1000904397**
JUNEAU INTL ARPRT BLK D LOT 1 **AK0000385609**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Site 1 of 3 in cluster D

Relative: Higher
Actual: 13 ft.

RCRA-CESQG:

Date form received by agency:	05/12/1994
Facility name:	L A B FLYING SVC
Facility address:	JUNEAU INTL ARPRT BLK D LOT 1 &2 JUNEAU, AK 99801
EPA ID:	AK0000385609
Mailing address:	NO MAILING ADDRESS NO MAILING CITY, OR
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	10
Land type:	Facility is not located on Indian land. Additional information is not known.
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any

L A B FLYING SVC (Continued) **1000904397**

time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

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

Facility Has Received Notices of Violations:
- Regulation violated: Not reported
- Area of violation: Generators - General
- Date violation determined: 04/28/1994
- Date achieved compliance: 06/29/1994
- Violation lead agency: State
  - Enforcement action: WRITTEN INFORMAL
  - Enforcement action date: 06/23/1994
  - Enf. disposition status: Not reported
  - Enf. disp. status date: Not reported
  - Enforcement lead agency: State
  - Proposed penalty amount: Not reported
  - Final penalty amount: Not reported
  - Paid penalty amount: Not reported

Evaluation Action Summary:
- Evaluation date: 04/28/1994
- Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
- Area of violation: Generators - General
- Date achieved compliance: 06/29/1994
- Evaluation lead agency: State

B11 **LOVE BROS** **RCRA NonGen / NLR** **1000456197**
8345 OLD DAIRY RD **FINDS** **AKD983068669**
< 1/8 **JUNEAU, AK 99801** **ECHO**
1 ft.

Site 2 of 3 in cluster B

Relative: Higher
Actual: 45 ft.

RCRA NonGen / NLR:
- Date form received by agency: 08/24/1990
- Facility name: LOVE BROS
- Facility address: 8345 OLD DAIRY RD
  JUNEAU, AK 99801
- EPA ID: AKD983068669
- Mailing address: JAMES BLVD

LOVE BROS (Continued) **1000456197**

JUNEAU, AK 99801
Contact: ALAN LOVE
Contact address: 9174 JAMES BLVD
JUNEAU, AK 99801
Contact country: US
Contact telephone: 907-789-7151
Contact email: Not reported
EPA Region: 10
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: LOVE BROTHERS
Owner/operator address: 9174 JAMES BLVD
JUNEAU, AK 99801
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: F001
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLOROETHYLENE, 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.

Violation Status: No violations found

FINDS:

Registry ID: 110003041075

LOVE BROS (Continued) **1000456197**

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000456197
Registry ID: 110003041075
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110003041075

E12 **JAKE'S INC. (HONDA HUT)** **AK UST** **U003765215**
8602 TEAL ST **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Site 1 of 3 in cluster E

Relative: Higher
Actual: 45 ft.

UST:
Facility ID: 1533
Facility Type: Unknown
Owner ID: 592
Owner Name: Jake's Inc.
Owner Address: 8602 Teal ST
Owner City,St,Zip: Juneau, AK 99801

Tank ID: 1
Tank Status: Permanently Out of Use
Tack Capacity: 150
Tank Product: Heating Oil
Installed Date: 06/24/1982
Regulated Tank: No

F13 **CHANNEL FLYING** **RCRA-CESQG** **1000904395**
8995 YANDUKIN DR **FINDS** **AK0000385583**
< 1/8 **JUNEAU, AK 99801** **ECHO**
1 ft.

Site 1 of 4 in cluster F

Relative: Higher
Actual: 23 ft.

RCRA-CESQG:
Date form received by agency: 05/13/1994
Facility name: CHANNEL FLYING
Facility address: 8995 YANDUKIN DR
JUNEAU, AK 99801-8086
EPA ID: AK0000385583
Mailing address: NO MAILING ADDRESS
NO MAILING CITY, OR
Contact: Not reported
Contact address: Not reported
Not reported
Contact country: US

CHANNEL FLYING (Continued) **1000904395**

Contact telephone: Not reported
Contact email: Not reported
EPA Region: 10
Land type: Facility is not located on Indian land. Additional information is not known.
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

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

Facility Has Received Notices of Violations:
Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 04/29/1994
Date achieved compliance: 07/29/1994
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/23/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 04/29/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General

CHANNEL FLYING (Continued) **1000904395**

Date achieved compliance: 07/29/1994
Evaluation lead agency: State

FINDS:

Registry ID: 110003044900

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000904395
Registry ID: 110003044900
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110003044900

G14 **FAA JUNEAU STATION** **AK SHWS** **S107504829**
JUNEAU AIRPORT **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Site 1 of 4 in cluster G

Relative: Higher
Actual: 18 ft.

SHWS:
File Number: 1513.38.048
Staff: Not reported
Facility Status: Cleanup Complete
Latitude: 58.360436
Longitude: -134.587534
Hazard ID: 2975
Problem: Leaking Underground Storage Tank (LUST) closure Release Investigation found petroleum contamination in soils near the fill piping above the UST. About five cubic yards of impacted soil excavated and shipped off-site for remediation. Soil confirmation sample concentrations for diesel range organics (DRO) exceeded Method 2 migration to groundwater cleanup levels. Follow-up soil borings in the UST footprint showed DRO and benzene, toluene, ethylbenzene, and xylenes (BTEX) concentrations in remaining soils were less than Method 2 migration to groundwater cleanup levels.

Actions:
Action Date: 8/30/2002
Action: Site Closure Approved
DEC Staff: Bruce Wanstall
Action Description: Closure letter issued to RP. Saved at G: SPAR/SparCSites/SE FIELD OPS/Southeast Sites/Wings Air Cargo/Wings Air Cargo Bldg Closure.

Action Date: 7/5/2000
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: Department request by letter for additional SI due to condition of

FAA JUNEAU STATION (Continued) **S107504829**

the heating oil tank at time of removal. About 5 cubic yards of impacted soil excavated and shipped off-site for remediation. Soil confirmation sample concentrations for DRO exceeded Method 2 migration to groundwater cleanup levels.

Action Date: 7/27/2001
Action: Site Characterization Workplan Approved
DEC Staff: Bruce Wanstall
Action Description: Supplemental Release Investigation workplan approved. SRI to address department concerns of petroleum soil and groundwater impacts.

Action Date: 7/10/2002
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: Follow-up soil borings in the UST footprint showed DRO and BTEX concentrations in remaining soils were less than Method 2 migration to groundwater cleanup levels.

Action Date: 2/27/2002
Action: Site Added to Database
DEC Staff: Bruce Wanstall
Action Description: Heating oil release to soils. Non-regulated UST transferred from Storage Tank Program.

Action Date: 2/27/2002
Action: Site Ranked Using the AHRM
DEC Staff: Bruce Wanstall
Action Description: Preliminary ranking.

Contaminants:
Staff: Not reported

Contaminate Name1: Wings Aircargo Building
Contaminate Level Description1: Not reported
Contaminate Media1: Not reported

Control Type: No ICs Required
Control Details Description1: Advance approval required to transport soil or groundwater off-site.
Contaminant CTD: Not reported
Contaminant CDR: Not reported
Comments: For more information about this site, contact DEC at (907) 465-5390.

File Number: 1513.38.051
Staff: Danielle Duncan, 9074655207 danielle.duncan@alaska.gov
Facility Status: Active
Latitude: 58.359401
Longitude: -134.583990
Hazard ID: 1450
Problem: Areas of concern at the FAA Juneau station include Sector Field Office (SFO) Building 300 UST, SFO Garage Building 602 drum storage area, SFO Building 200 UST, SFO Building 302 UST, SFO Emergency Generator Pad, Headquarters Building 320 UST, Headquarters Building 302 Emergency Generator, Headquarters Building 622 UST, Remote Communications Outlet Facility UST, Flight Service Station (FSS) Satellite Dish 1, FSS Building 200 USTs, and FSS Emergency Generator Pad.In December 2006, snow slid off the roof of the maintenance shop

FAA JUNEAU STATION (Continued) **S107504829**

at the SFO Maintenance Shop and severed the fuel lines of an aboveground storage tank, spilling 275 gallons of fuel. Investigation and remediation activities were performed in 2010 and 2014.Contamination associated with the regulated UST at Shop Building 300 is also tracked under the FAA Juneau SFOP site, hazard ID 24941.

Actions:

Action Date: 9/29/2010
Action: Site Characterization Report Approved
DEC Staff: Melody Debenham
Action Description: Received Technical Memorandum summarizing July 2010 groundwater sampling from 3 wells on site. Groundwater samples were analyzed for GRO, DRO, RRO, and BTEX. Benzene is the only compound reported above the cleanup level, at 11.1 ug/L in MW-A18.

Action Date: 9/29/2010
Action: Site Characterization Report Approved
DEC Staff: Melody Debenham
Action Description: Received a Technical Memorandum describing characterization activities to delineate the horizontal and vertical extent of the 2006 heating oil release. Based on field screening and analytical sample results, petroleum contamination related to the heating oil release is limited to the immediate vicinity of the AST and along the west side of the maintenance shop, with a maximum depth of 3 feet.

Action Date: 8/27/2007
Action: Site Characterization Report Approved
DEC Staff: Anne Marie Palmieri
Action Description: Site Characterization report approved this date. Letter addressed Building 300 Shop Tank 39-A-4, Building 602 Drum Storage Area, SFO Emergency Generator Pad and FSS Satellite Dish 1 Pad. Additional action was requested at the Building 300 Shop Tank only. Letter is attached to the database, but a summary of the determination at each source area is included on the database as a series of updates.

Action Date: 8/27/2007
Action: Update or Other Action
DEC Staff: Anne Marie Palmieri
Action Description: Building 300 Tank 39-E-1: This 500 gallon underground storage tank was used for providing diesel heating oil to Building 300 at the Sector Field Office (SFO). The tank was removed in May 1997, as documented in the Decommissioning Assessment Report dated November 1997. Eighty (80) cubic yards of petroleum contaminated soil was removed and sent to a disposal facility in Washington State. Six (6) confirmation samples were collected from the limits of the excavation at depths up to 12 feet bgs and analyzed for DRO, GRO, and BTEX. The highest concentrations detected were DRO: 29,000 mg/kg, GRO: 500 mg/kg, and benzene: 0.2 mg/kg. Sampling results for all other analytes were found below the approved cleanup levels. In October 1997, eight (8) soil borings were advanced and four (4) were completed as monitoring wells. Installation and sampling of the wells were documented in the Remedial Investigation Report, dated March 1998. Groundwater sample results found the highest concentrations detected were DRO: 2.8 milligrams per liter (mg/L), GRO: 1.2 mg/L, and toluene: 0.33 mg/L. In 2006, one (1) additional monitoring well was installed. This well, along with three (3) of the previously installed wells were sampled during two (2) separate sampling events. The first event occurred in August 2006, with the only exceedence

FAA JUNEAU STATION (Continued) **S107504829**

noted was DRO of 2.5 mg/L in MW-A10. In the November 2006 sampling event, the DRO concentration in this well was below the cleanup level, however, the GRO result was 6.3 mg/L and the benzene result was 1,610 micrograms per liter (&181;g/L), exceeding the cleanup levels of 1.3 mg/L and 5 &181;g/L, respectively. Exceedences were also noted in MW-A18 in November 2006 with a GRO result of 2 mg/L and a benzene result of 499 &181;g/L. Additional characterization of the soil and groundwater in this area may be warranted in order to determine the source of the GRO and benzene contamination. However, it would be prudent to first collect another round of groundwater sampling to determine if these concentrations are consistent or were potentially a result of cross-contamination. Unless a sound basis can be found to explain these anomalous results, the department will require further action at this site.

Action Date: 8/27/2007
Action: Update or Other Action
DEC Staff: Anne Marie Palmieri
Action Description: Building 602 Drum Storage: Drums of various types of fuel and materials have been stored in this area. Ten (10) soil samples were collected around Building 602 from depths of 6-12??? bgs. Groundwater was found at depths of 3-13??? bgs. All of the samples were analyzed for GRO, DRO, RRO, VOC, metals, and polychlorinated biphenyls (PCBs), and half were analyzed for PAHs. Low levels of DRO were found in eight (8) samples, however only one (1) sample result of 240 mg/kg exceeded the cleanup levels. No other analytes were found at concentrations exceeding their respective cleanup levels with the exception of an arsenic result of 3.8 mg/kg, which is likely to be naturally-occurring. Only one (1) sample result of one (1) contaminant of concern was found to be slightly exceeding the approved cleanup levels. This small volume of low-level contamination is not believed to pose an unacceptable risk to human health and the environment. Therefore, no additional characterization or cleanup actions are warranted at this area.

Action Date: 8/27/2007
Action: Update or Other Action
DEC Staff: Anne Marie Palmieri
Action Description: SFO Emergency Generator: A 10-gallon aboveground storage tank (AST) was formerly housed on a concrete pad and used to provide gasoline to a former engine generator. Stained soil had been noted in this area previously, however was not observed during the 2006 fieldwork nor was the grass in the area stressed. Six (6) samples were collected from depths of 12??? bgs around the perimeter of the pad and analyzed for DRO, GRO, RRO, VOCs, with one (1) sampled for PAHs, and four (4) for lead. All of the sample results were non-detect with the exception of one DRO result of 169 mg/kg, one RRO result of 598 mg/kg, and the four (4) lead sample results with the highest concentration detected of 5.97 mg/kg. No contaminants of concern were found to be present at levels exceeding the approved cleanup levels. Therefore, no additional characterization or cleanup actions are warranted at this area.

Action Date: 8/27/2007
Action: Update or Other Action
DEC Staff: Anne Marie Palmieri
Action Description: FSS Former Emergency Generator: A concrete pad is present at the FSS

FAA JUNEAU STATION (Continued) **S107504829**

where an emergency generator used to stand. Spills of both fuel and antifreeze were believed to have occurred here and no previous investigations had been conducted. Four (4) soil samples were collected and analyzed for DRO, GRO, RRO, VOCs, PAH, and glycol. Sample results for all analytes were non-detect, except for DRO. DRO was found in two (2) sample locations; on the north side, at 214 mg/kg at 2??? bgs and 1,300 mg/kg at 13??? bgs, and on the west side, at 1,670 mg/kg at 12??? bgs with a sample duplicate of 406 mg/kg. The contaminated soil present adjacent to the concrete pad likely extends below the pad. The department concurs with allowing the contaminated soil to remain in place until the pad is removed at some undetermined time in the future. The concentrations of DRO are below the ingestion-based and inhalation-based pathway cleanup levels and thus do no present an unacceptable risk to workers in the area. Groundwater in the area is not used for drinking water. When the pad is removed, the contaminated soil will need to be sampled and cleaned up appropriately. This area is considered conditionally closed.

Action Date: 8/27/2007
Action: Update or Other Action
DEC Staff: Anne Marie Palmieri
Action Description: Satellite Dish 1 Pad: The contaminated soil present adjacent to the concrete pad likely extends below the pad and cannot be removed without compromising the pad and interrupting service of the satellite dish which rests on it. Additional soil or groundwater investigation is not possible as the Juneau Facility station manager has stated that vibrations from a drill rig might interfere with signal reception. The FAA has stated that additional work is not possible until the dish is relocated at some undetermined future time due to national airspace security reasons. The department concurs with allowing the contaminated soil to remain in place until the pad is removed. The concentrations of DRO are below the ingestion-based and inhalation-based pathway cleanup levels and thus do no present an unacceptable risk to workers in the area. Groundwater in the area is not used for drinking water. When the pad is removed, the contaminated soil will need to be sampled and cleaned up appropriately. This area is considered conditionally closed.

Action Date: 8/16/1993
Action: Preliminary Assessment Approved
DEC Staff: No Longer Assigned
Action Description: NFRAP planned, once placed on federal docket.

Action Date: 7/19/1994
Action: Update or Other Action
DEC Staff: No Longer Assigned
Action Description: (Old R:Base Action Code = RAPR - Remedial Action Plan Review (CS)). Restoration Plan submitted by RP contractor details site investigation, sampling plan and interim cleanup. Non-regulated UST.

Action Date: 7/12/2010
Action: Site Characterization Workplan Approved
DEC Staff: Melody Debenham
Action Description: Approved the Final Site Remediation Work Plan for Federal Aviation Administration (FAA) Remote Communications Outlet/Radio Transmit Receive (RCO/RTR) Site, Juneau, Alaska. The FAA is decommissioning the RCO/RTR site and removing all associated infrastructure. Known

FAA JUNEAU STATION (Continued) **S107504829**

petroleum contamination is present beneath the engine generator building at this site, associated with a former underground storage tank removed in 1997. This work plan describes field activities associated with removing the remaining contamination at the engine generator building, and sampling and decommissioning the 3 existing groundwater monitoring wells.

Action Date: 7/12/2006
Action: Site Characterization Workplan Approved
DEC Staff: Mike Jaynes
Action Description: Site characterization workplan for investigations at Building 300 tank, Building 602 drum storage area, concrete pad at the Sector Field Office, and the satellite pad at the Flight Service Station. (action entry by Palmieri)

Action Date: 6/30/2008
Action: Spill Transferred from Prevention Preparedness and Response Program
DEC Staff: Mitzi Read
Action Description: Site transferred by PERP staff Scot Tiernan. Spill date = 12/7/06; spill no. 06119934102; PERP file no. 1513.02.312; substance = diesel; quantity = ~250 gallons. Description: A 275 gallon heating oil tank was struck by falling ice and/or snow and the fuel line from the tank was severed. The tank had just been filled and an estimated 250 gallons were lost in the incident. Local FAA responded to this incident and conducted an initial cleanup. The FAA was planning on doing a site assessment and additional cleanup as necessary in 2007, but the project funding was delayed until at least 2009.

Action Date: 6/23/2015
Action: Report or Workplan Review - Other
DEC Staff: Melody Debenham
Action Description: Received draft work plan describing petroleum contaminated soil removal and groundwater sampling at the Juneau Sector Field Office yard.

Action Date: 5/14/1998
Action: Site Ranked Using the AHRM
DEC Staff: Eileen Olson
Action Description: Initial ranking.

Action Date: 4/27/2018
Action: Update or Other Action
DEC Staff: Danielle Duncan
Action Description: Sent an update on the site needs this date.

Action Date: 4/1/2011
Action: Final Cleanup Report Reviewed
DEC Staff: Melody Debenham
Action Description: Approved the Final Site Remediation Report for FAA Remote Communications Outlet/Ratio Transmit Receive. The FAA decommissioned the RCO/RTR site and removed all associated infrastructure in August 2010. As part of the decommissioning activities, formerly inaccessible petroleum contaminated soil associated with an underground storage tank removed in 1997 was excavated and sent to Columbia Ridge Landfill in Arlington, Oregon for disposal. Three on-site groundwater monitoring wells were sampled, then decommissioned. All soil confirmation sample results and groundwater

FAA JUNEAU STATION (Continued) **S107504829**

sample results were below applicable cleanup levels.

Action Date: 4/1/2011
Action: Conceptual Site Model Submitted
DEC Staff: Melody Debenham
Action Description: A conceptual site model was submitted as part of the Final Site Remediation Report for FAA Remote Communications Outlet/Radio Transmit Receive Site. No complete pathways are identified in the CSM because all petroleum contaminated soils were removed.

Action Date: 3/28/2007
Action: Update or Other Action
DEC Staff: Anne Marie Palmieri
Action Description: Staff reviewed site file and determined that several unregulated tanks decommissioned in 1992 and 1996 could be closed. A letter was sent to the FAA dated 3/28/06 covering Tanks: 39-A-1 and 39-A-3; regulated Tanks 39-A2, 39-E-1, 39-D-1, and 39-B-1 were also closed in this letter but are tracked on the LUST database.

Action Date: 3/28/2007
Action: Cleanup Level(s) Approved
DEC Staff: Anne Marie Palmieri
Action Description: Method 2 cleanup levels approved: 18 AAC 75.341, Tables B1 and B2 for the over 40-inches of precipitation climate zone for the most stringent risk based exposure pathway, specifically, diesel-range organics (DRO): 230 milligrams per kilogram (mg/kg), gasoline-range organics (GRO): 260 mg/kg, residual-range organics (RRO): 8300 mg/kg, benzene: 0.02 mg/kg, ethylbenzene: 5 mg/kg, toluene: 4.8 mg/kg, xylenes: 69 mg/kg and lead: 400 mg/kg.

Action Date: 3/28/2007
Action: Update or Other Action
DEC Staff: Anne Marie Palmieri
Action Description: Tank 39-A-3: This 500 gallon underground storage tank was used for heating oil at Building 302 at the SFO. The tank was removed in June 1997, as documented in the Decommissioning Assessment Report dated November 1997. Three (3) cubic yards of petroleum contaminated soil was removed and sent to a disposal facility in Washington state. Three (3) confirmation samples were collected from the limits of the excavation at depths ranging from 5-8.5 feet bgs and analyzed for DRO, GRO, and BTEX. The highest concentrations detected were DRO: 52 mg/kg, toluene: 0.02 mg/kg, xylenes: 0.02 mg/kg with GRO, benzene and ethylbenzene all non-detect. All analytical results were below DEC???s method two cleanup levels. Site closure is approved for this tank site.

Action Date: 3/28/2007
Action: Update or Other Action
DEC Staff: Anne Marie Palmieri
Action Description: Tank 39-A-1: This 1000 gallon underground storage tank was used for heating oil at Building 200, a former office and storage building at the SFO. The tank was removed in April 1992, as documented in the Decommissioning Assessment Report, dated 1992. Twenty-five (25) cubic yards of petroleum contaminated soil was removed and sent to Channel Sanitation in Juneau for thermal treatment. Five (5) confirmation samples were collected from the limits of the excavation at depths of 5-6 feet below ground surface (bgs) and analyzed for extractable

FAA JUNEAU STATION (Continued) **S107504829**

petroleum hydrocarbons using the State of Washington analytical methods which are comparable with the DRO range as defined by DEC. All analytical results were non-detect; thus, DEC???s method two cleanup levels were met. Site closure is approved for this tank site.

Action Date: 3/24/2007
Action: Exposure Tracking Model Ranking
DEC Staff: Anne Marie Palmieri
Action Description: Not reported

Action Date: 12/7/2007
Action: Update or Other Action
DEC Staff: Anne Marie Palmieri
Action Description: Fuel spill occurred at the Juneau Sector Field Office when ice came off the roof of the building. 250 gallons of fuel was released.

Action Date: 12/30/1994
Action: Site Number Identifier Changed
DEC Staff: No Longer Assigned
Action Description: Changed workplan to reflect non-regulated UST site; site also encompasses multiple contamination issues.

Action Date: 12/29/1994
Action: Site Added to Database
DEC Staff: No Longer Assigned
Action Description: Federal UST, not regulated by DEC.

Action Date: 12/13/2016
Action: Report or Workplan Review - Other
DEC Staff: Melody Debenham
Action Description: Received final Contaminated Soil Removal and Groundwater Sampling Report for the Juneau Sector Field Office Yard.

Action Date: 1/6/2012
Action: Report or Workplan Review - Other
DEC Staff: Melody Debenham
Action Description: Approved the technical memorandum describing the hydrologic study at the Juneau Sector Field Office from November 2010 to November 2011.

Action Date: 1/25/2010
Action: Report or Workplan Review - Other
DEC Staff: Melody Debenham
Action Description: Received Technical Memorandum summarizing November 2009 groundwater sampling from 3 wells on site. Groundwater samples were analyzed for GRO, DRO, RRO, and BTEX. Benzene is the only compound reported above the cleanup level, at 11.1 ug/L in MW-A18 and 7.41 ug/L in MW-A10.

Action Date: 1/14/2010
Action: Site Characterization Workplan Approved
DEC Staff: Melody Debenham
Action Description: Approved work plan dated November 2009 for (1) characterizing the horizontal and lateral extent of soil contamination resulting from the heating oil release from the AST at the Maintenance Shop and (2) two rounds of groundwater monitoring for DRO, GRO, and BTEX near the former UST at Shop Building 300.

FAA JUNEAU STATION (Continued) **S107504829**

Contaminants:
Staff: Danielle Duncan, 9074655207 danielle.duncan@alaska.gov

Contaminate Name1: FAA Juneau Station
Contaminate Level Description1: Not reported
Contaminate Media1: Not reported

Control Type: Not reported
Control Details Description1: Not reported
Contaminant CTD: Not reported
Contaminant CDR: Not reported
Comments: Not reported

H15 **DOUGLAS TRUCKING INC.** **AK LUST U003330829**
8400 AIRPORT BLVD **AK UST N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Site 1 of 7 in cluster H

Relative: Higher
Actual: 38 ft.

LUST:
Facility Name: DOUGLAS TRUCKING
Facility Status: Cleanup Complete
Record Key: 1992110010801
File ID: 1513.26.037
Oname: Douglas Trucking Inc.
Lat/Lon: 58.35950 -134.5697
Lust Event ID: 1983
CS or Lust: LUST
Borough: Juneau
Staff: No Longer Assigned
Site Type: Unknown
Horizontal Datum: WGS84

UST:
Facility ID: 1266
Facility Type: Truck/Transporter
Owner ID: 370
Owner Name: Douglas Trucking Inc.
Owner Address: P.O. Box 32238
Owner City,St,Zip: Juneau, AK 99803

Tank ID: 1
Tank Status: Permanently Out of Use
Tack Capacity: 1000
Tank Product: Gasoline
Installed Date: 03/24/1982
Regulated Tank: Yes

Tank ID: 2
Tank Status: Permanently Out of Use
Tack Capacity: 1000
Tank Product: Diesel
Installed Date: 03/24/1982
Regulated Tank: Yes

F16 **CHANNEL FLYING JUNEAU AIRPORT** **AK SHWS** **S117849292**
8995 YANDUKIN DRIVE, JUNEAU AIRPORT **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Site 2 of 4 in cluster F

Relative:
Higher

Actual:
23 ft.

SHWS:

File Number:	1513.38.095
Staff:	Amy Rodman, 9074655368 amy.rodman@alaska.gov
Facility Status:	Active
Latitude:	58.358614
Longitude:	-134.579898
Hazard ID:	26362
Problem:	On July 25, 2014 petroleum-contaminated soil was discovered during activities for an airport ramp paving project in front of a 20-foot shipping container housing a used oil heat recovery burner and tank. The shipping container and underlying property is located immediately adjacent to, and the contamination spread from, the privately-owned source property onto property owned by the Juneau International Airport. Cleanup of the airport property was pursued but groundwater was found to be impacted and confirmation samples were at levels above DEC cleanup. 40 super sacks of contaminated soil were excavated and scheduled to be shipped for treatment and disposal on or about December 8, 2014. A monitoring well was installed at or near the property line adjoining the two properties. Characterization sampling found petroleum compounds in soil and groundwater and metals in soil above DEC cleanup levels. The area where contamination was found has been in active use by various airlines since at least the 1960s and perhaps earlier.On May 12, 2015 petroleum-contaminated soil was again discovered during additional construction activities approximately 140 feet east of the used oil burner and tank. Samples confirmed the presence of diesel range organics above DEC cleanup levels in surface and subsurface soil. Approximately 25 super sacks of contaminated soil were excavated and shipped for treatment and disposal.

Actions:

Action Date:	8/21/2015
Action:	Exposure Tracking Model Ranking
DEC Staff:	Mitzi Read
Action Description:	Initial ranking with ETM completed for source area id: 79807 name: Petroleum Contamination ~140 Ft E of Used Oil Burner
Action Date:	7/30/2015
Action:	Potentially Responsible Party/State Interest Letter
DEC Staff:	Mitzi Read
Action Description:	Potentially Responsible Party / State Interest Letter for spill no. 15119913201 sent to Channel Flying, Inc. by PERP staff Kayley Moen.
Action Date:	7/30/2015
Action:	Spill Transferred from Prevention Preparedness and Response Program
DEC Staff:	Mitzi Read
Action Description:	Spill transferred by PERP staff Kayley Moen. Spill no. 15119913201; spill date = 5/12/15; substance = unknown petroleum; quantity = unknown; suspected source used oil tank and burner in connex ~140 feet from location where contamination was discovered; possibly related to spill no. 14119920601.
Action Date:	7/28/2014
Action:	Potentially Responsible Party/State Interest Letter
DEC Staff:	Mitzi Read

CHANNEL FLYING JUNEAU AIRPORT (Continued) **S117849292**

Action Description:	Potentially Responsible Party / State Interest Letter for spill no. 14119920601 sent to City and Borough of Juneau, Juneau International Airport by PERP staff Bob Mattson.
Action Date:	7/28/2014
Action:	Potentially Responsible Party/State Interest Letter
DEC Staff:	Mitzi Read
Action Description:	Potentially Responsible Party / State Interest Letter for spill no. 14119920601 sent to Channel Flying, Inc. by PERP staff Bob Mattson.
Action Date:	6/28/2017
Action:	Exposure Tracking Model Ranking
DEC Staff:	Amy Rodman
Action Description:	Updated ETM for source area id: 79745 name: Waste Oil Burner
Action Date:	6/28/2017
Action:	Exposure Tracking Model Ranking
DEC Staff:	Amy Rodman
Action Description:	updated ETM for source area id: 79807 name: Petroleum Contamination ~140 Ft E of Used Oil Burner
Action Date:	5/14/2015
Action:	Potentially Responsible Party/State Interest Letter
DEC Staff:	Mitzi Read
Action Description:	Potentially Responsible Party / State Interest Letter for spill no. 15119913201 sent to City and Borough of Juneau, Juneau International Airport by PERP staff Kayley Moen.
Action Date:	3/17/2015
Action:	Site Added to Database
DEC Staff:	Mitzi Read
Action Description:	A new site has been added to the database
Action Date:	3/17/2015
Action:	Exposure Tracking Model Ranking
DEC Staff:	Mitzi Read
Action Description:	Initial ranking with ETM completed for source area id: 79745 name: Waste Oil Burner
Action Date:	2/23/2015
Action:	Spill Transferred from Prevention Preparedness and Response Program
DEC Staff:	Mitzi Read
Action Description:	Spill transferred by PERP staff Bob Mattson. Spill no. 14119920601; spill date = 7/25/14; substance = waste oil; quantity = ~15 gallons; source = handling practices associated with waste oil management and transfers for a used oil burner used to heat an airplane hangar.
Action Date:	11/30/2015
Action:	Update or Other Action
DEC Staff:	Christy Howard
Action Description:	Provided written authorization to Scott Rinkenberger at CBJ to continue the resurfacing project that included paving over the entire site where contamination was discovered on May 12, 2015. Soil investigation and cleanup included excavation and disposal of approximately 25yards of contaminated soil. Sub-surface contamination remains. The remaining detected concentrations of DRO are below the ADEC Method Two Soil Cleanup levels for ingestion and inhalation but

CHANNEL FLYING JUNEAU AIRPORT (Continued) **S117849292**

exceed the ADEC Method Two Soil Cleanup Levels for migration to groundwater. If the soil becomes accessible, the soil must be evaluated and contamination addressed in accordance with an ADEC approved work plan.

Contaminants:

Staff:	Amy Rodman, 9074655368 amy.rodman@alaska.gov
Contaminate Name1:	Channel Flying Juneau Airport
Contaminate Level Description1:	Not reported
Contaminate Media1:	Not reported
Control Type:	Not reported
Control Details Description1:	Not reported
Contaminant CTD:	Not reported
Contaminant CDR:	Not reported
Comments:	Not reported

C17 **CBJ GLACIER VALLEY FIRE STATION** **AK SHWS** **S109255392**
1700 CREST DRIVE **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Site 2 of 3 in cluster C

Relative: Higher
Actual: 29 ft.

SHWS:

File Number:	1513.26.065
Staff:	Not reported
Facility Status:	Cleanup Complete
Latitude:	58.357773
Longitude:	-134.573368
Hazard ID:	25160
Problem:	Concentrations of 3,670 parts per million (ppm) diesel range organics (DRO) and 112 ppm gasoline range organics (GRO) remain in soil 11 feet below ground surface along the west property boundary adjacent to buried utilities. Subsurface soil was not tested for polycyclic aromatic hydrocarbons (PAHs); but for benzene, toluene, ethylbenzene, and xylenes (BTEX) compound indicators instead. Minimal detections of BTEX compounds indicate that the exposure potential for ecoreceptors is not unacceptable.

Actions:

Action Date:	9/3/2003
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	Letter requesting Release Investigation and Corrective Action Plan sent to Responsible Party.
Action Date:	9/15/2004
Action:	Release Investigation
DEC Staff:	Bruce Wanstall
Action Description:	Site Assessment Report of additional subsurface soil removal from the former UST site; contamination screening began six feet below ground surface (BGS) and continued down to groundwater at about 12 feet BGS. 345 tons of contaminated material were excavated, transported offsite, and remediated.
Action Date:	8/20/2007

CBJ GLACIER VALLEY FIRE STATION (Continued) **S109255392**

Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	Develop a priority site list for CBJ Engineering and request ground water investigation at each of six leaking underground storage tank sites
Action Date:	7/14/2006
Action:	Report or Workplan Review - Other
DEC Staff:	Bruce Wanstall
Action Description:	Corrective Action Report Approval letter with request for additional site monitoring drafted and sent to the RP.
Action Date:	6/25/2004
Action:	Leaking Underground Storage Tank Cleanup Initiated - Petroleum
DEC Staff:	Bruce Wanstall
Action Description:	CBJ contracted to excavate, remove and remediate petroleum-contaminated soil left in place following closure of USTs in 1999. After six feet of overburden was removed and segregated for backfill, soil removal widened in depth and breadth from the previous excavation limits. 345 tons of material was transported for off-site remediation and limits of contamination were not found.
Action Date:	6/2/2004
Action:	Leaking Underground Storage Tank Corrective Action Underway
DEC Staff:	Bruce Wanstall
Action Description:	Corrective Action Plan approved by staff.
Action Date:	5/8/2002
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	Notice of Intent to Cost Recover sent to CBJ
Action Date:	3/27/2003
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	File review for site status. Request for additional Site Assessment sent to RP by email.
Action Date:	3/20/2002
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	Project Manager changed from Janes to Wanstall.
Action Date:	3/10/2006
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	Report review to determine the nature and quantity of contaminated material underlying the water main utility corridor on the west perimeter of the UST excavation pit for conditional closure consideration.
Action Date:	12/20/2004
Action:	Leaking Underground Storage Tank Corrective Action Underway
DEC Staff:	Bruce Wanstall
Action Description:	A total 445 tons of contaminated soil has been removed; additional contaminated material was removed from the subsurface soil layer extending outward to the east and south from the former fuel transfer

CBJ GLACIER VALLEY FIRE STATION (Continued) **S109255392**

building site. The limits of oily soil were found except beneath the water main along the west side of the excavation following it south where soil removal would threaten the integrity of the structure. Concentrations of DRO along the utility corridor ranged from 241 mg/kg to 3,670 mg/kg and extended from 11 feet to15 feet below ground surface (BGS).

Action Date: 10/31/2014
Action: Exposure Tracking Model Ranking
DEC Staff: Bruce Wanstall
Action Description: A new updated ranking with ETM has been completed for source area 77878 Underground Storage Tanks.

Action Date: 10/22/1999
Action: Site Added to Database
DEC Staff: * Not Assigned
Action Description: Not reported

Action Date: 10/2/2001
Action: Update or Other Action
DEC Staff: Cynthia Pring-Ham
Action Description: Changed Project Manager from Paul Horwath to Bill Janes

Action Date: 10/11/2007
Action: Exposure Tracking Model Ranking
DEC Staff: Bruce Wanstall
Action Description: Review reports for status evaluation using the environmental tracking module for the UST fuel subsurface release on property located adjacent to the Juneau International Airport.

Action Date: 1/29/2009
Action: Record of Decision
DEC Staff: Bruce Wanstall
Action Description: The cleanup actions to date have served to excavate and adequately remove contaminated soil from the site. Based on the information available, ADEC has determined no further assessment or cleanup action is required. Although a Corrective Action Complete determination has been granted, ADEC approval is required for off-site soil or groundwater disposal in accordance with 18 AAC 78.600(h). It should be noted that movement or use of potentially contaminated soil or groundwater in a manner that results in a violation of 18 AAC 70 water quality standards is unlawful.

Action Date: 1/29/2009
Action: Cleanup Complete Determination Issued
DEC Staff: Bruce Wanstall
Action Description: ADEC reviewed site assessment data on the Glacier Valley Fire Station facility located at 1700 Crest Drive in Juneau. Based on the information provided to date, it has been determined that the contaminant concentrations remaining on site do not pose an unacceptable risk to human health or the environment and no further remedial action will be required.

Action Date: 1/28/2009
Action: Site Characterization Report Approved
DEC Staff: Bruce Wanstall
Action Description: The concentrations of hydrocarbon fractions (GRO & DRO) and volatile

CBJ GLACIER VALLEY FIRE STATION (Continued) **S109255392**

petroleum compounds (BTEX) were each below the applicable migration to groundwater soil cleanup levels with the exception of one sample from the north side of the UST excavation. CL08 with DRO at 5,580 mg/kg represents a small pocket of contamination under the paved area just inside the JIA gated entrance. Residual soil under the utility line was characterized by analysis of three soil samples for GRO, DRO and BTEX compounds. Concentrations of each of the BTEX compounds was below Table B1 migration to ground water cleanup levels, indicating low potential for contamination to migrate to nearby surface water. A soil sample collected in 1999 at the buried water main had concentrations of DRO at 3,800 mg/kg and GRO at 540 mg/kg. Where additional removal occurred in 2004 further south along the buried water main, two more soil samples were collected for analysis. Soil sample CL01 had DRO at 241 mg/kg and GRO at 41 mg/kg; sample CL02 had DRO at 605 mg/kg and GRO at 39 mg/kg. The residual contamination smear zone lens in the utility corridor appears to be a meter wide and thick over a length of 20 meters.See attached map documents to view the orientation of this residual subsurface soil contamination.

Action Date: 1/27/2009
Action: Exposure Tracking Model Ranking
DEC Staff: Bruce Wanstall
Action Description: A new updated ranking with ETM has been completed for source area 77878 Underground Storage Tanks. The complete human exposure pathways to surface and subsurface petroleum contamination at this site include dermal contact and ingestion of soil particles, inhalation of ambient air. The outdoor inhalation and dermal contact/ingestion exposure risk is not unacceptable as the residual soil remains only below ground surface. The migration to ground and surface water exposure risk is not unacceptable because neither groundwater and nor surface water are potable near this marine estuary. Potable water at the facility and in the area is supplied by the City and Borough of Juneau. The close hydrological connection between groundwater and Jordan Creek is a complete pathway to surface water and ecological receptors. Based on Site Assessment data, the migration of residual petroleum contamination from the site does not pose an unacceptable risk of exceeding 18 AAC 70 Water Quality standards.

I18 **HALS BODY SHOP** **RCRA NonGen / NLR** **1001085225**
1990 ALPINE AVE **FINDS** **AKR000000919**
< 1/8 **JUNEAU, AK 99801** **ECHO**
1 ft.

Site 1 of 3 in cluster I

Relative: Higher
Actual: 35 ft.

RCRA NonGen / NLR:
Date form received by agency: 03/14/1996
Facility name: HALS BODY SHOP
Facility address: 1990 ALPINE AVE
JUNEAU, AK 99803
EPA ID: AKR000000919
Mailing address: PO BOX 32177
JUNEAU, AK 99803-2177
Contact: STEVE SEWILL
Contact address: PO BOX 32177
JUNEAU, AK 99803-2177
Contact country: US
Contact telephone: 907-789-0268

HALS BODY SHOP (Continued) **1001085225**

Contact email: Not reported
EPA Region: 10
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: STEVE ALWINE
Owner/operator address: 8725 MALLARD ST
JUNEAU, AK 99801
Owner/operator country: Not reported
Owner/operator telephone: 907-789-1386
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: NONE
. Waste name: None

Violation Status: No violations found

FINDS:

Registry ID: 110003038533

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

HALS BODY SHOP (Continued) **1001085225**

ECHO:
Envid: 1001085225
Registry ID: 110003038533
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110003038533

C19 **GLACIER FIRE STATION** **AK UST** **U003140262**
1700 CREST DR **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Site 3 of 3 in cluster C

Relative: Higher
Actual: 29 ft.

UST:
Facility ID: 2167
Facility Type: Unknown
Owner ID: 228
Owner Name: City & Borough of Juneau
Owner Address: Attn: Accounts Payable
Owner City,St,Zip: Juneau, AK 99801

Tank ID: 1
Tank Status: Permanently Out of Use
Tack Capacity: 1000
Tank Product: Gasoline
Installed Date: 01/01/1980
Regulated Tank: Yes

Tank ID: 2
Tank Status: Permanently Out of Use
Tack Capacity: 1000
Tank Product: Diesel
Installed Date: 01/01/1980
Regulated Tank: Yes

Tank ID: 3
Tank Status: Permanently Out of Use
Tack Capacity: 1500
Tank Product: Diesel
Installed Date: 01/01/1980
Regulated Tank: Yes

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20 **HALS BODY SHOP** **AK UST** **U003141425**
P. O. BOX 2177, 1990 ALPINE AVE **N/A**
< 1/8 **JUNEAU, AK 99803**
1 ft.

Relative: Higher
Actual: 44 ft.

UST:
Facility ID: 944
Facility Type: Unknown
Owner ID: 1066
Owner Name: Steve R. Sewill
Owner Address: P.O. Box 2177
Owner City,St,Zip: Juneau, AK 99803

Tank ID: 1

HALS BODY SHOP (Continued) **U003141425**

Tank Status:	**Permanently Out of Use**
Tack Capacity:	500
Tank Product:	Gasoline
Installed Date:	Not reported
Regulated Tank:	Yes

J21 **FORMER CAPITAL CITY CLEANERS NUGGET MALL** **AK SHWS** **S118659598**
2092 JORDAN AVE. SUITE 595 NUGGET MALL **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Site 1 of 4 in cluster J

Relative: Higher
Actual: 41 ft.

SHWS:

File Number:	1513.38.099
Staff:	Danielle Duncan, 9074655207 danielle.duncan@alaska.gov
Facility Status:	Active
Latitude:	58.362145
Longitude:	-134.578967
Hazard ID:	26537
Problem:	Phase I Environmental Site Assessment studies were conducted at the Site in 1996, 2004, and 2015. Smith, Bayliss LeResche (SBL) performed the 1996 and 2004 Phase I studies. BothSBL Phase I Studies reported finding no Recognized Environmental Concern (REC) associatedwith the Site and did not recommend any further action. In 2003, SBL collected concrete samples from within the building. Laboratory analysis of the samples showed concentrations PCE and TCE above ADEC Method II Cleanup levels for migration to groundwater, but did not exceed ADEC Method II inhalation standards. In January 2016, during a Phase II Subsurface Investigation at the former location of Capital City Cleaners in the Nugget Mall, sub-slab soil gas samples confirmed the presence of volatile organic compounds: PCE, TCE, and 1,2-DCE above ADEC target levels for commercial sub-slab soil gas. April 2016: Nortech June 2016 Site Assessment Report: A vapor intrusion investigation including air sampling found no TCE or PCE in indoor air. Soil and groundwater samples from the east side of the building are contaminated with PCE and 1,2-DCE above ADEC cleanup levels. The investigation continues. October 2016: An assessment/characterization was completed by Environmental Resource Group and a soil vapor extraction system was installed to mitigate the potential for vapor intrusion. February 2017: The soil vapor extraction system is having a positive effect on soil vapor and will remain running. No indoor air issues have been detected.

Actions:

Action Date:	9/29/2016
Action:	Site Characterization Workplan Approved
DEC Staff:	Danielle Duncan
Action Description:	Received a copy of the work plan submitted by ERG on 9/27/16 and approved this date. The plan outlines soil gas, indoor and outdoor air, sub-slab, soil, and groundwater sampling for CVOCs and VOCs.
Action Date:	9/16/2016
Action:	Update or Other Action
DEC Staff:	Danielle Duncan
Action Description:	Rec'd a phone call from an environmental consultant and discussed further air testing and potentially soil gas sampling on site.
Action Date:	8/9/2018

FORMER CAPITAL CITY CLEANERS NUGGET MALL (Continued) **S118659598**

Action:	Potentially Responsible Party/State Interest Letter
DEC Staff:	Danielle Duncan
Action Description:	Sent PRP letter today to Columbia Pacific Advisors as they have received the property.
Action Date:	8/3/2018
Action:	Update or Other Action
DEC Staff:	Danielle Duncan
Action Description:	The property transfer to Columbia Pacific Advisors should be final in 30 days.
Action Date:	8/16/2017
Action:	Update or Other Action
DEC Staff:	Danielle Duncan
Action Description:	The following tasks are proposed to be completed in the first/second weeks of September at the Nugget Mall:??? Indoor air sampling in the four suites as before.??? Grab GW sampling as outlined in the work plan submitted in March 2017.??? The 11 soil vapor wells will be sampled.??? GW monitoring of the 3 monitoring wells.??? Soil gas will be collected from sub-slabs SS1 through SS8 and SS13. In addition, we will submit a comprehensive report that will include the SVE system installation and startup, O&M history, analytical results, and status history.
Action Date:	6/9/2016
Action:	Report or Workplan Review - Other
DEC Staff:	Danielle Duncan
Action Description:	Rec'd the completed Site Assessment Report this date.
Action Date:	6/23/2016
Action:	Site Characterization Report Approved
DEC Staff:	Danielle Duncan
Action Description:	Sent report approval letter this date for Site Assessment Report 2092 Jordan Ave Building Suite 595 Nugget Mall. Indoor air was sampled and no PCE or TCE was detected in the air. Soil boring and groundwater samples indicated both were contaminated with dry cleaning solvent. A soil sample collected from outside the building the near the former location of the dry cleaning machine had a PCE concentration of 0.106 mg/kg which is above the ADEC cleanup level for migration to groundwater of 0.024 mg/kg. This value (0.106), although it is below the direct contact cleanup level for PCE of 21 mg/kg, it is 5 times higher than the cleanup level for migration to groundwater indicating a significant source of PCE in the soil. The groundwater monitoring well in the same location had a 1,2-DCE concentration of 0.0792 mg/L which is greater than the cleanup level of 0.07 mg/L. 1,2-DCE is a breakdown product of both PCE and TCE. This same well also had detections of PCE, TCE, toluene, and trans-1,2-DCE that were below ADEC cleanup levels. The contamination appears to be located on the east side of the building where the dry cleaning machine was located.
Action Date:	5/19/2016
Action:	Report or Workplan Review - Other
DEC Staff:	Danielle Duncan
Action Description:	Rec'd the Indoor Air Quality Testing report this date, preliminary, no lab data provided, but no detections of PCE or TCE in indoor air.
Action Date:	4/8/2016

FORMER CAPITAL CITY CLEANERS NUGGET MALL (Continued) **S118659598**

Action:	Potentially Responsible Party/State Interest Letter
DEC Staff:	Danielle Duncan
Action Description:	Sent certified 7014 2120 0001 4209 6670
Action Date:	4/8/2016
Action:	Report or Workplan Review - Other
DEC Staff:	Danielle Duncan
Action Description:	Rec'd Nortech's work plan to conduct air and groundwater sampling yesterday and conditionally approved it today. Added that the ADEC vapor intrusion guidance documents be followed to allow the ADEC and HHS to determine the level of potential risk due to PCE and TCE vapor intrusion.
Action Date:	4/7/2016
Action:	Site Added to Database
DEC Staff:	Mitzi Read
Action Description:	A new site has been added to the database
Action Date:	4/7/2016
Action:	Exposure Tracking Model Ranking
DEC Staff:	Mitzi Read
Action Description:	Initial ranking with ETM completed for source area id: 79898 name: Former Capital City Cleaners Nugget Mall
Action Date:	4/4/2016
Action:	Spill Transferred from Prevention Preparedness and Response Program
DEC Staff:	Mitzi Read
Action Description:	Spill transferred by PPRP staff Allison Natcher. Spill no. 16119903303; spill date = 2/2/16; substances = tetrachloroethylene, trichloroethylene, cis-1,2 dichloroethylene; quantity = unknown.
Action Date:	4/20/2016
Action:	Update or Other Action
DEC Staff:	Danielle Duncan
Action Description:	Consultant performed the structural analysis and IAQ sampling using summa canisters . We???re expecting to see results later this week and expecting monitoring wells to be installed May 3/4.
Action Date:	3/28/2017
Action:	Site Characterization Workplan Approved
DEC Staff:	Danielle Duncan
Action Description:	Approved a work plan to collect 5 grab water samples and potentially 5 soil samples to delineate the extent of groundwater contamination.
Action Date:	2/6/2017
Action:	Update or Other Action
DEC Staff:	Danielle Duncan
Action Description:	Sent a letter today outlining future characterization and monitoring requirements.
Action Date:	2/2/2017
Action:	Update or Other Action
DEC Staff:	Danielle Duncan
Action Description:	Rec'd new soil vapor data and the SVE system appears to be having a positive effect and will remain running.
Action Date:	11/21/2016

FORMER CAPITAL CITY CLEANERS NUGGET MALL (Continued) **S118659598**

Action: Update or Other Action
DEC Staff: Danielle Duncan
Action Description: Spoke to the consultant - the soil vapor extraction system is up and running and I should have a report in the next couple weeks.

Action Date: 11/1/2017
Action: Meeting or Teleconference Held
DEC Staff: Danielle Duncan
Action Description: Have had multiple teleconferences with both the consultant and Fairbanks staff regarding the contamination and data gaps. Currently awaiting a final report. The contaminated parcel will be left out of the pending sale of the property and cleanup will continue.

Action Date: 10/21/2016
Action: Report or Workplan Review - Other
DEC Staff: Danielle Duncan
Action Description: Approved a work plan to install a soil vapor extraction system on site to remediate solvent contaminated soils on site.

Action Date: 1/26/2018
Action: Report or Workplan Review - Other
DEC Staff: Danielle Duncan
Action Description: Five borings were outfitted with polyvinyl screens and dedicated tubing and a peristaltic pump were used to collect five grab groundwater samples from one boring on the north end of the alleyway and four from south of the former dry-cleaning suite. The samples were analyzed for chlorinated VOCs. Samples were also collected from three groundwater monitoring wells (MW). Of the five grab groundwater samples, only D3 in Mallard Street had detectable contamination with cis-1,2-dichloroethene at 52 &181;g/L which is above the human health cleanup level. This data point suggests that the contamination has moved off-site towards Teal Street. The Teal Street area is commercial in nature without any known daycare facilities or residential housing. Of the three groundwater MW sampled, only MW1 located near the former footprint of the dry-cleaning machine had detectable contamination with cis-1,2-dichloroethene at 120 &181;g/L and vinyl chloride at 2.5 &181;g/L; both values are above ADEC cleanup levels. MW1 also had concentrations of trichloroethene and trans-1,2-dichloroethene below ADEC cleanup levels. Conclusions1.Chlorinated VOC contamination may have moved off-site south across Mallard Street towards Teal Street as evidenced by sample D3 collected at or near Mallard Street. Submit a work plan for further groundwater contamination plume delineation in this area. 2.Provide the ADEC with a soil vapor extraction (SVE) system update. 3.Regarding the recommendation of site-specific cleanup levels for groundwater, please note that this will require a formal risk assessment and coordination with the ADEC risk assessor.

Action Date: 1/17/2017
Action: Site Characterization Report Approved
DEC Staff: Danielle Duncan
Action Description: Approved the Remedial Investigation and Soil Vapor Extraction System Installation Report this date. Conclusions:1.Soil vapor contamination is towards Nugget Mall to the east and risks to indoor air are present at this time within the west side of Nugget Mall (JoAnne Fabrics) and Suite 595 in the annex building. 2.Groundwater contamination is following a water pipeline moving southwest instead

FORMER CAPITAL CITY CLEANERS NUGGET MALL (Continued) **S118659598**

of the direction of groundwater flow (groundwater flow is to the southeast).3.In groundwater and soil vapor, daughter products of dechlorination have been detected along the outer margins of the contamination plume.4.Screening level exceedances do not extend beyond the annex building and JoAnne Fabrics within Nugget Mall. 5.The site is currently capped with asphalt and the City of Juneau supplies municipal drinking water. There are no known drinking water wells near the site. 6.The soil contamination above ADEC cleanup levels appears to be limited to the area adjacent to the annex building. 7.Contaminated groundwater does not appear to pose a vapor intrusion risk.8.A soil vapor extraction (SVE) system has been installed and is operational. 9.No air samples have tested above screening levels.

Contaminants:

Staff:	Danielle Duncan, 9074655207 danielle.duncan@alaska.gov
Contaminate Name1:	Former Capital City Cleaners Nugget Mall
Contaminate Level Description1:	Not reported
Contaminate Media1:	Not reported
Control Type:	Not reported
Control Details Description1:	Not reported
Contaminant CTD:	Not reported
Contaminant CDR:	Not reported
Comments:	Not reported

J22 **CAPITAL CITY CLEANERS** **EDR Hist Cleaner** **1019948324**
2092 JORDAN AVE STE 595 **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Site 2 of 4 in cluster J

Relative: EDR Hist Cleaner
Higher

Actual: **41 ft.**

Year:	Name:	Type:
2002	ALASKA LAUNDRY AND DRY CLRS	Drycleaning Plants, Except Rugs, NEC
2003	ALASKA LAUNDRY AND DRY CLRS	Drycleaning Plants, Except Rugs, NEC
2004	CAPITAL CITY CLEANERS	Drycleaning Plants, Except Rugs, NEC
2005	CAPITAL CITY CLEANERS	Drycleaning Plants, Except Rugs, NEC
2006	CAPITAL CITY CLEANERS	Drycleaning Plants, Except Rugs, NEC
2007	CAPITAL CITY CLEANERS	Drycleaning Plants, Except Rugs, NEC
2008	CAPITAL CITY CLEANERS	Drycleaning Plants, Except Rugs, NEC

K23 **CBJ - LEMON CREEK LIFT STATION** **AK LUST** **S105246771**
ADJ. TO TIA INSURANCE BLDG. & THE BIKE PATH ALONG EGAN HIGHW **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Site 1 of 2 in cluster K

Relative: LUST:
Higher

Actual: **47 ft.**

Facility Name:	CBJ - LEMON CREEK LIFT STATION
Facility Status:	Cleanup Complete
Record Key:	1997110026901
File ID:	1513.26.028

CBJ - LEMON CREEK LIFT STATION (Continued) **S105246771**

Oname:	City & Borough of Juneau
Lat/Lon:	58.36059 -134.5675
Lust Event ID:	1367
CS or Lust:	LUST
Borough:	Juneau
Staff:	No Longer Assigned
Site Type:	Water/Wastewater Facility
Horizontal Datum:	WGS84

K24 **CBJ - LEMON CREEK LIFT STATION** **AK SHWS** **S109255309**
ADJ. TO TIA INSURANCE BLDG. & THE BIKE PATH ALONG EGAN HIGHW **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Site 2 of 2 in cluster K

Relative: Higher
Actual: 47 ft.

SHWS:

File Number:	1513.26.028
Staff:	Not reported
Facility Status:	Cleanup Complete
Latitude:	58.360593
Longitude:	-134.567564
Hazard ID:	24631
Problem:	A 300-gallon underground storage tank (UST) was closed by removal; 2,800 parts per million (ppm) diesel range organics (DRO) was detected in oily soil collected from beneath the tank. Contaminated material from the subsurface was returned to the excavation.

Actions:

Action Date:	9/26/1997
Action:	Site Added to Database
DEC Staff:	* Not Assigned
Action Description:	Not reported

Action Date:	9/18/2013
Action:	Cleanup Complete Determination Issued
DEC Staff:	Denise Elston
Action Description:	Based on the information available, DEC has determined no further assessment or cleanup action is required. Although moderate levels of DRO were documented in soil during 1997 environmental work, follow-up sampling in 2012 show that no contamination remains above DEC regulatory criteria. This is further verified by groundwater monitoring data which reported no evidence of contamination. There is no longer a risk to human health or the environment, and this site will be designated as closed on the Department's database.

Action Date:	8/8/2006
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	File reviewed for conditional closure and discussed with the responsible party CBJ. ADEC site inspection found no indications of residual contamination reaching nearby surface water that appear intermittently during storm events.

Action Date:	8/20/2007
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	Develop a priority site list for CBJ Engineering and request ground water investigation at each of six leaking underground storage tank

CBJ - LEMON CREEK LIFT STATION (Continued) **S109255309**

sites

Action Date: 6/7/2012
Action: Update or Other Action
DEC Staff: Kristin Thompson
Action Description: Address updated, per Bruce Wanstall.

Action Date: 6/14/2002
Action: Update or Other Action
DEC Staff: Pam Mickelson
Action Description: Received check for CBJ from Department of Law (DOL) on 6/14/02 for $1,706.89

Action Date: 5/8/2002
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: Notice of Intent to Cost Recover sent to CBJ.

Action Date: 5/5/2008
Action: Site Visit
DEC Staff: Bruce Wanstall
Action Description: ADEC site inspection found no indications of residual contamination reaching nearby surface water that appear intermittently during storm events.

Action Date: 5/3/2013
Action: Report or Workplan Review - Other
DEC Staff: Denise Elston
Action Description: Received sampling and analysis workplan from consultant prepared March 2012. This SAP had been previously approved by the last project manager and therefore approval to commence work at site has been verbally granted.

Action Date: 4/25/2007
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: Letter requesting site investigation drafted and sent to CBJ Engineering. ADEC site inspection found no indications of residual contamination reaching nearby surface water that appear intermittently during storm events.

Action Date: 4/24/2007
Action: Exposure Tracking Model Ranking
DEC Staff: Bruce Wanstall
Action Description: Initial ranking using the Exposure Tracking Model (ETM) based on Storage Tank Program Report Forms.

Action Date: 4/18/2002
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: Request for Release Investigation Report for Approved Corrective Action sent by letter to City & Borough of Juneau (CBJ) Engineering.

Action Date: 3/11/2002
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: Letter drafted to accompany letters to responsible party (RP) for

CBJ - LEMON CREEK LIFT STATION (Continued) **S109255309**

other sites having soils stockpiled at Lemon Creek gravel pit. Final Report, quantity of, date, location, and final disposition of contaminated soil needed from RP.

Action Date: 3/11/2002
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: Project Manager changed from Bill Janes to Bruce Wanstall.

Action Date: 11/9/2001
Action: Leaking Underground Storage Tank Corrective Action Underway
DEC Staff: Bruce Wanstall
Action Description: Approximately 560 cubic yards of contaminated soil at the Lemon Creek gravel pit was transported to Bicknell Asphalt Plant in Juneau and remediated by incorporation into asphalt. Contaminated soils from this site may have been included in this action.

Action Date: 11/8/2006
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: Geographic Information Systems (GIS) data added.

Action Date: 10/2/2001
Action: Update or Other Action
DEC Staff: Cynthia Pring-Ham
Action Description: Changed Project Manager from Paul Horwath to Bill Janes

Action Date: 10/11/1999
Action: Leaking Underground Storage Tank Cleanup Initiated - Petroleum
DEC Staff: * Not Assigned
Action Description: Not reported

Action Date: 1/23/2009
Action: Exposure Tracking Model Ranking
DEC Staff: Bruce Wanstall
Action Description: A new updated ranking with ETM has been completed for source area 77833 UST. Evaluation of the site using the ETM found that complete exposure pathways have low risk potential, are controlled, or are de minimis in contaminant quantity and concentration.

L25 **VALLEY LUMBER** **RCRA-CESQG** **1004670276**
8525 OLD DAIRY RD **FINDS** **AKR000002238**
< 1/8 **JUNEAU, AK 99801** **ECHO**
1 ft.

Site 1 of 3 in cluster L

Relative: **Higher**
Actual: **55 ft.**

RCRA-CESQG:
Date form received by agency: 10/24/1996
Facility name: VALLEY LUMBER
Facility address: 8525 OLD DAIRY RD
JUNEAU, AK 99801
EPA ID: AKR000002238
Mailing address: OLD DAIRY RD
JUNEAU, AK 99801
Contact: DAN GRAVES
Contact address: 8525 OLD DAIRY RD
JUNEAU, AK 99801

VALLEY LUMBER (Continued) **1004670276**

Contact country: US
Contact telephone: 907-789-7500
Contact email: Not reported
EPA Region: 10
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:
Owner/operator name: DAN GRAVES
Owner/operator address: 8525 OLD DAIRY RD
JUNEAU, AK 99801
Owner/operator country: Not reported
Owner/operator telephone: 907-789-7500
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: NONE
. Waste name: None

Violation Status: No violations found

VALLEY LUMBER (Continued) **1004670276**

FINDS:

Registry ID: 110003038203

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1004670276
Registry ID: 110003038203
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110003038203

M26 **CAPITAL CITY CLEANERS** **RCRA NonGen / NLR** **1000264307**
8745 GLACIER HWY STE 595 **FINDS** **AKD983071887**
< 1/8 **JUNEAU, AK 99801** **ECHO**
1 ft.

Site 1 of 3 in cluster M

Relative: Higher
Actual: 46 ft.

RCRA NonGen / NLR:
Date form received by agency: 05/01/2000
Facility name: CAPITAL CITY CLEANERS
Facility address: 8745 GLACIER HWY STE 595
JUNEAU, AK 99801
EPA ID: AKD983071887
Mailing address: P O BOX 33375
JUNEAU, AK 99803
Contact: WM KENNEDY
Contact address: P O BOX 33375
JUNEAU, AK 99803
Contact country: US
Contact telephone: 907-789-3604
Contact email: Not reported
EPA Region: 10
Land type: Private
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: E. NEIL MACKINNON
Owner/operator address: 1114 GLACIER AVE
JUNEAU, AK 99801
Owner/operator country: Not reported
Owner/operator telephone: 907-586-1133
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private

CAPITAL CITY CLEANERS (Continued) **1000264307**

Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: KENNEDY WM
Owner/operator address: PO BOX 33375
JUNEAU, AK 99803
Owner/operator country: Not reported
Owner/operator telephone: 907-789-3604
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 09/12/1992
Site name: CAPITAL CITY CLEANERS
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 05/10/1990
Site name: CAPITAL CITY CLEANERS
Classification: Small Quantity Generator

Facility Has Received Notices of Violations:
Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 04/05/1990
Date achieved compliance: 05/22/1990
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/15/1990
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported

CAPITAL CITY CLEANERS (Continued) **1000264307**

Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 04/05/1990
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 05/22/1990
Evaluation lead agency: State

FINDS:

Registry ID: 110003040236

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000264307
Registry ID: 110003040236
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110003040236

M27 **RITZ CAMERA CENTERS #40** **RCRA NonGen / NLR** **1004670295**
8745 GLACIER HWY #432 **FINDS** **AKR000003186**
< 1/8 **JUNEAU, AK 99803** **ECHO**
1 ft.

Site 2 of 3 in cluster M

Relative: Higher
Actual: 46 ft.

RCRA NonGen / NLR:
Date form received by agency: 02/29/2008
Facility name: RITZ CAMERA CENTERS #40
Facility address: 8745 GLACIER HWY #432
NUGGET MALL
JUNEAU, AK 99803
EPA ID: AKR000003186
Mailing address: RITZ WY
BELTSVILLE, MD 20705
Contact: TOM KELLY
Contact address: 6711 RITZ WY
BELTSVILLE, MD 20705
Contact country: US
Contact telephone: 301-419-0000
Contact email: Not reported
EPA Region: 10
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: RITZ CAMERA CENTERS INC

RITZ CAMERA CENTERS #40 (Continued) **1004670295**

Owner/operator address: 6711 RITZ WY
BELTSVILLE, MD 20705
Owner/operator country: Not reported
Owner/operator telephone: 301-419-0000
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 03/30/1998
Site name: RITZ CAMERA CENTERS #40
Classification: Conditionally Exempt Small Quantity Generator

. Waste code: NONE
. Waste name: None

Violation Status: No violations found

FINDS:

Registry ID: 110006852405

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

RITZ CAMERA CENTERS #40 (Continued) **1004670295**

Envid: 1004670295
Registry ID: 110006852405
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110006852405

M28 **STARHILL ENTERPRISES** **EDR Hist Cleaner** **1018602095**
8745 GLACIER HWY STE 295 **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Site 3 of 3 in cluster M

Relative: Higher
Actual: 46 ft.

EDR Hist Cleaner

Year:	Name:	Type:
1987	CAPITAL CITY CLEANERS	Drycleaning Plants, Except Rugs
1988	STARHILL ENTERPRISES	Drycleaning Plants, Except Rugs
1989	STARHILL ENTERPRISES	Drycleaning Plants, Except Rugs, NEC
1990	STARHILL ENTERPRISES	Drycleaning Plants, Except Rugs, NEC
1991	STARHILL ENTERPRISES	Drycleaning Plants, Except Rugs, NEC
1992	STARHILL ENTERPRISES	Drycleaning Plants, Except Rugs, NEC
1993	STARHILL ENTERPRISES	Drycleaning Plants, Except Rugs, NEC
1994	STARHILL ENTERPRISES	Drycleaning Plants, Except Rugs, NEC
1995	STARHILL ENTERPRISES	Drycleaning Plants, Except Rugs, NEC
1996	STARHILL ENTERPRISES	Drycleaning Plants, Except Rugs, NEC
1997	STARHILL ENTERPRISES	Drycleaning Plants, Except Rugs, NEC
1998	STARHILL ENTERPRISES	Drycleaning Plants, Except Rugs, NEC
1999	STARHILL ENTERPRISES	Drycleaning Plants, Except Rugs, NEC
2000	STARHILL ENTERPRISES	Drycleaning Plants, Except Rugs, NEC
2001	STARHILL ENTERPRISES	Drycleaning Plants, Except Rugs, NEC

L29 **USDA FS OLD DAIRY RD** **RCRA-CESQG** **1004433687**
8465 OLD DAIRY RD **FINDS** **AK4122300151**
< 1/8 **JUNEAU, AK 99801** **ECHO**
1 ft. **CA HAZNET**

Site 2 of 3 in cluster L

Relative: Higher
Actual: 58 ft.

RCRA-CESQG:
Date form received by agency: 07/03/1989
Facility name: USDA FS OLD DAIRY RD
Facility address: 8465 OLD DAIRY RD
JUNEAU, AK 99801
EPA ID: AK4122300151
Mailing address: OLD DAIRY RD
JUNEAU, AK 99801
Contact: DEAN BRINKMAN
Contact address: 8465 OLD DAIRY RD
JUNEAU, AK 99801
Contact country: US
Contact telephone: 907-789-3331
Contact email: Not reported
EPA Region: 10
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or

USDA FS OLD DAIRY RD (Continued) **1004433687**

other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	US GOVERNMENT
Owner/operator address:	PO BOX 21628
	JUNEAU, AK 99802
Owner/operator country:	Not reported
Owner/operator telephone:	907-586-8723
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Federal
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NAME UNKNOWN
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Federal
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

. Waste code:	NONE
. Waste name:	None

USDA FS OLD DAIRY RD (Continued) **1004433687**

Violation Status: No violations found

FINDS:

Registry ID: 110003044287

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1004433687
Registry ID:	110003044287
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110003044287

HAZNET:

envid:	1004433687
Year:	2002
GEPAID:	AK4122300151
Contact:	DEAN BRINKMAN
Telephone:	9077893331
Mailing Name:	Not reported
Mailing Address:	8465 OLD DAIRY RD
Mailing City,St,Zip:	JUNEAU, AK 99801
Gen County:	Not reported
TSD EPA ID:	CAD059494310
TSD County:	Not reported
Waste Category:	Not reported
Disposal Method:	Transfer Station
Tons:	0.93
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	99

envid:	1004433687
Year:	2002
GEPAID:	AK4122300151
Contact:	DEAN BRINKMAN
Telephone:	9077893331
Mailing Name:	Not reported
Mailing Address:	8465 OLD DAIRY RD
Mailing City,St,Zip:	JUNEAU, AK 99801
Gen County:	Not reported
TSD EPA ID:	CAD059494310
TSD County:	Not reported
Waste Category:	Not reported
Disposal Method:	Disposal, Other
Tons:	3.66
Cat Decode:	Not reported

USDA FS OLD DAIRY RD (Continued) **1004433687**

Method Decode: Not reported
Facility County: 99

L30 **USFS JUNEAU RANGER DISTRICT WAREHOUSE** **AK SHWS** **S108540255**
8465 OLD DAIRY ROAD **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Site 3 of 3 in cluster L

Relative: Higher
Actual: 58 ft.

SHWS:

File Number:	1513.38.072
Staff:	Not reported
Facility Status:	Cleanup Complete
Latitude:	58.361585
Longitude:	-134.571790
Hazard ID:	4391
Problem:	Petroleum and metals contamination are present in the floor drains of a warehouse building originally constructed in 1968. Extent of contamination is unknown.

Actions:

Action Date:	6/13/2008
Action:	Exposure Tracking Model Ranking
DEC Staff:	Anne Marie Palmieri
Action Description:	Initial ranking with ETM completed.

Action Date:	4/3/2008
Action:	Update or Other Action
DEC Staff:	Anne Marie Palmieri
Action Description:	comments submitted on site characterization report and removal plan

Action Date:	4/18/2007
Action:	Site Added to Database
DEC Staff:	Mitzi Read
Action Description:	Site added to the database.

Action Date:	3/9/2009
Action:	Final Cleanup Report Reviewed
DEC Staff:	Anne Marie Palmieri
Action Description:	Cleanup report approved. Cleanup conducted at the former AST and former UST areas. The former AST area is located along the rear fence line of the warehouse. Characterization activities showed petroleum contaminated soil to be present on both Forest Service and City and Borough of Juneau (CBJ) property. In April 2008, the Forest Service excavated a total of approximately 89 tons of soil from both Forest Service and CBJ property. Eleven confirmation samples were collected. One sample, located below the concrete pad adjacent to the current fuel storage shed, contained elevated diesel range organics (DRO) of 4550 milligrams per kilogram (mg/kg); the cleanup level set for DRO was 230 mg/kg. Other sample results demonstrated that this is a relatively thin layer of contaminated soil in an area which is inaccessible due to the existing structure. Confirmation samples collected on CBJ property slightly exceeded the cleanup level for benzene; however, additional samples collected after the removal in the same general areas showed that no benzene contamination is present. The department determines that the contaminated soil below the fuel shed does not pose an unacceptable risk to human health and the environment. The extent of contamination is fairly limited and

USFS JUNEAU RANGER DISTRICT WAREHOUSE (Continued) **S108540255**

the concentrations do not exceed the department???s ingestion or inhalation risk-based screening levels. Groundwater sample results from the monitoring wells at the site did not show exceedences of the groundwater cleanup levels. Drinking water in this area is provided by the CBJ and is not supplied from an on-site well. The former UST was located behind the office on the northwest portion of the property. Characterization activities showed that petroleum contaminated soil was present. In April 2008, the Forest Service excavated a total of approximately 44 tons of soil. Four confirmation samples were collected with one sample, collected adjacent to the concrete pad on which the current AST is located, showing concentrations of DRO of 832 mg/kg. The department determines that the contaminated soil below the fuel shed does not pose an unacceptable risk to human health and the environment. The extent of contaminated is fairly limited and the concentrations do not exceed the department???s ingestion or inhalation risk-based screening levels. Groundwater sample results from the monitoring wells at the site did not show exceedences of the groundwater cleanup levels. Drinking water in this area is provided by the CBJ and is not supplied from an on-site well.

Action Date: 3/9/2009
Action: Cleanup Complete Determination Issued
DEC Staff: Anne Marie Palmieri
Action Description: Letter issued this date.

Action Date: 3/10/2009
Action: Exposure Tracking Model Ranking
DEC Staff: Anne Marie Palmieri
Action Description: A new updated ranking with ETM has been completed for source area 75376 facility.

Action Date: 12/17/2007
Action: Site Characterization Workplan Approved
DEC Staff: Anne Marie Palmieri
Action Description: Workplan approved this date; fieldwork is scheduled for 12/19 - 12/21.
Not reported

Contaminants:
Staff: Not reported

Contaminate Name1: USFS Juneau Ranger District Warehouse
Contaminate Level Description1: Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation
Contaminate Media1: Soil

Control Type: No ICs Required
Control Details Description1: Advance approval required to transport soil or groundwater off-site.
Contaminant CTD: Not reported
Contaminant CDR: Not reported
Comments: Contamination is below existing fuel tank shed and AST.

J31 **YUKON OFFICE SUPPLY** **RCRA NonGen / NLR** **1000817139**
2075 JORDAN AVE **FINDS** **AKD983075037**
< 1/8 **JUNEAU, AK 99801** **ECHO**
1 ft.

Site 3 of 4 in cluster J

Relative:
Higher

Actual:
39 ft.

RCRA NonGen / NLR:

Date form received by agency:	07/17/1992
Facility name:	YUKON OFFICE SUPPLY
Facility address:	2075 JORDAN AVE JUNEAU, AK 99801
EPA ID:	AKD983075037
Mailing address:	PO BOX 21788 JUNEAU, AK 99802
Contact:	BRYAN WILSON
Contact address:	2075 JORDAN AVE JUNEAU, AK 99801
Contact country:	US
Contact telephone:	907-790-2900
Contact email:	Not reported
EPA Region:	10
Land type:	Facility is not located on Indian land. Additional information is not known.
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	SE OFFICE SUPPLY INC
Owner/operator address:	PO BOX 21788 JUNEAU, AK 99802
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

. Waste code:	NONE
. Waste name:	None

YUKON OFFICE SUPPLY (Continued) **1000817139**

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 06/04/1999
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA

FINDS:

Registry ID: 110003039550

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Registry ID: 110013319113

Environmental Interest/Information System
NCDB (National Compliance Data Base) supports implementation of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA). The system tracks inspections in regions and states with cooperative agreements, enforcement actions, and settlements.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000817139
Registry ID: 110003039550
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110003039550

D32 **CIVIL AIR PATROL HANGAR** **AK UST** **U003331115**
JUNEAU AIRPORT, W RAMP MILE 9 GLACIER HWY **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Site 2 of 3 in cluster D

Relative: Higher
Actual: 13 ft.

UST:
Facility ID: 2891
Facility Type: Unknown
Owner ID: 2005
Owner Name: Civil Air Patrol
Owner Address: P.O. Box 730
Owner City,St,Zip: Juneau, AK 99802

Tank ID: 1
Tank Status: Permanently Out of Use
Tack Capacity: 1000
Tank Product: Gasoline

CIVIL AIR PATROL HANGAR (Continued) **U003331115**

Installed Date: 01/01/1975
Regulated Tank: Yes

Tank ID: 2
Tank Status: **Permanently Out of Use**
Tack Capacity: 1000
Tank Product: Gasoline
Installed Date: 01/01/1975
Regulated Tank: Yes

I33 **MENDENHALL AUTO CENTER** **AK UST** **U001960041**
8725 MALLARD ST **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Site 2 of 3 in cluster I

Relative: UST:
Higher
Actual: Facility ID: 2146
40 ft. Facility Type: Auto Dealership
Owner ID: 1416
Owner Name: Steven Allwine/karla Tollefson
Owner Address: 8725 Mallard St
Owner City,St,Zip: Juneau, AK 99801

Tank ID: 1
Tank Status: **Permanently Out of Use**
Tack Capacity: 1000
Tank Product: Diesel
Installed Date: 01/01/1975
Regulated Tank: Yes

Tank ID: 2
Tank Status: **Permanently Out of Use**
Tack Capacity: 1000
Tank Product: Diesel
Installed Date: 01/01/1975
Regulated Tank: Yes

Tank ID: 3
Tank Status: **Permanently Out of Use**
Tack Capacity: 300
Tank Product: Used Oil
Installed Date: 01/01/1975
Regulated Tank: Yes

B34 **T & S WELDING INC.** **AK UST** **U003139523**
8355 OLD DAIRY RD **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Site 3 of 3 in cluster B

Relative: UST:
Higher

Actual: Facility ID: 1192
51 ft. Facility Type: Unknown
Owner ID: 9104
Owner Name: Russell Shivers
Owner Address: PO Box 32156
Owner City,St,Zip: Juneau, AK 99803

Tank ID: 1
Tank Status: **Permanently Out of Use**
Tack Capacity: 500
Tank Product: Diesel
Installed Date: 05/08/1977
Regulated Tank: Yes

I35 **MENDENHALL AUTO CTR** **RCRA-CESQG** **1004670123**
8725 MALLARD ST **FINDS** **AK0000001115**
< 1/8 **JUNEAU, AK 99801** **ECHO**
1 ft.

Site 3 of 3 in cluster I

Relative: RCRA-CESQG:
Higher

Actual: Date form received by agency: 09/16/1993
40 ft. Facility name: MENDENHALL AUTO CTR
Facility address: 8725 MALLARD ST
JUNEAU, AK 99801-8052
EPA ID: AK0000001115
Mailing address: MALLARD ST
JUNEAU, AK 99801-8052
Contact: STEVEN ALLWINE
Contact address: 8725 MALLARD ST
JUNEAU, AK 99801-8052
Contact country: US
Contact telephone: 907-789-1386
Contact email: Not reported
EPA Region: 10
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

MENDENHALL AUTO CTR (Continued) **1004670123**

Owner/operator name: STEVEN ALLWINE & KARLA TOLLEFSON
Owner/operator address: 8725 MALLARD ST
JUNEAU, AK 99801
Owner/operator country: Not reported
Owner/operator telephone: 907-789-1386
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: Yes
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

. Waste code: D002
. Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-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 LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND

MENDENHALL AUTO CTR (Continued) **1004670123**

SPENT SOLVENT MIXTURES.

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

FINDS:

Registry ID: 110003371440

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1004670123
Registry ID: 110003371440
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110003371440

G36 **ALASKA AIRLINES - JUNEAU CARGO BUILDI** **AK UST** **U004115643**
1873 SHELL SIMMONS DR JUNEAU CARGO BUILDING **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Site 2 of 4 in cluster G

Relative: Higher
Actual: 20 ft.

UST:
Facility ID: 1570
Facility Type: Air Taxi (Airline)
Owner ID: 35
Owner Name: Alaska Airlines
Owner Address: PO Box 68900, SEAZA
Owner City,St,Zip: Seattle, WA 98168

Tank ID: 1
Tank Status: Permanently Out of Use
Tack Capacity: 10000
Tank Product: Other
Installed Date: 04/25/1978
Regulated Tank: No

ALASKA AIRLINES - JUNEAU CARGO BUILDI (Continued) **U004115643**

Tank ID: 2
Tank Status: **Permanently Out of Use**
Tack Capacity: 500
Tank Product: Used Oil
Installed Date: 04/25/1978
Regulated Tank: Yes

Tank ID: 3
Tank Status: **Permanently Out of Use**
Tack Capacity: 3000
Tank Product: Gasoline
Installed Date: 04/25/1978
Regulated Tank: Yes

G37 **JUNEAU AIRFIELD AND GARRISON** **SEMS-ARCHIVE** **1001814646**
1873 SHELL-SIMMONS DRIVE **AKSFN1002180**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Site 3 of 4 in cluster G

Relative: **Higher**
Actual: **20 ft.**

SEMS Archive:
Site ID: 1002180
EPA ID: AKSFN1002180
Cong District: 0
FIPS Code: 2110
FF: N
NPL: Not on the NPL
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information
Latitude: 58.366667
Longitude: -134.58333300000001

SEMS Archive Detail:
Region: 10
Site ID: 1002180
EPA ID: AKSFN1002180
Site Name: JUNEAU AIRFIELD AND GARRISON
NPL: N
FF: N
OU: 0
Action Code: VS
Action Name: ARCH SITE
SEQ: 1
Start Date: Not reported
Finish Date: 2005-10-25 00:00:00
Qual: Not reported
Current Action Lead: EPA Perf In-Hse

Region: 10
Site ID: 1002180
EPA ID: AKSFN1002180
Site Name: JUNEAU AIRFIELD AND GARRISON
NPL: N
FF: N
OU: 0
Action Code: PA
Action Name: PA
SEQ: 1

JUNEAU AIRFIELD AND GARRISON (Continued) **1001814646**

Start Date:	1999-11-30 00:00:00
Finish Date:	2005-10-25 00:00:00
Qual:	N
Current Action Lead:	EPA Perf
Region:	10
Site ID:	1002180
EPA ID:	AKSFN1002180
Site Name:	JUNEAU AIRFIELD AND GARRISON
NPL:	N
FF:	N
OU:	0
Action Code:	DS
Action Name:	DISCVRY
SEQ:	1
Start Date:	1999-11-17 00:00:00
Finish Date:	1999-11-17 00:00:00
Qual:	Not reported
Current Action Lead:	EPA Perf

G38 **JUNEAU INTL ARPRT MAINT SVCS BLDG** **RCRA-CESQG** **1000856046**
1873 SHELL SIMMONS DR #200 **AK0000084020**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Site 4 of 4 in cluster G

Relative: RCRA-CESQG:
Higher

Date form received by agency:	12/03/2001
Facility name:	JUNEAU INTL ARPRT MAINT SVCS BLDG
Facility address:	1873 SHELL SIMMONS DR #200 JUNEAU, AK 99801-9375
EPA ID:	AK0000084020
Mailing address:	SHELL SIMMONS DRIVE, #200 JUNEAU, AK 99801
Contact:	JERRY MAHLE
Contact address:	9243 BONNETT WY JUNEAU, AK 99801-9375
Contact country:	US
Contact telephone:	907-789-4001
Contact email:	Not reported
EPA Region:	10
Land type:	Municipal
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Actual:
20 ft.

JUNEAU INTL ARPRT MAINT SVCS BLDG (Continued) **1000856046**

Owner/Operator Summary:

Owner/operator name:	CBJ
Owner/operator address:	1873 SHELL SIMMONS DR #200 JUNEAU, AK 99801
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Municipal
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	CITY & BOROUGH OF JUNEAU
Owner/operator address:	155 S SEWARD ST JUNEAU, AK 99801
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Municipal
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

. Waste code: D001
. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

. Waste code: D007
. Waste name: CHROMIUM

JUNEAU INTL ARPRT MAINT SVCS BLDG (Continued) **1000856046**

. Waste code: D008
. Waste name: LEAD

Historical Generators:
Date form received by agency: 03/28/1996
Site name: JUNEAU INTL ARPRT MAINT SVCS BLDG
Classification: Small Quantity Generator

Facility Has Received Notices of Violations:
Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 04/28/1994
Date achieved compliance: 07/19/1994
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/23/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 02/28/1994
Date achieved compliance: 07/19/1994
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/23/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 08/08/2005
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA

Evaluation date: 04/28/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 07/19/1994
Evaluation lead agency: State

D39 **DELTA AIR LINES JUNEAU** **RCRA NonGen / NLR** **1000394869**
JUNEAU INTL ARPRT **AKD152465670**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Site 3 of 3 in cluster D

Relative: **Higher**

Actual: **13 ft.**

RCRA NonGen / NLR:

Date form received by agency:	11/04/1992
Facility name:	DELTA AIR LINES JUNEAU
Facility address:	JUNEAU INTL ARPRT JUNEAU, AK 99801
EPA ID:	AKD152465670
Mailing address:	DEPT 594 HARTSFIELD INTL ARPRT ATLANTA, GA 30320
Contact:	D AMUNDSON
Contact address:	DEPT 581,ATLANTA INTL AIRPORT ATLANTA, GA 30320
Contact country:	US
Contact telephone:	907-789-4777
Contact email:	Not reported
EPA Region:	10
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	CITY & BOROUGH OF JUNEAU
Owner/operator address:	Not reported Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	DELTA AIR LINES
Owner/operator address:	Not reported Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	07/06/1987
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

DELTA AIR LINES JUNEAU (Continued) **1000394869**

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: 02/19/1992
Site name: DELTA AIR LINES, INC. - JNU
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 07/06/1987
Site name: DELTA AIR LINES JUNEAU
Classification: Not a generator, verified

. Waste code: D001
. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

J40 **PACIFIC TELECOM, INC** **AK UST** **U004115942**
2075 JORDAN AVE **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Site 4 of 4 in cluster J

Relative: Higher
Actual: 39 ft.

UST:
Facility ID: 2687
Facility Type: Utilities
Owner ID: 879
Owner Name: PTI Communications
Owner Address: 3940 Arctic BLVD
Owner City,St,Zip: Anchorage, AK 99503

Tank ID: 1
Tank Status: Permanently Out of Use
Tack Capacity: 300
Tank Product: Diesel
Installed Date: 01/01/1982
Regulated Tank: Yes

E41 **CAMERON PLUMBING AND HEATING** **AK SHWS** **S105273790**
1850 CREST STREET, NEAR YANDUKIN DRIVE **AK LUST** **N/A**
< 1/8 **JUNEAU, AK 99801** **AK INST CONTROL**
1 ft.

Site 2 of 3 in cluster E

Relative: Higher
Actual: 40 ft.

SHWS:

File Number:	1513.38.001
Staff:	IC Unit, 9074655229 dec.icunit@alaska.gov
Facility Status:	Cleanup Complete - Institutional Controls
Latitude:	58.360393
Longitude:	-134.574322
Hazard ID:	1755
Problem:	1,000 gallon underground heating oil tank had visible holes upon removal. Soil field screening of the excavation segregated 20 cubic yards to an on-site lined stockpile. Complete removal of contamination limited by facility structure at west wall of pit where DRO in soil was detected at 2,800ppm. Material contaminated with heating oil is located beneath the main building adjacent to the site of the former heating oil UST. Volume is estimated at 30 cubic yards; a vent pipe is located adjacent to the former UST site and the east side of the building for addition of in-situ bioremedial chemicals.

Actions:

Action Date:	5/8/2003
Action:	Conditional Closure Approved
DEC Staff:	Bruce Wanstall
Action Description:	Copy of the decision letter is stored at \\\\Jn-svrfile\\groups\\SPAR\\Spar-Contaminated Sites\\38 Case Files (Contaminated Sites)\\1513 Juneau\\1513.38.001 Cameron Heating and Plumbing.

Action Date:	5/7/2003
Action:	Long Term Monitoring Established
DEC Staff:	Bruce Wanstall
Action Description:	Concentrations of 2,800ppm DRO were detected in the Site Assessment pit closure soil samples from the west wall of the excavation. The soil contamination extending beneath the main building from the former location of the heating oil UST was estimated at 30 cubic yards. Corrective action prior to closing the pit included the addition of fertilizer to promote in-situ bioremediation of the residual contamination. Fifty pounds of ordinary garden fertilizer was added to backfill soils and a 20-foot length of 4-inch perforated PVC pipe with a vertical chimney was installed along the west wall to provide aeration. Additional contaminated material shall be investigated and appropriately managed or removed in accordance with DEC cleanup requirements at such time if and when it becomes accessible through major structural modifications or demolition of current structures on the property. Groundwater supply wells will not be installed on the property without prior notification and approval of the DEC.

Action Date:	5/7/2003
Action:	Institutional Control Record Established
DEC Staff:	Bruce Wanstall
Action Description:	The following Institutional Controls are established for this property until such time that contaminant concentrations in soil are shown to meet the most stringent cleanup criteria. These Institutional Controls were verbally reviewed with the current property owner representative Natalie Cheeseman on May 8,

CAMERON PLUMBING AND HEATING (Continued) **S105273790**

2003.Contaminated material shall be investigated and appropriately managed or removed in accordance with ADEC cleanup requirements at such time if and when it becomes accessible through major structural modifications or demolition of current structures on the property.Groundwater supply wells will not be installed on the property without prior notification and approval of the DEC.

Action Date: 5/16/2013
Action: Long Term Monitoring Complete
DEC Staff: Kristin Thompson
Action Description: Administrative action added during a quality control check.

Action Date: 3/9/1994
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: Site Assessment, Release Investigation, and Corrective Action Plan submitted.

Action Date: 12/4/2013
Action: Institutional Control Compliance Review
DEC Staff: Evonne Reese
Action Description: IC review conducted.

Action Date: 12/23/2013
Action: Institutional Control Update
DEC Staff: Kristin Thompson
Action Description: An IC reminder letter was issued to the responsible party on this date.

Action Date: 12/20/2001
Action: Site Added to Database
DEC Staff: Bruce Wanstall
Action Description: Heating oil spill from UST.

Action Date: 12/20/2001
Action: Site Ranked Using the AHRM
DEC Staff: Bruce Wanstall
Action Description: Preliminary ranking.

Action Date: 11/30/1993
Action: Leaking Underground Storage Tank Corrective Action Underway
DEC Staff: Bruce Wanstall
Action Description: Corrective action includes addition of fertilizer to promote In-Situ Bioremediation of soils left in-place, volume estimated at 30 cubic yards. Perforated PVC pipe with vertical aeration chimney was installed. Contaminated soil stockpile was transported to the Bicknell Asphalt Facility for thermal remediation.

Contaminants:
Staff: IC Unit, 9074655229 dec.icunit@alaska.gov

Contaminate Name1: Cameron Plumbing and Heating
Contaminate Level Description1: Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation
Contaminate Media1: Soil

Control Type: CS Database Notation And Letter To Landowner/RP

CAMERON PLUMBING AND HEATING (Continued) **S105273790**

Control Details Description1: Groundwater Use Restrictions
Contaminant CTD: Not reported
Contaminant CDR: No wells shall be installed on the property
Comments: Not reported

Staff: IC Unit, 9074655229 dec.icunit@alaska.gov

Contaminate Name1: Cameron Plumbing and Heating
Contaminate Level Description1: Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation
Contaminate Media1: Soil

Control Type: CS Database Notation And Letter To Landowner/RP
Control Details Description1: When Contaminated Soil is Accessible, Remediation Should Occur
Contaminant CTD: Not reported
Contaminant CDR: Ground water is not used on the property or in the area; an estimatedd 30 cubic yards of material under the main building is contaminated with heating oil. If subsurface contaminated material becomes accessible or if groundwater well installation is planned the DEC will be notified before action is taken at the site.
Comments: Not reported

File Number: 1513.26.012
Staff: Not reported
Facility Status: Cleanup Complete
Latitude: 58.360400
Longitude: -134.574300
Hazard ID: 24385
Problem: Laboratory analytical data indicate that petroleum contamination detected in material collected from the limits of the excavation to close the USTs appears to be unrelated the regulated UST used to store gasoline. The unregulated heating oil UST located 30 feet to the west is accepted as the source of the inaccessible soil contamination. The closure by removal of the non-regulated tank will be managed by 18 AAC 75 regulation and cleanup decisions recorded on the Contaminated Site Database as ID1993110133401, file number 1513.38.001.

Actions:

Action Date: 8/1/1993
Action: Site Added to Database
DEC Staff: * Not Assigned
Action Description: Not reported

Action Date: 5/10/2003
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: Subsurface soil contamination associated with the unregulated heating oil tank is managed under the Contaminated Sites Program Database ID 1993110133401 where No Further Remedial Action Planned site status is established with owner agreement that inaccessible heating oil contamination beneath the main facility structure remains subject to the 18 AAC 75.325 Site Cleanup Rules when the soil becomes accessible for removal and remedial treatment.

Action Date: 3/2/1998
Action: Site Closure Approved

CAMERON PLUMBING AND HEATING (Continued) **S105273790**

DEC Staff: * Not Assigned
Action Description: A copy of the letter approving No Further Action on the regulated gasoline tank closure by removal is stored electronically at jnu-svrfile G:\\SPAR\\Spar-Contaminated Sites\\26 Case Files (LUST Sites)\\1513 Juneau\\1513.26.012 Cameron Plumbing & Heating, Incorporated

Action Date: 12/12/2001
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: Project Manager changed from Horwath to Bruce Wanstall

Action Date: 12/1/1997
Action: Update or Other Action
DEC Staff: * Not Assigned
Action Description: Montgomery Watson said they were clean and they probably have NFA; Debbie Coal; 789-2896

Action Date: 11/30/1993
Action: Leaking Underground Storage Tank Cleanup Initiated - Petroleum
DEC Staff: * Not Assigned
Action Description: LCAU;

Action Date: 11/20/1997
Action: Update or Other Action
DEC Staff: * Not Assigned
Action Description: ADEC sends Notification of Intent to Cost Recover Letter to Current Owner: CAMERON PLUMBING & HEATING, INC.

Action Date: 1/17/1994
Action: Underground Storage Tank Site Characterization or Assessment
DEC Staff: * Not Assigned
Action Description: SA1;

Action Date: 1/17/1994
Action: Update or Other Action
DEC Staff: * Not Assigned
Action Description: CAPR;

Action Date: 1/17/1994
Action: Release Investigation
DEC Staff: * Not Assigned
Action Description: RELR;

LUST:
Facility Name: CAMERON PLUMBING & HEATING, INCORPORATED
Facility Status: Cleanup Complete
Record Key: 1993110021301
File ID: 1513.26.012
Oname: Cameron Plumbing & Heating, Inc.
Lat/Lon: 58.3604 -134.5743
Lust Event ID: 1196
CS or Lust: LUST
Borough: Juneau
Staff: No Longer Assigned
Site Type: Unknown

CAMERON PLUMBING AND HEATING (Continued) **S105273790**

Horizontal Datum: NAD83

Inst Control:
Hazard ID: 1755
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Record Established
Action Date: 5/7/2003
File Number: 1513.38.001

Hazard ID: 1755
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Compliance Review
Action Date: 12/4/2013
File Number: 1513.38.001

Hazard ID: 1755
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Update
Action Date: 12/23/2013
File Number: 1513.38.001

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42 **N C MACHINERY CO JUNEAU** **RCRA-CESQG** **1000123250**
8850 AIRPORT BLVD **AK LUST** **AKD035418979**
< 1/8 **JUNEAU, AK 99803** **AK UST**
1 ft. **FINDS**
ECHO

Relative: **Higher**
Actual: **40 ft.**

RCRA-CESQG:
Date form received by agency: 02/02/1998
Facility name: N C MACHINERY CO JUNEAU
Facility address: 8850 AIRPORT BLVD
JUNEAU, AK 99803-2318
EPA ID: AKD035418979
Mailing address: P.O. BOX 32138
JUNEAU, AK 99803
Contact: ERROL CHAMPION
Contact address: PO BOX 2138
JUNEAU, AK 99803
Contact country: US
Contact telephone: 907-789-0181
Contact email: Not reported
EPA Region: 10
Land type: Private
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely

N C MACHINERY CO JUNEAU (Continued) **1000123250**

hazardous waste

Owner/Operator Summary:
- Owner/operator name: N C MACHINERY CO
- Owner/operator address: PO BOX 3562
  SEATTLE, WA 98124
- Owner/operator country: Not reported
- Owner/operator telephone: 206-251-9800
- Owner/operator email: Not reported
- Owner/operator fax: Not reported
- Owner/operator extension: Not reported
- Legal status: Private
- Owner/Operator Type: Owner
- Owner/Op start date: Not reported
- Owner/Op end date: Not reported

Handler Activities Summary:
- U.S. importer of hazardous waste: No
- Mixed waste (haz. and radioactive): No
- Recycler of hazardous waste: No
- Transporter of hazardous waste: No
- Treater, storer or disposer of HW: No
- Underground injection activity: No
- On-site burner exemption: No
- Furnace exemption: No
- Used oil fuel burner: No
- Used oil processor: No
- User oil refiner: No
- Used oil fuel marketer to burner: No
- Used oil Specification marketer: No
- Used oil transfer facility: No
- Used oil transporter: No

. Waste code: D000
. Waste name: Not Defined

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

Historical Generators:
- Date form received by agency: 02/22/1990
- Site name: N C MACHINERY CO.
- Classification: Not a generator, verified

Facility Has Received Notices of Violations:
- Regulation violated: Not reported
- Area of violation: Generators - General
- Date violation determined: 12/13/1988
- Date achieved compliance: 02/14/1989
- Violation lead agency: State
  - Enforcement action: WRITTEN INFORMAL
  - Enforcement action date: 01/17/1989

N C MACHINERY CO JUNEAU (Continued) **1000123250**

Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 08/09/2005
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA

Evaluation date: 12/13/1988
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 02/14/1989
Evaluation lead agency: State

LUST:
Facility Name: NC MACHINERY COMPANY
Facility Status: Cleanup Complete
Record Key: 1992110024401
File ID: 1513.26.009
Oname: N. C. Machinery Co.
Lat/Lon: 58.30194 -134.4196
Lust Event ID: 1187
CS or Lust: LUST
Borough: Juneau
Staff: No Longer Assigned
Site Type: Unknown
Horizontal Datum: NAD27

UST:
Facility ID: 828
Facility Type: Unknown
Owner ID: 818
Owner Name: N. C. Machinery Co.
Owner Address: 8550 Airport BLVD
Owner City,St,Zip: Juneau, AK 99803

Tank ID: 1
Tank Status: Permanently Out of Use
Tack Capacity: 750
Tank Product: Used Oil
Installed Date: 05/05/1984
Regulated Tank: Yes

Tank ID: 2
Tank Status: Permanently Out of Use
Tack Capacity: 1000
Tank Product: Diesel
Installed Date: 01/01/1984
Regulated Tank: Yes

N C MACHINERY CO JUNEAU (Continued) **1000123250**

FINDS:

Registry ID: 110003043448

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000123250
Registry ID: 110003043448
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110003043448

H43 **PETROLEUM SVCS INC** **RCRA NonGen / NLR** **1000473430**
8401 AIRPORT BLVD **FINDS** **AKD983069121**
< 1/8 **JUNEAU, AK 99803** **ECHO**
1 ft.

Site 2 of 7 in cluster H

Relative: Higher
Actual: 33 ft.

RCRA NonGen / NLR:
Date form received by agency: 11/08/2002
Facility name: PETROLEUM SVCS INC
Facility address: 8401 AIRPORT BLVD
JUNEAU, AK 99803
EPA ID: AKD983069121
Mailing address: NO MAILING ADDRESS
NO MAILING CITY, OR
Contact: Not reported
Contact address: Not reported
Not reported
Contact country: US
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 10
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: PETROLEUM SVCS INC
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner

PETROLEUM SVCS INC (Continued) **1000473430**

Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110003040780

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000473430
Registry ID: 110003040780
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110003040780

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44 **JUNEAU AIRPORT** **AK LUST U003140252**
SHELL SIMMONS DR AT N APRON **AK UST N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Relative: Higher
Actual: 22 ft.

LUST:
Facility Name: CBJ JUNEAU AIRPORT MAINTENANCE FACILITY
Facility Status: Cleanup Complete - Institutional Controls
Record Key: 1999110028101
File ID: 1513.26.061
Oname: City & Borough of Juneau
Lat/Lon: 58.36125 -134.5853
Lust Event ID: 2731
CS or Lust: LUST

JUNEAU AIRPORT (Continued) **U003140252**

Borough: Juneau
Staff: IC Unit
Site Type: Airport/Airfield
Horizontal Datum: NAD83

UST:
Facility ID: 2157
Facility Type: Unknown
Owner ID: 228
Owner Name: City & Borough of Juneau
Owner Address: Attn: Accounts Payable
Owner City,St,Zip: Juneau, AK 99801

Tank ID: 1
Tank Status: Permanently Out of Use
Tack Capacity: 5000
Tank Product: Gasoline
Installed Date: 01/01/1962
Regulated Tank: Yes

Tank ID: 2
Tank Status: Permanently Out of Use
Tack Capacity: 5000
Tank Product: Diesel
Installed Date: 01/01/1962
Regulated Tank: Yes

Tank ID: 3
Tank Status: Permanently Out of Use
Tack Capacity: 750
Tank Product: Diesel
Installed Date: Not reported
Regulated Tank: Yes

Tank ID: 4
Tank Status: Permanently Out of Use
Tack Capacity: 750
Tank Product: Diesel
Installed Date: Not reported
Regulated Tank: Yes

H45 **NC MACHINERY COMPANY** **AK SHWS** **S109256445**
8550 AIRPORT BLVD; **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Site 3 of 7 in cluster H

Relative: SHWS:
Higher
File Number: 1513.26.009
Actual: Staff: Not reported
33 ft. Facility Status: Cleanup Complete
Latitude: 58.301941
Longitude: -134.419678
Hazard ID: 24505

NC MACHINERY COMPANY (Continued) **S109256445**

Problem: Farnell was last staff assigned.

Actions:

Action Date: 9/1/1992
Action: Leaking Underground Storage Tank Cleanup Initiated - Petroleum
DEC Staff: * Not Assigned
Action Description: LCAU; 118 cyds of contaminated soil was excavated in conjunction with tank closure. Groundwater was also encountered during the closure/site assessment. The excavated soils were successfully thermally remediated at the Bicknell facility in June 94. Diesel and oil range hydrocarbons were not detected above the reported detection limits in groundwater samples collected 8/27/93. : LCAU date changed DB conversion

Action Date: 8/31/1992
Action: Site Added to Database
DEC Staff: * Not Assigned
Action Description: Not reported

Action Date: 2/14/1996
Action: Site Closure Approved
DEC Staff: * Not Assigned
Action Description: CLOS; Site closed via letter dated 2/14/96. All contaminated soil thermally remediated; gw shown to be uncontaminated via Dames & Moore 8/27/93 sampling.

H46 **JUNEAU DAIRIES DISTRICT, INCORPORATED** **AK SHWS** **S109256439**
8403 AIRPORT BLVD., LOTS 20, 21 & 22 BLOCK M VALLEY CENTRE S **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Site 4 of 7 in cluster H

Relative: Higher
Actual: 32 ft.

SHWS:

File Number: 1513.26.004
Staff: Not reported
Facility Status: Cleanup Complete
Latitude: 58.359046
Longitude: -134.569494
Hazard ID: 24490
Problem: Farnell was last staff assigned.

Actions:

Action Date: 8/12/1991
Action: Update or Other Action
DEC Staff: * Not Assigned
Action Description: NOR;

Action Date: 7/25/1991
Action: Leaking Underground Storage Tank Cleanup Initiated - Petroleum
DEC Staff: * Not Assigned
Action Description: LCAU; Oily soil immobilized in excavation with addition of concrete. Sampling results showed all contaminats below cleanup standards. NFA recommended. : LCAU date changed DB conversion

Action Date: 7/24/1991
Action: Leaking Underground Storage Tank Corrective Action Underway
DEC Staff: * Not Assigned
Action Description: CAPR; 8-14 cy gasoline contaminated sand/gravel to be fixed at block

JUNEAU DAIRIES DISTRICT, INCORPORATED (Continued) **S109256439**

of concrete in place on-site. All additional contaminated soil in pit to be removed until no gas odors are detectable. DEC requested additional sampling reports.

Action Date: 7/24/1991
Action: Site Added to Database
DEC Staff: * Not Assigned
Action Description: Not reported

Action Date: 3/3/1992
Action: Underground Storage Tank Site Characterization or Assessment
DEC Staff: * Not Assigned
Action Description: SA1;

Action Date: 1/12/1994
Action: Site Closure Approved
DEC Staff: * Not Assigned
Action Description: CLOS; All contamination permenantly contained/below cleanup levels.

E47 **CAMERON PLUMBING & HEATING, INC.** **AK UST** **U000730012**
1850 CREST ST **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Site 3 of 3 in cluster E

Relative: UST:
Higher
Actual: Facility ID: 2726
40 ft. Facility Type: Unknown
Owner ID: 1833
Owner Name: Cameron Plumbing & Heating, Inc.
Owner Address: 1850 Crest ST
Owner City,St,Zip: Juneau, AK 99801

Tank ID: 1
Tank Status: **Permanently Out of Use**
Tack Capacity: 1000
Tank Product: Gasoline
Installed Date: Not reported
Regulated Tank: Yes

Tank ID: 2
Tank Status: **Permanently Out of Use**
Tack Capacity: 1000
Tank Product: Heating Oil
Installed Date: Not reported
Regulated Tank: No

H48 **DOUGLAS TRUCKING** **AK SHWS** **S109256725**
8400 AIRPORT BLVD **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Site 5 of 7 in cluster H

Relative: SHWS:
Higher
Actual: File Number: 1513.26.037
38 ft. Staff: Not reported
Facility Status: Cleanup Complete
Latitude: 58.359506
Longitude: -134.569708
Hazard ID: 24917
Problem: SA 4/17/92, Closure Notice 4/2/92, FacID (1266). ?Validity of sample.Below cleanup levels. NFA issued 6/11/97. Resampling on 3/29/93 and again on 10/13/96. First high, second nondetect, suspect interference on first round.

Actions:
Action Date: 4/17/1992
Action: Leaking Underground Storage Tank Cleanup Initiated - Petroleum
DEC Staff: * Not Assigned
Action Description: Not reported

Action Date: 4/17/1992
Action: Site Closure Approved
DEC Staff: * Not Assigned
Action Description: Not reported

Action Date: 4/17/1992
Action: Site Added to Database
DEC Staff: * Not Assigned
Action Description: Not reported

Action Date: 11/23/2016
Action: Update or Other Action
DEC Staff: Kristin Thompson
Action Description: Administrative update: the closure documentation for this site could not be located.

F49 **WARD AIR** **AK SHWS** **S109256577**
WARD AIR **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Site 3 of 4 in cluster F

Relative: SHWS:
Higher
Actual: File Number: 1513.26.030
23 ft. Staff: Not reported
Facility Status: Cleanup Complete
Latitude: 58.358800
Longitude: -134.578300
Hazard ID: 24697
Problem: Farnell was last staff assigned.

Actions:
Action Date: 3/19/1998
Action: Site Closure Approved
DEC Staff: * Not Assigned
Action Description: Not reported

WARD AIR (Continued) **S109256577**

Action Date: 1/1/1994
Action: Leaking Underground Storage Tank Cleanup Initiated - Petroleum
DEC Staff: * Not Assigned
Action Description: Not reported

Action Date: 1/1/1994
Action: Site Added to Database
DEC Staff: * Not Assigned
Action Description: Not reported

F50 **WARD AIR INC** **RCRA-CESQG 1000904399**
8991 YANDUKIN DR **AK LUST AK0000385625**
< 1/8 **JUNEAU, AK 99801** **AK UST**
1 ft. **FINDS**
Site 4 of 4 in cluster F **ECHO**

Relative: Higher
Actual: 23 ft.

RCRA-CESQG:
Date form received by agency: 05/13/1994
Facility name: WARD AIR INC
Facility address: 8991 YANDUKIN DR
JUNEAU, AK 99801-8086
EPA ID: AK0000385625
Mailing address: NO MAILING ADDRESS
NO MAILING CITY, OR
Contact: Not reported
Contact address: Not reported
Not reported
Contact country: US
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 10
Land type: Facility is not located on Indian land. Additional information is not known.
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

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

WARD AIR INC (Continued) **1000904399**

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

Facility Has Received Notices of Violations:
Regulation violated: Not reported
Area of violation: Used Oil - Fuel Marketers
Date violation determined: 12/06/2005
Date achieved compliance: 12/31/2005
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/06/2005
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 04/29/1994
Date achieved compliance: 07/08/1994
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/23/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 08/08/2005
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Used Oil - Fuel Marketers
Date achieved compliance: 12/31/2005
Evaluation lead agency: EPA

Evaluation date: 04/29/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 07/08/1994
Evaluation lead agency: State

LUST:
Facility Name: WARD AIR
Facility Status: Cleanup Complete
Record Key: 1994110012201
File ID: 1513.26.030
Oname: Ward Air

WARD AIR INC (Continued) **1000904399**

Lat/Lon: 58.3588 -134.5783
Lust Event ID: 1593
CS or Lust: LUST
Borough: Juneau
Staff: No Longer Assigned
Site Type: Unknown
Horizontal Datum: NAD83

UST:
Facility ID: 2725
Facility Type: Air Taxi (Airline)
Owner ID: 1832
Owner Name: Ward Air
Owner Address: 8991 Yandukin Dr
Owner City,St,Zip: Juneau, AK 99801

Tank ID: 1
Tank Status: **Permanently Out of Use**
Tack Capacity: 3000
Tank Product: Gasoline
Installed Date: 08/01/1985
Regulated Tank: Yes

Tank ID: 2
Tank Status: **Permanently Out of Use**
Tack Capacity: 3000
Tank Product: Gasoline
Installed Date: 08/01/1985
Regulated Tank: Yes

FINDS:

Registry ID: 110003044777

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000904399
Registry ID: 110003044777
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110003044777

51 **SILVER BAY AVIATION** **RCRA-CESQG** **1000904398**
8892 YANDUKIN DR **FINDS** **AK0000385617**
< 1/8 **JUNEAU, AK 99801** **ECHO**
1 ft.

Relative: Higher

Actual: 24 ft.

RCRA-CESQG:

Date form received by agency:	05/13/1994
Facility name:	SILVER BAY AVIATION
Facility address:	8892 YANDUKIN DR JUNEAU, AK 99801-8086
EPA ID:	AK0000385617
Mailing address:	NO MAILING ADDRESS NO MAILING CITY, OR
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	10
Land type:	Facility is not located on Indian land. Additional information is not known.
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

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

Facility Has Received Notices of Violations:

Regulation violated:	Not reported
Area of violation:	Generators - General
Date violation determined:	05/02/1994

SILVER BAY AVIATION (Continued) **1000904398**

Date achieved compliance: 06/30/1994
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/23/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 05/02/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 06/30/1994
Evaluation lead agency: State

FINDS:

Registry ID: 110003044768

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000904398
Registry ID: 110003044768
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110003044768

H52 **JUNEAU DAIRIES DISTRICT, INCORPORATED** **AK LUST** **S109261083**
8403 AIRPORT BLVD. **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Site 6 of 7 in cluster H

Relative: Higher
Actual: 33 ft.

LUST:
Facility Name: JUNEAU DAIRIES DISTRICT, INCORPORATED
Facility Status: Cleanup Complete
Record Key: 1991110020501
File ID: 1513.26.004
Oname: Juneau Dairies District Inc.
Lat/Lon: 58.35904 -134.5694
Lust Event ID: 1173
CS or Lust: LUST
Borough: Juneau
Staff: No Longer Assigned
Site Type: Unknown

JUNEAU DAIRIES DISTRICT, INCORPORATED (Continued) **S109261083**

Horizontal Datum: WGS84

H53 **JUNEAU DAIRIES DISTRICT, INC.** **AK UST** **U000001067**
8403 AIRPORT BLVD **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Site 7 of 7 in cluster H

Relative: Higher
Actual: 33 ft.

UST:
Facility ID: 51
Facility Type: Unknown
Owner ID: 640
Owner Name: Juneau Dairies District Inc.
Owner Address: P.O. Box 249 8403 Airport BLVD
Owner City,St,Zip: Juneau, AK 99801

Tank ID: 1
Tank Status: Permanently Out of Use
Tack Capacity: 670
Tank Product: Gasoline
Installed Date: 05/23/1973
Regulated Tank: Yes

N54 **CBJ JUNEAU AIRPORT MAINTENANCE FACILITY** **AK SHWS** **S109254538**
West **SHELL SIMMONS DRIVE AT NORTH APRON** **AK INST CONTROL** **N/A**
< 1/8 **JUNEAU, AK 99801**
0.010 mi.
52 ft.

Site 1 of 2 in cluster N

Relative: Higher
Actual: 24 ft.

SHWS:
File Number: 1513.26.061
Staff: IC Unit, 9074655229 dec.icunit@alaska.gov
Facility Status: Cleanup Complete - Institutional Controls
Latitude: 58.361259
Longitude: -134.585385
Hazard ID: 25156
Problem: DRO @ 8300ppm remains in soil beneath west side of airport maintenance building and utility lines under the north apron. Contamination release is from corrosion holes in 1,000gallon diesel UST excavated along with 70 tons of DRO impacted soil.

Actions:
Action Date: 9/22/2003
Action: Conditional Closure Approved
DEC Staff: Bruce Wanstall
Action Description: No Further Remedial Action Plan discussed with facility operations supervisor. Institutional control notation made in the LUST database for remedial action when residual soil contamination becomes accessible. Groundwater not a drinking water source.

Action Date: 9/22/2003
Action: Institutional Control Record Established
DEC Staff: Bruce Wanstall
Action Description: DRO @ 8300ppm remains in soil beneath west side of airport maintenance building and utility lines under the north apron. If groundwater supply well installation on the property is planned or if removal of soil from the contaminant plume area of the property

CBJ JUNEAU AIRPORT MAINTENANCE FACILITY (Continued) **S109254538**

becomes necessary the DEC will be notified in advance to provide oversight to ensure drinking water and petroleum regulations are not exceeded.

Action Date: 8/6/1991
Action: Release Investigation
DEC Staff: * Not Assigned
Action Description: NOR; Subsurface soil and gravel contamination, nothing above ground.

Action Date: 8/6/1991
Action: Site Added to Database
DEC Staff: * Not Assigned
Action Description: Not reported

Action Date: 8/29/2003
Action: Report or Workplan Review - Other
DEC Staff: Bruce Wanstall
Action Description: Site Assessment review to develop plan for no further remedial action at site with institutional control for further petroleum contamination assessment if building removal allows access to soils under its foundation.

Action Date: 8/29/2003
Action: Underground Storage Tank Site Characterization or Assessment
DEC Staff: Bruce Wanstall
Action Description: Determined that this event ID corresponds to a Spill Report dated 1991. Follow-up Site Assessment traced the release to the 2 5,000gallon USTs. Corrective action plan monitored the piping and tanks with leak detection until closure planned for a later date. LUST Event ID 2731 marks the eventual removal of these 2 USTs and a third at the CBJ Airport Maintenance building on the north apron.

Action Date: 5/8/2002
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: Project manager changed from Janes to Wanstall. Site ranked and updated with on-site acitivity in 1999.

Action Date: 5/8/2002
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: Notice of Intent to Cost Recover sent to CBJ.

Action Date: 12/5/2013
Action: Institutional Control Compliance Review
DEC Staff: Evonne Reese
Action Description: IC compliance review conducted. Scheduled to send an IC reminder letter to RP right away.

Action Date: 12/23/2013
Action: Institutional Control Update
DEC Staff: Kristin Thompson
Action Description: An IC reminder letter was issued to the responsible party on this date.

Action Date: 11/20/1997
Action: Update or Other Action

CBJ JUNEAU AIRPORT MAINTENANCE FACILITY (Continued) **S109254538**

DEC Staff: * Not Assigned
Action Description: ADEC sends Notification of Intent to Cost Recover Letter to Current Owner: CITY & BOROUGH OF JUNEAU. For same site - duplicate event di 2731 that has been deleted.

Action Date: 10/8/1999
Action: Leaking Underground Storage Tank Cleanup Initiated - Petroleum
DEC Staff: Bruce Wanstall
Action Description: Initial release found at site assessment of the two registered fuel USTs and dispensing pumps east of the airport maintenance building. Unregistered UST from the west side of the building found with corrosion holes. Along with the 3 USTs 500 tons of impacted soil removed for off-site treatment.

Action Date: 10/7/2003
Action: Update or Other Action
DEC Staff: Cynthia Pring-Ham
Action Description: Administrator deleted record for EventId 1210 which is a duplicate record for this site.

Action Date: 10/2/2001
Action: Update or Other Action
DEC Staff: Cynthia Pring-Ham
Action Description: Changed Project Manager from Paul Horwath to Bill Janes

Inst Control:
Hazard ID: 25156
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Record Established
Action Date: 9/22/2003
File Number: 1513.26.061

Hazard ID: 25156
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Compliance Review
Action Date: 12/5/2013
File Number: 1513.26.061

Hazard ID: 25156
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Update
Action Date: 12/23/2013
File Number: 1513.26.061

55
NE
< 1/8
0.010 mi.
55 ft.

FRED MEYER #158 FUEL STOP
8181 GLACIER HWY
JUNEAU, AK 99801

AK UST **U004116415**
AK Financial Assurance **N/A**
AK NPDES

Relative:
Higher

Actual:
54 ft.

UST:
Facility ID: 716
Facility Type: Gas Station
Owner ID: 457
Owner Name: Fred Meyer Stores, Inc.
Owner Address: Env Dept 23E, Fuel Stops

FRED MEYER #158 FUEL STOP (Continued) **U004116415**

Owner City,St,Zip: Portland, OR 97242

Tank ID: 1
Tank Status: Permanently Out of Use
Tack Capacity: 5000
Tank Product: Diesel
Installed Date: 04/07/1984
Regulated Tank: Yes

Tank ID: 2
Tank Status: Currently in Use
Tack Capacity: 20000
Tank Product: Gasoline
Installed Date: 06/18/2002
Regulated Tank: Yes

Tank ID: 3
Tank Status: Currently in Use
Tack Capacity: 16000
Tank Product: Gasoline
Installed Date: 06/02/2002
Regulated Tank: Yes

AK Financial Assurance 1:
Region: 1
Financial Responsibility: WITH PROOF OF FINANCIAL RESPONSIBILITY
Facility ID: 716
Facility Type: Gas Station
Owner ID: 457
Owner Name: Fred Meyer Stores, Inc.
Owner Addr: Env Dept 23E, Fuel Stops
Owner City: Portland
Owner State: OR
Owner Zip: 97242
Owner City,St,Zip: Portland, OR 97242
Policy Begin Date: 05/01/2018
Policy End Date: 05/01/2019

NPDES:
Facility Type: Con-SWPP or SW Eng. Plan
Permit Number: 06-3P-072-068
Issued Date: Not reported
Responsible Party: Not reported
Lat/Long: Not reported
Latitude Direction: N
Lat/Lon Type Code: LAT
Longitude Direction: W

Permit:
Permit No: 06-3P-072-068
Permit Type: Stormwater
Permit Status: Not migrated yet
Date Type: EPA Dates
Issued Date/Time: Not reported
Expiration Date/Time: 7/1/2008

FRED MEYER #158 FUEL STOP (Continued) **U004116415**

Dec Date Type: DEC Dates
Dec Issue Date: 3/13/2006
Dec Expiration Date: 7/1/2008

Outfall:
Receiving Water: Not reported
Stormwater Receiving Water: undetermined - migration

O56 **DELTA AIR CARGO** **AK LUST** **U003140141**
West **JUNEAU INTERNATIONAL AIRPORT** **N/A**
< 1/8 **JUNEAU, AK 99801**
0.014 mi.
75 ft. **Site 1 of 2 in cluster O**

Relative:
Higher

Actual:
18 ft.

LUST:
Facility Name: DELTA AIR CARGO
Facility Status: Cleanup Complete
Record Key: 1991110009201
File ID: 1513.26.034
Oname: Delta Airlines Inc. Anc
Lat/Lon: 58.36024 -134.5853
Lust Event ID: 1974
CS or Lust: LUST
Borough: Juneau
Staff: No Longer Assigned
Site Type: Unknown
Horizontal Datum: Not reported

O57 **DELTA AIR CARGO** **AK SHWS** **S109256693**
West **JUNEAU INTERNATIONAL AIRPORT** **N/A**
< 1/8 **JUNEAU, AK 99801**
0.016 mi.
82 ft. **Site 2 of 2 in cluster O**

Relative:
Higher

Actual:
18 ft.

SHWS:
File Number: 1513.26.034
Staff: Not reported
Facility Status: Cleanup Complete
Latitude: 58.360240
Longitude: -134.585340
Hazard ID: 24902
Problem: Below matrix levels. No gasoline range detected, no BTEX detected. Tank was removed. File says No Contamination. Contaminants low concentration. Missing: EventID, Reckey, FacID, LedgerCode. Farnell was last staff assigned.

Actions:
Action Date: 4/2/1991
Action: Site Added to Database
DEC Staff: * Not Assigned
Action Description: Not reported

Action Date: 3/5/2002
Action: Site Closure Approved
DEC Staff: Bill Janes

DELTA AIR CARGO (Continued) **S109256693**

Action Description:	File review and administrative closure - Nothing in 1991 Mont Watson reports to indicate contamination present. Tank removed 4/2/91. Total of six samples taken from end walls and below the middle of tank bottom. Analyzed for BTEX and VOCs. All samples either ND or below current cleanup levels.
Action Date:	2/8/2002
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Site tickler update - no action at this time. Site looks it can probably be closed without too much more work.
Action Date:	11/23/2016
Action:	Update or Other Action
DEC Staff:	Kristin Thompson
Action Description:	Administrative update: as this site was administratively closed, no closure documentation was issued for the site.
Action Date:	10/2/2001
Action:	Update or Other Action
DEC Staff:	Cynthia Pring-Ham
Action Description:	Changed Project Manager from Paul Horwath to Bill Janes
Action Date:	10/11/1999
Action:	Leaking Underground Storage Tank Cleanup Initiated - Petroleum
DEC Staff:	* Not Assigned
Action Description:	Not reported

P58 **CHEVRON - AIRPORT (PAUL'S CHEVRON)** **AK LUST** **S104891675**
WNW **9151 GLACIER HWY** **N/A**
< 1/8 **JUNEAU, AK 99801**
0.022 mi.
116 ft. **Site 1 of 4 in cluster P**

Relative: LUST:
Higher

Actual: Facility Name:	CHEVRON - AIRPORT (PAUL'S CHEVRON)
34 ft. Facility Status:	Cleanup Complete - Institutional Controls
Record Key:	1994110036401
File ID:	1513.26.017
Oname:	Pilcher Properties LLC
Lat/Lon:	58.3627 -134.5839
Lust Event ID:	1213
CS or Lust:	LUST
Borough:	Juneau
Staff:	IC Unit
Site Type:	Gas Station
Horizontal Datum:	NAD83

P59 **PAUL'S CHEVRON** **AK UST** **U003141408**
WNW **9151 GLACIER HWY** **N/A**
< 1/8 **JUNEAU, AK 99801**
0.022 mi.
116 ft. **Site 2 of 4 in cluster P**

Relative:
Higher

Actual:
34 ft.

UST:

Facility ID:	928
Facility Type:	Gas Station
Owner ID:	895
Owner Name:	Erwin Enterprises C/O Key Book Keeping
Owner Address:	9105 Mendenhall RD
Owner City,St,Zip:	Juneau, AK 99801
Tank ID:	1
Tank Status:	**Permanently Out of Use**
Tack Capacity:	10000
Tank Product:	Gasoline
Installed Date:	05/25/1985
Regulated Tank:	Yes
Tank ID:	2
Tank Status:	**Permanently Out of Use**
Tack Capacity:	10000
Tank Product:	Gasoline
Installed Date:	05/25/1985
Regulated Tank:	Yes
Tank ID:	3
Tank Status:	**Permanently Out of Use**
Tack Capacity:	10000
Tank Product:	Gasoline
Installed Date:	05/25/1985
Regulated Tank:	Yes
Tank ID:	4
Tank Status:	**Permanently Out of Use**
Tack Capacity:	1000
Tank Product:	Used Oil
Installed Date:	Not reported
Regulated Tank:	Yes
Tank ID:	5
Tank Status:	**Permanently Out of Use**
Tack Capacity:	5000
Tank Product:	Gasoline
Installed Date:	05/25/1966
Regulated Tank:	Yes
Tank ID:	6
Tank Status:	**Permanently Out of Use**
Tack Capacity:	5000
Tank Product:	Gasoline
Installed Date:	05/25/1966

PAUL'S CHEVRON (Continued) **U003141408**

Regulated Tank: Yes

Tank ID: 7
Tank Status: **Permanently Out of Use**
Tack Capacity: 1000
Tank Product: Diesel
Installed Date: 05/25/1966
Regulated Tank: Yes

Tank ID: 8
Tank Status: **Permanently Out of Use**
Tack Capacity: 1000
Tank Product: Gasoline
Installed Date: 05/25/1966
Regulated Tank: Yes

Tank ID: 9
Tank Status: **Permanently Out of Use**
Tack Capacity: 1000
Tank Product: Heating Oil
Installed Date: 05/25/1985
Regulated Tank: No

Tank ID: 10
Tank Status: **Permanently Out of Use**
Tack Capacity: 1000
Tank Product: Diesel
Installed Date: 05/01/1986
Regulated Tank: No

P60 **CHEVRON - AIRPORT (PAUL'S CHEVRON)** **AK SHWS** **S109254667**
WNW **9151 GLACIER HWY;** **AK ENG CONTROLS** **N/A**
< 1/8 **JUNEAU, AK 99801** **AK INST CONTROL**
0.022 mi.
116 ft. **Site 3 of 4 in cluster P**

Relative:
Higher

Actual:
34 ft.

SHWS:
File Number: 1513.26.017
Staff: IC Unit, 9074655229 dec.icunit@alaska.gov
Facility Status: Cleanup Complete - Institutional Controls
Latitude: 58.362700
Longitude: -134.583900
Hazard ID: 24532
Problem: Not reported

Actions:
Action Date: 9/28/2011
Action: Report or Workplan Review - Other
DEC Staff: Erik Norberg
Action Description: Reviewed the first semi-annual 2011 Groundwater Monitoring Report dated July 13, 2011. Field monitoring was completed on May 18, 2011. The report indicates that wells MW-2, MW-3 and MW-4 still have contaminant concentrations above ADEC cleanup levels. GRO levels in MW-3 had a concentration of 4.3mg/l which is above ADEC cleanup

CHEVRON - AIRPORT (PAUL'S CHEVRON) (Continued) **S109254667**

levels. Both MW-2 and MW-4 results indicate concentrations of benzene 0.14mg/l which are also above ADEC cleanup levels. Additional groundwater monitoring will be performed in fall 2011 and site conditions will be re-evaluated at that time.

Action Date: 9/20/2004
Action: Report or Workplan Review - Other
DEC Staff: Bill Janes
Action Description: June gw monitoring report reviewed. Results from 5/18/04 sampling (8th event since 1997) show GRO and benzene still slightly above Table C levels in some of the wells. However, concentrations have dropped significantly since May 02 sampling. Next sampling scheduled for 06. Evaluate whether monitoring can be terminated after those results are received and reviewed.

Action Date: 9/14/2012
Action: Report or Workplan Review - Other
DEC Staff: Evonne Reese
Action Description: Reviewed the First Semi-Annual Groundwater Monitoring Report 2012 dated August 23, 2012. Field monitoring was conducted on May 16, 2012. Included in this monitoring event were wells 1, 2, 3, and 4. GRO concentrations in MW-1, 2, and 3 were below cleanup levels, but the GRO concentration in MW-4 was 3.0 mg/L which is above the cleanup concentration of 2.2 mg/L. DRO concentrations were also below cleanup levels in all wells except for MW-4 which showed a concentration of 2.5 mg/L. Concentrations of benzene were above cleanup levels in MW-2 and due to sample matrix interference, the reporting limit was raised above the Table C cleanup level in MW-3 and 4. Concentrations of toluene, ethylbenzene, and xylenes were all below cleanup levels in all four wells. The next sampling event is scheduled for September 2012. Site conditions will be re-evaluated at that time.

Action Date: 9/11/2013
Action: Site Visit
DEC Staff: Evonne Reese
Action Description: Visited the site during the fall groundwater monitoring. Took photos of the site and the different groundwater monitoring wells. The photos are saved in the electronic site file.

Action Date: 8/30/2010
Action: Offsite Soil or Groundwater Disposal Approved
DEC Staff: Evonne Reese
Action Description: Approval given to dispose of purged groundwater at the Mendenhall Treatment Plant from the 1st and 2nd 2010 semiannual sampling events. Tom Trego, wastewater plant superintendent copied on the email approval.

Action Date: 7/29/2015
Action: Institutional Control Update
DEC Staff: Evonne Reese
Action Description: Informed by the site consultant that they will be onsite to do the summer groundwater monitoring on August 6th and 7th.

Action Date: 6/17/1999
Action: Conditional Closure Approved
DEC Staff: * Not Assigned
Action Description: ADEC approved No Further Remedial Action Planned (NFRAP) status.

CHEVRON - AIRPORT (PAUL'S CHEVRON) (Continued) **S109254667**

Institutional controls were negotiated and approved. Two instruments were recorded: 1. Equitable Servitude & Easement, 2. Management Right Assignment. Long term groundwater monitoring required.

Action Date: 6/17/1999
Action: Long Term Monitoring Established
DEC Staff: * Not Assigned
Action Description: Not reported

Action Date: 6/17/1999
Action: Cleanup Level(s) Approved
DEC Staff: * Not Assigned
Action Description: Site concentrations below risk-based ACLs.

Action Date: 6/17/1999
Action: Institutional Control Record Established
DEC Staff: Bill Janes
Action Description: Equitable Servitude and Easement

Action Date: 5/29/1996
Action: Leaking Underground Storage Tank Cleanup Initiated - Petroleum
DEC Staff: * Not Assigned
Action Description: LCAU; Extensive contamination associated with waste oil tank. Contaminated soil excavated and stockpiled. Dispostion of stockpile still under consideration. Contaminated soil also encountered during removal of old tanks under canopy. Soil excavated and stockpiled, awaiting treatment options.

Action Date: 4/7/2006
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: Meeting with John Riggi, Bruce Eppler of Cambria Environmental, Chevron's new consultant. GW sampling to continue on bi-annual basis. GRO will no longer be sampled in MW-1, MW-2, MW-3. DRO will no longer be sampled in MW-1. John to send email regarding PAH's.

Action Date: 4/24/1996
Action: Underground Storage Tank Site Characterization or Assessment
DEC Staff: * Not Assigned
Action Description: SA1A; Report documented waste oil contamination.

Action Date: 4/22/2008
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: GW monitoring moved to semi-annual at the request of the consultant.

Action Date: 4/14/2015
Action: Report or Workplan Review - Other
DEC Staff: Kristin Thompson
Action Description: Reviewed the 2014 Annual Groundwater Monitoring Report submitted by ARCADIS and dated February 3, 2015. Groundwater samples were collected on August 11, 2014 from monitoring wells MW-1, MW-2, MW-3, and MW-4. Samples were analyzed for DRO, GRO, and BTEX. DRO concentrations were below cleanup levels in all wells except for MW-4 which showed a concentration of 2.5 mg/L, but when analyzed using silica gel cleanup the concentration was 0.87 mg/L. Concentrations of GRO and BTEX were all below cleanup levels in all four wells. The

CHEVRON - AIRPORT (PAUL'S CHEVRON) (Continued) **S109254667**

next sampling event is scheduled for August 2015. If the 2015 results remain generally stable, future sampling events will occur on a biennial basis.

Action Date: 3/22/2017
Action: Institutional Control Compliance Review
DEC Staff: Kristin Thompson
Action Description: IC compliance review conducted. Closure/IC Details updated according to the Equitable Servitude requirements. Groundwater monitoring occurs every other year and the responsible party is actively engaged with ADEC as far as IC compliance goes; therefore, an ICs Verification letter will not be issued at this time. Reminder system set for future compliance reviews to take place every four years.

Action Date: 2/7/2014
Action: Institutional Control Update
DEC Staff: Evonne Reese
Action Description: Issued a letter to Chevron requesting one more complete sampling event which will most likely be in the late spring of 2014. If the results trend continues, we???ll discontinue sampling on all wells but MW-3 where we are still getting hits of benzene.

Action Date: 2/3/2014
Action: Report or Workplan Review - Other
DEC Staff: Kristin Thompson
Action Description: Reviewed the Annual Groundwater Monitoring Report 2013 dated December 31, 2013. Field monitoring was conducted on September 11, 2013. Included in this monitoring event were wells 1, 2, 3, and 4. GRO concentrations were below cleanup levels in all wells. DRO concentrations were below cleanup levels in all wells except for MW-4 which showed a concentration of 1.9 mg/L, but when analyzed using silica gel cleanup the concentration was 0.22 mg/L. Concentrations of benzene were above cleanup levels in MW-3 at 0.0089 mg/L. Concentrations of toluene, ethylbenzene, and xylenes all remained below cleanup levels in all four wells.

Action Date: 2/28/2008
Action: Update or Other Action
DEC Staff: Evonne Reese
Action Description: Reviewed August 2007 groundwater monitoring report. DRO, GRO and benzene are above cleanup levels in MW-4 and benzene levels have increased when compared to 2006 sampling results. Benzene was above cleanup levels in MW-2. All contaminant concentrations in MW-1 and MW-3 were below cleanup levels.

Action Date: 2/27/2018
Action: Update or Other Action
DEC Staff: Evonne Reese
Action Description: The Juneau Empire ran an article on this date about St. Vincent De Paul's purchase of the Valley Auto Parts building. Update the Affiliates info once the Tax Assessor's office has the updated information.

Action Date: 2/26/2013
Action: Report or Workplan Review - Other
DEC Staff: Evonne Reese
Action Description: Reviewed the Second Semi-Annual Groundwater Monitoring Report 2012

CHEVRON - AIRPORT (PAUL'S CHEVRON) (Continued) **S109254667**

dated February 4, 2013. Field monitoring was conducted on September 15, 2012. Included in this monitoring event were wells 1, 2, 3, and 4. GRO concentrations were below cleanup levels in all wells. DRO concentrations were below cleanup levels in all wells except for MW-4 which showed a concentration of 2.8 mg/L, but when analyzed using silica gel cleanup the concentration was 0.61 mg/L. Concentrations of benzene were above cleanup levels in MW-2 at 0.0059 mg/L and also in MW-3 at 0.011 mg/L. Concentrations of toluene, ethylbenzene, and xylenes all remained below cleanup levels in all four wells.

Action Date: 2/18/2010
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: New contact at Chevron Environmental Management is Amy Gilpin at 925-543-5687.

Action Date: 12/8/2011
Action: Report or Workplan Review - Other
DEC Staff: Evonne Reese
Action Description: Reviewed the Second Semi-Annual Groundwater Monitoring Report 2011 dated November 8, 2011. Field monitoring was conducted on October 2, 2011. Included in this monitoring event were wells 1, 2, 3, and 4. GRO concentrations in all four wells were below cleanup levels. DRO concentrations were below cleanup levels in all wells except for 1. Concentrations of benzene were above cleanup levels in well 2 and 3, and are unknown for well 4 due to sample matrix interference. Concentrations of toluene, ethylbenzene, and xylenes were all below cleanup levels in all four wells. The next sampling event is scheduled for May 2012. Site conditions will be re-evaluated at that time.

Action Date: 12/8/2011
Action: Institutional Control Compliance Review
DEC Staff: Evonne Reese
Action Description: IC review completed. Groundwater monitoring is done at this site consistently twice yearly.

Action Date: 12/30/1994
Action: Site Added to Database
DEC Staff: * Not Assigned
Action Description: Not reported

Action Date: 12/19/2008
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: Received the second semi annual groundwater monitoring report for field activities conducted during August 2008. DRO increased to 25 mg/L in MW-2. All previous results at this well, dating back to 1997, were below the DRO cleanup level of 1.5 mg/L. MW-3, to the east of MW-2, also had a significant DRO spike (21 mg/L).

Action Date: 12/17/2007
Action: Update or Other Action
DEC Staff: Evonne Reese
Action Description: Conceptual site model received from Conestoga-Rovers

Action Date: 11/30/2015

CHEVRON - AIRPORT (PAUL'S CHEVRON) (Continued) **S109254667**

Action:	Report or Workplan Review - Other
DEC Staff:	Kristin Thompson
Action Description:	Reviewed the 2015 Annual Groundwater Monitoring Report submitted by ARCADIS and dated November 6, 2015. Groundwater samples were collected on August 6, 2015 from monitoring wells MW-1, MW-2, MW-3, and MW-4. Samples were analyzed for DRO, GRO, and BTEX. DRO concentrations were below cleanup levels in all wells except for MW-4 which showed a concentration of 1.9 mg/L (decrease from last year's results), and when analyzed using silica gel cleanup the concentration was 0.023 mg/L. Concentrations of GRO, toluene, ethylbenzene, and total xylenes were all below cleanup levels in all four wells. Benzene concentrations were below cleanup levels in all wells except for MW-4, which was only slightly above at a concentration of 0.0053 mg/L. As results have gradually decreased or remained generally stable since 2013, monitoring frequency is reduced from annually to biennially. The next sampling event is scheduled for August 2017.
Action Date:	11/30/2015
Action:	Institutional Control Compliance Review
DEC Staff:	Kristin Thompson
Action Description:	The IC compliance review was conducted at the same time as the 2015 Annual Groundwater Monitoring report was reviewed.
Action Date:	11/20/1997
Action:	Update or Other Action
DEC Staff:	* Not Assigned
Action Description:	ADEC sends Notification of Intent to Cost Recover Letter to Current Owner: ERWIN ENTERPRISES C/O KEY BOOK KEEPING
Action Date:	11/18/2010
Action:	Report or Workplan Review - Other
DEC Staff:	Evonne Reese
Action Description:	Reviewed the First Semiannual 2010 Groundwater Monitoring Report dated October 22, 2010. Field monitoring was completed on May 9, 2010. The report results showed that benzene concentrations continue to decrease in all wells except for MW-2 where levels were at 0.008 mg/L. Diesel concentrations continue to decrease in all wells except for MW-1 which had a DRO spike of 6.5 mg/L. The contractor speculated that this spike is likely form surface infiltration or another source. Continue to track MW-1 to make sure concentrations go back down. GRO concentrations in MW-4 were 4.5 mg/l. Additional groundwater monitoring will be performed in August 2010 and site conditions will be re-evaluated at that time.
Action Date:	11/18/2010
Action:	Report or Workplan Review - Other
DEC Staff:	Evonne Reese
Action Description:	Reviewed the Second Semiannual 2010 Groundwater Monitoring Report dated October 29, 2010. Field monitoring was completed on August 11, 2010. The report results showed that benzene concentrations continue to decrease in all wells except for MW-2 where levels were at 0.014 mg/L. DRO concentrations continue to decrease in all wells except for MW-4 which had concentrations of 1.9 mg/L. GRO concentrations in MW-4 were 4.0 mg/l. Additional groundwater monitoring will be performed in 2011 and site conditions will be re-evaluated at that time.

CHEVRON - AIRPORT (PAUL'S CHEVRON) (Continued) **S109254667**

Action Date:	11/1/2011
Action:	Offsite Soil or Groundwater Disposal Approved
DEC Staff:	Bill Janes
Action Description:	Approval provided to Conestoga-Rovers for transport and disposal of one 55-gallon drum of purge water generated durning the first and second semiannual groundwater sampling events. Waste to be taken by Lynden Tranport to the Emerald facility in Anchorage.
Action Date:	10/4/2006
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	August 2006 monitoring report reviewed. Sampliing occurred in June. DRO above Table C deanup level in MW-1.MW-3, MW-4. Concentrations significantly higher than the May 2004 sampling results. GRO above Table C in MW-1 and MW-4. MW-4 has consistently been above cleanup levels going back to 11/98. Benzene above Table C in MW-2 and MW-4. Next monitoring event scheduled for June 2008.
Action Date:	10/28/2009
Action:	Offsite Soil or Groundwater Disposal Approved
DEC Staff:	Bill Janes
Action Description:	Approved to dispose of purged groundwater at the Mendenhall Treatment Plant from the 1st and 2nd 2009 semi-annual sampling events. Plant supervisor copied on the email approval.
Action Date:	10/14/2008
Action:	Report or Workplan Review - Other
DEC Staff:	Evonne Reese
Action Description:	Received the semiannual 2008 groundwater monitoring report on 9/15/2008. Field monitoring was completed on June 24, 2008. For this sampling event petroleum concentrations were below Table C cleanup levels in MW-1 and MW-2. Benzene concentrations were above Table C in MW-3, and MW-4 showed GRO, DRO, and benzene concentrations above Table C, but still indicate decreasing concentrations since 2006 GWM. Groundwater monitoring will be completed again before the end of 2008. Not reported
Action Date:	1/7/1999
Action:	Risk Assessment
DEC Staff:	* Not Assigned
Action Description:	ADEC received risk assessment
Action Date:	1/29/2010
Action:	Report or Workplan Review - Other
DEC Staff:	Evonne Reese
Action Description:	Reviewed the Second Semiannual 2009 Groundwater Monitoring Report dated 12/15/2009. Field monitoring was completed on October 12, 2009. The report results showed that benzene concentrations continue to decrease in all wells and the only well that has levels above Table C is MW-2 at 0.009 mg/L. Diesel concentrations continue to decrease in all wells except for MW-4 which has increased to 5.5 mg/L. Continue to track MW-3 after the spike of DRO in 2008 and MW-4 to make sure the DRO levels don???t keep increasing. Groundwater monitoring will continue in 2010 and site conditions will be re-evaluated at that time.
Action Date:	1/12/2018

CHEVRON - AIRPORT (PAUL'S CHEVRON) (Continued) **S109254667**

Action: Report or Workplan Review - Other
DEC Staff: Kristin Thompson
Action Description: Reviewed the 2017 Annual Groundwater Monitoring Report submitted by ARCADIS and dated November 30, 2017. Groundwater samples were collected on August 7, 2017 from three monitoring wells (MW-1, MW-3, and MW-4). Well MW-2 could not be sampled because it appeared to have been paved over by the neighboring property owner. Samples were analyzed for DRO, GRO, and BTEX. While the report concluded that concentrations were all below cleanup levels in all three wells, the ADEC's cleanup level regulations had been updated and the report appeared to quote the former cleanup levels for BTEX. ADEC issued an email to the ARCADIS contact person noting the discrepancies: (1) under the updated regulations, ethylbenzene in MW-4 was slightly above the new cleanup levels, and (2) though total xylenes in MW-2 were considered below cleanup levels during the 2015 monitoring event (under the old regulations), that level (2.7 mg/L) is now quite a bit higher than the new cleanup level of 0.19 mg/L. ADEC agrees with ARCADIS's recommendation to sample again in 2018, with an attempt to locate MW-2 at that time. If MW-2 can be located, it should be restored for sampling. Since MW-1 and MW-3 have shown relatively stable or decreasing concentrations, ADEC approved excluding these two wells from the 2018 sampling event. Only MW-2 and MW-4 will be required to be sampled during the 2018 monitoring event.

ENG CONTROLS:
File Number: 1513.26.017
Facility Status: Cleanup Complete - Institutional Controls
Control Details Description: Maintenance / Inspection Of Engineering Controls
Hazard ID: 24532

Inst Control:
Hazard ID: 24532
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Record Established
Action Date: 6/17/1999
File Number: 1513.26.017

Hazard ID: 24532
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Compliance Review
Action Date: 12/8/2011
File Number: 1513.26.017

Hazard ID: 24532
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Update
Action Date: 2/7/2014
File Number: 1513.26.017

Hazard ID: 24532
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Update
Action Date: 7/29/2015
File Number: 1513.26.017

CHEVRON - AIRPORT (PAUL'S CHEVRON) (Continued) **S109254667**

Hazard ID: 24532
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Compliance Review
Action Date: 11/30/2015
File Number: 1513.26.017

Hazard ID: 24532
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Compliance Review
Action Date: 3/22/2017
File Number: 1513.26.017

P61 **EMIGS CHEVRON** **EDR Hist Auto** **1021462288**
WNW **9151 GLACIER HWY** **N/A**
< 1/8 **JUNEAU, AK 99801**
0.022 mi.
116 ft. **Site 4 of 4 in cluster P**

Relative: EDR Hist Auto
Higher

Actual: **34 ft.**

Year:	Name:	Type:
1980	EMIGS CHEVRON	Gasoline Service Stations
1982	EMIGS CHEVRON	Gasoline Service Stations
1983	EMIGS CHEVRON	Gasoline Service Stations
1985	EMIGS CHEVRON	Gasoline Service Stations
1986	EMIGS CHEVRON	Gasoline Service Stations
1992	ROBITAILLES INC	Tour Operators, NEC
1993	ROBITAILLES INC	Tour Operators, NEC

Q62 **FAA JUNEAU** **AK UST** **U004115416**
WNW **9230 CESSNA DR** **N/A**
< 1/8 **JUNEAU, AK 99801**
0.023 mi.
119 ft. **Site 1 of 5 in cluster Q**

Relative: UST:
Higher

Actual: **29 ft.**

Facility ID: 1020
Facility Type: Unknown
Owner ID: 432
Owner Name: Federal Aviation Administration
Owner Address: 3868 University Ave S
Owner City,St,Zip: Fairbanks, AK 99709

Tank ID: 1
Tank Status: **Permanently Out of Use**
Tack Capacity: 1000
Tank Product: Gasoline
Installed Date: 05/07/1963
Regulated Tank: Yes

Tank ID: 2
Tank Status: **Permanently Out of Use**
Tack Capacity: 100
Tank Product: Gasoline
Installed Date: 05/06/1982

FAA JUNEAU (Continued) **U004115416**

Regulated Tank: No

Tank ID: 3
Tank Status: **Permanently Out of Use**
Tack Capacity: 500
Tank Product: Diesel
Installed Date: 05/06/1985
Regulated Tank: Yes

Tank ID: 4
Tank Status: **Permanently Out of Use**
Tack Capacity: 2500
Tank Product: Heating Oil
Installed Date: 01/01/1989
Regulated Tank: No

Tank ID: 5
Tank Status: **Permanently Out of Use**
Tack Capacity: 500
Tank Product: Gasoline
Installed Date: 05/07/1963
Regulated Tank: Yes

Tank ID: 6
Tank Status: **Permanently Out of Use**
Tack Capacity: 300
Tank Product: Diesel
Installed Date: 05/06/1986
Regulated Tank: Yes

Tank ID: 7
Tank Status: **Permanently Out of Use**
Tack Capacity: 1000
Tank Product: Other
Installed Date: 01/01/1963
Regulated Tank: No

Tank ID: 8
Tank Status: **Permanently Out of Use**
Tack Capacity: 100
Tank Product: Diesel
Installed Date: 01/01/1986
Regulated Tank: No

Tank ID: 9
Tank Status: **Permanently Out of Use**
Tack Capacity: 500
Tank Product: Other
Installed Date: 01/01/1963
Regulated Tank: No

FAA JUNEAU (Continued) **U004115416**

Tank ID: 10
Tank Status: Permanently Out of Use
Tack Capacity: 2500
Tank Product: Diesel
Installed Date: 01/01/1989
Regulated Tank: Yes

Q63 **DELTA WESTERN JUNEAU AIRPORT FUEL STORAGE** **AK SHWS S109255032**
West **9203 CESSNA DRIVE; JUNEAU INTERNATIONAL AIRPORT** **AK LUST N/A**
< 1/8 **JUNEAU, AK 99801**
0.027 mi.
141 ft. **Site 2 of 5 in cluster Q**

Relative: Higher
Actual: 28 ft.

SHWS:
File Number: 1513.26.046
Staff: Not reported
Facility Status: Cleanup Complete
Latitude: 58.362327
Longitude: -134.588998
Hazard ID: 23308
Problem: A 25,000-gallon underground storage tank (UST) for aviation fuel was closed by removal. Soil analysis detected 97,612 parts per million (ppm) benzene, toluene, ethylbenzene, and xylenes (Total BTEX) and 3,400 ppm gasoline range hydrocarbons (GRO) in soil surrounding the UST. Petroleum impacted soil was evident at the surface and beneath the tank. Contamination to the groundwater is greatest in the diesel range hydrocarbons (DRO); speculation that petroleum did not escape the UST resulted in no additional soil analysis for gasoline and Jet A fuel additives such as lead.

Actions:
Action Date: 9/6/2007
Action: Leaking Underground Storage Tank Corrective Action Underway
DEC Staff: Bruce Wanstall
Action Description: ADEC approved the installation of a solar powered ozone injection device to remediate residual diesel contamination of soil and ground water at the Juneau Airport Fueling Facility. Visit the Site Summary published soon on the Contaminated Sites Program webpage to view photos and to obtain additional information.

Action Date: 9/26/1999
Action: Underground Storage Tank Site Characterization or Assessment
DEC Staff: Bruce Wanstall
Action Description: RRM Assessment for Chevron advanced 14 borings to collect subsurface soil and water samples then sampled the contaminated material stockpile. Gasoline range hydrocarbons were detected at concentration of 2,120ppm in boring B-6-; 112ppm in B-7; 140ppm in B-8. GRO in ground water reached 500ppm in B-6, 13.8 GRO in B-7, 9.8 GRO in B-1 and 3.54 GRO in B-2. All DRO and RRO samples were treated by silica gel before analysis; not the GRO samples. Most stringent cleanup levels for contaminated media are recommended for a residential exposure scenario.

Action Date: 8/21/2006
Action: Long Term Monitoring Established
DEC Staff: Bruce Wanstall
Action Description: Review and approve Cambria Site Characterization Report and Ground Water monitoring Workplan

DELTA WESTERN JUNEAU AIRPORT FUEL STORAGE (Continued) **S109255032**

Action Date:	8/21/2002
Action:	Update or Other Action
DEC Staff:	Cynthia Pring-Ham
Action Description:	RECKEY has automatically been generated.
Action Date:	7/24/2009
Action:	Report or Workplan Review - Other
DEC Staff:	Bruce Wanstall
Action Description:	ADEC reviewed and approves the 2008 GMRs for data quality. Diesel contamination of ground water is in decline but concentrations still exceed regulatory cleanup levels. Active treatment and monitoring will continue in 2009.
Action Date:	7/23/2007
Action:	Release Investigation
DEC Staff:	Bruce Wanstall
Action Description:	Plans for development involving earthwork on Lots 5 & 6 at the JIA facility are presently on hold. A low flow ozone diffuser equipped with a solar panel is a remedial strategy under consideration by Chevron to reduce diesel range hydrocarbons in shallow subsurface soil and groundwater at the site.
Action Date:	7/20/2006
Action:	Release Investigation
DEC Staff:	Bruce Wanstall
Action Description:	Meeting with Cooper Engineering, Chevron, Delta Western, and Juneau International Airport staff to develop plans to address a pocket of contamination at the facility that intersects with a current development project.
Action Date:	6/2/2006
Action:	Site Visit
DEC Staff:	Bruce Wanstall
Action Description:	Attended soil boring site investigation at the facility with airport personel and Cambria Environmental representing Chevron Environmental. The pattern of subsurface contamination appeared consistent with conclusions arrived at during the April boring inspection. Samples were collected for laboratory analysis from Lots 5 & 6 in the JIA Fuel Facility proposed new development area.
Action Date:	6/13/2008
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	ADEC approves reduction of the sample analyte list for future ground water monitoring of MW-4.
Action Date:	5/21/1999
Action:	Site Visit
DEC Staff:	* Not Assigned
Action Description:	Site visit on 5/14/99 by Dick Farnell & Sally Schlichting of DEC and Jason Ginter consultant. Viewed former UST location and confirmed improbability of contamination detected at UST closure as coming from UST due to elevation differences and lateral distances. Letter sent to Delta Western 5/21/99 stated that contamination found did not come from the UST, but that release investigation still needed (by property owner - City) to determine nature and extent of contamination. City (Alan Heese of Airport staff) was encouraged to

DELTA WESTERN JUNEAU AIRPORT FUEL STORAGE (Continued) **S109255032**

take a groundwater sample from point of groundwater flow exit into construction excavation for Duck Creek culvert installation to check for petroleum. Case still open.

Action Date: 4/4/2007
Action: Release Investigation
DEC Staff: Bruce Wanstall
Action Description: The ADEC and Chevron met with the Juneau Airport Board of Directors to review the proposed plans for future development of the properties that comprise the facility. The ADEC had requested development of a management plan in the event that petroleum contaminated material is encountered on Lots 5 & 6 during development related earthwork activities. Chevron introduced plans to install an ozone injection remedial system for reducing dissolved-phase hydrocarbons in groundwater in site monitoring well MW-4.

Action Date: 4/14/2006
Action: Leaking Underground Storage Tank Corrective Action Underway
DEC Staff: Bruce Wanstall
Action Description: Meeting with Stacy Hartung-Freirchs (Chevron), John Riggi (Cambria), John Cooper (Cooper Consulting Engineer Inc), Bill Janes and Bruce Wanstall concerning new construction on Lots 5 & 6 that is adjacent to the subsurface petroleum smear zone on Lot 8B. Wanstall and Cooper inspected the site in the afternoon; Wanstall assumes site project management.

Action Date: 3/27/2008
Action: Exposure Tracking Model Ranking
DEC Staff: Bruce Wanstall
Action Description: ADEC reviewed the CRA Conceptual Site Model and evaluated site conditions using the ETM and 2007 site data. ADEC approval and comment on the 2007 GMR, Residential Sampling Report and the CSM was sent to CRA and Chevron.

Action Date: 3/25/2008
Action: Report or Workplan Review - Other
DEC Staff: Bruce Wanstall
Action Description: ADEC review of the Residential Sampling Report for the laboratory checklist. Data meet Contaminated Sites Program quality assurance standard.

Action Date: 3/21/2008
Action: Report or Workplan Review - Other
DEC Staff: Bruce Wanstall
Action Description: ADEC reviewed Annual 2007 Groundwater Monitoring and Remedial Actions Report for MW-4 at the facility. The CRA report data meet Contaminated Sites Program quality assurance standards and are accepted.

Action Date: 12/31/2012
Action: Cleanup Complete Determination Issued
DEC Staff: Bruce Wanstall
Action Description: ADMINISTRATIVE SITE CLOSURE based on concurrent site investigation, active remediation and groundwater monitoring under the site name Juneau Airport Fueling Facility with Hazard ID 2987 and DEC file 1513.38.008

DELTA WESTERN JUNEAU AIRPORT FUEL STORAGE (Continued) **S109255032**

Action Date:	12/31/2012
Action:	Long Term Monitoring Complete
DEC Staff:	Kristin Thompson
Action Description:	Administrative action on 5/1/2013.
Action Date:	12/30/2002
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	ADMINISTRATIVE SITE CLOSURE based on informtion in 5/21/99 email below. Concurrent investigation in C-Sites under name Juneau Airport Fueling Facility.Cleanup has occurred and annual gw monitoring has been implemented under the C-Sites project.
Action Date:	11/4/1998
Action:	Leaking Underground Storage Tank Cleanup Initiated - Petroleum
DEC Staff:	* Not Assigned
Action Description:	Entered by JC (QAQC work)
Action Date:	11/4/1998
Action:	Underground Storage Tank Site Characterization or Assessment
DEC Staff:	* Not Assigned
Action Description:	Not reported
Action Date:	11/4/1998
Action:	Site Added to Database
DEC Staff:	* Not Assigned
Action Description:	Not reported
Action Date:	10/24/2011
Action:	Report or Workplan Review - Other
DEC Staff:	Bruce Wanstall
Action Description:	DEC approves disposal of the well purge water to the ground surface at the site where residual petroleum soil contamination is present near MW-4 at the bulk fuel storage site.
Action Date:	10/2/2001
Action:	Update or Other Action
DEC Staff:	Cynthia Pring-Ham
Action Description:	Changed Project Manager from Paul Horwath to Bill Janes
Action Date:	10/15/2012
Action:	Report or Workplan Review - Other
DEC Staff:	Bruce Wanstall
Action Description:	DEC approved Annual 2011 Groundwater Monitoring and Ozone System Maintenance Report by CRA documenting groundwater monitoring at the Chevron Site 8-2307, Hazard ID 2987. Dissolved DRO in groundwater remains an order of magnitude above the Table C DRO cleanup level of 1.5 mg/L.
Action Date:	10/15/2010
Action:	Report or Workplan Review - Other
DEC Staff:	Bruce Wanstall
Action Description:	DEC approved the Annual 2010 Groundwater Monitoring Report and Ozone System Maintenance Report by Conestoga Rovers & Associates. Diesel contamination of ground water is in stable in concentrations still exceeding regulatory cleanup levels. Active treatment and monitoring will continue in 2011.

DELTA WESTERN JUNEAU AIRPORT FUEL STORAGE (Continued) **S109255032**

Action Date: 10/13/2010
Action: Report or Workplan Review - Other
DEC Staff: Bruce Wanstall
Action Description: ADEC approved field and laboratory data in Annual 2009 Groundwater Monitoring Report and Ozone System Maintenance Report by Conestoga Rovers & Associates. Diesel contamination of ground water is in stable in concentrations still exceeding regulatory cleanup levels. Active treatment and monitoring will continue in 2010.

LUST:
Facility Name: DELTA WESTERN JUNEAU AIRPORT FUEL STORAGE
Facility Status: Cleanup Complete
Record Key: 1998110030801
File ID: 1513.26.046
Oname: Not reported
Lat/Lon: 58.36232 -134.5889
Lust Event ID: 2319
CS or Lust: LUST
Borough: Juneau
Staff: No Longer Assigned
Site Type: Airport/Airfield
Horizontal Datum: WGS84

R64 **TEMSCO HELICOPTERS - JNU HELIPORT** **AK VCP** **S109254664**
East **1650 MAPLESDEN WAY** **N/A**
< 1/8 **JUNEAU, AK**
0.033 mi.
175 ft. **Site 1 of 6 in cluster R**

Relative: VCP:
Lower
DEC File Number: 1513.26.053
Actual: Facility Status: Cleanup Complete - Institutional Controls
1 ft. Staff: IC Unit,
Hazard Id: 24511

R65 **TEMSCO HELICOPTERS** **AK LUST** **S122315768**
East **1650 MAPLEADEN WAY** **N/A**
< 1/8 **JUNEAU, AK 99801**
0.033 mi.
175 ft. **Site 2 of 6 in cluster R**

Relative: LUST:
Lower
Facility Name: TEMSCO HELICOPTERS
Actual: Facility Status: Cleanup Complete
1 ft. Record Key: 1992110029701
File ID: 1513.26.010
Oname: Temsco Helicopters, Inc.
Lat/Lon: 58.35701 -134.5605
Lust Event ID: 1189
CS or Lust: LUST
Borough: Juneau
Staff: No Longer Assigned
Site Type: Unknown
Horizontal Datum: NAD83

R66 **TEMSCO HELICOPTERS, INC.** **AK UST** **U004115945**
East **1650 MAPLESDEN WAY** **AK Financial Assurance** **N/A**
< 1/8 **JUNEAU, AK 99801**
0.033 mi.
175 ft. **Site 3 of 6 in cluster R**

Relative:
Lower

Actual:
1 ft.

UST:

Facility ID:	270
Facility Type:	Air Taxi (Airline)
Owner ID:	1091
Owner Name:	Temsco Helicopters, Inc.
Owner Address:	P.O. Box 5057
Owner City,St,Zip:	Ketchikan, AK 99901
Tank ID:	1
Tank Status:	**Permanently Out of Use**
Tack Capacity:	6000
Tank Product:	Gasoline
Installed Date:	04/09/1983
Regulated Tank:	Yes
Tank ID:	2
Tank Status:	**Permanently Out of Use**
Tack Capacity:	1000
Tank Product:	Gasoline
Installed Date:	04/09/1983
Regulated Tank:	Yes
Tank ID:	3
Tank Status:	**Permanently Out of Use**
Tack Capacity:	300
Tank Product:	Used Oil
Installed Date:	04/09/1983
Regulated Tank:	Yes
Tank ID:	4
Tank Status:	**Currently in Use**
Tack Capacity:	8000
Tank Product:	Kerosene
Installed Date:	01/01/1990
Regulated Tank:	Yes

AK Financial Assurance 1:

Region:	1
Financial Responsibility:	WITH PROOF OF FINANCIAL RESPONSIBILITY
Facility ID:	270
Facility Type:	Air Taxi (Airline)
Owner ID:	1091
Owner Name:	Temsco Helicopters, Inc.
Owner Addr:	P.O. Box 5057
Owner City:	Ketchikan
Owner State:	AK
Owner Zip:	99901
Owner City,St,Zip:	Ketchikan, AK 99901
Policy Begin Date:	08/22/2018
Policy End Date:	08/22/2019

R67
East
< 1/8
0.033 mi.
175 ft.

TEMSCO HELICOPTERS
1650 MAPLEADEN WAY;
JUNEAU, AK 99801

Site 4 of 6 in cluster R

AK SHWS **S109256446**
N/A

Relative:
Lower

Actual:
1 ft.

SHWS:

File Number:	1513.26.010
Staff:	Not reported
Facility Status:	Cleanup Complete
Latitude:	58.357010
Longitude:	-134.560543
Hazard ID:	24507
Problem:	Approximately 300 cubic yards removed as of 11/9/92. Some contamination remains in place-a problem exists for future excavation as there are structures in place which inhibit further excavation (buildings, fences, concrete aprons). CAP for stockpiled so

Actions:

Action Date:	8/24/1993
Action:	Leaking Underground Storage Tank Corrective Action Underway
DEC Staff:	* Not Assigned
Action Description:	CAPR; Proposal to thermally treat oily soil using a Pioneer Agregate Dryer and Dust Collector unit.

Action Date:	12/18/1992
Action:	Underground Storage Tank Site Characterization or Assessment
DEC Staff:	* Not Assigned
Action Description:	SA1; 3 Site assessments submitted for the locations of each of the three UST's removed in 10/92. Diesel, gasoline and jet fuels.

Action Date:	10/7/1993
Action:	Site Closure Approved
DEC Staff:	* Not Assigned
Action Description:	CLOS; No further action necessary.

Action Date:	10/24/1992
Action:	Leaking Underground Storage Tank Cleanup Initiated - Petroleum
DEC Staff:	* Not Assigned
Action Description:	LCAU; Oily soil from Jet A UST pit excavated. Second phase of cleanup to occur in May 1993. : LCAU date changed DB conversion

Action Date:	10/23/1992
Action:	Update or Other Action
DEC Staff:	* Not Assigned
Action Description:	NOR; Source of contamination was from a fuel nozzle purge barrel, leaks in concrete barrier, overfills and accidental spills. Contamination was from 3 USTs which were removed.

Action Date:	10/23/1992
Action:	Site Added to Database
DEC Staff:	* Not Assigned
Action Description:	Not reported

R68 **TEMSCO HELICOPTERS - JUNEAU HELIPORT** **AK LUST** **S122315769**
East **1650 MAPLESDEN WAY** **N/A**
< 1/8 **JUNEAU, AK 99801**
0.033 mi.
175 ft. **Site 5 of 6 in cluster R**

Relative: LUST:
Lower
Actual: Facility Name: TEMSCO HELICOPTERS - JUNEAU HELIPORT
1 ft. Facility Status: Cleanup Complete - Institutional Controls
Record Key: 1999110012601
File ID: 1513.26.053
Oname: Temsco Helicopters, Inc.
Lat/Lon: 58.35546 -134.5601
Lust Event ID: 2618
CS or Lust: LUST
Borough: Juneau
Staff: IC Unit
Site Type: Airport/Airfield
Horizontal Datum: WGS84

R69 **TEMSCO HELICOPTERS - JUNEAU HELIPORT** **AK SHWS** **U003331078**
East **1650 MAPLESDEN WAY** **AK INST CONTROL** **N/A**
< 1/8 **JUNEAU, AK 99801**
0.033 mi.
175 ft. **Site 6 of 6 in cluster R**

Relative: SHWS:
Lower
Actual: File Number: 1513.26.053
1 ft. Staff: IC Unit, 9074655229 dec.icunit@alaska.gov
Facility Status: Cleanup Complete - Institutional Controls
Latitude: 58.355465
Longitude: -134.560122
Hazard ID: 24511
Problem: Soil contamination reached 20,000 miligrams per kilogram (mg/Kg) diesel range hydrocarbons, benzene 2.2 mg/Kg and 7,100 mg/Kg gasoline range hydrocarbons. 75 cubic yards of contaminated soil excavated from the piping run was remediated off-site. DEC approved backfill with clean soil leaving unknown quantity of residual soil contamination left in place where piping run from Jet A fuel UST continued to and beneath the hanger at a depth of five feet below ground surface.

Actions:
Action Date: 9/9/2004
Action: Streamlined Cleanup Program
DEC Staff: Bruce Wanstall
Action Description: Site reranked based on site visit and personal knowledge of the area. Property is located in Mendenhall Wetlands Wildlife Refuge, the primary contaminant of concern is gasoline range hydrocarbons and benzene, both remain in soil on the property. Groundwater not considered a drinking water source; eligible for Streamlined Cleanup Program and accepted under current review.

Action Date: 9/16/2004
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: Notice of ADEC Cost Recovery policy sent to responsible party in conjunction with NFRAP Decision with institutional controls.

Action Date: 9/15/2004

TEMSCO HELICOPTERS - JUNEAU HELIPORT (Continued) **U003331078**

Action:	Conditional Closure Approved
DEC Staff:	Bruce Wanstall
Action Description:	The volume of diesel contaminated material not accessible under the pipeline sump and extending to and beneath the hanger is estimated at greater than 50 cubic yards. NFRAP Decision is letter located at: G:\\SPAR\\Spar-Contaminated Sites\\26 Case Files (LUST Sites)\\1513 Juneau\\1513.26.053 Temsco Helicopters, Inc
Action Date:	9/13/2004
Action:	Institutional Control Record Established
DEC Staff:	Bruce Wanstall
Action Description:	Elevated concentrations of diesel range hydrocarbons remain in subsurface soil beneath the hanger foundation on Heliport Lot 1 2 3 4 & 5 Parcel 3B1501000030. The quantity of soil contamination beneath the structure is not estimated; inaccessible contaminated material on the south side of the hanger by the AST is estimated at less than 50 cubic yards; GRO reached 3,100ppm and benzene at 0.15ppm in 1999. If removal of soil from beneath the concrete apron and hanger becomes necessary or if groundwater supply well installation on the property is planned the DEC will be notified in advance to ensure that water quality or petroleum regulations are not violated.
Action Date:	9/10/2004
Action:	Report or Workplan Review - Other
DEC Staff:	Bruce Wanstall
Action Description:	File review of event 1992 closure by removal of 3 USTs at the Juneau Heliport. NFA taken on residual GRO/DRO in soil above cleanup levels at that time.
Action Date:	4/14/2004
Action:	Leaking Underground Storage Tank Corrective Action Underway
DEC Staff:	Bruce Wanstall
Action Description:	File located and reviewed; corrective action plan to excavate soil contamination carried out to reasonable measure in consideration of structural constraints of the hanger and co-located above ground fuel storage tank.
Action Date:	3/6/1999
Action:	Site Added to Database
DEC Staff:	* Not Assigned
Action Description:	Not reported
Action Date:	3/30/1999
Action:	Leaking Underground Storage Tank Cleanup Initiated - Petroleum
DEC Staff:	Bruce Wanstall
Action Description:	75 yards of soil contaminated with 7,100ppm GRO and 20,000ppm DRO was transported off-site and remediated by incineration in accordance with DEC approval.
Action Date:	3/18/2002
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	Project Manager changed from Janes to Wanstall.
Action Date:	3/17/1999
Action:	Underground Storage Tank Site Characterization or Assessment
DEC Staff:	Colin Basye

TEMSCO HELICOPTERS - JUNEAU HELIPORT (Continued) **U003331078**

Action Description: Contamination found up to 20 K ppm DRO, 7.1 K ppm GRO. Residual contamination left in situ because of proximity to bldg.

Action Date: 3/10/2017
Action: Update or Other Action
DEC Staff: Kristin Thompson
Action Description: This site falls within 1500 feet of a proposed dewatering location associated with the Juneau Runway Safety Area Improvements project. The figures in the dewatering application show the work in this phase of the project to be at the west end of the runway, whereas Temsco Helicopters - Juneau Heliport is near the east end of the runway. Impacts are not expected to occur as a result of the proposed dewatering project, however DEC staff will be contacted in the event oily soil is found or a sheen appears on the airplane pond or in the surface water path to the pond.

Action Date: 3/10/2017
Action: Institutional Control Compliance Review
DEC Staff: Kristin Thompson
Action Description: IC compliance review conducted. Periodic review every three years was added to the IC requirements as this site has a groundwater use restriction. ICs Verification letter issued. Reminder system set to follow-up in 2020.

Action Date: 12/4/2013
Action: Institutional Control Compliance Review
DEC Staff: Evonne Reese
Action Description: IC review conducted. Scheduled to send the RP an IC reminder letter.

Action Date: 12/29/2002
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: Hard file not available for review at this time.

Action Date: 12/23/2013
Action: Institutional Control Update
DEC Staff: Kristin Thompson
Action Description: An IC reminder letter was issued to the responsible party on this date.

Action Date: 10/2/2001
Action: Update or Other Action
DEC Staff: Cynthia Pring-Ham
Action Description: Changed Project Manager from Paul Horwath to Bill Janes

Inst Control:
Hazard ID: 24511
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Record Established
Action Date: 9/13/2004
File Number: 1513.26.053

Hazard ID: 24511
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Compliance Review
Action Date: 12/4/2013

TEMSCO HELICOPTERS - JUNEAU HELIPORT (Continued) **U003331078**

File Number: 1513.26.053

Hazard ID: 24511
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Update
Action Date: 12/23/2013
File Number: 1513.26.053

Hazard ID: 24511
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Compliance Review
Action Date: 3/10/2017
File Number: 1513.26.053

N70 **AERO SERVICES, JUNEAU AIRPORT** **AK SHWS S109349499**
West **"F"GATE 9203 SHELL SIMMONS DRIVE** **AK LUST N/A**
< 1/8 **JUNEAU, AK 99801**
0.036 mi.
189 ft. **Site 2 of 2 in cluster N**

Relative:
Higher

Actual:
23 ft.

SHWS:
File Number: 1513.26.051
Staff: Not reported
Facility Status: Cleanup Complete
Latitude: 58.361270
Longitude: -134.586145
Hazard ID: 23170
Problem: A 10,000-gallon aviation gasoline underground storage tank (UST) was removed in good condition; minor contamination found.

Actions:
Action Date: 7/14/1999
Action: Leaking Underground Storage Tank Cleanup Initiated - Petroleum
DEC Staff: Colin Basye
Action Description: Soil sampling; no piping or dispenser assessment performed. Letter writtern 7/31/00 from Dept.asking for additional assessment.

Action Date: 7/14/1999
Action: Site Added to Database
DEC Staff: * Not Assigned
Action Description: Not reported

Action Date: 3/27/2002
Action: Underground Storage Tank Site Characterization or Assessment
DEC Staff: Bruce Wanstall
Action Description: Dispenser island displayed in SA Report drawing not piped to this 10,000gallon UST. Characterization of the dispenser island was performed in 1991 Site Assessment of 4 Avgas USTs taken out of service in 1988. Sampling/analysis of dispenser island soils at that time indicated no GRO or BTEX detected.

Action Date: 3/27/2002
Action: Site Closure Approved
DEC Staff: Bruce Wanstall
Action Description: NFA letter issued to RP.

Action Date: 3/18/2002
Action: Update or Other Action

AERO SERVICES, JUNEAU AIRPORT (Continued) **S109349499**

DEC Staff: Bruce Wanstall
Action Description: Project manager changed from Janes to Wanstall.

Action Date: 10/2/2001
Action: Update or Other Action
DEC Staff: Cynthia Pring-Ham
Action Description: Changed Project Manager from Colin Basye to Bill Janes

LUST:
Facility Name: AERO SERVICES, JUNEAU AIRPORT
Facility Status: Cleanup Complete
Record Key: 1999110025601
File ID: 1513.26.051
Oname: Trajen Flight Support, LP, dba Aero Services, Inc.
Lat/Lon: 58.36127 -134.5861
Lust Event ID: 2579
CS or Lust: LUST
Borough: Juneau
Staff: No Longer Assigned
Site Type: Unknown
Horizontal Datum: NAD83

Q71 **JUNEAU & DOUGLAS TELCO.** **AK UST** **U004115583**
West **9229 CESSNA DR** **N/A**
< 1/8 **JUNEAU, AK 99803**
0.036 mi.
191 ft. **Site 3 of 5 in cluster Q**

Relative:
Higher

Actual:
26 ft.

UST:
Facility ID: 143
Facility Type: Utilities
Owner ID: 879
Owner Name: PTI Communications
Owner Address: 3940 Arctic BLVD
Owner City,St,Zip: Anchorage, AK 99503

Tank ID: 1
Tank Status: Permanently Out of Use
Tack Capacity: 600
Tank Product: Diesel
Installed Date: 04/29/1979
Regulated Tank: Yes

Q72 **PTI- JUNEAU CESSNA DRIVE** **AK SHWS** **S109254684**
West **9225 CESSNA DRIVE** **AK INST CONTROL** **N/A**
< 1/8 **JUNEAU, AK 99803** **AK VCP**
0.065 mi.
342 ft. **Site 4 of 5 in cluster Q**

Relative:
Higher

Actual:
24 ft.

SHWS:
File Number: 1513.26.056
Staff: IC Unit, 9074655229 dec.icunit@alaska.gov
Facility Status: Cleanup Complete - Institutional Controls
Latitude: 58.361846
Longitude: -134.586520

PTI- JUNEAU CESSNA DRIVE (Continued) **S109254684**

Hazard ID: 24743
Problem: Faulty field screening during the USTclosure by removal project failed to detect elevated levels of diesel contamination in undisturbed excavation sidewalls and floor. Olfactory and visual are not accepted stand alone field screening methods.

Actions:

Action Date: 6/23/2004
Action: Conditional Closure Approved
DEC Staff: Bruce Wanstall
Action Description: No Further Remedial Action Planned Decision Letter located at G:\\SPAR\\Spar-Contaminated Sites\\26 Case Files (LUST Sites)\\1513 Juneau\\1513.26.058 PTI - Juneau Glacier Highway\\ NFRAP PTI Glacier

Action Date: 6/22/2004
Action: Institutional Control Record Established
DEC Staff: Bruce Wanstall
Action Description: Property restriction discussed with current landowner for agreement this day: if groundwater access wells are installed on the property, groundwater assessment for petroleum will be performed and reported to the DEC in a timely manner; if through property improvements soil contamination is encountered, additional investigation of the release may be required.

Action Date: 6/21/2004
Action: Release Investigation
DEC Staff: Bruce Wanstall
Action Description: Additional investigation of residual contamination is waived under SCP.

Action Date: 6/21/2004
Action: Leaking Underground Storage Tank Cleanup Initiated - Petroleum
DEC Staff: Cynthia Pring-Ham
Action Description: Added by the Administrator.

Action Date: 6/21/2004
Action: Leaking Underground Storage Tank Corrective Action Underway
DEC Staff: Bruce Wanstall
Action Description: CAP waived for residual weathered petroleum in soil 10 times above the approved migration to groundwater cleanup levels at the time of UST closure; groundwater at the site is not considered a drinking water source; City and Borough of Juneau maintains a public drinking water system for the commercial area.

Action Date: 6/15/2004
Action: Streamlined Cleanup Program
DEC Staff: Bruce Wanstall
Action Description: Site file review; accepted into the Streamlined Cleanup Program

Action Date: 5/20/2002
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: File review for site status and database ranking. No corrective action on release found in 6/23/97 removal of 1,000gallon UST and piping. Laboratory testing of soil confirmation samples found DRO up to 2300 mg/kg at the east end of the tank, 480 mg/kg at the west end of the tank, and 950 mg/kg under the center of the tank. No soil samples taken under the fill and vent pipes and 9 foot bgs excavation

PTI- JUNEAU CESSNA DRIVE (Continued) **S109254684**

did not encounter groundwater.

Action Date: 3/18/2002
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: Project manager changed from Janes to Wanstall.

Action Date: 2/18/2004
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: Streamlined Cleanup Program invitation letter sent to owner/RP

Action Date: 12/23/2013
Action: Institutional Control Update
DEC Staff: Kristin Thompson
Action Description: An IC reminder letter was issued to the responsible party on this date.

Action Date: 12/13/2013
Action: Institutional Control Compliance Review
DEC Staff: Evonne Reese
Action Description: IC review conducted. Scheduled for an IC reminder letter to be issued. Not reported

Action Date: 10/7/1997
Action: Site Added to Database
DEC Staff: * Not Assigned
Action Description: Not reported

Action Date: 10/2/2001
Action: Update or Other Action
DEC Staff: Cynthia Pring-Ham
Action Description: Changed Project Manager from Paul Horwath to Bill Janes

Action Date: 1/3/2017
Action: Institutional Control Compliance Review
DEC Staff: Kristin Thompson
Action Description: IC compliance review conducted. Affiliates information and Closure/IC Details updated. IC reminder letter issued. Reminder system set to follow-up every three years.

Inst Control:
Hazard ID: 24743
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Record Established
Action Date: 6/22/2004
File Number: 1513.26.056

Hazard ID: 24743
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Compliance Review
Action Date: 12/13/2013
File Number: 1513.26.056

Hazard ID: 24743
Facility Status: Cleanup Complete - Institutional Controls

PTI- JUNEAU CESSNA DRIVE (Continued) **S109254684**

Action: Institutional Control Update
Action Date: 12/23/2013
File Number: 1513.26.056

Hazard ID: 24743
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Compliance Review
Action Date: 1/3/2017
File Number: 1513.26.056

VCP:
DEC File Number: 1513.26.056
Facility Status: Cleanup Complete - Institutional Controls
Staff: IC Unit,
Hazard Id: 24743

Q73 **PTI- JUNEAU CESSNA DRIVE** **AK LUST** **S105096354**
West **9225 CESSNA DRIVE** **N/A**
< 1/8 **JUNEAU, AK 99803**
0.065 mi.
342 ft. **Site 5 of 5 in cluster Q**

Relative: **Higher**
Actual: **24 ft.**

LUST:
Facility Name: PTI- JUNEAU CESSNA DRIVE
Facility Status: Cleanup Complete - Institutional Controls
Record Key: 1997110028001
File ID: 1513.26.056
Oname: City and Borough of Juneau & Airport
Lat/Lon: 58.36184 -134.5865
Lust Event ID: 2706
CS or Lust: LUST
Borough: Juneau
Staff: IC Unit
Site Type: Telecommunications
Horizontal Datum: WGS84

S74 **MIKE'S AIRPORT EXPRESS** **AK UST** **U003141313**
WNW **9190 GLACIER HWY** **AK Financial Assurance** **N/A**
< 1/8 **JUNEAU, AK 99801**
0.076 mi.
399 ft. **Site 1 of 4 in cluster S**

Relative: **Higher**
Actual: **33 ft.**

UST:
Facility ID: 816
Facility Type: Gas Station
Owner ID: 9513
Owner Name: Mike Holloway
Owner Address: 9190 Glacier Hwy
Owner City,St,Zip: Juneau, AK 99801

Tank ID: 1
Tank Status: **Permanently Out of Use**
Tack Capacity: 550
Tank Product: Used Oil
Installed Date: 06/10/1986
Regulated Tank: Yes

MIKE'S AIRPORT EXPRESS (Continued) **U003141313**

Tank ID: 2
Tank Status: Currently in Use
Tack Capacity: 12000
Tank Product: Gasoline
Installed Date: 06/10/1986
Regulated Tank: Yes

Tank ID: 3
Tank Status: Currently in Use
Tack Capacity: 12000
Tank Product: Gasoline
Installed Date: 06/10/1986
Regulated Tank: Yes

AK Financial Assurance 1:
Region: 1
Financial Responsibility: WITH PROOF OF FINANCIAL RESPONSIBILITY
Facility ID: 816
Facility Type: Gas Station
Owner ID: 9513
Owner Name: Mike Holloway
Owner Addr: 9190 Glacier Hwy
Owner City: Juneau
Owner State: AK
Owner Zip: 99801
Owner City,St,Zip: Juneau, AK 99801
Policy Begin Date: 03/29/2018
Policy End Date: 03/29/2019

S75 **MIKES AIRPORT UNION** **EDR Hist Auto** **1022106396**
WNW **9190 GLACIER HWY** **N/A**
< 1/8 **JUNEAU, AK 99801**
0.076 mi.
399 ft. **Site 2 of 4 in cluster S**

Relative: EDR Hist Auto
Higher

Actual:
33 ft.

Year:	Name:	Type:
1986	MIKES AIRPORT UNION	Gasoline Service Stations
1987	MIKES AIRPORT UNION	Gasoline Service Stations
1988	MIKES AIRPORT UNION	Gasoline Service Stations
1989	MIKES AIRPORT UNION	Gasoline Service Stations
1990	MIKES AIRPORT UNION	Gasoline Service Stations, NEC
1991	MIKES AIRPORT UNION	Gasoline Service Stations, NEC
1992	MIKES AIRPORT UNION	Gasoline Service Stations, NEC
1993	MIKES AIRPORT UNION	Gasoline Service Stations, NEC
1994	MIKES AIRPORT UNION	Gasoline Service Stations, NEC
1995	MIKES AIRPORT UNION	Gasoline Service Stations, NEC
1996	MIKES AIRPORT UNION	Gasoline Service Stations, NEC
1997	MIKES AIRPORT UNION	Gasoline Service Stations, NEC
1998	MIKES AIRPORT UNION	Gasoline Service Stations, NEC
1999	MIKES AIRPORT UNION	Gasoline Service Stations, NEC
2000	MIKES AIRPORT UNION	Gasoline Service Stations, NEC
2001	HOLLOWAY MIKE	Gasoline Service Stations, NEC
2002	HOLLOWAY MIKE	Gasoline Service Stations, NEC
2003	HOLLOWAY MIKE	Gasoline Service Stations, NEC

MIKES AIRPORT UNION (Continued) **1022106396**

2004	HOLLOWAY MIKE	Gasoline Service Stations, NEC
2005	HOLLOWAY MIKE	Gasoline Service Stations, NEC
2006	HOLLOWAY MIKE	Gasoline Service Stations, NEC
2007	HOLLOWAY MIKE	Gasoline Service Stations, NEC
2008	HOLLOWAY MIKE	Gasoline Service Stations, NEC
2009	HOLLOWAY MIKE	Gasoline Service Stations, NEC
2010	HOLLOWAY MIKE	Gasoline Service Stations, NEC
2011	HOLLOWAY MIKE	Gasoline Service Stations, NEC
2012	HOLLOWAY MIKE	Gasoline Service Stations, NEC
2013	HOLLOWAY MIKE	Gasoline Service Stations, NEC
2014	HOLLOWAY MIKE	Gasoline Service Stations, NEC

S76 **UNOCAL - #5785- AIRPORT UNION** **AK SHWS S104893243**
WNW **9190 GLACIER HIGHWAY** **AK LUST N/A**
< 1/8 **JUNEAU, AK 99801** **AK INST CONTROL**
0.076 mi.
399 ft. **Site 3 of 4 in cluster S**

Relative:
Higher

Actual:
33 ft.

SHWS:

File Number:	1513.38.005
Staff:	IC Unit, 9074655229 dec.icunit@alaska.gov
Facility Status:	Cleanup Complete - Institutional Controls
Latitude:	58.363300
Longitude:	-134.584800
Hazard ID:	2984
Problem:	This site contained contamination associated with regulated USTs that has been brought into acceptable ADEC levels. There also existed batteries in the fill, which have also since been removed. There is a small amount of contaminated soil that was thought to be associated with a hydraulic lift, but on closer investigation seems more likely to be associated with a HOT or service bay floor drain. The LUST site is Unocal - 5785-Airport Union (LUST event ID 2352).

Actions:

Action Date:	7/25/2009
Action:	Institutional Control Update
DEC Staff:	Evonne Reese
Action Description:	Received a groundwater well decommissioning report for 14 wells closed onsite in September of 2008.
Action Date:	5/18/2001
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Deed Notice on file at Juneau Recording District, Book 0558, Page 145 regarding concentrations of hydraulic fluid or other diesel and residual range pollutants beneath building exceed state cleanup levels. Deed notice states that any person proposing to drill or excavate must first contact Contaminated Sites.
Action Date:	4/5/2001
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Teleconference with Schlichting at Carson Dorn - 5 GRO, DRO and RRO from each face of excavation, hot spots - 2 BTEX with 8021, Metals, one PAH from hottest field screen. 2 metals.
Action Date:	4/4/2001
Action:	Update or Other Action

UNOCAL - #5785- AIRPORT UNION (Continued) **S104893243**

DEC Staff:	Bill Janes
Action Description:	Carson Dorn to sample soils excavated from around lube rack to see if they are appropriate for disposal at USR. I asked for metals, BTEX, GRO, DRO and RRO. VOCs and SVOCs to be sampled only if interview of service station manager indicates solvent use in the past. Clean confirmation sampling to include PAHs.
Action Date:	2/14/2002
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Project tickler update - email to Carson Dorn to see if they have a final report so this can be NFRAPed.
Action Date:	12/8/1999
Action:	Site Characterization Workplan Approved
DEC Staff:	Sally Schlichting
Action Description:	I have reviewed your proposal for addressing the contaminated sites-related portion of this primarily LUST site. You plan to install groundwater monitoring wells downgradient from the hydraulic lift of the main shop facility and conduct subsurface investigation to better quantify contamination beneath the hydraulic lift area. Your investigation and sampling strategies are acceptable. In addition to the work proposed, please investigate the oil/water separator area to verify this system is functioning properly by collecting samples for GRO, DRO and RRO at the discharge point. The work plan is hereby approved.
Action Date:	12/13/2013
Action:	Institutional Control Compliance Review
DEC Staff:	Evonne Reese
Action Description:	IC compliance review conducted. The scheduled IC reminder letters will be documented in the Unocal 5785 (1513.26.049) (Mike's Airport Express regulated leaking underground storage tank) site record. An IC reminder letter was issued on 8/1/2014.
Action Date:	11/22/2002
Action:	Institutional Control Record Established
DEC Staff:	Bill Janes
Action Description:	1. Groundwater supply wells will not be installed on this property.2. A deed notice is on file at the Juneau Recording District, Book 0560, Page 423, regarding residual contaminant concentrations below the building exceeding state cleanup levels. The deed notice states that any person proposing to drill or excavate must first contact DEC???s Contaminated Sites Program.
Action Date:	11/22/2002
Action:	Conditional Closure Approved
DEC Staff:	Bill Janes
Action Description:	Not reported
Action Date:	1/13/2000
Action:	Site Added to Database
DEC Staff:	Meilani Clark
Action Description:	Gasoline contamination.
Action Date:	1/10/2000
Action:	Site Ranked Using the AHRM

UNOCAL - #5785- AIRPORT UNION (Continued) **S104893243**

DEC Staff: Meilani Clark
Action Description: Initial ranking.

Contaminants:

Staff: IC Unit, 9074655229 dec.icunit@alaska.gov

Contaminate Name1: Mike's Airport Express
Contaminate Level Description1: Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation
Contaminate Media1: Soil

Control Type: Notice of Environmental Contamination (Deed Notice)
Control Details Description1: When Contaminated Soil is Accessible, Remediation Should Occur
Contaminant CTD: Juneau Recording District, Book 0560, Page 423
Contaminant CDR: Contamination remains beneath the building foundation. None
Comments: Not reported

Staff: IC Unit, 9074655229 dec.icunit@alaska.gov

Contaminate Name1: Mike's Airport Express
Contaminate Level Description1: Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation
Contaminate Media1: Soil

Control Type: Notice of Environmental Contamination (Deed Notice)
Control Details Description1: Groundwater Use Restrictions
Contaminant CTD: Juneau Recording District, Book 0560, Page 423
Contaminant CDR: No drinking water wells None
Comments: Not reported

Staff: IC Unit, 9074655229 dec.icunit@alaska.gov

Contaminate Name1: Mike's Airport Express
Contaminate Level Description1: Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation
Contaminate Media1: Soil

Control Type: Notice of Environmental Contamination (Deed Notice)
Control Details Description1: When Contaminated Soil is Accessible, Remediation Should Occur
Contaminant CTD: Juneau Recording District, Book 0560, Page 423
Contaminant CDR: Contamination remains beneath the building foundation. None
Comments: Not reported

Staff: IC Unit, 9074655229 dec.icunit@alaska.gov

Contaminate Name1: Mike's Airport Express
Contaminate Level Description1: Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation
Contaminate Media1: Soil

Control Type: Notice of Environmental Contamination (Deed Notice)
Control Details Description1: Groundwater Use Restrictions
Contaminant CTD: Juneau Recording District, Book 0560, Page 423
Contaminant CDR: No drinking water wells None
Comments: Not reported

UNOCAL - #5785- AIRPORT UNION (Continued) **S104893243**

File Number: 1513.26.049
Staff: IC Unit, 9074655229 dec.icunit@alaska.gov
Facility Status: Cleanup Complete - Institutional Controls
Latitude: 58.363300
Longitude: -134.584800
Hazard ID: 23568
Problem: Waste Oil Tank Removal on 8/25/97 showed remaining in ground contamination levels of DRO of 211 mg/kg and RRO of 317 mg/kg, non detect for BTEX, non-detect halogenated volatile organics, non-detect PCB's, 0.4 mg/kg lead; stockpile had 1,600 mg/kg DRO and 560 mg/kg RRO, non-detect HVO and PCB, 0.3 mg/kg lead.

Actions:

Action Date: 9/25/2006
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: July 2006 monitoring report received. Benzene above cleanup level in G-1 only. Ethylbenzene, toluene, GRO increased in G-9 since Oct. 05 sampling event, but are still well below cleanup levels.

Action Date: 9/18/2003
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: November 02 gw monitoring report reviewed.Benzene consistently elevated in G-1. Also elevated above cleanup levels in G-11 and G-13. Significant decrease in G-9. No metal hits in any of the wells

Action Date: 9/17/1999
Action: Update or Other Action
DEC Staff: * Not Assigned
Action Description: Waste oil UST removal of 8/25/97 SA rept reviewed. 2 cu yds contam soil (temporary) stockpiled on-site. Need to determine final fate.

Action Date: 9/15/2004
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: February 04 GW monitoring report reviewed. Benzene above cleanup level in G-1, G-9, G-11. GRO slightly elevated above cleanup level in a duplicate from G-11. Contaminants continue to fluctuate generally with the water table.

Action Date: 9/15/1999
Action: Update or Other Action
DEC Staff: * Not Assigned
Action Description: Sent e-mail to RPCON re-status of diagram showing installation of MWs. RPCON: To be submitted end of 9/99 or early 10/99. Made contact w/CS/Jnu.

Action Date: 8/9/1999
Action: Release Investigation
DEC Staff: * Not Assigned
Action Description: DEC writes ltr in concurrence with RPCON's conclusion for RI & hydraulic fluid release to be handled by CS/Jnu.

Action Date: 8/25/1997
Action: Underground Storage Tank Site Characterization or Assessment
DEC Staff: * Not Assigned
Action Description: Waste oil UST removal (by Geo Engineers)

UNOCAL - #5785- AIRPORT UNION (Continued) **S104893243**

Action Date:	8/23/2007
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	August 2007 monitoring report received for the May 2007 event. Results indicate that dissolved hydrocarbons above cleanup levels remain in the immediate vicinity of the UST system. The remediation system will remain in operation to address soil and groundwater impacts. GW sampling will be continued to evaluate the effectiveness of remediation.
Action Date:	8/22/2003
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Approval to transport four drums of contaminated soil to Alaska Soil Recycling in Anchorage
Action Date:	8/20/1999
Action:	Update or Other Action
DEC Staff:	* Not Assigned
Action Description:	RPCON requests that DEC communicate via e-mail re-work plan. DEC defers approval of RI work plan until diagram is submitted re-location of MWs, including location of existing piping as well as where former piping was removed. RPCON encouraged to make contact with CS/Jnu.
Action Date:	8/18/1999
Action:	Release Investigation
DEC Staff:	* Not Assigned
Action Description:	DEC receives RI work plan fr RPCON. Work plan does not indicate drawings of where MWs will be installed
Action Date:	8/15/2001
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Approval to transport 150 cy of contaminated soil to USR facility in Juneau given to Gilfillian Engineers by Paul Horwath.
Action Date:	8/1/2014
Action:	Institutional Control Update
DEC Staff:	Kristin Thompson
Action Description:	An IC reminder letter was issued to the responsible party on this date.
Action Date:	7/23/2009
Action:	Update or Other Action
DEC Staff:	Evonne Reese
Action Description:	Received Monitoring Well/Remediation System Decommissiong Report from MWH.
Action Date:	7/23/1999
Action:	Leaking Underground Storage Tank Cleanup Initiated - Petroleum
DEC Staff:	* Not Assigned
Action Description:	4/10/99 SA rept reviewed. Rept indicates piping GRO release. Hydraulic lift RRO=1600 ppm & DRO 440 ppm. Excavated dump pit: found 22 intact batteries and many automotive parts. Pit cleanup has been accomplished. Contact by e-mail w/Schlichting re-CS portion of report. Not reported

UNOCAL - #5785- AIRPORT UNION (Continued) **S104893243**

Action Date:	7/10/2006
Action:	Site Visit
DEC Staff:	Daniel Fremgen
Action Description:	Site visit w/ Michael Zidek of MWH Anch. Discussed site history and current data trends while he sampled monitoring wells and performance-checked the SVE system.
Action Date:	6/20/2002
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Well search amendment report received this date.Numerous inactive wells in area. Four active wells identified. No wells downgradient of site (south-southwest)
Action Date:	5/21/1999
Action:	Update or Other Action
DEC Staff:	* Not Assigned
Action Description:	SA rept received by DEC on removal/upgrade of piping conducted 11/30/98
Action Date:	5/20/2009
Action:	Site Visit
DEC Staff:	Evonne Reese
Action Description:	Site visit in order to observe some of the monitoring wells being decommissioned and to take photos of the process. Decommissioning report will follow from MWH.
Action Date:	4/6/2004
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Oct 03 gw monitoring report reviewed.Benzene has increased in G-1 again. Benzene also elevated above cleanup level in G-11 and G-15. No GRO or DRO elevations any longer. Soil vapor extraction system seems to be working as engineered. Air sparge pilot study results provided enough data concerning the viability of the wells to move forward with a permanent system installation if needed.
Action Date:	3/9/2005
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Reviewed 2005 final workplan received Jan 24. Reviewed March 2 2005 gw monitoring report for November gw monitoring. Benzene has increased in G-1 compared to past data. Correlated with seasonal fluctuation in static gw table. Benzene down in all other wells compared to June 2004 data.
Action Date:	3/25/2009
Action:	Cleanup Complete Determination Issued
DEC Staff:	Evonne Reese
Action Description:	Not reported
Action Date:	3/25/2009
Action:	Institutional Control Record Established
DEC Staff:	Bill Janes
Action Description:	Institutional Controls established and entered into the database.
Action Date:	2/7/2007

UNOCAL - #5785- AIRPORT UNION (Continued) **S104893243**

Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	November 3 monitoring report received this date. Benzene at 0.0304 mg/L in G-1 and 0.00658 in G-11. Cleanup level is 0.005 mg/L. SVE system still operating.
Action Date:	2/20/2002
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	December gw monitoring report reviewed. Benzene, GRO, DRO showing up in monitoring well G-9. Filtered metal samples came up ND, indicating that previous hits were from suspended sediment.
Action Date:	2/2/2006
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	October 2005 monitoring report received.
Action Date:	2/1/2007
Action:	Exposure Tracking Model Ranking
DEC Staff:	Daniel Fremgen
Action Description:	ETM Baseline Ranking completed 1/07SVE system appears to be reducing petroleum contaminant levels in GW monitoring wells. Levels in off-site wells are below detection limits; one on-site well has persistent amounts of benzene above cleanup levels.
Action Date:	12/8/1999
Action:	Update or Other Action
DEC Staff:	* Not Assigned
Action Description:	Work plan approval given to RPCON by CS for their work plan. Field work to begin 1st quarter of 2000. Assume LUST/CS will be worked together at that time.
Action Date:	12/8/1999
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	This is LUST/CS combination site. CS called Mike’s Airport Express.
Action Date:	12/6/2005
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Telecon with Tesoro project manager and consultant to discuss next year’s draft work plan. Semi-annual monitoring and SVE operation to continue. Off-site benzene plume appears to be attenuating according to June and October 05 sampling. Benzene and GRO still elevated in G-1 in particular.
Action Date:	12/4/2013
Action:	Institutional Control Compliance Review
DEC Staff:	Evonne Reese
Action Description:	IC compliance review conducted. Groundwater monitoring requirements have been discontinued. Reminder system set for March 2014 to verify that the contaminated soil remains covered with asphalt or concrete.
Action Date:	12/3/2003
Action:	Update or Other Action
DEC Staff:	Bill Janes

UNOCAL - #5785- AIRPORT UNION (Continued) **S104893243**

Action Description:	Meeting with Tesoro and consultant to discuss 2004 workplan for site. SVE installed 10/03. Two new monitoring wells and air sparge system proposed for 04.
Action Date:	12/19/2001
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	GW monitoring. Met on site with Gilfilian Engineering and Robert Reges, attorney for Holloway, to discuss site issues.
Action Date:	11/30/1998
Action:	Underground Storage Tank Site Characterization or Assessment
DEC Staff:	* Not Assigned
Action Description:	Gasoline USTs piping removal & upgrade (by Gilfilian Engineering)
Action Date:	11/3/2008
Action:	Exposure Tracking Model Ranking
DEC Staff:	Evonne Reese
Action Description:	A new updated ETM ranking has been completed for source area UST.
Action Date:	11/27/2002
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Web conference with Montgomery Watson Harza staff Ivarson and Gilfilian and Peter Ribbens from Tesoro to discuss next year's workplan.
Action Date:	11/22/2006
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	CR check received by Law - $200.27
Action Date:	11/2/2008
Action:	Report or Workplan Review - Other
DEC Staff:	Evonne Reese
Action Description:	Reviewed Summary Report and Request for Conditional Closure dated 9/30/08. Petroleum contamination associated with the groundwater has been reduced considerably at this site. Contamination in the groundwater has not been detected or has been below Table C levels in all but two of the monitoring wells in all events covering the last three years. Benzene levels in G-1 was 0.0095 mg/kg and in G-11 was 0.0211 mg/kg. Low levels of volatile hydrocarbons observed in a rebound test of the soil vapor extraction system indicate that this treatment is no longer effective; therefore the treatment has been discontinued. An updated ETM ranking should be done for this site and then closure considered.
Action Date:	11/19/2004
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Telecon with Tesoro and MWH to discuss next year's workplan. Sampling from monitoring wells G-12 and G-14 will be terminated. DRO will not be collected in any wells except G-9. One more round of monitoring all wells for all parameters to occur this year.
Action Date:	11/16/2001
Action:	Update or Other Action

UNOCAL - #5785- AIRPORT UNION (Continued) **S104893243**

DEC Staff:	Bill Janes
Action Description:	Routine gw monitoring. Next one scheduled for December. Release investigation for heavy metals on site. Release from adjoining property . Will be getting a report on the heating oil AST on west side of station. Another round of monitoring. Complete a NFRAP by second quarter. Confirm the CSM. Problems at site - remaining GRO and benzene above Table C. Heavy metals in trace amonts with several metals above Table C. Most are below the 10 x level. Does not appear off site migration has occurred but no wells are currently off site. Kris sending a package that shows a downward concentration trend in most of the wells (First quarter). Workplan
Action Date:	11/13/2002
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	File review
Action Date:	11/1/2002
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	March 02 gw monitoring report reviewed. Benzene, GRO, DRO showing up above Table C in several wells. MW G-9 levels the highest to date. Filtered metal samples came up ND, indicating that previous hits were from suspended sediment. Emailed Kris Iverson rgd status. New Tesoro site manager is Peter Ribbens.
Action Date:	11/1/2002
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	5/20/02 ust piping upgrade assessment reviewed. Email to Gilfilian asking if results of pilot SVE effort are in.
Action Date:	10/9/1997
Action:	Site Added to Database
DEC Staff:	* Not Assigned
Action Description:	Not reported
Action Date:	10/6/2008
Action:	Report or Workplan Review - Other
DEC Staff:	Evonne Reese
Action Description:	Received Summary Report and Request for Conditional Closure from Tesoro. After review of this report, a cleanup complete determination will be considered.
Action Date:	10/6/1999
Action:	Update or Other Action
DEC Staff:	* Not Assigned
Action Description:	DEC receives ltr w/backup documents from RPCON involved with 8/25/97 w/o UST removal. HOT & w/o UST located in same pit. Contam believed to be from HOT since w/o UST unused. 10/3/97 DEC Jnu ltr permitted contam soils to be thermally remediated.
Action Date:	10/29/1999
Action:	Update or Other Action
DEC Staff:	* Not Assigned
Action Description:	DEC receives RPCON's ltr & sketch of where (4) MWs will be installed plus response to CS comments. 11/1/99 DEC approves LUST addendum to

UNOCAL - #5785- AIRPORT UNION (Continued) **S104893243**

9/23/99 RI work plan via e-mail to RPCON

Action Date: 10/27/2004
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: Reviewed Sept 04 GW monitoring report for June monitoring. Benzene plume appears to be migrating from the site in a southwest direction. Appears to be attenuating before reaching Duck Creek. RP's consultant directed not to install new monitoring well as proposed in NW corner of FAA property. Plume is not going in that direction.

Action Date: 10/2/2001
Action: Update or Other Action
DEC Staff: Cynthia Pring-Ham
Action Description: Changed Project Manager from Colin Basye to Bruce Wanstall

Action Date: 1/24/2007
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: Telecon with MWH on the draft 2007 workplan submitted Nov. 06 Monitoring to continue 2nd and 4th qtr. Conditional closure potential will be explored 2nd quarter when sampling results are received. SVE to be turned off for 90 days and then a rebound test conducted. Plan for addressing area around G-1 where benzene in gw is significantly elevated will be proposed.

Action Date: 1/22/2002
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: July monitoring report reviewed. Benzene and DRO, RRO table C levels exceeded in some wells. Also lead, chromium, arsenic, vanadium.

Action Date: 1/20/2004
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: Final 2004 workplan received.

Action Date: 1/16/2008
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: Teleconference held with MWH and Tesoro to discuss groundwater plume trend and possible conditonal site closure this year.

Action Date: 1/15/2004
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: June 03 gw monitoring report reviewed.Benzene elevated above cleanup level in G-1, G-9, G-11, G-12, G-13. GRO and DRO elevated in G-9. No metal hits in any of the wells

LUST:
Facility Name: UNOCAL - #5785- AIRPORT UNION
Facility Status: Cleanup Complete - Institutional Controls
Record Key: 1997110023701
File ID: 1513.26.049
Oname: Mike Holloway

UNOCAL - #5785- AIRPORT UNION (Continued) **S104893243**

Lat/Lon: 58.3633 -134.5848
Lust Event ID: 2352
CS or Lust: LUST
Borough: Juneau
Staff: IC Unit
Site Type: Gas Station
Horizontal Datum: WGS84

Inst Control:
Hazard ID: 2984
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Record Established
Action Date: 11/22/2002
File Number: 1513.38.005

Hazard ID: 2984
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Update
Action Date: 7/25/2009
File Number: 1513.38.005

Hazard ID: 2984
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Compliance Review
Action Date: 12/13/2013
File Number: 1513.38.005

Hazard ID: 23568
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Record Established
Action Date: 3/25/2009
File Number: 1513.26.049

Hazard ID: 23568
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Compliance Review
Action Date: 12/4/2013
File Number: 1513.26.049

Hazard ID: 23568
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Update
Action Date: 8/1/2014
File Number: 1513.26.049

S77 **JUNEAU AIRPORT TRAVELODGE HOTEL** **AK SHWS** **S108940957**
WNW **9200 GLACIER HIGHWAY, TRAVELODGE HOTEL** **AK INST CONTROL** **N/A**
< 1/8 **JUNEAU, AK 99803**
0.112 mi.
594 ft. **Site 4 of 4 in cluster S**

Relative: SHWS:
Higher File Number: 1513.38.076
Staff: IC Unit, 9074655229 dec.icunit@alaska.gov
Actual: Facility Status: Cleanup Complete - Institutional Controls
33 ft. Latitude: 58.363897
Longitude: -134.585642

JUNEAU AIRPORT TRAVELODGE HOTEL (Continued) **S108940957**

Hazard ID: 4517
Problem: After removal of the 600-gallon underground storage tank (UST), abatement of free phase petroleum from off-site fresh water and groundwater in the excavation, all stockpiled contaminated soil was transported off-site and remediated. Soil contamination remained trapped under building structures. In samples of crawlspace soil collected in 2000, the greatest diesel range organics (DRO) level reached was 6,900 milligrams per kilogram (mg/kg). In 2010, the samples of crawlspace soil reached DRO levels of 7,190 mg/kg and total xylenes of 0.725 mg/kg. Piping was installed in the floor of the excavation at the foundation to allow the addition of quick release nitrogen fertilizer and ammonium hydroxide to the subsurface to treat the soil. The effort does not appear to have had a measurable effect on reducing the levels of petroleum in the subsurface soil possibly due to the frequent influx of shallow groundwater. After the 1,000-gallon UST and the associated contaminated soil were excavated and disposed off-site, a small volume of contaminated material remained at a depth of 10 feet below the surface under the structural supports for the awning. The greatest level of DRO in the remaining subsurface soil was measured at 680 mg/kg. Samples were not analyzed for volatile compounds.

Actions:

Action Date: 9/14/2012
Action: Report or Workplan Review - Other
DEC Staff: Bruce Wanstall
Action Description: DEC approved the NORTECH work plan for site characterization of remediation activities to address petroleum contamination remaining from an underground storage tank release at the referenced site.

Action Date: 8/6/2012
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: DEC examined status of residual contaminated soil in the crawlspace at the Juneau Airport Travel Lodge. A sampling event in August 2010 assessed the effectiveness of an in-situ periodic soil amendment addition cleanup remedy. DEC requests a plan be submitted for a current assessment of contaminated soil in the crawlspace. Samples collected in the crawlspace must be submitted to a DEC approved laboratory to test for benzene, toluene, ethylbenzene and total xylene compounds and diesel and residual range hydrocarbons.

Action Date: 8/16/2012
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: The buried tank, associated piping and the majority of the contaminated soil have been removed from the site but contaminated soil remains under the building's foundation and in the crawlspace. Although assessment sampling in August 2010 by Nortech Environmental Inc. indicated the periodic addition of soil amendments to the crawlspace was having the positive effect of bringing down the levels of petroleum, DEC has determined that petroleum contamination remaining at the site may still present a risk of exposure to human receptors. DEC letter requests additional sampling and characterization to ensure that conditions at the site are protective of human health and the environment. The results may indicate that the cleanup remedy has reduced the historical petroleum contamination to levels acceptable for regulatory site closure.

JUNEAU AIRPORT TRAVELODGE HOTEL (Continued) **S108940957**

Action Date:	8/13/2012
Action:	Exposure Tracking Model Ranking
DEC Staff:	Bruce Wanstall
Action Description:	A new updated ranking with ETM has been completed for source area 78299 600-gal Diesel UHOT. With the site information and environmental data currently available for pathway evaluation, additional assessment of crawlspace soil and ambient air is necessary to determine the exposure risk for the 600 gallon UST source area at the site.
Action Date:	8/13/2012
Action:	Exposure Tracking Model Ranking
DEC Staff:	Bruce Wanstall
Action Description:	A new updated ranking with ETM has been completed for source area 78300 1,000-gal Diesel UHOT. With the information and environmental data currently available for pathway evaluation, DEC has determined that exposure risk for the 1,000 gallon UST source area is de minimis and does not pose an unacceptable risk to human health and the environment.
Action Date:	7/16/2010
Action:	Report or Workplan Review - Other
DEC Staff:	Bruce Wanstall
Action Description:	ADEC approved the field and laboratory quality assurance criteria for the Site Characterization Report, Heating Oil Spill at the Travelodge by Nortech. ADEC approval letter requests ongoing investigation and monitoring with the soil analyte list expanded to include BTEX and sampling of the crawlspace sump oil/water separator discharge for TAH/TAqH WQ parameters.
Action Date:	5/19/2008
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	ADEC contacted the RP consultant concerning workplan development; recent site inspection found that additional remedial treatement of soil in the crawlspace is recommended.
Action Date:	3/28/2017
Action:	Institutional Control Compliance Review
DEC Staff:	Kristin Thompson
Action Description:	IC compliance review conducted. Closure/IC Details updated.
Action Date:	12/6/2007
Action:	Site Added to Database
DEC Staff:	Mitzi Read
Action Description:	Site added to the database.
Action Date:	12/31/2012
Action:	Institutional Control Record Established
DEC Staff:	Bruce Wanstall
Action Description:	Institutional Controls are established on the property. Soil contamination remains in the subsurface of the crawlspace at the north end of the building at depth of the water table. The highest DRO level detected in soil in 2012 was 2,930 milligrams per liter at one foot below the surface in the crawlspace. Change in land use and/or excavation of the area are not planned. If this assumption changes DEC must be notified to provide oversight before any such

JUNEAU AIRPORT TRAVELODGE HOTEL (Continued) **S108940957**

work begins.

Action Date: 12/31/2012
Action: Exposure Tracking Model Ranking
DEC Staff: Bruce Wanstall
Action Description: A new updated ranking with ETM has been completed for source area 78299 600-gal Diesel UHOT.

Action Date: 12/3/2007
Action: Spill Transferred from Prevention Preparedness and Response Program
DEC Staff: Mitzi Read
Action Description: Site transferred by PERP staff Lester Leatherberry. Spill Date = 8/28/00; Spill No. 00119924101; PERP File No. 1513.02.170; Substance = Diesel; Quantity = Unknown; Site Formerly Known As Duck Creek Mystery.

Action Date: 12/27/2012
Action: Report or Workplan Review - Other
DEC Staff: Bruce Wanstall
Action Description: DEC approves by letter to the Travelodge Hotel the Site Remediation Assessment Report, Heating Oil Spill at the Travelodge, dated November 26, 2012. Nortech Environmental Engineering Inc completed the report documenting the results of soil and ambient air sample collection for analysis to assess the effectiveness of active remediation at the referenced site. The current sampling results indicate that the vapor intrusion pathway is incomplete and the cleanup remedy may have reduced the residual DRO soil contamination to levels acceptable for regulatory site closure.

Action Date: 12/11/2007
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: Ground-water contamination is the controlling pathway for exposure risk. Although the City and Borough of Juneau drinking water system serves the area, potable wells are used near the property. Groundwater investigation and a sensitive receptor survey may be needed. DEC mailed a data request letter certified to the responsible party with a 60 day limit to reply.

Action Date: 12/10/2007
Action: Exposure Tracking Model Ranking
DEC Staff: Mitzi Read
Action Description: Initial ranking with ETM completed.

Action Date: 11/22/2010
Action: Report or Workplan Review - Other
DEC Staff: Bruce Wanstall
Action Description: The sample data collection and field screening for the Report were performed by qualified person(s) and are consistent with methodology in the site characterization work plan approved by ADEC in accordance with 18 Alaska Administrative Code (AAC) 75.355 (b). The data meet field and laboratory report quality assurance criteria in Contaminated Sites Program guidance documents, therefore the Report is approved in accordance with 18 AAC 75.335(d). The August samples document the effectiveness of in-situ treatment efforts implemented over the last two years to remediate residual diesel soil contamination in the building crawlspace.

JUNEAU AIRPORT TRAVELODGE HOTEL (Continued) **S108940957**

Action Date:	1/8/2016
Action:	Institutional Control Compliance Review
DEC Staff:	Kristin Thompson
Action Description:	An IC compliance review was conducted and an IC reminder letter was issued to the responsible party on this date. Reminder system set to follow-up in 2019.
Action Date:	1/29/2008
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	ADEC discussed the site cleanup with the RP consultant pertaining to the request for current site data. Review of the cleanup report found that a sump to drain water from the crawlspace during periods of high water was used to mop up oil in the crawlspace during the spill cleanup; the sump may be useful to evaluate current status instead of installing a monitoring well.
Action Date:	1/21/2013
Action:	Institutional Control Compliance Review
DEC Staff:	Kristin Thompson
Action Description:	IC Compliance Review conducted. Reminder system set-up to follow-up with the responsible party in 2016. Staff changed from Bruce Wanstall to IC Unit.
Action Date:	1/14/2013
Action:	Enforcement Action Closed
DEC Staff:	Bruce Wanstall
Action Description:	The Manager of the Travelodge Hotel delivered a signed copy of the Institutional Control Agreement page to the DEC office in Juneau. No further action pertaining to 18 AAC 75 regulation is required at the site other than the reporting requirements stated in the IC agreements.
Action Date:	1/11/2013
Action:	Institutional Control Update
DEC Staff:	Evonne Reese
Action Description:	Deed notice filed by DEC staff at the Recorder’s Office on this date.
Action Date:	1/10/2013
Action:	Enforcement Agreement or Order
DEC Staff:	Bruce Wanstall
Action Description:	Travelodge will report to DEC that property ownership and land use is unchanged every three years until new information indicates that the remaining soil contamination is below regulatory levels or until DEC determines that conditions at the site are protective of human health, safety and the environment.
Action Date:	1/10/2013
Action:	Enforcement Agreement or Order
DEC Staff:	Bruce Wanstall
Action Description:	Manager of the Travelodge Hotel must return a signed copy of the Attachment A document in the cleanup complete with institutional control determination letter.
Action Date:	1/10/2013
Action:	Cleanup Complete Determination Issued
DEC Staff:	Bruce Wanstall

JUNEAU AIRPORT TRAVELODGE HOTEL (Continued) **S108940957**

Action Description: DEC reviewed and approved, subject to this institutional control, the cleanup as protective of human health, safety, welfare and the environment. No further cleanup is necessary at this site unless new information becomes available that indicates to DEC that the site may pose an unacceptable risk to human health, safety, welfare or the environment. DEC determined, in accordance with 18 AAC 75.325(f) (1), that site cleanup has been performed to the maximum extent practicable even though residual diesel contaminated soil exists on-site. Further cleanup was determined to be impracticable because soil contamination extending into the crawlspace could not be reached without endangering the integrity of the building foundation. A layer of diesel contaminated soil remains in the crawlspace at the north end of the building at the depth of the water table. In the event that the remaining contaminated soil becomes accessible (i.e. by the building or other structure being removed) or through some other action, or other information becomes available which indicates that the site may pose an unacceptable risk to human health, safety, welfare or the environment, the land owner and/or operator are required under 18 AAC 75.300 to notify DEC and evaluate the environmental status of the contamination in accordance with applicable laws and regulations; further site characterizations and cleanup may be necessary under 18 AAC 75.325-.390.

Contaminants:

Staff:	IC Unit, 9074655229 dec.icunit@alaska.gov
Contaminate Name1:	Juneau Airport Travelodge Hotel
Contaminate Level Description1:	Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation
Contaminate Media1:	Soil
Control Type:	Notice of Environmental Contamination (Deed Notice)
Control Details Description1:	Movement or use of contaminated material (including on site) in a manner that res
Contaminant CTD:	Soil contamination remains in a layer at the water table in the crawlspace at the north end of the building. The highest DRO level detected in soil in 2012 was 2,930 milligrams per liter at one foot below the surface in the crawlspace. Change in land use and excavation are not planned. If this assumption changes DEC will be notified to provide oversight before any work begins.
Contaminant CDR:	Standard condition.
Comments:	Soil contamination remains in the subsurface of the crawlspace at the north end of the building at depth of the water table. The highest DRO level detected in soil in 2012 was 2,930 milligrams per liter at one foot below the surface in the crawlspace. Change in land use and/or excavation of the area are not planned. If this assumption changes DEC must be notified to provide oversight before any such work begins.
Staff:	IC Unit, 9074655229 dec.icunit@alaska.gov
Contaminate Name1:	Juneau Airport Travelodge Hotel
Contaminate Level Description1:	Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation
Contaminate Media1:	Soil
Control Type:	Notice of Environmental Contamination (Deed Notice)
Control Details Description1:	Excavation / Soil Movement Restrictions
Contaminant CTD:	Soil contamination remains in a layer at the water table in the

JUNEAU AIRPORT TRAVELODGE HOTEL (Continued) **S108940957**

crawlspace at the north end of the building. The highest DRO level detected in soil in 2012 was 2,930 milligrams per liter at one foot below the surface in the crawlspace. Change in land use and excavation are not planned. If this assumption changes DEC will be notified to provide oversight before any work begins.

Contaminant CDR: Soil contamination remains in a layer at the water table in the crawlspace at the north end of the building. The highest DRO level detected in soil in 2012 was 2,930 milligrams per liter at one foot below the surface in the crawlspace. Change in land use and excavation are not planned. If this assumption changes DEC will be notified to provide oversight before any work begins.

Comments: Soil contamination remains in the subsurface of the crawlspace at the north end of the building at depth of the water table. The highest DRO level detected in soil in 2012 was 2,930 milligrams per liter at one foot below the surface in the crawlspace. Change in land use and/or excavation of the area are not planned. If this assumption changes DEC must be notified to provide oversight before any such work begins.

Staff: IC Unit, 9074655229 dec.icunit@alaska.gov

Contaminate Name1: Juneau Airport Travelodge Hotel
Contaminate Level Description1: Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation
Contaminate Media1: Soil

Control Type: Notice of Environmental Contamination (Deed Notice)
Control Details Description1: Periodic Review
Contaminant CTD: Soil contamination remains in a layer at the water table in the crawlspace at the north end of the building. The highest DRO level detected in soil in 2012 was 2,930 milligrams per liter at one foot below the surface in the crawlspace. Change in land use and excavation are not planned. If this assumption changes DEC will be notified to provide oversight before any work begins.

Contaminant CDR: Travelodge will report to DEC that property ownership and land use is unchanged every three years until new information indicates that the remaining soil contamination is below regulatory levels or until DEC determins that conditions at the site are protective of human health, safety and the environment.

Comments: Soil contamination remains in the subsurface of the crawlspace at the north end of the building at depth of the water table. The highest DRO level detected in soil in 2012 was 2,930 milligrams per liter at one foot below the surface in the crawlspace. Change in land use and/or excavation of the area are not planned. If this assumption changes DEC must be notified to provide oversight before any such work begins.

Staff: IC Unit, 9074655229 dec.icunit@alaska.gov

Contaminate Name1: Juneau Airport Travelodge Hotel
Contaminate Level Description1: Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation
Contaminate Media1: Soil

Control Type: Notice of Environmental Contamination (Deed Notice)
Control Details Description1: Groundwater Use Restrictions
Contaminant CTD: Soil contamination remains in a layer at the water table in the crawlspace at the north end of the building. The highest DRO level detected in soil in 2012 was 2,930 milligrams per liter at one foot

JUNEAU AIRPORT TRAVELODGE HOTEL (Continued) **S108940957**

below the surface in the crawlspace. Change in land use and excavation are not planned. If this assumption changes DEC will be notified to provide oversight before any work begins.

Contaminant CDR: Installation of groundwater wells will require prior approval from ADEC.

Comments: Soil contamination remains in the subsurface of the crawlspace at the north end of the building at depth of the water table. The highest DRO level detected in soil in 2012 was 2,930 milligrams per liter at one foot below the surface in the crawlspace. Change in land use and/or excavation of the area are not planned. If this assumption changes DEC must be notified to provide oversight before any such work begins.

Staff: IC Unit, 9074655229 dec.icunit@alaska.gov

Contaminate Name1: Juneau Airport Travelodge Hotel
Contaminate Level Description1: Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation
Contaminate Media1: Soil

Control Type: Notice of Environmental Contamination (Deed Notice)
Control Details Description1: Advance approval required to transport soil or groundwater off-site.
Contaminant CTD: Soil contamination remains in a layer at the water table in the crawlspace at the north end of the building. The highest DRO level detected in soil in 2012 was 2,930 milligrams per liter at one foot below the surface in the crawlspace. Change in land use and excavation are not planned. If this assumption changes DEC will be notified to provide oversight before any work begins.

Contaminant CDR: Standard condition.
Comments: Soil contamination remains in the subsurface of the crawlspace at the north end of the building at depth of the water table. The highest DRO level detected in soil in 2012 was 2,930 milligrams per liter at one foot below the surface in the crawlspace. Change in land use and/or excavation of the area are not planned. If this assumption changes DEC must be notified to provide oversight before any such work begins.

Inst Control:

Hazard ID: 4517
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Record Established
Action Date: 12/31/2012
File Number: 1513.38.076

Hazard ID: 4517
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Update
Action Date: 1/11/2013
File Number: 1513.38.076

Hazard ID: 4517
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Compliance Review
Action Date: 1/21/2013
File Number: 1513.38.076

Hazard ID: 4517
Facility Status: Cleanup Complete - Institutional Controls

JUNEAU AIRPORT TRAVELODGE HOTEL (Continued) **S108940957**

Action: Institutional Control Compliance Review
Action Date: 1/8/2016
File Number: 1513.38.076

Hazard ID: 4517
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Compliance Review
Action Date: 3/28/2017
File Number: 1513.38.076

T78 **ALASKA AIRLINES - JUNEAU CARGO FACILITY** **AK SHWS** **S109254969**
West **1915 ALEX HOLDEN WAY JUNEAU INTERNATIONAL AIRPORT, SOURCE AR** **AK LUST** **N/A**
< 1/8 **JUNEAU, AK 99801**
0.120 mi.
636 ft. **Site 1 of 4 in cluster T**

Relative: **Higher**
Actual: **12 ft.**

SHWS:
File Number: 1513.26.054
Staff: Amy Rodman, 9074655368 amy.rodman@alaska.gov
Facility Status: Active
Latitude: 58.359031
Longitude: -134.587689
Hazard ID: 22996
Problem: Groundwater monitoring well and soil boring samples indicate residual contamination consists of primarily gasoline and some diesel in soils at 8-12 feet below ground surface in the proximity of the former underground storage tanks (USTs).

Actions:
Action Date: 9/30/2004
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: Cost recovery check for $946.44 received from Alaska Airlines to cover ADEC FY04 expense for cleanup project oversight staff.

Action Date: 9/20/2002
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: Stormwater Pollution Prevention Plan for Juneau International Airport dated 11/01 from maintenance dept. found to have accurate stormdrain locations in areas of the residual plume at the site. Met with E&E staff on-site for well sampling, measuring water levels, and recording drain locations with GPS. Copies of Plan made and forwarded to RP/consultant.

Action Date: 9/16/2002
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: Approval letter issued for 2002-03 Quarterly Groundwater Sampling Workplan submitted 9/13/02. Continuation of the supplemental release investigation, the sampling plan is designed to delineate the dissolved phase of the GRO/BTEX contaminant plume and changes over the period of the monitoring events.

Action Date: 9/15/2014
Action: Report or Workplan Review - Other
DEC Staff: Bruce Wanstall
Action Description: DEC evaluated and approved, by letter sent by electronic and regular

ALASKA AIRLINES - JUNEAU CARGO FACILITY (Continued) **S109254969**

mail, Groundwater Monitoring Report, Alaska GSE/Cargo Facility, Juneau International Airport (Report), dated July, 2014. URS Corporation (URS) completed the Report documenting groundwater monitoring performed in accordance with the Revised Corrective Action Plan for the site, dated January 8, 2004, and the Groundwater Monitoring Plan (GMP), dated May 18, 2004. The objective of the groundwater monitoring program is to generate data for trend analysis of the groundwater contaminant plume in excess of cleanup levels and to assess effectiveness of active remediation at the site. Since 2005, petroleum concentrations in the contaminant plume stopped increasing and have declined as a result of active remediation at the UST release source area. The rate of decline has been less than was anticipated, perhaps due to anoxic conditions (low dissolved oxygen) in the contaminant plume. The Report recommends collecting samples in spring 2015 from wells MW-1, -2, -3, -4, -8, -9, -10, and -14 for COCs GRO and BTEX compounds chemical analyses to assess effectiveness of the newly installed remediation system. The Report also recommends continuing the GMP at the current annual interval until cleanup levels are met.

Action Date: 9/15/1998
Action: Leaking Underground Storage Tank Cleanup Initiated - Petroleum
DEC Staff: Bruce Wanstall
Action Description: BTEX, GRO and DRO soil and groundwater contamination detected in excavation adjacent to previously removed 500gallon used oil UST. Dispensers, piping and 3 USTs removed and scrapped; 77 cubic yards contaminated soil removed with the tanks was stockpiled and later transported off-site for remediation.

Action Date: 9/1/1998
Action: Site Added to Database
DEC Staff: * Not Assigned
Action Description: Not reported

Action Date: 8/21/2003
Action: Leaking Underground Storage Tank Corrective Action Underway
DEC Staff: Bruce Wanstall
Action Description: Review of Corrective Action Plan remedial alternatives. Department approval for Pilot Test sent by email.

Action Date: 8/18/2016
Action: Report or Workplan Review - Other
DEC Staff: Bruce Wanstall
Action Description: DEC reviewed the Alaska Airlines - Juneau Cargo Building LUST annual site sampling report by AECOM. An air sparge and soil vapor extraction system was installed at the Site in 2014. Report approval letter was sent to Alaska Airlines by regular and electronic mail recommending continued annual monitoring.

Action Date: 8/16/2004
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: Cost recovery memo sent to DOL approving current site log package.

Action Date: 8/15/2003
Action: Report or Workplan Review - Other
DEC Staff: Bruce Wanstall

ALASKA AIRLINES - JUNEAU CARGO FACILITY (Continued) **S109254969**

Action Description:	Review of Corrective Action Plan by E&E received 8/14/03. Remedial technologies and alternative solutions evaluated for site specific plan are consistent with earlier discussion with affiliated parties.
Action Date:	7/9/2002
Action:	Release Investigation
DEC Staff:	Bruce Wanstall
Action Description:	Supplemental RI workplan approval sent by letter and by phone message to RP consultant.
Action Date:	7/5/2006
Action:	Report or Workplan Review - Other
DEC Staff:	Bruce Wanstall
Action Description:	Request semi-annual sampling event schedule from URS; review 2005 sampling data Report.
Action Date:	7/31/2001
Action:	Underground Storage Tank Site Characterization or Assessment
DEC Staff:	Bruce Wanstall
Action Description:	Supplemental Site Characterization Workplan approved for GRO, BTEX, and DRO soil and groundwater contamination.
Action Date:	7/26/2004
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	Results of the June groundwater monitoring event were received for review. Concentrations of dissolved GRO in groundwater exceed cleanup level in 3 wells; concentrations of benzene exceed cleanup level in 5 wells; elevated dissoved oxygen compared with previous sampling events is attributed to ozone sparging unit remedial operation.
Action Date:	7/21/2014
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	URS submitted to DEC electronic and hard copy of a 2014 groundwater sampling report that will serve as a baseline for the AS/SVE remediation system being installed at the Juneau Airport facility site. A system installation report will be submitted after the system is fully operational.
Action Date:	6/15/2018
Action:	Exposure Tracking Model Ranking
DEC Staff:	Amy Rodman
Action Description:	A new updated ranking with ETM has been completed for source area 77618 underground storage tanks - fuel.
Action Date:	6/1/2016
Action:	Report or Workplan Review - Other
DEC Staff:	Bruce Wanstall
Action Description:	DEC approved by letter and email to Alaska Airlines the sample monitoring report for the cargo facility at the Juneau International Airport submitted by AECOM Inc.
Action Date:	5/7/2008
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	ADEC requested a 2007 GMR.

ALASKA AIRLINES - JUNEAU CARGO FACILITY (Continued) **S109254969**

Action Date:	5/30/2002
Action:	Report or Workplan Review - Other
DEC Staff:	Bruce Wanstall
Action Description:	Review 2001 SRI Report for comment on pending 2002 SRI workplan for the Ak Aircargo blg USTs.
Action Date:	5/27/2003
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	April 2003 Quarterly Groundwater Sampling Report received. All quarterly monitoirng event groundwater elevation data indicate groundwater ebbs and flows with levels of rainfall rather than tides. Petroleum concentrations in well samples are greatest near former UST site but may be increasing in downgradient well samples. Continued monitoring for contaminant migration is recommended.
Action Date:	5/20/2014
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	URS provided DEC, CBJ and operator Delta Western with an update on completing installation of the groundwater remediation system at the Alaska Air Cargo Building. After installation of the new remedial system, URS plans to collect samples from all the wells to update and maintain the Long Term Monitoring Plan. The most recent well monitoring was in summer 2011 by URS.
Action Date:	5/19/2004
Action:	Leaking Underground Storage Tank Corrective Action Underway
DEC Staff:	Bruce Wanstall
Action Description:	Approval to transport IDW petroleum contaminated soil off-site for remediation sent by fax and mail.
Action Date:	5/18/2004
Action:	Long Term Monitoring Established
DEC Staff:	Bruce Wanstall
Action Description:	Groundwater Monitoring Plan approved.
Action Date:	5/14/2008
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	ADEC reviewed and approved data from the 2007 Groundwater Monitoring Report by URS. As expected, the effectiveness of the active remediation is limited by low oxygen in the phreatic (saturated) subsurface zone. The goal of reversing the expansion of the gasoline plume in groundwater, however, continues to be met.
Action Date:	5/1/2007
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	$399.82 Check received for project management costs from Alaska Airlines.
Action Date:	4/8/1999
Action:	Release Investigation
DEC Staff:	Bruce Wanstall
Action Description:	Four soil vapor extraction wells, SVE-1 thru 4, were completed to 12 feet bgs. Two soil-gas monitoring points, MP-1 and 2, were completed

ALASKA AIRLINES - JUNEAU CARGO FACILITY (Continued) **S109254969**

with two screens within each location. MP-1 has a screen at 5.5feet bgs and 9feet bgs. MP-2 has a screen at 3feet bgs and 7feet bgs.

Action Date: 4/6/1999
Action: Release Investigation
DEC Staff: Bruce Wanstall
Action Description: Three soil borings advanced and 4 GW monitoring wells installed using hollow-stem auger drill rig. Wells completed to depths between 10 and 15feet bgs with varying screen depth. 2-inch ID shcedule 40 PVC casing with 0.020-inch slot screen.

Action Date: 4/4/2014
Action: Report or Workplan Review - Other
DEC Staff: Bruce Wanstall
Action Description: DEC evaluated and by email approved a URS plan to complete installation the groundwater treatment system in the next few months and then sample all wells on-site and submit a report on overall site conditions.

Action Date: 4/25/2012
Action: Report or Workplan Review - Other
DEC Staff: Bruce Wanstall
Action Description: DEC approves the corrective action Remediation System Installation Plan and the Long Term Monitoring Plan by URS for the Alaska Air GSE/Cargo Facility at the JIA. The air sparging/soil vapor extraction system will continue active remediation of groundwater contamination. The schedule for the AS-SVE system installation is after the annual monitoring event in May 2012. The proposed Long Term Monitoring Plan lists GRO and BTEX as COCs and the September 2009 18 AAC 75.341 Table C cleanup levels for those COCs for unrestricted land-use as cleanup goals. The LTM appropriately suggests that annual sampling be discontinued for wells MW-12 and MW-15 and sampling resume in wells MW-10 and MW-11 in order to achieve more upper-plume delineation. The LTM appropriately suggests the use of a submersible sampling pump for well purging and sample collection and annual reporting of the sampling results.

Action Date: 4/25/2004
Action: Leaking Underground Storage Tank Corrective Action Underway
DEC Staff: Bruce Wanstall
Action Description: Ozone sparging unit is installed in the subsurface at the site and operating.

Action Date: 4/2/2014
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: DEC requested URS provide DEC with an update on progress completing the sampling report for 2013 groundwater monitoring and the status for getting the treatment system up and running again.

Action Date: 4/16/2009
Action: Report or Workplan Review - Other
DEC Staff: Bruce Wanstall
Action Description: In accordance with quality assurance criteria ADEC has reviewed and approves the data in the 2008 Groundwater Monitoring Report by URS.

Action Date: 4/11/2005

ALASKA AIRLINES - JUNEAU CARGO FACILITY (Continued) **S109254969**

Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	Project management FY 05 cost recovery check for $302.15 received from Alaska Airlines 3/15/05.
Action Date:	4/10/2006
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	Review monitoring well data for the June and December 2005 sampling events; change to Spring/ Fall sampling schedule is requested.
Action Date:	3/6/2014
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	DEC requested that URS provide an update on the remedial treatment system installation and well sampling.
Action Date:	3/3/2003
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	January 2003 Quarterly Groundwater Sampling Report received. Water table elevated for this event; benzene and GRO concentrations lower than previous quarter; concentrations highest near former USTsite.
Action Date:	3/15/2007
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	Review the 2006 semi-annual groundwater monitoring report and requested change to annual sampling. ADEC agreement to change from semi-annual to annual sampling during the summer seasonal period was sent by letter to Alaska Airlines; copied to consultant URS.
Action Date:	2/9/2007
Action:	Exposure Tracking Model Ranking
DEC Staff:	Bruce Wanstall
Action Description:	Baseline ranking for the former UST sources has been completed and locked in.
Action Date:	2/9/2004
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	Reached Dorothy Saunders at EPA inquiring into permit needs for subsurface UIC (Class V). She will contact the DEC if permit is requested.
Action Date:	2/27/2002
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	Verbal approval given to transport IDW soil and water, stored at site indoors in drums, to USR Juneau Facility. IDW water will be delivered to the Juneau Douglas Wastewater Treatment Plant when it thaws.
Action Date:	2/17/2004
Action:	Leaking Underground Storage Tank Corrective Action Underway
DEC Staff:	Bruce Wanstall
Action Description:	Revised Corrective Action Plan approved. Implementation scheduled for Spring 2004. Approval letter sent with recommendations to analyze GW

ALASKA AIRLINES - JUNEAU CARGO FACILITY (Continued) **S109254969**

for bioremedial tracking parameters.

Action Date: 12/27/2017
Action: Report or Workplan Review - Other
DEC Staff: Amy Rodman
Action Description: Reviewed and approved SLR's December 2017 Groundwater Monitoring and Operation & Maintenance Report for Alaska Airlines - Juneau Cargo Facility with June 2017 groundwater sampling data. ADEC will evaluate site for closure.

Action Date: 12/2/2009
Action: Report or Workplan Review - Other
DEC Staff: Bruce Wanstall
Action Description: DEC approves the URS 2009 Ground Water Monitoring Report data and recommendations to continue active treatment of a residual subsurface gasoline contaminated ground water and annual monitoring well sampling during the summer season. Annual sampling data dating back to 2005 when active treatment began indicate that GRO and BTEX concentrations in ground water have declined and the volume of the contaminant plume is reduced.

Action Date: 12/18/2002
Action: Report or Workplan Review - Other
DEC Staff: Bruce Wanstall
Action Description: Draft letter for SRI and QGS reports. Review regs and areawide land use 350 determination for 10 times rule ACLs at Juneau Airport.

Action Date: 12/14/2011
Action: Report or Workplan Review - Other
DEC Staff: Bruce Wanstall
Action Description: DEC approves the URS 2011 Groundwater Monitoring Report that documents annual monitoring of petroleum contaminated groundwater that resulted from leakage underground storage tank (UST) systems at the GSE/ Cargo Building. The groundwater sampling is an annual event in the Revised Corrective Action Plan approved by DEC in 2004 for active remediation at the site. In accordance with 18 AAC 78.090 and 18 AAC 78.230, qualified person(s) used data collection methods consistent with DEC methodology in the DEC-approved Corrective Action Plan for long term monitoring of groundwater. The data meet field and laboratory report quality assurance criteria in Contaminated Sites Program guidance documents and the UST Procedures Manual. The Report documents the results of current and historical results of field and laboratory investigation into petroleum release from regulated UST systems as required by 18 AAC 78.230 - 18 AAC 78.280 and 18 AAC 78.600 - 18 AAC 78.625.

Action Date: 12/12/2002
Action: Report or Workplan Review - Other
DEC Staff: Bruce Wanstall
Action Description: Review of Airport Chevron file. Review of Sept Quarterly GW sampling Report; discussion with RP consultant about taking the lead to develop 18 AAC 350 and 10X rule ACLs. Forwarded link to lower Duck Creek groundwater study.

Action Date: 12/12/2001
Action: Update or Other Action
DEC Staff: Bill Janes

ALASKA AIRLINES - JUNEAU CARGO FACILITY (Continued) **S109254969**

Action Description: Changed Project Manager from Janes to Bruce Wanstall.

Action Date: 11/8/2013
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: URS installed all of the treatment wells and wired the remediation system in fall 2012 but installation of the lateral lines between the treatment system and the treatment wells is held up until fall 2013 at best. Regardless of the outcome of the remedial system installation, URS plans to collect samples from all the wells to update and maintain the long term monitoring Plan.

Action Date: 11/4/2002
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: Teleconference discussion of possible tidal influence affecting potable quality of GW. Saline indicators could support 350 determination for proposed ACLs for soil and GW.

Action Date: 11/20/1997
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: Cost Recovery Notice letter to Ak Air (owner ID 35) from Storage Tank Program concerning facility ID1570 effective 12/1/1997.

Action Date: 11/19/2009
Action: Report or Workplan Review - Other
DEC Staff: Bruce Wanstall
Action Description: Alaska Air Cargo Facility at the JIA; project manager waiver of the requirement for laboratory report case narrative of data quality variances is necessary to accept the Test America URS 2009 GMR laboratory report for ADEC quality assurance criteria. While LIMS notation in the 2009 Report for sample dilution may be acceptable, an analysis-specific narrative signed by the laboratory project manager or analyst is normally required when surrogate recovery is outside limits.

Action Date: 11/19/2009
Action: Report or Workplan Review - Other
DEC Staff: Bruce Wanstall
Action Description: 2009 Annual Ground Water Monitoring Report of the Alaska Air Cargo Facility at the JIA; a URS chemist provided a case narrative discussion of data quality variances in the Test America laboratory report. The discussion is adequate for ADEC quality assurance criteria. While LIMS notation in the 2009 Report for sample dilution may be acceptable, an analysis-specific narrative signed by the laboratory project manager or analyst is advisable when surrogate recoveries are outside limits. In this report, another surrogate was within range that more closely approximates the contaminants of concern for this site (gasoline).

Action Date: 10/8/2015
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: DEC received by regular mail a hard copy of Groundwater Monitoring Report Alaska Airlines GSE/Cargo Facility Juneau International Airport Juneau Alaska prepared by AECOM Anchorage in September 2015

ALASKA AIRLINES - JUNEAU CARGO FACILITY (Continued) **S109254969**

as AECOM Project No. 60437490. The groundwater sampling event is scheduled in the corrective action plan and results will evaluate effectiveness of a new air sparge/soil vapor extraction (AS/SVE) system installed in 2014 for Alaska Airlines by URS as Project No. 26219627.

Action Date: 10/29/2013
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: DEC sent a request by email to Alaska Airlines to provide current information regarding URS installing the new remediation system at the Juneau Airport site and information regarding the outcome of annual sampling of monitor wells in accordance with approved revisions to the long term plan.

Action Date: 10/29/2013
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: DEC sent a request by email to Alaska Airlines to provide current information regarding URS installing the new remediation system at the Juneau Airport site and information regarding the outcome of annual sampling of monitor wells in accordance with approved revisions to the long term plan.

Action Date: 10/2/2001
Action: Update or Other Action
DEC Staff: Cynthia Pring-Ham
Action Description: Changed Project Manager from Paul Horwath to Bill Janes

Action Date: 1/9/2015
Action: Report or Workplan Review - Other
DEC Staff: Bruce Wanstall
Action Description: DEC approved by letter the 2014 Air Sparge/Soil Vapor Extraction System Installation Report by URS regarding remedial treatment of groundwater contamination at the AK Air Juneau Cargo Building LUST facility. URS installed two soil vapor extraction well points, and three air sparge well points using direct-push drilling methods at locations based on the distribution of soil and groundwater contaminants previously identified during historical groundwater monitoring events. Operation of the current AS/SVE treatment system should effectively mitigate groundwater contamination by treating the residual soil contamination in the source.

Action Date: 1/7/2011
Action: Exposure Tracking Model Ranking
DEC Staff: Bruce Wanstall
Action Description: A new updated ranking with ETM has been completed for source area 77618 underground storage tanks - fuel. As a result of active and ongoing remediation at the site BTEX compounds in ground water no longer exceed Table C cleanup levels; only GRO and DRO exceed Table C cleanup levels near maintenance shop on the south side of the building.

File Number: 1513.26.014
Staff: Not reported
Facility Status: Cleanup Complete

ALASKA AIRLINES - JUNEAU CARGO FACILITY (Continued) **S109254969**

Latitude: 58.359031
Longitude: -134.587689
Hazard ID: 24525
Problem: In September 1993, certified underground storage tank worker John Bertholl with Petroleum Services Inc. (PSI) removed a 500-gallon used-oil, underground storage tank (UST) from the Alaska Airlines Cargo Building at the Juneau International Airport. Concurrent with the UST removal, Smith Bayliss LeResche Inc (SBL) conducted an assessment of the site. Once petroleum contamination was identified in the excavated soil to remove the UST, SBL began a release investigation and identified a volume of fifteen cubic yards by field screening. DEC authorized PSI to transport the soil to Channel Sanitation where it was thermally remediated. In January 1994, SBL submitted the Release Investigation Report to the DEC which cited piping connectors as the source of the release. The tank had no sign of faulty material and was cleaned and then scrapped off-site in accordance with UST regulations. Two existing, active USTs used to store diesel and gasoline were situated on either side of the waste oil tank, prohibiting the complete removal of contaminated soil. Due to sloughing walls and the close proximity of other UST systems, the excavation was lined and then backfilled with clean material before the limits of subsurface contamination were found. Field screening and observation of the contaminated material indicated that soil contaminated with waste oil was fully removed and that the remaining contaminated soil was impacted by a release from one of the other UST systems. No groundwater was encountered in the excavation and therefore was not investigated for contamination.

Actions:

Action Date: 7/5/2002
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: Additional UST release investigation and remediation progress for this facility will be logged on database UST Event ID 2677. Unregulated heating oil tank removals at the adjacent Wings Air Cargo Building are managed as a site on the CS Database.

Action Date: 7/26/2004
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: Results of the June groundwater monitoring event were received for review. Concentrations of dissolved GRO in groundwater exceed cleanup level in 3 wells; concentrations of benzene exceed cleanup level in 5 wells; elevated dissoved oxygen compared with previous sampling events is attributed to ozone sparging unit remedial operation.

Action Date: 3/9/1994
Action: Leaking Underground Storage Tank Cleanup Initiated - Petroleum
DEC Staff: * Not Assigned
Action Description: LCAU; Preliminary risk evaluation, 15cy soil removed and incinerated, underground contamination completely sealed. : LCAU date changed DB conversion

Action Date: 12/29/2010
Action: Exposure Tracking Model Ranking
DEC Staff: Bruce Wanstall
Action Description: A new updated ranking with ETM has been completed for source area 77880 underground waste oil tank.

ALASKA AIRLINES - JUNEAU CARGO FACILITY (Continued) **S109254969**

Action Date:	12/2/2009
Action:	Report or Workplan Review - Other
DEC Staff:	Bruce Wanstall
Action Description:	DEC approves the URS 2009 Ground Water Monitoring Report data and recommends continuing active treatment of a residual subsurface gasoline contaminated ground water and annual monitoring well sampling in the summer season. BTEX concentrations in ground water have declined but GRO and DRO concentrations in ground water still exceed Table C cleanup levels.
Action Date:	12/13/2011
Action:	Cleanup Complete Determination Issued
DEC Staff:	Bruce Wanstall
Action Description:	The DEC has concluded that a UST closure by removal release investigation and cleanup in 1994 at the Alaska Airlines Cargo Facility in Juneau satisfies 18 AAC 78 regulations allowing closure of the record on the contaminated sites database. Although the records for this Hazard ID 24525 and file 1513.26.014 will be Corrective Action Complete, the records for Hazard ID 22996 and file 1513.26.054 remain active to manage on-going soil and groundwater contamination stemming from the 1998 closure by removal of gasoline and diesel USTs at the Cargo Facility in Juneau.
Action Date:	12/12/2001
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Project manager changed from Janes to Wanstall.
Action Date:	11/25/2011
Action:	Exposure Tracking Model Ranking
DEC Staff:	Bruce Wanstall
Action Description:	A new updated ranking with ETM has been completed for source area 77880 underground waste oil tank. The soil contaminated by the waste oil UST has been transported to the local treatment facility and thermally treated. Any remaining contamination in subsurface soil above MTG levels was released from another UST at the site and is managed under hazard ID 22996.
Action Date:	10/31/2014
Action:	Exposure Tracking Model Ranking
DEC Staff:	Bruce Wanstall
Action Description:	A new updated ranking with ETM has been completed for source area 77880 underground waste oil tank.
Action Date:	10/2/2001
Action:	Update or Other Action
DEC Staff:	Cynthia Pring-Ham
Action Description:	Changed Project Manager from Paul Horwath to Bill Janes.
Action Date:	10/12/2007
Action:	Exposure Tracking Model Ranking
DEC Staff:	Bruce Wanstall
Action Description:	Environmental status evaluated using the environmental tracking module for the waste oil tank site assessment. Release Investigation data and the Corrective Action Remedy controls are used in this initial review.

ALASKA AIRLINES - JUNEAU CARGO FACILITY (Continued) **S109254969**

Action Date:	10/1/1992
Action:	Update or Other Action
DEC Staff:	* Not Assigned
Action Description:	NOR; Leaking underground pipe connection and infrequent overfills over a 15-year period.

Action Date:	1/27/1994
Action:	Release Investigation
DEC Staff:	* Not Assigned
Action Description:	RELR; 500gallon used oil UST removed. Leaky pipe connection was discovered upon decommissioning. Other source of contamination: approximately 3 overfills in 15 years. 15cy oily soil were excavated and incinerated per DEC approval. Currently the UST pit is sealed pending a cleanup plan for the underground contamination.

Action Date:	1/27/1994
Action:	Site Added to Database
DEC Staff:	* Not Assigned
Action Description:	Not reported

Action Date:	1/14/2002
Action:	Underground Storage Tank Site Characterization or Assessment
DEC Staff:	Bruce Wanstall
Action Description:	Supplelmental Release Investigation recieved investigating UST releases at the site. Groundwater moving downgradient to the southwest past the UST footprints: MW 02 had 73ppm GRO and 4.4ppm benzene, MW04 had GRO of 49ppm and benzene at 0.071, MW08 had 33ppm GRO and 2.3ppm benzene, MW07 had 22ppm GRO and 1.7ppm benzene, MW09 had 17ppm GRO and 1.7ppm benzene.

LUST:

Facility Name:	ALASKA AIRLINES - JUNEAU CARGO FACILITY
Facility Status:	Open
Record Key:	1998110022201
File ID:	1513.26.054
Oname:	Not reported
Lat/Lon:	58.35903 -134.5876
Lust Event ID:	2677
CS or Lust:	LUST
Borough:	Juneau
Staff:	Amy Rodman
Site Type:	Airport/Airfield
Horizontal Datum:	WGS84

T79 **ALASKA AIRLINES - JUNEAU CARGO BUILDING** **AK LUST** **S105453951**
West **1915 ALEX HOLDEN WAY** **N/A**
< 1/8 **JUNEAU, AK 99801**
0.120 mi.
636 ft. **Site 2 of 4 in cluster T**

Relative:
Higher

Actual:
12 ft.

LUST:

Facility Name:	ALASKA AIRLINES - JUNEAU CARGO BUILDING
Facility Status:	Cleanup Complete
Record Key:	1994110002701
File ID:	1513.26.014
Oname:	Alaska Airlines

ALASKA AIRLINES - JUNEAU CARGO BUILDING (Continued) **S105453951**

Lat/Lon:	58.35903 -134.5876
Lust Event ID:	1206
CS or Lust:	LUST
Borough:	Juneau
Staff:	No Longer Assigned
Site Type:	Commercial/Retail/Office
Horizontal Datum:	WGS84

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80 West 1/8-1/4 0.127 mi. 670 ft.

JUNEAU AIRPORT FUELING FACILITY **AK SHWS** **S104893281**
2085 ALEX HOLDEN WAY **N/A**
JUNEAU, AK 99801

Relative: Higher

Actual: 23 ft.

SHWS:

File Number:	1513.38.008
Staff:	Danielle Duncan, 9074655207 danielle.duncan@alaska.gov
Facility Status:	Active
Latitude:	58.362254
Longitude:	-134.588824
Hazard ID:	2987
Problem:	In 1998, following a brief period of operation by Delta Western, the former Chevron bulk fuel above ground storage tanks (ASTs) were dismantled and removed from a 0.25 acre portion of the eight acre commercial fuel storage facility located on a northern branch of the Juneau International Airport (JIA). Delta Western's new bulk fuel facility is located 100 feet to the southeast. Adjacent to the new Delta Western facility, Aero Services operates three ASTs. Two inactive ASTs are also present and most of the surface of the facility is bare soil with little or no fuel spill containment capacity. Subsurface soil and groundwater are contaminated by historical release of gasoline and diesel fuel from facility operations dating back to land use as a U.S. Army Base. The cleanup process has seen numerous site investigations, limited interim removals of contaminated soils, and an in-situ groundwater remediation system operated by Chevron since 2007, now dismantled. The final phase of the cleanup process monitoring low concentrations of weathered petroleum constituents is at or near its end.

Actions:

Action Date:	9/7/2000
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Reviewed draft site characterizaton repor dated August 7, 2000; a few problems; contacted Reinsma and Cochran.

Action Date:	9/6/2007
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	ADEC approved the installation of a solar powered ozone injection device to remediate residual diesel contamination of soil and ground water at the Juneau Airport Fueling Facility. Visit the Site Summary published soon on the Contaminated Sites Program webpage to view photos and to obtain additional information.

Action Date:	9/14/1999
Action:	Site Ranked Using the AHRM
DEC Staff:	Bill Janes

JUNEAU AIRPORT FUELING FACILITY (Continued) **S104893281**

Action Description:	By staff.
Action Date:	9/14/1999
Action:	Update or Other Action
DEC Staff:	No Longer Assigned
Action Description:	Reviewed Delta Western Juneau Airport report from RRM and replying to Dave Reinsma. Sent email, will need to follow-up with more formal letter. Told RRM they could not leave the soil exceeding the migration to GW standard on site as proposed.
Action Date:	9/10/2001
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Email from Reinsma. Based on four quarters of data from June 2000 to June 2001, hydrocarbon concentrations in the four site wells are stable and decreasing. Three out of four wells have values well below Table C cleanup levels. The only well that does not meet Table C levels is the source area well that is screened in perched groundwater. RRM recommends annual groundwater monitoring for this site starting next year. Delta/RRM will be submitting the second quarter 2001 monitoring report with this recommendation to ADEC shortly. This will be the last report for this site during 2001.RRM/Delta will also be submitting a project status update document to the Juneau Airport administration office summarizing past assessment and remedial activities, current soil and groundwater conditions, future groundwater monitoring plans, and notification protocol for future possible development activities at the site.
Action Date:	9/1/2005
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Telecon with David Wiegner of SECOR. Proposed September monitoring at what we thought would be low water table and thus below smear zone will be placed on hold. Historic data shows September is not a low water table period. We will probably not be able to get below the smear zone as we thought we could. David will discuss with Stacie H. at Chevron and get back to me.
Action Date:	8/27/2007
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	Through the Department of Law ADEC received a check for $891.90 from Chevron Environmental in return for providing cleanup project oversight.
Action Date:	8/22/2006
Action:	Cleanup Level(s) Approved
DEC Staff:	Bruce Wanstall
Action Description:	Method Two Table B2 Migration to Groundwater cleanup levels for soil in the Over 40-inch Rainfall Zone are approved for the former Delta Western/ Chevron tank farm additional cleanup workplan at the facility; approval letter to sent to Cambria, copied to affiates.
Action Date:	7/26/2005
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Groundwater monitoring results in. DRO still high (24 ppm) in MW-4.

JUNEAU AIRPORT FUELING FACILITY (Continued) **S104893281**

Action Date:	7/24/2009
Action:	Report or Workplan Review - Other
DEC Staff:	Bruce Wanstall
Action Description:	ADEC approved the 2008 Ground Water Monitoring Report for field and laboratory quality assurance criteria. Diesel contamination of ground water is in decline but concentrations still exceed regulatory cleanup levels. Active treatment and monitoring will continue in 2010. Not reported
Action Date:	7/23/2007
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	Plans for development involving earthwork on Lots 5 & 6 at the JIA facility are presently on hold. A low flow ozone diffuser equipped with a solar panel is a remedial strategy under consideration by Chevron to reduce diesel range hydrocarbons in shallow subsurface soil and groundwater at the site.
Action Date:	7/20/2006
Action:	Meeting or Teleconference Held
DEC Staff:	Bruce Wanstall
Action Description:	Meeting with Cooper Engineering, Chevron, Delta Western, and Juneau International Airport staff to develop plans to address a pocket of contamination at the facility that intersects with a current development project.
Action Date:	7/11/2005
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Monitoring well abandonment report received. MW-1, MW-2, MW-3 abandoned using 18 AAC 80.010 and SNSI/AWWA A100-97 standards.
Action Date:	6/30/2014
Action:	Site Visit
DEC Staff:	Bruce Wanstall
Action Description:	DEC met with Conestoga-Rovers & Associates (CRA) for groundwater monitoring and sampling at well MW-4 located at Chevron Site 82307, 9203 Cessna Drive, Juneau, AK. DEC approved disposal of anticipated purge water (approximately 5 gallons) directly to ground surface (in the driveway or grass area) at the airport facility, adjacent to the monitoring well.
Action Date:	6/30/2004
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	First semi-annual GW monitoring results received from SECOR for May 18 sampling. DRO still at 12.8 mg/l in MW-4. GRO also above cleanup level. SECOR evaluating alternatives for reducing levels and will submit workplan approximately late 2004 or early 2005.
Action Date:	6/2/2006
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	Attended soil boring site investigation at the facility with airport personel and Cambria Environmental representing Chevron Environmental. The pattern of subsurface contamination appeared consistent with conclusions arrived at during the April boring

JUNEAU AIRPORT FUELING FACILITY (Continued) **S104893281**

inspection. Samples were collected for laboratory analysis.

Action Date: 6/18/2001
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: Cost recovery check received by Law in the amount of $210.80.

Action Date: 5/5/2000
Action: Cleanup Plan Approved
DEC Staff: Bill Janes
Action Description: 3/16/00 letter work plan to further address location of debris; perform soil excavations; conduct well installations.

Action Date: 5/30/2000
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: Waiver letter sent to USR to accept soils past the May 30 deadline for accepting soils at the facility. In reading file but not site file.

Action Date: 5/27/2005
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: Annual gw sampling this date.

Action Date: 5/24/2006
Action: Site Characterization Workplan Approved
DEC Staff: Bruce Wanstall
Action Description: Received and reviewed the Cambria Soil Assessment Workplan scheduled for June 1st and 2nd at the JIA Fuel Facility new development project area; responded with comments based on the DQO 7-step process and sent approval by email.

Action Date: 5/23/2000
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: Cost recovery check received from Chevron may 18.

Action Date: 5/23/2000
Action: Interim Removal Action Approved
DEC Staff: Bill Janes
Action Description: RRM on site and excavating soil for transport to USR. Approval letter written.G:\\SPAR\\Spar-Contaminated Sites\\SITES\\Del West Juneau Airprt Soil Transport Approval.doc.

Action Date: 5/20/2014
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: DEC held a telephone discussion with JIA Manager Patty deLaBruere concerning institutional controls on the property stated in the May 12th letter to Chevron concerning closure of the site and interests of the facility operators. In an email to Chevron, DEC stated: Based on information currently available, DEC approves Chevron dismantling the solar panel ozone injection system at MW-4 on the JIA Fuel Facility property.

Action Date: 5/17/2007

JUNEAU AIRPORT FUELING FACILITY (Continued) **S104893281**

Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	In addition to a sensitive receptor and well survey of the JIA area, Chevron consultant CRA has completed a conceptual site model to evaluate exposure pathways at the site.
Action Date:	5/12/2014
Action:	Report or Workplan Review - Other
DEC Staff:	Bruce Wanstall
Action Description:	DEC evaluated the CRA Sampling Report for 2013 site activity at the JIA Fuel Facility for CS Program approval criteria. A Report Approval letter was sent by regular and electronic mail to Dan Carrier at Chevron copied to consultant Conestoga Rovers & Associates project manager Darek Wilken, Juneau Airport Manager Patricia deLaBruere and Delta Western Environmental Manager Bev Niemann. Consistent with previous correspondence, the DEC letter accepts the current evaluation of ongoing remediation of petroleum contamination performed by CRA for Chevron using a solar panel powered ozone injection system. Although only an estimate due to laboratory quality deficiencies, the 2013 results indicate that contamination is at levels that are acceptable for regulatory site closure with institutional controls (ICs) on the property. ICs include standard conditions for a contaminated site (controlling any off-site transport of soil and/or groundwater) and in addition a restriction that the installation of wells to access and use groundwater be coordinated with the CS Program. If the JIA Manager and Board (City and Borough of Juneau) find these IC controls are consistent with the Airport Management Plan then a closure determination can be achieved.
Action Date:	5/12/2014
Action:	Exposure Tracking Model Ranking
DEC Staff:	Bruce Wanstall
Action Description:	A new updated ranking with ETM has been completed for source area 73962 Above and Underground tanks, piping & dispensers.
Action Date:	5/10/2001
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Teleconference with Reinsma. Agreed to put project on hold regarding additional cleanup of soils for now. Cochran to communicate with airport regarding leaving it in place. Told Reinsma that based on their concerns Chevron may have to do more soils work. Quarterly monitoring to continue. Move to semi annual when RRM feels there is enough data.
Action Date:	4/7/2006
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Meeting with John Riggi and Bruce Eppler, Cambria Environemental. Cambria is taking over the project from Secor.Sampling will continue on an annual basis. Sampling to occur this May or June. Analyses for MW-4 to include GRO, DRO. BTEX will no longer be evaluated. Decision to go to 5-year monitoring will occur late summer or early fall.
Action Date:	4/4/2007
Action:	Meeting or Teleconference Held
DEC Staff:	Bruce Wanstall

JUNEAU AIRPORT FUELING FACILITY (Continued) **S104893281**

Action Description:	The ADEC and Chevron met with the Juneau Airport Board of Directors to review the proposed plans for future development of the properties that comprise the facility. The ADEC had requested development of a management plan in the event that petroleum contaminated material is encountered on Lots 5 & 6 during development related earthwork activities. Chevron introduced plans to install an ozone injection remedial system for reducing dissolved-phase hydrocarbons in groundwater in site monitoring well MW-4.
Action Date:	4/4/2000
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Teleconference with Reinsma regarding modifying the placement of two of the proposed wells
Action Date:	4/3/2002
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Site tickler update - no action at this time. Reply back from RRM stating monitoring to occur 2nd quarter.
Action Date:	4/24/2008
Action:	Long Term Monitoring Established
DEC Staff:	Bruce Wanstall
Action Description:	ADEC approved changing the long term monitoring schedule from annual to semi-annual for MW-4.
Action Date:	4/23/2014
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	Conestoga-Rovers & Associates provided notice to DEC by letter dated April 17, 2014, of a project manager change to Mr. Derek Wilken, PG working from the Irvine CA office.
Action Date:	4/21/2000
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Cost Rrecovery Memorandum sent to Kay Rawlings for $1,086 for the period July 1999 thru March 2000.
Action Date:	4/18/2006
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	Teleconference meeting with Stacy Hartung-Freirchs (Chevron), John Riggi (Cambria), John Cooper (Cooper Consulting Engineer Inc), Bill Janes and Bruce Wanstall concerning new construction on Lots 5 & 6 in Block J that are adjacent to the subsurface petroleum smear zone on Lot 8B. Wanstall and Cooper inspected the site in the afternoon; SART staff were updated on the site status.
Action Date:	3/4/2005
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Telecon with Brian Silva. Will continue to sample MW-4 at least annually for now rather than actively try to bring levels down.. Will sample in conjunction with trip to Yakutat in May or June.

JUNEAU AIRPORT FUELING FACILITY (Continued) **S104893281**

Action Date:	3/30/2000
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	EPA completed PA on Juneau Airfield and Garrison. The entire garrison is not being listed as a site. The report is stored in this file because it does have relevance - much of the report is dedicated to the fueling facility.
Action Date:	3/27/2008
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	ADEC reviewed the CRA Conceptual Site Model.
Action Date:	3/27/2008
Action:	Exposure Tracking Model Ranking
DEC Staff:	Bruce Wanstall
Action Description:	ADEC reviewed the CRA Conceptual Site Model and evaluated site conditions using the ETM and 2007 site data. ADEC approval and comment on the 2007 GMR, Residential Sampling Report and the CSM was sent to CRA and Chevron.
Action Date:	3/25/2008
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	ADEC review of the Residential Sampling Report for the laboratory checklist. Data meet Contaminated Sites Program quality assurance standard.
Action Date:	3/23/2000
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Public notice submitted to Empire announcing new site. Also sent to Camille to place on web page. Site Summary drafted for web page posting.
Action Date:	3/22/2001
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Final report on additional assessment and soil remediation dated 12/19/00 received January 4, 2001. Approximately 1000 tons of soil above method 2 for benzene, GRO, DRO estimated to remain. RRM recommends no further active remediation of the material because it is in the GW smear zone. Continued GW monitoring recommended. Drafted an email to RRM expressing my concerns.Not enough documentation showing that contamination was removed to the maximum extent practicable.
Action Date:	3/21/2008
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	ADEC reviewed Annual 2007 Groundwater Monitoring and Remedial Actions Report for MW-4 at the facility. The CRA report data meet Contaminated Sites Program quality assurance standards and are accepted.
Action Date:	3/21/2001
Action:	Long Term Monitoring Established

JUNEAU AIRPORT FUELING FACILITY (Continued) **S104893281**

DEC Staff: Bill Janes
Action Description: 4th quarter GW monitoring results received February 9. Results relatively consistent with previous data. DRO exceeded Table C concentration in MW-4. No other constituents exceeded Table C. RRM to continue quarterly monitoring for two more quarters to establish dissolved pet. hydrocarb. concentration, flow direction, and gradient trends.

Action Date: 3/18/2005
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: Email to Brian Silva documenting continued annual MW-4 sampling

Action Date: 3/14/2000
Action: Meeting or Teleconference Held
DEC Staff: Bill Janes
Action Description: Met with Mendenhall Watershed Partnership and handed out fact sheet.

Action Date: 3/1/2004
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: GW monitoring report from December 2003 sampling received from Secor. DRO still elevated above cleanup levels in MW-4, the source area well. This well is screened in perched groundwater. 12/02 and 8/03 DRO results very similar, between 20 and 30 ppm.

Action Date: 3/1/2000
Action: Meeting or Teleconference Held
DEC Staff: Bill Janes
Action Description: RRM, Chevron, DEC, Del West and CBJ met to discuss next phase of site characterization

Action Date: 12/7/2000
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: EPA Preliminary Assessment received 11/30 under the name Juneau Airfield and Garrison. NFA under CERCLA. To be entered into database as a distinct site for tracking purposes although there is sig. overlap.

Action Date: 12/7/1999
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: Based on RRM's limited site assessment of the former tank farm, drafted correspondence to airport manager calling for a meeting in January or February. Copied other RPs. Letter is at g:/spar/csites/sites/airport tank farm 1

Action Date: 12/30/2002
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: Have not yet received the annual GW monitoring report. Monitoring was supposed to have occurred 2nd quarter this year. Emailed RRM this date.

Action Date: 12/29/2006
Action: Update or Other Action

JUNEAU AIRPORT FUELING FACILITY (Continued) **S104893281**

DEC Staff: Bruce Wanstall
Action Description: Payment was received for project management costs incurred by the ADEC; $489.72 from Chevron Environmental Management Co.

Action Date: 12/28/2000
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: Cost recovery check $157.25 received by Law.

Action Date: 11/30/2001
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: Quarterly monitoring report reviewed. Emailed RRM to initiate annual GW monitoring beginning first quarter 2002.

Action Date: 11/18/1999
Action: Site Number Identifier Changed
DEC Staff: No Longer Assigned
Action Description: Former Reckeys were 1998110130801 and 1994110130701.

Action Date: 10/6/1999
Action: Site Added to Database
DEC Staff: Bill Janes
Action Description: DRO, GRO, in soil; benzene and unidentified compounds in GW.

Action Date: 10/30/2000
Action: Cleanup Level(s) Approved
DEC Staff: Bill Janes
Action Description: Teleconference with Reinsma. See my site log this date for details.

Action Date: 10/30/2000
Action: Site Characterization Report Approved
DEC Staff: Bill Janes
Action Description: Teleconference with Reinsma. Changing recommendations in report. RRM now to say something such as no immediate remediation but in the event that it is necessary Chevron will be prepared to move forward in order to remove the implication that they are seeking a NFRAP at this time. Get idea of where GW contamination is, at what levels to take into account seasonal fluctuations, and to determine if point of compliance is being met at the property boundary. Four quarters of monitoring thru 3rd quarter of 2001. More wells could potentially be placed depending on the results of each quarterly event. Subsurface soil GRO and DRO contamination above table B2 levels - Dave to integrate into report why excavation should not be done right now. I will look into details of regulations to see if we can find a way to leave this contamination in place as it does not appear problematic. Told Dave that perhaps FW could extrapolate the results of the Willoughby risk assessment work to the airport situation since sub-surface soil contamination also remains at the Willoughby site.

Action Date: 10/24/2011
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: DEC approved disposal of contaminated groundwater purged from monitor well MW-4 to the ground surface where residual subsurface diesel contamination has been identified at the well on the active fuel terminal site.

JUNEAU AIRPORT FUELING FACILITY (Continued) **S104893281**

Action Date:	10/19/2000
Action:	Meeting or Teleconference Held
DEC Staff:	Bill Janes
Action Description:	Went over recommendations in draft report. Dave Reinsma will be changing some language as they are not really seeking a NFRAP at this time although the report implied that.
Action Date:	10/15/2012
Action:	Report or Workplan Review - Other
DEC Staff:	Bruce Wanstall
Action Description:	DEC approved field and laboratory data in the Annual 2011 Groundwater Monitoring Report and Ozone System Maintenance report by CRA documenting groundwater monitoring at the Chevron Site 8-2307, Hazard ID 2987. Dissolved DRO in groundwater remains an order of magnitude above Table C DRO cleanup level of 1.5 milligrams per liter. Active groundwater treatment will continue in 2012.
Action Date:	10/15/2010
Action:	Report or Workplan Review - Other
DEC Staff:	Bruce Wanstall
Action Description:	DEC approved field and laboratory data in the Annual 2010 Groundwater Monitoring Report and Ozone System Maintenance report by CRA. Diesel contaminated groundwater is an order of magnitude above 18 AAC 75.345 Table C cleanup level of 1.5 milligrams per liter. Active groundwater treatment will continue in 2011.
Action Date:	10/13/2010
Action:	Report or Workplan Review - Other
DEC Staff:	Bruce Wanstall
Action Description:	DEC approved field and laboratory data in the Annual 2009 Groundwater Monitoring Report and Ozone System Maintenance report by CRA. Diesel contaminated groundwater is an order of magnitude above 18 AAC 75.345 Table C cleanup level of 1.5 milligrams per liter. Active groundwater treatment will continue in 2010.
Action Date:	1/7/2005
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Telecon with Brian Silva at SECOR. Workplan for addressing GW contamination expected to be completed this quarter. Replacement at Chevron for Bob Cochran is Stacy Hartung-Ferricks.
Action Date:	1/30/2002
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Site tickler update - Sent email to RRM to determine schedule for 1st quarter monitoring.
Action Date:	1/3/2013
Action:	Report or Workplan Review - Other
DEC Staff:	Bruce Wanstall
Action Description:	Conestoga Rovers & Associates has reported the results of environmental site activity in 2012. DEC letter accepts the current evaluation of ongoing remediation of petroleum contamination performed by CRA for Chevron using a solar panel powered ozone injection system. The current results indicate that the cleanup remedy has stabilized contamination at levels that may be acceptable

JUNEAU AIRPORT FUELING FACILITY (Continued) **S104893281**

for regulatory site closure with institutional controls controlling any off-site transport of soil and/or groundwater and the installation of wells to access and use groundwater. If the land manager (City and Borough of Juneau) finds the controls are consistent with the Airport Management Plan then an agreement can be reached.

Action Date: 1/12/2015
Action: Report or Workplan Review - Other
DEC Staff: Bruce Wanstall
Action Description: DEC reviewed the letter/report: Annual 2014 Groundwater Monitoring Report (Report), dated November 5, 2014 and provided approval by letter mailed today to Chevron and copied by electronic mail to the CBJ Juneau International Airport (JIA) Manager, the Delta Western Environmental Manager and Conestoga-Rovers & Associates Inc. (CRA). CRA completed the report documenting sampling activity at the Site. The site activity met the objectives of the approved work plan and the Report data is of sufficient quality for use in the decision making process. In accordance with 18 AAC 75.360, qualified person(s) performed data collection consistent with DEC methodology. The DEC laboratory report checklist indicate the data meet Contaminated Sites Program quality assurance criteria, therefore the Report is approved in accordance with 18 AAC 75.335(d). The CRA Report stated that conversations with the JIA Engineer Ken Nichols on June 2, 2014 indicated that the Master Plan for the airport is currently being written and is projected to be completed in approximately 2 years. Chevron and CRA will continue to work with the JIA to ensure implementation of the Institutional Controls denoted in the DEC's May 12, 2014 correspondence.

Contaminants:
Staff: Danielle Duncan, 9074655207 danielle.duncan@alaska.gov

Contaminate Name1: Juneau Airport Fueling Facility
Contaminate Level Description1: Not reported
Contaminate Media1: Not reported

Control Type: Not reported
Control Details Description1: Not reported
Contaminant CTD: Not reported
Contaminant CDR: Not reported
Comments: Not reported

U81 **MILLER CONSTRUCTION CO LTD** **ABANDONED MINES** **1024248009**
WNW **2207 NORTH JORDAN AVE.** **N/A**
1/8-1/4 **JUNEAU, AK 99801**
0.131 mi.
691 ft. **Site 1 of 4 in cluster U**

Relative: **Higher**

Actual: **50 ft.**

ABANDONED MINES:
Mine ID: 5001746
Mine Type: Surface
Mine Status Description: Abandoned
Mine Status Date: 2017-10-01 00:00:00
Coal (C) or Metal (M) Mine: M/NM
Controller ID: 0040959

MILLER CONSTRUCTION CO LTD (Continued) **1024248009**

Controller Name:	Robert Miller; Terrence Miller
Operator ID:	0050610
Operator name:	Miller Construction Co Ltd
Address of Record Street:	8520 East Valley Court
Address of Record PO Box:	Not reported
Address of Record City:	Juneau
Address of Record State:	AK
Address of Record Zip Code:	99803
Assessment Address Street:	8520 East Valley Court
Assessment Address PO Box:	0
Assessment Address City:	JUNEAU
Assessment Address State:	AK
Assessment Address Zip Code:	99803
Mine Health and Safety Address Street:	9211 Emily Way
Mine Health and Safety Address PO Box:	0
Mine Health and Safety Address City:	Juneau
Mine Health and Safety Address State:	AK
Mine Health and Safety Address Zip Code:	99801
Latitude:	58.365278
Longitude:	-134.580278

82
WSW
1/8-1/4
0.136 mi.
716 ft.

ALASKA COASTAL AIRLINES **RCRA-CESQG** **1000904403**
JUNEAU INTL ARPRT BLK H LOT 7 **AK0000444174**
JUNEAU, AK 99801

Relative:
Lower

Actual:
10 ft.

RCRA-CESQG:

Date form received by agency:	04/29/1994
Facility name:	ALASKA COASTAL AIRLINES
Facility address:	JUNEAU INTL ARPRT BLK H LOT 7 JUNEAU, AK 99801
EPA ID:	AK0000444174
Mailing address:	NO MAILING ADDRESS NO MAILING CITY, OR
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	10
Land type:	Facility is not located on Indian land. Additional information is not known.
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

ALASKA COASTAL AIRLINES (Continued) **1000904403**

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

Facility Has Received Notices of Violations:
- Regulation violated: Not reported
- Area of violation: Generators - General
- Date violation determined: 04/29/1994
- Date achieved compliance: 07/28/1994
- Violation lead agency: State
  - Enforcement action: WRITTEN INFORMAL
  - Enforcement action date: 06/23/1994
  - Enf. disposition status: Not reported
  - Enf. disp. status date: Not reported
  - Enforcement lead agency: State
  - Proposed penalty amount: Not reported
  - Final penalty amount: Not reported
  - Paid penalty amount: Not reported

Evaluation Action Summary:
- Evaluation date: 04/29/1994
- Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
- Area of violation: Generators - General
- Date achieved compliance: 07/28/1994
- Evaluation lead agency: State

T83 **AERO SERVICES, INC.** **AK UST** **U003998651**
West **1890 RENSHAW WAY** **N/A**
1/8-1/4 **JUNEAU, AK 99801**
0.137 mi.
721 ft. **Site 3 of 4 in cluster T**

Relative: **Higher**
Actual: **12 ft.**

UST:
- Facility ID: 1375
- Facility Type: Gas Station
- Owner ID: 1476
- Owner Name: Atlantic Aviation dba Trajen Flight Support, LP
- Owner Address: alternate name: Aero Services, Inc.P.O. Box
- Owner City,St,Zip: Portland, OR 97208

- Tank ID: 1
- **Tank Status:** **Permanently Out of Use**
- Tack Capacity: 3000
- Tank Product: Gasoline

AERO SERVICES, INC. (Continued) **U003998651**

Installed Date: 08/01/1988
Regulated Tank: Yes

Tank ID: 2
Tank Status: Permanently Out of Use
Tack Capacity: 3000
Tank Product: Diesel
Installed Date: 08/01/1988
Regulated Tank: Yes

T84 **NORTHSTAR TREKKING DBA N.STAR HELICOPTER** **RCRA NonGen / NLR** **1007879133**
West **1910 RENSHAW WAY** **AKR000201368**
1/8-1/4 **JUNEAU, AK 99801**
0.138 mi.
730 ft. **Site 4 of 4 in cluster T**

Relative:
Higher

Actual:
12 ft.

RCRA NonGen / NLR:
Date form received by agency: 11/10/2004
Facility name: NORTHSTAR TREKKING DBA N.STAR HELICOPTER
Facility address: 1910 RENSHAW WAY
JUNEAU, AK 99801
EPA ID: AKR000201368
Mailing address: PO BOX 32540
JUNEAU, AK 99803
Contact: BOB ENGELBRECHT
Contact address: Not reported
Not reported
Contact country: US
Contact telephone: 907-790-4530
Contact email: ENGELBRECHT@ALASKA.COM
EPA Region: 10
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: NORTHSTAR TREKKING
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 04/01/1998
Owner/Op end date: Not reported

Owner/operator name: THI INC
Owner/operator address: TONGASS AVE
KETCHIKAN, AK 99901
Owner/operator country: US
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported

NORTHSTAR TREKKING DBA N.STAR HELICOPTER (Continued) **1007879133**

Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/01/2004
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: Yes
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

U85 **CHANNEL CONSTRUCTION INC** **RCRA NonGen / NLR** **1015757153**
NW **2223 NORTH JORDAN AVE** **PADS** **AKR000002378**
1/8-1/4 **JUNEAU, AK 99801**
0.172 mi.
909 ft. **Site 2 of 4 in cluster U**

Relative:
Higher

Actual:
51 ft.

RCRA NonGen / NLR:
Date form received by agency: 03/03/1997
Facility name: CHANNEL CONSTRUCTION INC
Facility address: 2223 NORTH JORDAN AVE
JUNEAU, AK 99801
EPA ID: AKR000002378
Mailing address: TONSGARD CT
JUNEAU, AK 99801-7201
Contact: W R JR TONSGARD
Contact address: 5600 TONSGARD CT
JUNEAU, AK 99801-7201
Contact country: US
Contact telephone: 907-780-4224
Contact email: Not reported
EPA Region: 10
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: W R TONSGARD JR
Owner/operator address: 2223 NORTH JORDAN AVE
JUNEAU, AK 99801
Owner/operator country: Not reported
Owner/operator telephone: 907-780-4224
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private

CHANNEL CONSTRUCTION INC (Continued) **1015757153**

Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: Yes
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: Yes

. Waste code: NONE
. Waste name: None

Violation Status: No violations found

PADS:
EPAID: AKR000002378
Facility name: CONSUELO
Facility Address: 223 NORTH JORDAN AVE.
JUNEAU, AK 99801
Facility country: US
Generator: No
Storer: No
Transporter: Yes
Disposer: No
Research facility: No
Smelter: No
Facility owner name: CHANNEL CONSTRUCTION, INC.
Contact title: Not reported
Contact name: MARCY JOHNSON
Contact tel: 907-789-0200
Contact extension: Not reported
Contact Email: Not reported
Mailing address: P.O. BOX 33359
JUNEAU, AK 99803
Mailing country: US
Cert. date: 06/19/2004

U86 **PORTABLE 191** **ABANDONED MINES** **1018260304**
NW **2223 N. JORDAN AVE.** **N/A**
1/8-1/4 **JUNEAU, AK 99801**
0.172 mi.
909 ft. **Site 3 of 4 in cluster U**

Relative: **Higher**
Actual: **51 ft.**

ABANDONED MINES:

Mine ID:	5001723
Mine Type:	Surface
Mine Status Description:	Abandoned
Mine Status Date:	2010-10-10 00:00:00
Coal (C) or Metal (M) Mine:	M/NM
Controller ID:	M31703
Controller Name:	William Tonsgard
Operator ID:	L31703
Operator name:	Channel Construction Inc
Address of Record Street:	2223 N Jordan Ave
Address of Record PO Box:	Not reported
Address of Record City:	Juneau
Address of Record State:	AK
Address of Record Zip Code:	99801
Assessment Address Street:	2223 N Jordan Ave
Assessment Address PO Box:	0
Assessment Address City:	JUNEAU
Assessment Address State:	AK
Assessment Address Zip Code:	99801
Mine Health and Safety Address Street:	2223 N. Jordan Ave.
Mine Health and Safety Address PO Box:	0
Mine Health and Safety Address City:	Juneau
Mine Health and Safety Address State:	AK
Mine Health and Safety Address Zip Code:	99801
Latitude:	58.365277
Longitude:	-134.580277

U87 **CHANNEL CONSTRUCTION INC** **US MINES** **1001195071**
NW **N/A**
1/8-1/4 **JUNEAU (County), AK**
0.175 mi.
922 ft. **Site 4 of 4 in cluster U**

Relative: **Higher**
Actual: **52 ft.**

US MINES:

Mine ID:	5001723
SIC code(s):	141102 000000 000000 000000 000000 000000
Entity name:	PORTABLE 191
Company:	CHANNEL CONSTRUCTION INC
Status:	4
Status date:	20101010
Operation Class:	non-Coal Mining
Number of shops:	0
Number of plants:	0
Latitude:	58 21 54
Longitude:	134 34 48

Violations Details:

Violation Number:	8554417
Date Issued:	05/27/2010
Mine Status:	Abandoned
Status Date:	10/10/2010
Action Type:	104(a)

CHANNEL CONSTRUCTION INC (Continued) **1001195071**

Date Abated:	05/28/2010
Citation/Order:	Citation
Sig and Sub Designation:	N
Proposed Penalty:	100.00
Paid Penalty:	100.00
Assessment Status code:	Closed
Assess. Case Status code:	Proposed
Assessment Amount:	100.00
Year:	2010

Violation Number:	8554418
Date Issued:	05/27/2010
Mine Status:	Abandoned
Status Date:	10/10/2010
Action Type:	104(a)
Date Abated:	05/28/2010
Citation/Order:	Citation
Sig and Sub Designation:	N
Proposed Penalty:	100.00
Paid Penalty:	100.00
Assessment Status code:	Closed
Assess. Case Status code:	Proposed
Assessment Amount:	100.00
Year:	2010

Violation Number:	8554419
Date Issued:	05/27/2010
Mine Status:	Abandoned
Status Date:	10/10/2010
Action Type:	104(a)
Date Abated:	05/27/2010
Citation/Order:	Citation
Sig and Sub Designation:	N
Proposed Penalty:	100.00
Paid Penalty:	100.00
Assessment Status code:	Closed
Assess. Case Status code:	Proposed
Assessment Amount:	100.00
Year:	2010

Violation Number:	6367887
Date Issued:	03/31/2005
Mine Status:	Abandoned
Status Date:	10/10/2010
Action Type:	104(a)
Date Abated:	05/23/2005
Citation/Order:	Citation
Sig and Sub Designation:	N
Proposed Penalty:	Not reported
Paid Penalty:	Not reported
Assessment Status code:	Not reported
Assess. Case Status code:	Not reported
Assessment Amount:	Not reported
Year:	2005

Violation Number:	6435840
Date Issued:	01/22/2009

CHANNEL CONSTRUCTION INC (Continued) **1001195071**

Mine Status:	Abandoned
Status Date:	10/10/2010
Action Type:	104(a)
Date Abated:	01/22/2009
Citation/Order:	Citation
Sig and Sub Designation:	N
Proposed Penalty:	100.00
Paid Penalty:	100.00
Assessment Status code:	Closed
Assess. Case Status code:	Proposed
Assessment Amount:	100.00
Year:	2009

88
West
1/8-1/4
0.192 mi.
1013 ft.

T W HALL **RCRA NonGen / NLR** **1004670314**
9393 LA PEROUSE AVE **FINDS** **AKR000004283**
JUNEAU, AK 99801 **ECHO**

Relative:
Higher

Actual:
23 ft.

RCRA NonGen / NLR:

Date form received by agency:	05/02/2000
Facility name:	T.W. HALL
Facility address:	9393 LAPROUSE JUNEAU, AK 99801
EPA ID:	AKR000004283
Mailing address:	LONGRUNDRIVE JUNEAU, AK 99801
Contact:	DWAN HALL
Contact address:	9217 LONGRUNDRIVE JUNEAU, AK 99801
Contact country:	US
Contact telephone:	907-789-3725
Contact email:	Not reported
EPA Region:	10
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	DWAN HALL
Owner/operator address:	9217 LONGRUNDRIVE JUNEAU, AK 99801
Owner/operator country:	Not reported
Owner/operator telephone:	907-789-3725
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	Yes
Treater, storer or disposer of HW:	No

T W HALL (Continued) **1004670314**

Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: Yes
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: Yes
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: Yes

. Waste code: NONE
. Waste name: None

Violation Status: No violations found

FINDS:

Registry ID: 110003036946

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1004670314
Registry ID: 110003036946
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110003036946

V89 **CHANNEL CONSTRUCTION INC** **US MINES** **1016521834**
NW **N/A**
1/8-1/4 **JUNEAU (County), AK**
0.194 mi.
1025 ft. **Site 1 of 2 in cluster V**

Relative:
Higher

Actual:
52 ft.

US MINES:
Mine ID: 5001722
SIC code(s): 142900 000000 000000 000000 000000 000000
Entity name: PORTABLE 235
Company: CHANNEL CONSTRUCTION INC
Status: 2
Status date: 20080522
Operation Class: non-Coal Mining
Number of shops: 0
Number of plants: 0
Latitude: 58 21 55
Longitude: 134 34 49

Violations Details:

CHANNEL CONSTRUCTION INC (Continued) **1016521834**

Violation Number:	6444803
Date Issued:	8/23/2017
Mine Status:	Intermittent
Status Date:	5/22/2008
Action Type:	104(a)
Date Abated:	8/23/2017
Citation/Order:	Citation
Sig and Sub Designation:	N
Proposed Penalty:	116.00
Paid Penalty:	116.00
Assessment Status code:	Proposed
Assess. Case Status code:	Closed
Assessment Amount:	116.00
Year:	2017

Violation Number:	8786878
Date Issued:	09/22/2015
Mine Status:	Intermittent
Status Date:	05/22/2008
Action Type:	104(a)
Date Abated:	09/22/2015
Citation/Order:	Citation
Sig and Sub Designation:	N
Proposed Penalty:	100.00
Paid Penalty:	100.00
Assessment Status code:	Closed
Assess. Case Status code:	Proposed
Assessment Amount:	100.00
Year:	2015

Violation Number:	8786879
Date Issued:	09/22/2015
Mine Status:	Intermittent
Status Date:	05/22/2008
Action Type:	104(a)
Date Abated:	10/15/2015
Citation/Order:	Citation
Sig and Sub Designation:	N
Proposed Penalty:	100.00
Paid Penalty:	100.00
Assessment Status code:	Closed
Assess. Case Status code:	Proposed
Assessment Amount:	100.00
Year:	2015

Violation Number:	8786876
Date Issued:	09/21/2015
Mine Status:	Intermittent
Status Date:	05/22/2008
Action Type:	104(a)
Date Abated:	09/22/2015
Citation/Order:	Citation
Sig and Sub Designation:	N
Proposed Penalty:	100.00
Paid Penalty:	100.00
Assessment Status code:	Closed
Assess. Case Status code:	Proposed

CHANNEL CONSTRUCTION INC (Continued) **1016521834**

Assessment Amount: 100.00
Year: 2015

Violation Number: 8786874
Date Issued: 09/21/2015
Mine Status: Intermittent
Status Date: 05/22/2008
Action Type: 104(a)
Date Abated: 09/22/2015
Citation/Order: Citation
Sig and Sub Designation: Y
Proposed Penalty: 100.00
Paid Penalty: 100.00
Assessment Status code: Closed
Assess. Case Status code: Proposed
Assessment Amount: 100.00
Year: 2015

Violation Number: 8786875
Date Issued: 09/21/2015
Mine Status: Intermittent
Status Date: 05/22/2008
Action Type: 104(a)
Date Abated: 09/22/2015
Citation/Order: Citation
Sig and Sub Designation: N
Proposed Penalty: 100.00
Paid Penalty: 100.00
Assessment Status code: Closed
Assess. Case Status code: Proposed
Assessment Amount: 100.00
Year: 2015

Violation Number: 8786877
Date Issued: 09/21/2015
Mine Status: Intermittent
Status Date: 05/22/2008
Action Type: 104(a)
Date Abated: 10/15/2015
Citation/Order: Citation
Sig and Sub Designation: N
Proposed Penalty: 100.00
Paid Penalty: 100.00
Assessment Status code: Closed
Assess. Case Status code: Proposed
Assessment Amount: 100.00
Year: 2015

Violation Number: 8786873
Date Issued: 09/21/2015
Mine Status: Intermittent
Status Date: 05/22/2008
Action Type: 104(a)
Date Abated: 09/22/2015
Citation/Order: Citation
Sig and Sub Designation: N
Proposed Penalty: 100.00

CHANNEL CONSTRUCTION INC (Continued) **1016521834**

Paid Penalty: 100.00
Assessment Status code: Closed
Assess. Case Status code: Proposed
Assessment Amount: 100.00
Year: 2015

Violation Number: 8881066
Date Issued: 08/27/2015
Mine Status: Intermittent
Status Date: 05/22/2008
Action Type: 104(a)
Date Abated: 08/27/2015
Citation/Order: Citation
Sig and Sub Designation: N
Proposed Penalty: 100.00
Paid Penalty: 100.00
Assessment Status code: Closed
Assess. Case Status code: Proposed
Assessment Amount: 100.00
Year: 2015

Violation Number: 8881065
Date Issued: 08/27/2015
Mine Status: Intermittent
Status Date: 05/22/2008
Action Type: 104(a)
Date Abated: 08/27/2015
Citation/Order: Citation
Sig and Sub Designation: N
Proposed Penalty: 100.00
Paid Penalty: 100.00
Assessment Status code: Closed
Assess. Case Status code: Proposed
Assessment Amount: 100.00
Year: 2015

Violation Number: 8881063
Date Issued: 08/27/2015
Mine Status: Intermittent
Status Date: 05/22/2008
Action Type: 104(a)
Date Abated: 08/27/2015
Citation/Order: Citation
Sig and Sub Designation: Y
Proposed Penalty: 807.00
Paid Penalty: 807.00
Assessment Status code: Closed
Assess. Case Status code: Proposed
Assessment Amount: 807.00
Year: 2015

Violation Number: 8881067
Date Issued: 08/27/2015
Mine Status: Intermittent
Status Date: 05/22/2008
Action Type: 104(g)(1)
Date Abated: 02/25/2016

CHANNEL CONSTRUCTION INC (Continued) **1016521834**

Citation/Order: Order
Sig and Sub Designation: N
Proposed Penalty: 112.00
Paid Penalty: 112.00
Assessment Status code: Closed
Assess. Case Status code: Proposed
Assessment Amount: 112.00
Year: 2015

Violation Number: 8881064
Date Issued: 08/27/2015
Mine Status: Intermittent
Status Date: 05/22/2008
Action Type: 104(a)
Date Abated: 08/27/2015
Citation/Order: Citation
Sig and Sub Designation: Y
Proposed Penalty: 807.00
Paid Penalty: 807.00
Assessment Status code: Closed
Assess. Case Status code: Proposed
Assessment Amount: 807.00
Year: 2015

Violation Number: 8610239
Date Issued: 08/14/2012
Mine Status: Intermittent
Status Date: 05/22/2008
Action Type: 104(a)
Date Abated: 08/14/2012
Citation/Order: Citation
Sig and Sub Designation: N
Proposed Penalty: 100
Paid Penalty: 100
Assessment Status code: Closed
Assess. Case Status code: Proposed
Assessment Amount: 100
Year: 2012

Violation Number: 8610241
Date Issued: 08/08/2012
Mine Status: Intermittent
Status Date: 05/22/2008
Action Type: 104(a)
Date Abated: 08/08/2012
Citation/Order: Citation
Sig and Sub Designation: N
Proposed Penalty: 162
Paid Penalty: 162
Assessment Status code: Closed
Assess. Case Status code: Proposed
Assessment Amount: 162
Year: 2012

Violation Number: 8610240
Date Issued: 08/08/2012
Mine Status: Intermittent

CHANNEL CONSTRUCTION INC (Continued) **1016521834**

Status Date: 05/22/2008
Action Type: 104(a)
Date Abated: 08/08/2012
Citation/Order: Citation
Sig and Sub Designation: N
Proposed Penalty: 100
Paid Penalty: 100
Assessment Status code: Closed
Assess. Case Status code: Proposed
Assessment Amount: 100
Year: 2012

Violation Number: 8610238
Date Issued: 08/08/2012
Mine Status: Intermittent
Status Date: 05/22/2008
Action Type: 104(a)
Date Abated: 08/14/2012
Citation/Order: Citation
Sig and Sub Designation: N
Proposed Penalty: 100
Paid Penalty: 100
Assessment Status code: Closed
Assess. Case Status code: Proposed
Assessment Amount: 100
Year: 2012

Violation Number: 8610237
Date Issued: 08/08/2012
Mine Status: Intermittent
Status Date: 05/22/2008
Action Type: 104(a)
Date Abated: 08/08/2012
Citation/Order: Citation
Sig and Sub Designation: N
Proposed Penalty: 162
Paid Penalty: 162
Assessment Status code: Closed
Assess. Case Status code: Proposed
Assessment Amount: 162
Year: 2012

Violation Number: 8610236
Date Issued: 08/08/2012
Mine Status: Intermittent
Status Date: 05/22/2008
Action Type: 104(a)
Date Abated: 08/08/2012
Citation/Order: Citation
Sig and Sub Designation: Y
Proposed Penalty: 100
Paid Penalty: 100
Assessment Status code: Closed
Assess. Case Status code: Proposed
Assessment Amount: 100
Year: 2012

CHANNEL CONSTRUCTION INC (Continued) **1016521834**

Violation Number:	6395812
Date Issued:	07/07/2007
Mine Status:	Intermittent
Status Date:	05/22/2008
Action Type:	104(a)
Date Abated:	07/07/2007
Citation/Order:	Citation
Sig and Sub Designation:	Y
Proposed Penalty:	124.00
Paid Penalty:	124.00
Assessment Status code:	Closed
Assess. Case Status code:	Proposed
Assessment Amount:	124.00
Year:	2007

Click this hyperlink while viewing on your computer to access
11 additional US_MINES: record(s) in the EDR Site Report.

V90 **MILLER CONSTRUCTION CO LTD** **US MINES** **1016521846**
NW **N/A**
1/8-1/4 **JUNEAU (County), AK**
0.194 mi.
1025 ft. **Site 2 of 2 in cluster V**

Relative:
Higher

Actual:
52 ft.

US MINES:

Mine ID:	5001746
SIC code(s):	142900 000000 000000 000000 000000 000000
Entity name:	MILLER CONSTRUCTION CO LTD
Company:	MILLER CONSTRUCTION CO LTD
Status:	4
Status date:	20171001
Operation Class:	non-Coal Mining
Number of shops:	0
Number of plants:	0
Latitude:	58 21 55
Longitude:	134 34 49

Violations Details:

Violation Number:	6395825
Date Issued:	5/24/2017
Mine Status:	Abandoned
Status Date:	10/1/2017
Action Type:	104(a)
Date Abated:	5/24/2017
Citation/Order:	Citation
Sig and Sub Designation:	N

MILLER CONSTRUCTION CO LTD (Continued) **1016521846**

Proposed Penalty: 116.00
Paid Penalty: 116.00
Assessment Status code: Proposed
Assess. Case Status code: Closed
Assessment Amount: 116.00
Year: 2017

Violation Number: 6395601
Date Issued: 5/24/2017
Mine Status: Abandoned
Status Date: 10/1/2017
Action Type: 104(a)
Date Abated: 5/24/2017
Citation/Order: Citation
Sig and Sub Designation: N
Proposed Penalty: 116.00
Paid Penalty: 116.00
Assessment Status code: Proposed
Assess. Case Status code: Closed
Assessment Amount: 116.00
Year: 2017

Violation Number: 6444248
Date Issued: 5/23/2017
Mine Status: Abandoned
Status Date: 10/1/2017
Action Type: 104(a)
Date Abated: 5/23/2017
Citation/Order: Citation
Sig and Sub Designation: N
Proposed Penalty: 116.00
Paid Penalty: 116.00
Assessment Status code: Proposed
Assess. Case Status code: Closed
Assessment Amount: 116.00
Year: 2017

Violation Number: 6444325
Date Issued: 5/23/2017
Mine Status: Abandoned
Status Date: 10/1/2017
Action Type: 104(a)
Date Abated: 5/24/2017
Citation/Order: Citation
Sig and Sub Designation: N
Proposed Penalty: 116.00
Paid Penalty: 116.00
Assessment Status code: Proposed
Assess. Case Status code: Closed
Assessment Amount: 116.00
Year: 2017

Violation Number: 8789072
Date Issued: 09/17/2014
Mine Status: Intermittent
Status Date: 07/15/2013
Action Type: 104(a)

MILLER CONSTRUCTION CO LTD (Continued) **1016521846**

Date Abated:	09/17/2014
Citation/Order:	Citation
Sig and Sub Designation:	N
Proposed Penalty:	100.00
Paid Penalty:	100.00
Assessment Status code:	Closed
Assess. Case Status code:	Proposed
Assessment Amount:	100.00
Year:	2014

Violation Number:	8789073
Date Issued:	09/17/2014
Mine Status:	Intermittent
Status Date:	07/15/2013
Action Type:	104(a)
Date Abated:	09/17/2014
Citation/Order:	Citation
Sig and Sub Designation:	N
Proposed Penalty:	100.00
Paid Penalty:	100.00
Assessment Status code:	Closed
Assess. Case Status code:	Proposed
Assessment Amount:	100.00
Year:	2014

Violation Number:	8881369
Date Issued:	09/02/2016
Mine Status:	Intermittent
Status Date:	07/15/2013
Action Type:	104(a)
Date Abated:	09/02/2016
Citation/Order:	Citation
Sig and Sub Designation:	N
Proposed Penalty:	114.00
Paid Penalty:	114.00
Assessment Status code:	Closed
Assess. Case Status code:	Proposed
Assessment Amount:	114.00
Year:	2016

Violation Number:	8881364
Date Issued:	08/18/2016
Mine Status:	Intermittent
Status Date:	07/15/2013
Action Type:	104(a)
Date Abated:	08/22/2016
Citation/Order:	Citation
Sig and Sub Designation:	N
Proposed Penalty:	114.00
Paid Penalty:	114.00
Assessment Status code:	Closed
Assess. Case Status code:	Proposed
Assessment Amount:	114.00
Year:	2016

Violation Number:	8881363
Date Issued:	08/18/2016

MILLER CONSTRUCTION CO LTD (Continued) **1016521846**

Mine Status:	Intermittent
Status Date:	07/15/2013
Action Type:	104(a)
Date Abated:	08/18/2016
Citation/Order:	Citation
Sig and Sub Designation:	Y
Proposed Penalty:	413.00
Paid Penalty:	413.00
Assessment Status code:	Closed
Assess. Case Status code:	Proposed
Assessment Amount:	413.00
Year:	2016

Violation Number:	8881362
Date Issued:	08/18/2016
Mine Status:	Intermittent
Status Date:	07/15/2013
Action Type:	104(a)
Date Abated:	08/18/2016
Citation/Order:	Citation
Sig and Sub Designation:	Y
Proposed Penalty:	124.00
Paid Penalty:	124.00
Assessment Status code:	Closed
Assess. Case Status code:	Proposed
Assessment Amount:	124.00
Year:	2016

Violation Number:	8881361
Date Issued:	08/18/2016
Mine Status:	Intermittent
Status Date:	07/15/2013
Action Type:	104(a)
Date Abated:	08/22/2016
Citation/Order:	Citation
Sig and Sub Designation:	N
Proposed Penalty:	114.00
Paid Penalty:	114.00
Assessment Status code:	Closed
Assess. Case Status code:	Proposed
Assessment Amount:	114.00
Year:	2016

Violation Number:	6367943
Date Issued:	07/27/2005
Mine Status:	Intermittent
Status Date:	07/15/2013
Action Type:	104(a)
Date Abated:	07/27/2005
Citation/Order:	Citation
Sig and Sub Designation:	N
Proposed Penalty:	60.00
Paid Penalty:	60.00
Assessment Status code:	Closed
Assess. Case Status code:	Proposed
Assessment Amount:	60.00
Year:	2005

MILLER CONSTRUCTION CO LTD (Continued) **1016521846**

Violation Number:	6367944
Date Issued:	07/27/2005
Mine Status:	Intermittent
Status Date:	07/15/2013
Action Type:	104(a)
Date Abated:	07/27/2005
Citation/Order:	Citation
Sig and Sub Designation:	N
Proposed Penalty:	60.00
Paid Penalty:	60.00
Assessment Status code:	Closed
Assess. Case Status code:	Proposed
Assessment Amount:	60.00
Year:	2005

Violation Number:	6367945
Date Issued:	07/27/2005
Mine Status:	Intermittent
Status Date:	07/15/2013
Action Type:	104(a)
Date Abated:	07/27/2005
Citation/Order:	Citation
Sig and Sub Designation:	N
Proposed Penalty:	60.00
Paid Penalty:	60.00
Assessment Status code:	Closed
Assess. Case Status code:	Proposed
Assessment Amount:	60.00
Year:	2005

Violation Number:	6367946
Date Issued:	07/27/2005
Mine Status:	Intermittent
Status Date:	07/15/2013
Action Type:	104(a)
Date Abated:	04/26/2006
Citation/Order:	Citation
Sig and Sub Designation:	N
Proposed Penalty:	60.00
Paid Penalty:	60.00
Assessment Status code:	Closed
Assess. Case Status code:	Proposed
Assessment Amount:	60.00
Year:	2005

Violation Number:	6367941
Date Issued:	07/26/2005
Mine Status:	Intermittent
Status Date:	07/15/2013
Action Type:	104(a)
Date Abated:	07/26/2005
Citation/Order:	Citation
Sig and Sub Designation:	N
Proposed Penalty:	60.00
Paid Penalty:	60.00
Assessment Status code:	Closed
Assess. Case Status code:	Proposed

MILLER CONSTRUCTION CO LTD (Continued) **1016521846**

Assessment Amount: 60.00
Year: 2005

Violation Number: 6367940
Date Issued: 07/26/2005
Mine Status: Intermittent
Status Date: 07/15/2013
Action Type: 104(a)
Date Abated: 07/26/2005
Citation/Order: Citation
Sig and Sub Designation: N
Proposed Penalty: 60.00
Paid Penalty: 60.00
Assessment Status code: Closed
Assess. Case Status code: Proposed
Assessment Amount: 60.00
Year: 2005

Violation Number: 6367942
Date Issued: 07/26/2005
Mine Status: Intermittent
Status Date: 07/15/2013
Action Type: 104(a)
Date Abated: 07/26/2005
Citation/Order: Citation
Sig and Sub Designation: Y
Proposed Penalty: 107.00
Paid Penalty: 107.00
Assessment Status code: Closed
Assess. Case Status code: Proposed
Assessment Amount: 107.00
Year: 2005

Violation Number: 8693515
Date Issued: 07/25/2012
Mine Status: Intermittent
Status Date: 07/15/2013
Action Type: 104(a)
Date Abated: 07/26/2012
Citation/Order: Citation
Sig and Sub Designation: N
Proposed Penalty: 100
Paid Penalty: 100
Assessment Status code: Closed
Assess. Case Status code: Proposed
Assessment Amount: 100
Year: 2012

Violation Number: 8693514
Date Issued: 07/25/2012
Mine Status: Intermittent
Status Date: 07/15/2013
Action Type: 104(a)
Date Abated: 07/26/2012
Citation/Order: Citation
Sig and Sub Designation: Y
Proposed Penalty: 362

MILLER CONSTRUCTION CO LTD (Continued) **1016521846**

Paid Penalty: 362
Assessment Status code: Closed
Assess. Case Status code: Proposed
Assessment Amount: 362
Year: 2012

Click this hyperlink while viewing on your computer to access
27 additional US_MINES: record(s) in the EDR Site Report.

W91 **FAA JUNEAU SFOP** **AK SHWS S109255355**
WNW **9341 GLACIER HIGHWAY** **AK LUST N/A**
1/4-1/2 **JUNEAU, AK 99801**
0.276 mi.
1458 ft. **Site 1 of 2 in cluster W**

Relative:
Higher

Actual:
20 ft.

SHWS:
File Number: 1513.38.051
Staff: Danielle Duncan, 9074655207 danielle.duncan@alaska.gov
Facility Status: Active
Latitude: 58.366888
Longitude: -134.588456
Hazard ID: 24941
Problem: This Event ID covers several underground storage tanks which were removed in 1992 and 1996. Decommissioning Reports were reviewed again in 2007 and it was determined that all tanks with the exception of Building 300 Tank 39-A-4 could be closed. Activities associated with regulated tank 39-A-4 will be the only ones tracked on this Event ID. Other contaminated areas will be tracked under the FAA Juneau Station site, hazard ID 1450, as they are not associated with a regulated tank.

FAA JUNEAU SFOP (Continued) **S109255355**

Actions:

Action Date:	9/29/2010
Action:	Report or Workplan Review - Other
DEC Staff:	Melody Debenham
Action Description:	Received Technical Memorandum summarizing July 2010 groundwater sampling from 3 wells on site. Groundwater samples were analyzed for GRO, DRO, RRO, and BTEX. Benzene is the only compound reported above the cleanup level, at 11.1 ug/L in MW-A18.
Action Date:	9/12/2017
Action:	Update or Other Action
DEC Staff:	Danielle Duncan
Action Description:	Reviewed data for USTs on site and found that there are 3 USTs that were not closed in 2007: 39-A-004, 39-B-001, and 56-C-003. Results of investigation efforts indicate that the UST 39-B-001 can now be closed.
Action Date:	8/21/2002
Action:	Update or Other Action
DEC Staff:	Anne Marie Palmieri
Action Description:	RECKEY has automatically been generated.
Action Date:	7/27/2006
Action:	Update or Other Action
DEC Staff:	Wendy Uzzell
Action Description:	updated file number
Action Date:	6/23/2015
Action:	Report or Workplan Review - Other
DEC Staff:	Melody Debenham
Action Description:	Received draft work plan describing petroleum contaminated soil removal and groundwater sampling at the Juneau Sector Field Office yard.
Action Date:	4/27/2018
Action:	Update or Other Action
DEC Staff:	Danielle Duncan
Action Description:	Sent an update on the site needs this date.
Action Date:	3/28/2007
Action:	Update or Other Action
DEC Staff:	Anne Marie Palmieri
Action Description:	From a letter dated 3/28/07: Tank 39-E-1: This 1000 gallon regulated underground storage tank was used for providing gasoline to an emergency generator at Building 622 at the Localizer Display Approach (LDA). The tank was removed in May 1997, as documented in the Decommissioning Assessment Report dated November 1997. Twenty (20) cubic yards of petroleum contaminated soil was removed and sent to a disposal facility in Washington state. Five (5) confirmation samples were collected from the limits of the excavation at depths ranging from 4-4.5 feet bgs and analyzed for DRO, GRO, BTEX, and lead. The highest concentrations detected were DRO: 29 mg/kg, GRO: 8 mg/kg, benzene: 0.014 mg/kg, ethylbenzene: 0.05 mg/kg, toluene: 0.05 mg/kg, xylenes: 0.1 mg/kg, and lead: 5 mg/kg. All analytical results were below DEC???s method two cleanup levels. Site closure is approved for this tank site.

FAA JUNEAU SFOP (Continued) **S109255355**

Action Date: 3/28/2007
Action: Update or Other Action
DEC Staff: * Not Assigned
Action Description: Not reported

Action Date: 3/28/2007
Action: Update or Other Action
DEC Staff: Anne Marie Palmieri
Action Description: From a letter dated 3/28/07: Tank 39-D-1: This 500 gallon regulated underground storage tank was used for storing diesel fuel at the MALSR. The tank was removed in May 1997, as documented in the Decommissioning Assessment Report, dated November 1997. No petroleum contaminated soil was discovered during the tank removal. Two (2) confirmation samples were collected from the limits of the excavation at 4-5??? bgs and one (1) below the fuel lines at 1??? bgs which were analyzed for DRO and BTEX. All analytical results were non-detect, thus, DEC???s method two cleanup levels were met. Site closure is approved for this tank site.

Action Date: 3/28/2007
Action: Update or Other Action
DEC Staff: Anne Marie Palmieri
Action Description: From a letter dated 3/28/07: Tank 39-B-1: This 100 gallon regulated underground storage tank was used for storing diesel fuel at Building 4213 at the Remote Transmitter Receiver (RTR). The tank was removed in June 1997, as documented in the Decommissioning Assessment Report, dated November 1997. Two (2) cubic yards of petroleum contaminated soil was removed and to a disposal facility in Washington state. The excavation could not be expanded due to the proximity of the building. Three (3) confirmation samples were collected from the limits of the excavation and analyzed for DRO and BTEX. Additional contamination was found to be present in the excavation hole with the highest DRO sample result of 4300 mg/kg. All BTEX results were non-detect. As documented in the Remedial Investigation, dated 1998, six (6) soil borings were advanced with three of those turned into monitoring wells. All soil and groundwater sample results were non-detect, with the exception of one diesel-range organics soil sample result of 23 mg/kg. The location of the former UST has been covered with a concrete pad and a new above-ground storage tank placed there. DEC determines that the contamination at the Tank 39-B-1 location is likely localized in extent with further characterization and removal not possible until the building and concrete pad are removed. As the contamination plume is likely stable, this site can be conditionally closed until the building and concrete pad are removed; at such time the remaining contamination will need to be addressed.

Action Date: 3/24/2007
Action: Exposure Tracking Model Ranking
DEC Staff: * Not Assigned
Action Description: Not reported

Action Date: 3/10/2004
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: Project manager changed to Wanstall. File review shows that single UST facility ID has been used for numerous FAA facility locations in

FAA JUNEAU SFOP (Continued) **S109255355**

Juneau area where release events have occurred.

Action Date: 12/13/2016
Action: Report or Workplan Review - Other
DEC Staff: Melody Debenham
Action Description: Received final Contaminated Soil Removal and Groundwater Sampling Report for the Juneau Sector Field Office Yard.

Action Date: 10/2/2001
Action: Update or Other Action
DEC Staff: Cynthia Pring-Ham
Action Description: Changed Project Manager from Paul Horwath to Bill Janes

Action Date: 1/6/2012
Action: Report or Workplan Review - Other
DEC Staff: Melody Debenham
Action Description: Approved the technical memorandum describing the hydrologic study at the Juneau Sector Field Office from November 2010 to November 2011.

Action Date: 1/25/2010
Action: Report or Workplan Review - Other
DEC Staff: Melody Debenham
Action Description: Received Technical Memorandum summarizing November 2009 groundwater sampling from 3 wells on site. Groundwater samples were analyzed for GRO, DRO, RRO, and BTEX. Benzene is the only compound reported above the cleanup level, at 11.1 ug/L in MW-A18 and 7.41 ug/L in MW-A10.

Action Date: 1/22/1999
Action: Leaking Underground Storage Tank Cleanup Initiated - Petroleum
DEC Staff: Bill Janes
Action Description: I retroactively dated the Cleanup Initiated action on 7/19/07 based on Palmeri's March 28, 2007 database entry documenting that cleanup had occurred.

Action Date: 1/22/1999
Action: Site Added to Database
DEC Staff: * Not Assigned
Action Description: Not reported

Action Date: 1/14/2010
Action: Site Characterization Workplan Approved
DEC Staff: Melody Debenham
Action Description: Approved work plan dated November 2009 for (1) characterizing the horizontal and lateral extent of soil contamination resulting from the heating oil release from the AST at the Maintenance Shop and (2) two rounds of groundwater monitoring for DRO, GRO, and BTEX near the former UST at Shop Building 300.

LUST:
Facility Name: FAA JUNEAU SFOP
Facility Status: Open
Record Key: 1999110002201
File ID: 1513.38.051
Oname: Federal Aviation Administration
Lat/Lon: 58.36688 -134.5884
Lust Event ID: 2015

FAA JUNEAU SFOP (Continued) **S109255355**

CS or Lust: LUST
Borough: Juneau
Staff: Danielle Duncan
Site Type: Airport/Airfield
Horizontal Datum: Not reported

W92 **USDOT FAA JUNEAU** **SEMS-ARCHIVE** **1000456199**
WNW **9341 GLACIER HWY NAV AIDS** **RCRA NonGen / NLR** **AK9690500179**
1/4-1/2 **JUNEAU, AK 99801** **PADS**
0.276 mi. **FINDS**
1458 ft. **Site 2 of 2 in cluster W** **ECHO**

Relative: Higher
Actual: 20 ft.

SEMS Archive:
Site ID: 1001753
EPA ID: AK9690500179
Cong District: 1
FIPS Code: 2110
FF: Y
NPL: Not on the NPL
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information
Latitude: 58.366667
Longitude: -134.58333300000001

SEMS Archive Detail:
Region: 10
Site ID: 1001753
EPA ID: AK9690500179
Site Name: USDOT FAA JUNEAU STATION
NPL: N
FF: Y
OU: 0
Action Code: VS
Action Name: ARCH SITE
SEQ: 1
Start Date: Not reported
Finish Date: 1993-08-16 00:00:00
Qual: Not reported
Current Action Lead: EPA Perf In-Hse

Region: 10
Site ID: 1001753
EPA ID: AK9690500179
Site Name: USDOT FAA JUNEAU STATION
NPL: N
FF: Y
OU: 0
Action Code: DS
Action Name: DISCVRY
SEQ: 1
Start Date: 1992-10-01 00:00:00
Finish Date: 1992-10-01 00:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 10
Site ID: 1001753
EPA ID: AK9690500179
Site Name: USDOT FAA JUNEAU STATION

USDOT FAA JUNEAU (Continued) **1000456199**

NPL:	N
FF:	Y
OU:	0
Action Code:	PA
Action Name:	PA
SEQ:	1
Start Date:	1993-08-16 00:00:00
Finish Date:	1993-08-16 00:00:00
Qual:	N
Current Action Lead:	Fed Fac

RCRA NonGen / NLR:

Date form received by agency:	03/04/2010
Facility name:	USDOT FAA JUNEAU
Facility address:	9341 GLACIER HWY NAV AIDS JUNEAU, AK 99801
EPA ID:	AK9690500179
Mailing address:	W 7TH BOX 14 AAL 471 ANCHORAGE, AK 99513-7587
Contact:	CATHY BENEDIKTSSON
Contact address:	222 W 7TH BOX 14 AAL 471 ANCHORAGE, AK 99513-7587
Contact country:	US
Contact telephone:	907-271-5373
Contact email:	Not reported
EPA Region:	10
Land type:	Other land type
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	NAME UNKNOWN
Owner/operator address:	Not reported Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Federal
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	FEDERAL AVIATION ADMINISTRATION
Owner/operator address:	Not reported AK
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Federal
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported

USDOT FAA JUNEAU (Continued) **1000456199**

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: 01/16/1998
Site name: USDOT FAA JUNEAU
Classification: Conditionally Exempt Small Quantity Generator

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 08/08/2005
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA

Evaluation date: 06/04/1999
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA

PADS:
EPAID: AK9690500179
Facility name: JUNEAU FAA STATION
Facility Address: 9341 GLACIER HIGHWAY
JUNEAU, AK 99801
Facility country: US
Generator: Yes
Storer: No
Transporter: No
Disposer: No
Research facility: No
Smelter: No
Facility owner name: FEDERAL AVIATION ADMIN, AK REG
Contact title: Not reported
Contact name: RUSTY MURPHY
Contact tel: 907-271-2124
Contact extension: Not reported

USDOT FAA JUNEAU (Continued) **1000456199**

Contact Email: Not reported
Mailing address: 222 WEST 7TH AVE BOX 14 FAA-AAL-465
ANCHORAGE, AK 99513
Mailing country: US
Cert. date: 09/30/1992

FINDS:

Registry ID: 110003044036

Environmental Interest/Information System
FEDERAL FACILITY HAZARDOUS WASTE DOCKET

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000456199
Registry ID: 110003044036
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110003044036

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93 WNW 1/4-1/2 0.348 mi. 1839 ft.

Relative: Higher

Actual: 19 ft.

COMMERCIAL PROPERTY - 9351 GLACIER HIGHWAY **AK SHWS S110762070**
9351 GLACIER HIGHWAY **AK INST CONTROL N/A**
JUNEAU, AK 99801

SHWS:
File Number: 1513.38.084
Staff: Not reported
Facility Status: Cleanup Complete
Latitude: 58.366367
Longitude: -134.591250
Hazard ID: 25608
Problem: On or about 11/10/2010, a release of diesel fuel from an aboveground heating oil tank system occurred at 9351 Glacier Highway. At the time of the release the building was occupied by a hair and nail salon. Diesel range organics (DRO) were dectected above cleanup levels in surface soil. About a cubic yard of sandy contaminated soil was removed from the site and taken to Bicknell Construction for incorporation into asphalt. The two original soil samples were taken after excavation.

Actions:
Action Date: 9/11/2013
Action: Update or Other Action
DEC Staff: Kristin Thompson
Action Description: Staff changed from Erik Norberg to Denise Elston.

COMMERCIAL PROPERTY - 9351 GLACIER HIGHWAY (Continued) **S110762070**

Action Date:	8/29/2011
Action:	Cleanup Complete Determination Issued
DEC Staff:	Erik Norberg
Action Description:	Remediation complete at this site. Cleanup complete determination issued.
Action Date:	8/29/2011
Action:	Institutional Control Record Established
DEC Staff:	Erik Norberg
Action Description:	Institutional Controls established and entered into the database.
Action Date:	4/29/2011
Action:	Site Visit
DEC Staff:	Erik Norberg
Action Description:	Site visit with PERP Representative to become familiar with site. No oil sheen noted on pavement or a diesel smell detected. It was also noted that the site and parking lot run off flows away from Duck Creek.
Action Date:	2/11/2011
Action:	Site Added to Database
DEC Staff:	Mitzi Read
Action Description:	A new site has been added to the database
Action Date:	2/11/2011
Action:	Exposure Tracking Model Ranking
DEC Staff:	Mitzi Read
Action Description:	Initial ranking with ETM completed for source area id: 79041 name: Heating Oil AST System - Diesel
Action Date:	2/10/2011
Action:	Spill Transferred from Prevention Preparedness and Response Program
DEC Staff:	Mitzi Read
Action Description:	Spill transferred by PERP staff Sarah Moore. Spill no. 10119931401; spill date = 11/10/10; substance = diesel; quantity = ~150 gallons; source = fuel filter and damaged compression fitting on line from aboveground heating oil tank system.

Contaminants:

Staff:	Not reported
Contaminate Name1:	Commercial Property - 9351 Glacier Highway
Contaminate Level Description1:	Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation
Contaminate Media1:	Soil
Control Type:	No ICs Required
Control Details Description1:	Advance approval required to transport soil or groundwater off-site.
Contaminant CTD:	Not reported
Contaminant CDR:	Not reported
Comments:	A small amount of heating fuel contamination remains underneath the foundation stem wall of the building, but this layer of soil is de minimis and could not be excavated without undermining the foundation.

Inst Control:

COMMERCIAL PROPERTY - 9351 GLACIER HIGHWAY (Continued) **S110762070**

Hazard ID: 25608
Facility Status: Cleanup Complete
Action: Institutional Control Record Established
Action Date: 8/29/2011
File Number: 1513.38.084

94
West
1/4-1/2
0.380 mi.
2007 ft.

MENDENHALL WW TREATMENT PLANT **AK SHWS** **S108033073**
2009 RADCLIFFE ROAD, ADJACENT TO JUNEAU INTERNATIONAL AIRPOR **N/A**
JUNEAU, AK 99801

Relative:
Lower

Actual:
3 ft.

SHWS:
File Number: 1513.38.054
Staff: Danielle Duncan, 9074655207 danielle.duncan@alaska.gov
Facility Status: Active
Latitude: 58.362045
Longitude: -134.596441
Hazard ID: 3863
Problem: In 2002, the fuel transfer system leaked oil into the wet well next to the ABF building on the north side of the facility. In 2004, a below ground fuel leak contaminated the subsurface construction of the ultraviolet disinfection unit. The source of the 2004 release was a buried fuel tank supply line to a backup generator located on the north side of the facility. In 2008, a below ground leak was found in the boiler fuel pipeline on the south side of the SBR building. Fuel loss estimates range from 20- 30,000 gallons for the 2008 spill.

Actions:
Action Date: 9/10/2012
Action: Update or Other Action
DEC Staff: Kristin Thompson
Action Description: Address updated in database to match the address from the hard file.

Action Date: 9/1/2005
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: Report for 7/24/05 groundwater sampling received this date. MW-4, in the vicinity of the former source, still has levels of DRO and benzene above cleanup levels (86.1 mg/L DRO and 0.052 mg/L benzene). This event represents CBJ's final planned monitoring of the groundwater wells.

Action Date: 8/4/2009
Action: Site Characterization Workplan Approved
DEC Staff: Bruce Wanstall
Action Description: ADEC reviewed and commented on a letter/report workplan sent by CBJ Utility Department for the Mendenhall Wastewater Treatment Plant contaminated site. The workplan addresses concerns and requests made by the State for improved communications, site assessment and site controls on off-site migration of subsurface contamination of ground water and soil. In a few weeks, new product recovery wells will be operational and new ground water monitoring wells will be installed.

Action Date: 8/24/2016
Action: Report or Workplan Review - Other
DEC Staff: Bruce Wanstall
Action Description: DEC evaluated the Groundwater Monitoring Report submitted by Carson

MENDENHALL WW TREATMENT PLANT (Continued) **S108033073**

Dorn Inc. and sent approval to the CBJ by electronic mail today. In accordance with the Long Term Groundwater Sampling and Analysis Plan CDI will collect biennial samples in seven wells this month and will gauge three wells for free product on a quarterly schedule.

Action Date: 7/24/2014
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: CDI contacted DEC on behalf of CBJ to provide an update on the scheduled installation of a new product recovery well located above the bank of the Mendenhall River on the residential property north of the WTP. High tides and flooding a few weeks ago caused fuel to seep from the riverbank near this location causing a sheen on the Mendenhall River. A new Spill Buster oil sensor will be installed in the new well to pump oil floating on groundwater into a recovery reservoir operating 24/7.

Action Date: 7/24/2014
Action: Site Visit
DEC Staff: Bruce Wanstall
Action Description: DEC performed a safe view site visit and observed no sheen on the surface of the Mendenhall River. A product recovery well installation is planned for the adjacent upriver property.

Action Date: 7/23/2010
Action: Report or Workplan Review - Other
DEC Staff: Bruce Wanstall
Action Description: ADEC has determined that the ground water data in the Report by CDI meet ADEC field and laboratory and data reporting Quality Assurance criteria. During a site visit to the facility on July 21, 2010, ADEC verbally made three requests for the next (3rd) quarter monitoring report: include copies of river observations for sheen and measure of product in wells made by facility staff, analyze LNAPL recovery well drawdown water for DRO and water quality parameters, and complete a site risk evaluation by CDI, including examination of petroleum off-site migration.

Action Date: 7/21/2010
Action: Site Visit
DEC Staff: Bruce Wanstall
Action Description: ADEC walked the banks of the Mendenhall River following a lead from a concerned citizen reporting sheen on the river to the National Response Center. The reported location is adjacent to the Mendenhall Waste Water Treatment Plant contaminated site where continuous Light Non Aqueous Petroleum Liquid (LNAPL) recovery from the ground water is ongoing. Two unregulated underground diesel storage tanks and appurtenances at the facility are responsible for oil spill discoveries in 2002, 2004 and 2008. No sheen was observed during the ADEC site visit.

Action Date: 7/2/2004
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: GW monitoring plan approved. Email approval is in Outlook folder.

Action Date: 7/10/2009
Action: Update or Other Action

MENDENHALL WW TREATMENT PLANT (Continued) **S108033073**

DEC Staff: Bruce Wanstall
Action Description: ADEC letter was sent to CBJ Utility Superintendent Joe Meyers requesting prompt submittal of workplans for investigation and product recovery at the Wise property boundary.

Action Date: 6/5/2014
Action: Report or Workplan Review - Other
DEC Staff: Bruce Wanstall
Action Description: DEC sent a letter to the City and Borough of Juneau (CBJ) and Carson Dorn Inc (CDI) approving the 2013 Annual Groundwater Monitoring Report, Mendenhall Wastewater Treatment Facility dated May, 2014. CDI completed the report documenting environmental activities at the facility in the 2013 calendar year. The report summarizes facility personnel logs gauging water and petroleum levels in monitor wells, monitoring the Mendenhall River for petroleum sheen and volumes of free product recovered from wells at the facility as well as the analytical results on groundwater samples collected annually by CDI. TAH and TAqH is calculated from the concentrations of hydrocarbon compounds detected in samples from wells located adjacent to the Mendenhall River (MW-1, MW-2, MW-11 and NMW-1). All well samples are analyzed for DRO and RRO. DRO was detected above the groundwater cleanup level of 1.5 mg/L in three samples (MW-1, MW-3 and NMW-2). TAqH was calculated to be 27 ug/L in MW-11 which exceeds the DEC standard of 15 ug/L. In June 2014, a 4-inch well will replace the 2-inch well at NMW-1 to improve the efficiency of recovering free phase petroleum floating on groundwater reaching the well.

Action Date: 6/26/2018
Action: Update or Other Action
DEC Staff: Danielle Duncan
Action Description: 30 cubic yards of petroleum contaminated soil has been taken to Bicknell Inc. form about 5 ft. belowground. I ok'd analyzing polycyclic aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs), and gasoline range organics (GRO) on 10 of the samples.

Action Date: 6/25/2018
Action: Site Characterization Workplan Approved
DEC Staff: Danielle Duncan
Action Description: Approved the Cox SAP this date. The contaminated soil stockpile will be sent to Bicknell Inc. for thermal remediation. The contamination will not be chased due to the presence of underground utilities and because it is outside the current scope of work. The final excavation limits will be characterized and diesel range organics (DRO), gasoline range organics (GRO), volatile organic compounds (VOCs), and polycyclic aromatic hydrocarbons (PAHs) will be reported.

Action Date: 6/20/2018
Action: Update or Other Action
DEC Staff: Danielle Duncan
Action Description: Petroleum contaminated soil has been encountered at 2 ft. belowground during excavation for the biowaste facility. Contaminated soil is on plastic sheeting and is covered. Cox environmental is going to assess the issue.

Action Date: 5/5/2010
Action: Report or Workplan Review - Other
DEC Staff: Bruce Wanstall

MENDENHALL WW TREATMENT PLANT (Continued) **S108033073**

Action Description: ADEC conducted a review and has determined that the ground water data in the March 2010 Summary Report by the CBJ Wastewater Utility meet ADEC Quality Assurance Criteria.

Action Date: 5/30/2012
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: DEC approved by letter dated May 2012 the CDI Sampling and Analysis Plan for long term groundwater monitoring and reporting that will include the ongoing abatement site activities by CBJ personnel. Groundwater sampling and analysis will be conducted and reported annually; free product recovery, weekly well gauging and observation for sheen on the Mendenhall River will be reported semi-annually.

Action Date: 5/27/2011
Action: Report or Workplan Review - Other
DEC Staff: Bruce Wanstall
Action Description: DEC has determined that the 2011 1st Quarter Groundwater Monitoring Report by CDI dated April 2011 meets field and laboratory report quality assurance criteria and is consistent with methodology in the site characterization and monitoring work plan approved by DEC in accordance with 18 Alaska Administrative Code (AAC) 75.355(b). Therefore the report is approved in accordance with 18 AAC 75.335(d). Recovery of free product from the groundwater wells was interrupted during this period by a failure of the drawdown pump. Repairs to the pump will be completed and product recovery efforts will resume in monitoring wells MW-8,MW-9 and MW-3. The 18 AAC 75.345 Table C groundwater cleanup level exceedences in the 1st quarter sampling event were limited to DRO and RRO in the MW-3 sample. The 2nd quarter 2011 groundwater sampling will be conducted by CDI in June 2011.

Action Date: 5/25/2004
Action: Meeting or Teleconference Held
DEC Staff: Bill Janes
Action Description: Telecon with Steve Haavig and Jim Dorn of Carson Dorn. CD will submit a plan for installing sentry monitoring wells.

Action Date: 5/14/2013
Action: Report or Workplan Review - Other
DEC Staff: Bruce Wanstall
Action Description: DEC evaluated 2012 Annual Groundwater Monitoring Report (Report), dated March, 2013 compiled by Carson Dorn for the CBJ. The Report summarizes analytical results of CDI groundwater sampling, and CBJ weekly gauging of monitor wells, free product recovery, and monitoring of the Mendenhall River for petroleum sheen. Approximately 35 gallons of free product was recovered from MW-8 and less than 10 gallons was recovered from MW-9 during 2012. MW-3 does not have a sufficient volume of free product for recovery and remains offline. Oil sheen and product were observed in MW-4 (0.01 inches to 1.95 inches), MW-8 (0.06 inches to 0.58 inches), MW-9 (0.07 inches to 0.56 inches), and NMW-1 (0.01 inches to 1.25 inches) throughout the year. No sheen was observed on the Mendenhall River by CBJ personnel during 2012. DRO was detected above the DEC groundwater cleanup level of 1.5 mg/L in two samples (MW-3 and NMW-2). RRO, GRO, benzene, ethylbenzene, xylenes, 1-methylnaphthalene, and fluorine were detected below the DEC Table C groundwater cleanup levels. TAqH was calculated to be 21 ug/L in MW-11 which exceeds the DEC standard of

MENDENHALL WW TREATMENT PLANT (Continued) **S108033073**

15 ug/L for surface water. The site activity met the objectives of the project and review of the sample collection found that the number of representative samples collected is acceptable and the precision, accuracy and completeness of the resulting analytical data is sufficient to be used to support the decision making process. In accordance with Title 18 AAC 75.360, a qualified person performed data collection methods consistent with DEC methodology in the DEC approved annual monitoring plan. The DEC laboratory report checklist is acceptable and the data meet field and laboratory report quality assurance criteria in Contaminated Sites Program guidance documents, therefore the Report is approved in accordance with 18 AAC 75.335(d).

Action Date: 5/14/2008
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: PERP provided April 14 letter from Carson Dorn to Denny Kay, plant supervisor, regarding a sub-surface release that occurred in February. As much as 30,000 gallons of heating fuel may have leaked from underground lines on the south side of the SBR building. Two to 12 inches of free product measured in MW5 and MW6. Carson Dorn to install an 8 diameter well neaer MW6 to create a cone of depression. GW will be pumped to the plant to enhance gravitational flow of free product into the recovery well.

Action Date: 5/13/2016
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: DEC evaluated a proposal by DOWL Engineering to advance geotechnical borings on the property in preparation for demolition and foundation work on the ABF building at the facility (copy attached) for a biosolids dryer unit and sent approval by email with a request to contain and store all cuttings on the property for disposal at the Bicknell Facility in Juneau, or an equivalent licensed soil treatment facility.

Action Date: 5/12/2010
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: ADEC requested that the CBJ submit a sampling plan for ADEC approval for the quarterly event due in May 2010. In addition, ADEC requested CBJ report the data in June 2010 with trend analysis of the ongoing monthly well observations and the monitoring well data collected to date.

Action Date: 5/12/2009
Action: Meeting or Teleconference Held
DEC Staff: Bruce Wanstall
Action Description: The ADEC met with a new City and Borough of Juneau water treatment facility superintendent to discuss status of the Mendenhall Treatment Plant product recovery and site characterization plans. ADEC requested a feasibility study into on-site treatment of excess water from the ground water drawdown used in the on-site product recovery system. In addition, ADEC requested installation of deeper monitoring wells and a new recovery well to bring under control off-site migration to the neighboring property and seepage to the banks of the adjacent Mendenhall River.

MENDENHALL WW TREATMENT PLANT (Continued) **S108033073**

Action Date:	4/3/2003
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Karen Blue from CBJ reported soil contamination discovered while excavating for upgrades to the UV treatment system. 20 cubic yards taken to the other treatment plant and stockpiled temporarily where there is more room. Juneau Empire called today regarding the contamination.
Action Date:	4/23/2009
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	An adjacent residential landowner emailed ADEC photos of minor sheen on the Mendenhall River emerging from a riverbank seep due to extensive subsurface soil and groundwater contamination at the Mendenhall wastewater treatment plant (WTP) contaminated site in Juneau. ADEC contacted the facility manager who stated that WTP staff had been checking sentinel wells periodically over the past few months but each time found nothing in the wells (tidal influenced). The City and Borough of Juneau lead environmental contractor CDI stated that well elevations surveyed months ago had not been analyzed into a hydrological flow net and a monitoring well installed to assess off-site subsurface migration of petroleum on the residential property has not been sampled yet. ADEC requested a more timely investigation into the riverbank seep but site assessment is unlikely until mid-May.
Action Date:	4/12/2005
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Reviewed April 4 report on the 3/7/05 monitoring. MW-4 concentrations sitll elevated. 121 ppm DRO plus elevated benzene and RRO above cleanup levels. DRO and benzene detected in MW-1 below cleanup levels. Not reported
Action Date:	4/1/2005
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Reviewed January 6 report on the 12/13/04 monitoring. MW-4 concentrations still elevated. DRO 6.81 mg/L, Benzene 0.0164 mg/L. RRO non-detect.
Action Date:	3/3/2004
Action:	Meeting or Teleconference Held
DEC Staff:	Bill Janes
Action Description:	with Karen Blue and Denny Kay, treatment plant supervisor. His staff will take GW samples at the monitoring well and the manhole nearby. Karen will look for funding to conduct site characterization. Soil contamination likely remaining on site.
Action Date:	3/17/2012
Action:	Report or Workplan Review - Other
DEC Staff:	Bruce Wanstall
Action Description:	DEC approved 2011 4th Quarter Groundwater Monitoring Report completed by Carson Dorn Inc (CDI) summarizing the results of the groundwater sampling conducted by CDI and the CBJ site activity of weekly gauging of monitoring wells, the observations of the Mendenhall River for

MENDENHALL WW TREATMENT PLANT (Continued) **S108033073**

sheen and the free product recovery from groundwater during the 4th quarter of 2011. The field sampling and data reporting were performed by qualified person(s) and are consistent with work plan approved by DEC in 18 AAC 75.355 (b). The data meet field and laboratory report quality assurance criteria in Contaminated Sites Program guidance documents, therefore the Report is approved in accordance with 18 AAC 75.335(d). The well gauging activities, LNAPL recovery rates and groundwater sampling analysis data are sufficient to establish trends in both the LNAPL thickness in wells and petroleum concentrations dissolved in the groundwater. DEC requested that CBJ propose a long term site activity plan that will continue the current site activities with modifications to reduce the frequency of well sample collection, the schedule for data reporting and the number of COCs for laboratory analysis.

Action Date: 3/14/2003
Action: Site Ranked Using the AHRM
DEC Staff: Bruce Wanstall
Action Description: Preliminary ranking.

Action Date: 3/13/2017
Action: Report or Workplan Review - Other
DEC Staff: Bruce Wanstall
Action Description: DEC has reviewed and approved Biennial Groundwater Monitoring Report Mendenhall River Wastewater Treatment Plant Juneau, Alaska (Report), dated February, 2017 and received electronically in March, 2017. The Report was prepared and submitted to DEC and the City and Borough of Juneau (CBJ) by Cox Environmental Services (CES) on behalf of Carson Dorn Inc. (CDI). The Report documents environmental sampling at the referenced Site in accordance with the modified Long Term Groundwater Sampling and Analysis Plan (LTGSAP). CBJ will continue daily observation of the Mendenhall River for sheen and will continue free product recovery from wells MW-8 and MW-9. CES will conduct quarterly gauging of on-site and off-site monitoring wells for product and will conduct groundwater sampling again in August 2018. Approval letter was sent by email today to the CBJ.

Action Date: 3/1/2011
Action: Report or Workplan Review - Other
DEC Staff: Bruce Wanstall
Action Description: DEC has reviewed 2010 3rd Quarter Ground Water Monitoring Report which summarizes the results of groundwater sampling conducted by Carson Dorn Inc (CDI) and the weekly gauging of monitoring wells, observations of the Mendenhall River and free product recovery at the MWWTP conducted by CBJ personnel during the 4th quarter of 2010. The data meet field and laboratory report quality assurance criteria in Contaminated Sites Program guidance documents, therefore the Report is approved in accordance with 18 AAC 75.335(d).A total of approximately 35 gallons of free product was recovered from MW-8 and approximately 30 gallons of free product was recovered from MW-9 during the 4th quarter of 2010. No product has been recovered to date from MW-3. No sheen was observed on the Mendenhall River by CBJ personnel during the 4th quarter. CBJ will continue weekly gauging of monitoring wells, observation of the Mendenhall River for sheens, and its efforts to recovery free product from the groundwater. The 1st quarter 2011 groundwater sampling will be conducted by CDI in March 2011.

MENDENHALL WW TREATMENT PLANT (Continued) **S108033073**

Action Date:	3/1/2004
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Karen Blue notified me that approximately 180 tons of petroleum-contaminated soil were shipped to Rabanco in WA State last Oct.

Action Date:	3/1/2004
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Emailed Karen Blue asking about status of stockpiled soil.

Action Date:	2/26/2008
Action:	Exposure Tracking Model Ranking
DEC Staff:	Bill Janes
Action Description:	Initial ranking with ETM completed.

Action Date:	2/25/2010
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	Contaminated Sites Program requested an update from the City and Borough of Juneau Wastewater Superintendent on changes, events and weekly monitoring data that have occurred over the last six months, free product recovery to maintain site controls and monitoring at the Mendenhall Wastewater Treatment Plant contaminated site in Juneau. In addition, ADEC sent an informal update to the adjacent property owner and their legal representative.

Action Date:	12/9/2015
Action:	Report or Workplan Review - Other
DEC Staff:	Bruce Wanstall
Action Description:	DEC has reviewed: 2014 Annual Groundwater Monitoring Report (Report), dated May, 2015 and received by the department on December 7, 2015. Carson Dorn Inc. (CDI) completed the Report documenting Mendenhall River sheen monitoring, continuous free product recovery, monthly well gauging, and annual well sampling at the referenced Site in 2014. The monthly well gauging log reports for the period of August through December, 2014, document that measurable product was present in recovery wells MW-8 and NMW-1 in August and in recovery well NMW-1 in November, 2014. CDI replaced monitor well NMW-1 located on the adjacent property upriver from the Site with a new product recovery well. Free product collected from on-site recovery wells MW-8 and MW-9 during 2014 totaled less than 10 gallons and collection from off-site recovery well NMW-1 totaled less than one gallon. Neither sheen nor free product was observed in the monitor well samples collected in 2014.

Action Date:	12/9/2015
Action:	Long Term Monitoring Established
DEC Staff:	Bruce Wanstall
Action Description:	DEC approved the following changes to the Long Term Groundwater Sampling and Analysis Plan dated May 2012, to take effect at the end of 2015: 1) Reduce the frequency of annual sampling of monitoring wells MW-3, MW-7, MW-10, MW-13 and NMW-2 to biennial intervals beginning in 2015. These wells will not be sampled in 2015; these wells will be sampled in 2016 for DRO and RRO analysis. 2)Reduce the frequency of annual sampling of the river sentinel monitoring wells

MENDENHALL WW TREATMENT PLANT (Continued) **S108033073**

MW-1, MW-2 and MW-11 to biennial intervals beginning in 2016. These wells will be sampled for DRO, RRO, BTEX, and PAHs in 2015 and 2016. 3)Since sheen was not observed in any of the monitoring well samples in 2014, suspend indefinitely the monthly gauging of groundwater monitor wells for depth to product, depth to groundwater, oil sheen, and product thickness. 4)Change the schedule of monthly gauging of on-site and off-site product recovery wells (MW-8 & MW-9, and NMW-1 respectively) for depth to product, depth to groundwater, oil sheen, and product thickness to a quarterly schedule (every 90 days). 5)Continue product recovery in on-site wells MW-8 & MW-9. Take the spill buster unit in well NMW-1 offline. If quarterly gauging indicates recoverable free product is present in well NMW-1, then resume operation of the spill buster until product is no longer present. Record such actions in the quarterly gauging log and submit with the next scheduled analytical sampling report. 6)Continue the weekly schedule of observation monitoring of the Mendenhall River for sheen. Include observation results in the next scheduled analytical sampling report.

Action Date: 12/31/2002
Action: Site Added to Database
DEC Staff: Bruce Wanstall
Action Description: Free product was observed in a wet well near the inactive active biological filter (ABF) building and was traced back to a manhole 25 feet from the wet well. Pressure tests on the estimated 600 feet of buried fuel lines at the facility narrowed down the source to include a series of pipelines passing under the power plant concrete pad adjacent to the USTs. CBJ reported recovery of 400 gallons of fresh diesel from the old ABF wet well which acts as an oil-water separator. A sample of groundwater from a monitoring well near the two 15,000 gallon underground tanks was analyzed; the result was 0.29 mg/L DRO.

Action Date: 11/5/2013
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: DEC held a telephone meeting with Jolene Cox at CDI. Product levels in MW-1 (1.5-inch) have increased in recent weeks and the CBJ and consultant CDI are conducting a feasibility study to use a peristaltic pump type spill-buddy recovery system to determine if the recharge rate in the small well is sufficient to recover levels. Product recovery in wells MW-8 and MW-9 has been declining in recent years. DEC concurred with the recommendations made by CDI and approved this site activity.

Action Date: 11/4/2008
Action: Exposure Tracking Model Ranking
DEC Staff: Bruce Wanstall
Action Description: The recent release of 30,000gallons of heating oil to the subsurface at the Mendenhall Waste Water Treatment Plant contaminated site has potential to impact an active private drinking water well. As a result, a new updated ranking with ETM has been completed for the source area 74838 UST Fuel Line. The private well is located in a densely populated residential area between the Mendenhall WTP and the Juneau International Airport Fuel Facility contaminated sites. The private well was tested as free of petroleum in 2007 by Chevron to address concern of possible impacts from the Juneau International

MENDENHALL WW TREATMENT PLANT (Continued) **S108033073**

Airport Fuel Facility. Additional wells may be present even though the area is served by a municipal drinking water system.

Action Date: 11/26/2010
Action: Report or Workplan Review - Other
DEC Staff: Bruce Wanstall
Action Description: DEC reviewed the 2010 3rd Quarter Ground Water Monitoring Report dated October 2010. The sample collection from monitoring wells are consistent with methodology in the site characterization and monitoring work plan approved by ADEC. The data meet field and laboratory report quality assurance criteria in Contaminated Sites Program guidance documents, therefore the Report is approved in accordance with 18 AAC 75.335(d). The Report concludes that DRO concentrations were detected above the 18 AAC 75.345 Table C ground water screening level of 1.5 milligrams per liter (mg/L) in ground water samples collected from MW-1 and from MW-3. RRO fractions were detected above Table C ground water cleanup level of 1.1 mg/L in a sample collected from MW-3. All detected concentrations of GRO fractions, toluene, ethylbenzene, and xylenes in ground water samples were below the Table C ground water screening levels. Toluene was not detected in any of the samples.

Action Date: 11/25/2008
Action: Report or Workplan Review - Other
DEC Staff: Bruce Wanstall
Action Description: ADEC review of submitted soil boring sample data analytical report found low bias in the benzene, toluene, ethylbenzene and total xylenes results. Matrix interference and high concentration of diesel range hydrocarbon (DRO) resulted in variance out of range in the quality assurance tests. Otherwise the data are useful and are accepted into the record. Data show 6,660ppm DRO found at soil seep on the Mendenhall Riverbank below the Weiss residence property and 28,800ppm DRO detected in soil 15 feet below ground surface at the property boundary nearest the Mendenhall River and the Weiss residence property.

Action Date: 11/24/2008
Action: Potentially Responsible Party/State Interest Letter
DEC Staff: Sally Schlichting
Action Description: PERP (Moore) issued a state letter of interest to CBJ MWWTP, attn: Scott Jeffers, notifying CBJ of liability and responsibility for State oversight costs. Copy is in the CS hard file.

Action Date: 11/21/2008
Action: Meeting or Teleconference Held
DEC Staff: Bruce Wanstall
Action Description: ADEC was represented by the Prevention and Spill Response and Contaminated Sites Programs at a meeting with City and Borough of Juneau Waste Water Treatment Plant Supervisor and the CBJ environmental consultant. The Mendenhall Waste Water Treatment Plant contaminated site is located adjacent to the Mendenhall River and a State Wildlife Refuge. In February 2008, another leaking pipeline was discovered(other leaks were found in 2002 and 2004). Estimates of the release are 20-30,000 gallons of diesel. Product recovery thus far totals over 10,000gallons of diesel from the surface of groundwater. New investigation has found an active seep of petroleum on the banks of the Mendenhall River and free product on groundwater at the

MENDENHALL WW TREATMENT PLANT (Continued) **S108033073**

property line nearest the river. Stepped up control measures and site investigation were requested by the ADEC.

Action Date: 10/5/2006
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: Sent email to Karen Blue asking about possibility of pumping from MW-4 at a low flow rate and running the water thru the plant. Also stated that monitoring MW-4 needs to continue but reduced to annual. Monitoring at other wells can be discontinued until it is time to do a final site closure sampling.

Action Date: 10/25/2006
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: Telecon with Jim Dorn. There is an old manhole near the generator building near the former source area. The manhole has strong petroleum odors/thin free product layer. The valve in the manhole will be opened to let the contaminated water into the influent pump house and then into the treatment plant. The nearby monitoring well will be measured to confirm a hydrologic connection.

Action Date: 10/20/2011
Action: Report or Workplan Review - Other
DEC Staff: Bruce Wanstall
Action Description: DEC approves the 2011 2nd Quarter Groundwater Monitoring Report by Carson Dorn Inc that summarizes the results of groundwater sampling conducted by CDI, the CBJ personnel weekly gauging of monitoring wells, observations of the Mendenhall River for sheen and the free product recovery from groundwater during the 2nd quarter of 2011. Repair of the drawdown pump allowed intermittent recovery of free product from the groundwater monitor wells MW-8 and MW-9 during the 2nd Quarter 2011. About 25 gallons was recovered from MW-8 and about 25 gallons was recovered from MW-9. Although sheen was observed in purge water, petroleum concentrations continue to decline in MW-3 and no product was recovered from the well in the 2nd Quarter 2011. The DRO concentration in the monitor well MW-3 sample was 1.6 mg/L which exceeds the Table C cleanup level of 1.5 mg/L.

Action Date: 10/15/2004
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: GW monitoring results in from 8/04 sampling. Elevated concentrations of DRO, RRO and benzene in MW-4, located in the area where contaminated soil was removed in 2003. Other three downgradient wells were ND for everything except for minor concentrations of DRO. Next monitoring scheduled for November 2004

Action Date: 1/8/2009
Action: Spill Transferred from Prevention Preparedness and Response Program
DEC Staff: Mitzi Read
Action Description: Spill transferred by PERP staff Sarah Moore. Spill Number 08119907201; Spill Date 3/12/08; PERP File Number 1513.02.3' Substance = Diesel; Quantity = Over 100 Gallons. Description: Fuel line from underground fuel tank to boilers failed.

Action Date: 1/24/2012

MENDENHALL WW TREATMENT PLANT (Continued) **S108033073**

Action: Report or Workplan Review - Other
DEC Staff: Bruce Wanstall
Action Description: DEC letter approves the 2011 3rd Quarter Groundwater Monitoring Report by CDI. The Report covers the following site activity: groundwater sampling by CDI and the CBJ personnel weekly gauging of monitoring wells, observations of the Mendenhall River for sheen and free product recovery from groundwater. No sheen was observed on the Mendenhall River during the period. Weekly well gauging during the period found free product in measureable volume in MW-4, MW-8, MW-9 and MW-12. Each of these four wells are located on the north side of the property. The highest volumes of free product were consistently found in MW-8 and MW-9 and the free product measured in MW-4 and MW-12 had much less volume and was inconsistent during the period. DRO was detected in five out of seven wells sampled; concentrations ranged from the lowest at 0.11 mg/L in MW-13 to 1.9 mg/L in MW-1 and the highest was at 12 mg/L in MW-3. These wells are located on the east, the west and the south sides of the property, respectively. RRO was detected in five of seven wells sampled; the concentrations ranged from lowest at 0.26 mg/L in MW-1 to the highest at 1.8 mg/L in MW-3. The wells are located on the west and south sides of the property, respectively. BTEX compounds were detected in four of the seven wells sampled. The detection of benzene at a concentration of 0.0015mg/L in MW-1 was the only result above Table C cleanup levels for each of the respective BTEX compounds. MW-1 is located on the west side of the property above the banks of the Mendenhall River.

Contaminants:
Staff: Danielle Duncan, 9074655207 danielle.duncan@alaska.gov

Contaminate Name1: Mendenhall WW Treatment Plant
Contaminate Level Description1: Not reported
Contaminate Media1: Not reported

Control Type: Not reported
Control Details Description1: Not reported
Contaminant CTD: Not reported
Contaminant CDR: Not reported
Comments: Not reported

95
WNW
1/4-1/2
0.392 mi.
2071 ft.

SKATEBOARD PARK **AK SHWS** **S105464279**
MENDENHALL LOOP ROAD, 1/4 MILE SOUTH OF EGAN **AK INST CONTROL** **N/A**
JUNEAU, AK 99801 **AK VCP**

Relative:
Higher

Actual:
27 ft.

SHWS:
File Number: 1513.38.038
Staff: Not reported
Facility Status: Cleanup Complete
Latitude: 58.368056
Longitude: -134.588333
Hazard ID: 2696
Problem: Diesel and gasoline contamination encountered during site preparation work for the skateboarding facility. Sources not confirmed, but possibly from fueling/maintenance activities in the past when the property was owned by FAA and prior to that the U.S. Department of

SKATEBOARD PARK (Continued) **S105464279**

the Army. Cleanup occurring under VCP. Last staff assigned was Palmieri.

Actions:

Action Date:	8/19/2005
Action:	GIS Position Updated
DEC Staff:	Bruce Wanstall
Action Description:	Lat Long data recorded for the site using Garmin 76 instrument. Metadata include Topozone Pro web utility map projection on USGS topographic 1:24,000 scale map; accuracy is high, within 10 meters. Map recorded at ???jnsvr ???G:\\SPAR\\Spar-Contaminated Sites\\38 Case Files (Contaminated Sites)\\1513 Juneau\\1513.38.038 Skateboard Park
Action Date:	7/11/1997
Action:	Voluntary Cleanup Program
DEC Staff:	Anne Marie Palmieri
Action Description:	Application accepted for acceptance into the VCP.
Action Date:	2/23/1998
Action:	Site Closure Approved
DEC Staff:	Anne Marie Palmieri
Action Description:	Contamination is present on adjacent property -- this will be a new site.
Action Date:	11/7/1997
Action:	Site Added to Database
DEC Staff:	Sally Schlichting
Action Description:	Not reported
Action Date:	11/14/1997
Action:	Cleanup Plan Approved
DEC Staff:	Anne Marie Palmieri
Action Description:	(Old R:Base Action Code = CAPA - Corrective Action Plan).

Contaminants:

Staff:	Not reported
Contaminate Name1:	Skateboard Park
Contaminate Level Description1:	Not reported
Contaminate Media1:	Not reported
Control Type:	No ICs Required
Control Details Description1:	Advance approval required to transport soil or groundwater off-site.
Contaminant CTD:	Not reported
Contaminant CDR:	Not reported
Comments:	For more information about this site, contact DEC at (907) 465-5390.

File Number:	1513.38.004
Staff:	IC Unit, 9074655229 dec.icunit@alaska.gov
Facility Status:	Cleanup Complete - Institutional Controls
Latitude:	58.367676
Longitude:	-134.588402
Hazard ID:	2697
Problem:	Concentrations of GRO and BTEX above the most conservative Method Two migration to groundwater cleanup levels are present in soil in the right-of-way corridor at the bus turnout construction site. The

SKATEBOARD PARK (Continued) **S105464279**

source of contamination is the adjacent CBJ owned property where contaminated soil was removed up to the utility corridor. Addional soil removal in the active utility corridor between the two properties is considered not feasible at this time. Numerous water rights on record in Section 31 indicate presence of inactive individual water wells; the area is serviced by CBJ Public Water System.

Actions:

Action Date: 8/9/2005
Action: GIS Position Updated
DEC Staff: Bruce Wanstall
Action Description: Lat Long data recorded for the site. Metadata include Topozone Pro web utility map projection on USGS topographic 1:24,000 scale map; accuracy is medium, within 100 meters. Map recorded at ???jnsvr ???G:\\SPAR\\Spar-Contaminated Sites\\38 Case Files (Contaminated Sites)\\1513 Juneau\\1513.38.004 Skateboard Park ADOT&PF R.O.W

Action Date: 8/8/2005
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: Site visit to record GPS lat long data.

Action Date: 8/18/2005
Action: Institutional Control Record Established
DEC Staff: Bruce Wanstall
Action Description: Elevated concentrations of diesel range hydrocarbons remain in soil underlying the utility corridor adjacent to the bus turnout. The quantity of soil is estimated at ten cubic yards or less. If removal of soil from the site becomes necessary the DEC will be notified in advance to ensure that final placement of the soil does not violate water quality or petroleum regulations. If groundwater supply well installation on the property is planned, the DEC will be notified in advance to provide oversight to ensure drinking water and petroleum regulations are not exceeded. Controls were discussed with ADOT property manager and Mr. Van Sundberg agrees with the controls.

Action Date: 8/18/2005
Action: Conditional Closure Approved
DEC Staff: Bruce Wanstall
Action Description: Additional contaminated material shall be investigated and appropriately managed or removed in accordance with DEC cleanup requirements at such time if and when it becomes accessible through major structural modifications or demolition of current structures on the property.If groundwater supply well installation on the property is planned, the DEC will be notified in advance to provide oversight to ensure drinking water and petroleum regulations are not exceeded. Decision letter is located at: G:\\SPAR\\Spar-Contaminated Sites\\38 Case Files (Contaminated Sites)\\1513 Juneau\\1513.38.004 Skateboard Park ADOT&PF ROW

Action Date: 7/3/2003
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: File review and database update for assuming project management. 36 tons of contaminated soil was removed from adjacent Park property. The limit of soil contamiation to the west pit walll deemed inaccesible due to water main.

SKATEBOARD PARK (Continued) **S105464279**

Action Date: 3/8/2000
Action: Site Ranked Using the AHRM
DEC Staff: Anne Marie Palmieri
Action Description: Via phone with Ms. Palmieri.

Action Date: 12/30/1999
Action: Site Added to Database
DEC Staff: No Longer Assigned
Action Description: Diesel and gasoline contamination.

Action Date: 12/23/2013
Action: Institutional Control Update
DEC Staff: Kristin Thompson
Action Description: An IC reminder letter was issued to the responsible party on this date.

Action Date: 12/13/2013
Action: Institutional Control Compliance Review
DEC Staff: Evonne Reese
Action Description: IC review conducted.

Contaminants:
Staff: IC Unit, 9074655229 dec.icunit@alaska.gov

Contaminate Name1: Skateboard Park Right-of-Way
Contaminate Level Description1: Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation
Contaminate Media1: Soil

Control Type: CS Database Notation And Letter To Landowner/RP
Control Details Description1: Excavation / Soil Movement Restrictions
Contaminant CTD: Controls were discussed with ADOT property manager and Mr. Van Sundberg agrees with the controls.
Contaminant CDR: Elevated concentrations of diesel range hydrocarbons remain in soil underlying the utility corridor adjacent to the bus turnout. The quantity of soil is estimated at ten cubic yards or less. If removal of soil from the site becomes necessary the DEC will be notified in advance to ensure that final placement of the soil does not violate water quality or petroleum regulations. If groundwater supply well installation on the property is planned, the DEC will be notified in advance.
Comments: Not reported

Inst Control:
Hazard ID: 2697
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Record Established
Action Date: 8/18/2005
File Number: 1513.38.004

Hazard ID: 2697
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Compliance Review
Action Date: 12/13/2013
File Number: 1513.38.004

SKATEBOARD PARK (Continued) **S105464279**

Hazard ID: 2697
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Update
Action Date: 12/23/2013
File Number: 1513.38.004

VCP:
DEC File Number: 1513.38.038
Facility Status: Cleanup Complete
Staff: No Longer Assigned,
Hazard Id: 2696

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96 ENE 1/4-1/2 0.460 mi. 2430 ft. **GLACIER GARDENS RAINFOREST ADVENTURES AST SPILL** **AK SHWS** **S105273792**
7600 GLACIER HIGHWAY **N/A**
JUNEAU, AK 99801

Relative: Higher
Actual: 51 ft.

SHWS:
File Number: 1513.38.016
Staff: Not reported
Facility Status: Cleanup Complete
Latitude: 58.359714
Longitude: -134.548404
Hazard ID: 3709
Problem: An unknown volume of heating oil escaped the storage tank from a piping failure and followed the surface water drainage along the driveway into the roadside ditch, beneath the highway and into privately-owned wetlands. The owner and consultant Carson Dorn Inc installed three oil recovery ponds and recovered an unknown volume of product by applying sorbent pads to the surface of the water. Wet conditions and erosion structures limited oil infiltration to soils in the drainage. In a removal action limited by erosion control structures in the storm water drainage, the owner excavated 50 cubic yards of contaminated soil and stored it between liners on-site. With DEC approval the contaminated soil was later transported to United Soil Recycling in Juneau where it was thermally remediated. Site characterization of remaining soil contamination was completed in the drainage around the geotextile liner and tiling erosion controls.

Actions:
Action Date: 9/4/2007
Action: Exposure Tracking Model Ranking
DEC Staff: Not reported
Action Description: Intitial Ranking Complete for Source Area: 74684 (Autogenerated Action)

Action Date: 9/4/2007
Action: Exposure Tracking Model Ranking
DEC Staff: Not reported
Action Description: Updated Ranking Complete for Source Area: 74684 (Autogenerated Action) Not reported

Action Date: 8/8/2006
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: File review and telephone contact made with adjacent property owner Miller; by regular mail, I sent Mr. Miller a copy of the recent DEC

GLACIER GARDENS RAINFOREST ADVENTURES AST SPILL (Continued) **S105273792**

letter to Bowhay requesting a Site Cleanup Final Report that included assessment of the Miller property wetlands.

Action Date: 8/24/2012
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: DEC letter was sent certified by regular mail to the owner/operator of the Glacier Gardens Rainforest Adventures in Juneau Alaska requesting a plan be submitted for approval that will schedule soil and surface water investigation of contamination from a heating oil spill on the property. The purpose of these site activities is to ensure that the pollution is contained and that the migration of contamination is not presenting a risk of exposure that could affect human health and safety or the environment.

Action Date: 7/24/2006
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: Letter of State Interest requesting a prompt site investiation was sent to the responsible party.

Action Date: 6/6/2013
Action: Exposure Tracking Model Ranking
DEC Staff: Bruce Wanstall
Action Description: A new updated ranking with ETM has been completed for source area 74684 Above Ground Storage Tank.

Action Date: 6/6/2005
Action: GIS Position Updated
DEC Staff: Bruce Wanstall
Action Description: GIS Lat Long data collected on-site and entered on CS database. Metadata include Garmin GPS 76 calibrated for NAD 27; accuracy estimate is high. Map projection QA using Topozone Pro Web utility 1:24K saved at \\\\Jn-svrfile\\groups \\SPAR\\Spar-Contaminated Sites\\38 Case Files (Contaminated Sites)\\1513 Juneau\\1513.38.016 Glacier Gardens AST Spill.

Action Date: 6/11/2013
Action: Cleanup Complete Determination Issued
DEC Staff: Bruce Wanstall
Action Description: The cleanup actions to date have served to excavate and adequately remove contaminated soil from the site. Based on the information available, DEC has determined no further assessment or cleanup action is required. There is no longer a risk to human health or the environment, and this site will be designated as closed on the Department’s database. Although a Cleanup Complete determination has been granted, DEC approval is required for off-site soil disposal in accordance with 18 AAC 75.325(i). It should be noted that movement or use of potentially contaminated soil in a manner that results in a violation of 18 AAC 70 water quality standards is unlawful. This determination is in accordance with 18 AAC 75.380 and does not preclude DEC from requiring additional assessment and/or cleanup action if future information indicates that this site may pose an unacceptable risk to human health or the environment.

Action Date: 5/15/2002
Action: Update or Other Action

GLACIER GARDENS RAINFOREST ADVENTURES AST SPILL (Continued) **S105273792**

DEC Staff: Bruce Wanstall
Action Description: Ledger Code added.

Action Date: 3/25/2004
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: Discussion with Bohay by telephone that site investigation was needed on the oil spill zone.

Action Date: 12/3/2001
Action: Site Added to Database
DEC Staff: Bruce Wanstall
Action Description: Heating Oil AST Spill. Transfer from PERP

Action Date: 12/3/2001
Action: Site Ranked Using the AHRM
DEC Staff: Bruce Wanstall
Action Description: Preliminary ranking.

Action Date: 12/2/2003
Action: Spill Transferred from Prevention Preparedness and Response Program
DEC Staff: Bruce Wanstall
Action Description: Project management changed to Wanstall.

Contaminants:
Staff: Not reported

Contaminate Name1: Glacier Gardens Rainforest Adventures AST Spill
Contaminate Level Description1: Other
Contaminate Media1: Soil

Control Type: No ICs Required
Control Details Description1: Advance approval required to transport soil or groundwater off-site.
Contaminant CTD: Not reported
Contaminant CDR: Not reported
Comments: Not reported

X97 **BRUCE D. MORLEY, INCORPORATED** **AK LUST** **S106166020**
SE **9128 N. DOUGLAS HIGHWAY** **N/A**
1/4-1/2 **JUNEAU, AK 99801**
0.469 mi.
2475 ft. **Site 1 of 2 in cluster X**

Relative:
Higher

Actual:
33 ft.

LUST:
Facility Name: BRUCE D. MORLEY, INCORPORATED
Facility Status: Cleanup Complete
Record Key: 1996110030401
File ID: 1513.26.026
Oname: Bruce D. Morley
Lat/Lon: 58.33970 -134.5527
Lust Event ID: 1231
CS or Lust: LUST
Borough: Juneau
Staff: No Longer Assigned
Site Type: Unknown
Horizontal Datum: NAD83

X98
SE
1/4-1/2
0.469 mi.
2475 ft.

BRUCE D. MORLEY, INCORPORATED
9128 N. DOUGLAS HIGHWAY;
JUNEAU, AK 99801

Site 2 of 2 in cluster X

AK SHWS **S109256489**
N/A

Relative:
Higher

Actual:
33 ft.

SHWS:

File Number:	1513.26.026
Staff:	Not reported
Facility Status:	Cleanup Complete
Latitude:	58.339701
Longitude:	-134.552716
Hazard ID:	24560
Problem:	Change In Service Site Assessment found DRO, BTEX, and GRO below applicable Matrix level cleanup (Level B), except for surface diesel contamination (260 pppm) most likely due to overfill/spill. Subsurface testing showed DRO, GRO and BTEX to be below Level B values. Tank was cleaned prior to Change In Service. DEC letter sent 11/21/96 saying no further action needed.Farnell was last staff assigned.

Actions:

Action Date:	12/12/2001
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Project Manager changed from Horwath to Bruce Wanstall
Action Date:	11/22/1996
Action:	Leaking Underground Storage Tank Cleanup Initiated - Petroleum
DEC Staff:	Cynthia Pring-Ham
Action Description:	Added by the Database Administrator.
Action Date:	11/22/1996
Action:	Site Closure Approved
DEC Staff:	* Not Assigned
Action Description:	CLOS; letter from DEC dated 11/21/96 sent to consultant stating no further action needed. Subsurface contamination was below Level B matrix values. Surface contamination likely due to overfills/spills - effect on subsurface did not exceed Matrix Level B values.
Action Date:	10/30/1996
Action:	Site Added to Database
DEC Staff:	* Not Assigned
Action Description:	Not reported

99
NW
1/2-1
0.656 mi.
3466 ft.

USFS DUCK CREEK ADMINISTRATION
NW CORNER OF ATLIN DRIVE & TESLIN STREET
JUNEAU, AK 99801

AK SHWS **S108540253**
N/A

Relative:
Higher

Actual:
45 ft.

SHWS:

File Number:	1513.38.071
Staff:	Not reported
Facility Status:	Cleanup Complete
Latitude:	58.371900
Longitude:	-134.581580
Hazard ID:	4389
Problem:	Soil contamination is present at a storage facility owned by the

USFS DUCK CREEK ADMINISTRATION (Continued) **S108540253**

USFS. Lead-based paint has flaked off of 2 quonset huts and is in the soil at elevated concentrations which exceed the TCLP-criteria for designation as a hazardous waste. Heavy metal contaminated soil (As, Ba, Cd, Ca, Cr, Pb, Hg) is also present near the former NMFS shed at the terminius of a drain pipe. EPA ID AKN001002947; EPA site name USDA FS Tongass NF: Duck Creek Administration Site.

Actions:

Action Date:	4/17/2007
Action:	Site Ranked Using the AHRM
DEC Staff:	Anne Marie Palmieri
Action Description:	Not reported
Action Date:	4/17/2007
Action:	Exposure Tracking Model Ranking
DEC Staff:	Anne Marie Palmieri
Action Description:	ETM ranking
Action Date:	4/17/2007
Action:	Site Added to Database
DEC Staff:	Mitzi Read
Action Description:	Site added to the database.
Action Date:	3/10/2009
Action:	Final Cleanup Report Reviewed
DEC Staff:	Anne Marie Palmieri
Action Description:	Report approved this date. All lead contaminated soil has been removed from around the Quonset huts. Residential cleanup level of 400 mg/kg was met in all confirmation samples.
Action Date:	3/10/2009
Action:	Exposure Tracking Model Ranking
DEC Staff:	Anne Marie Palmieri
Action Description:	A new updated ranking with ETM has been completed for source area 75374 Facility.
Action Date:	3/10/2009
Action:	Cleanup Complete Determination Issued
DEC Staff:	Anne Marie Palmieri
Action Description:	Letter sent to the USFS on this date.
Action Date:	12/17/2007
Action:	Cleanup Plan Approved
DEC Staff:	Anne Marie Palmieri
Action Description:	Workplan approved this date; additional characterization field work scheduled for 12/19-12/21. Removal scheduled for the spring

Contaminants:

Staff:	Not reported
Contaminate Name1:	USFS Duck Creek Administration
Contaminate Level Description1:	< Method 2 Most Stringent
Contaminate Media1:	Soil
Control Type:	No ICs Required
Control Details Description1:	Advance approval required to transport soil or groundwater off-site.
Contaminant CTD:	Not reported

USFS DUCK CREEK ADMINISTRATION (Continued) **S108540253**

Contaminant CDR: Not reported
Comments: Not reported

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100 West 1/2-1 0.661 mi. 3488 ft. **BICKNELL** **AK SHWS S117718815**
2275 BRANDY LANE **AK SPILLS N/A**
JUNEAU / DOUGLAS, AK 99801

Relative: Higher
Actual: 18 ft.

SHWS:
File Number: 1513.38.112
Staff: Amy Rodman, 9074655368 , amy.rodman@alaska.gov
Facility Status: Active
Latitude: 58.364667
Longitude: -134.603573
Hazard ID: 26908
Problem: In September 2017 a release of diesel fuel occurred due to a damaged return line on a 500-gallon aboveground heating oil tank at Bicknell Inc. An estimated 40 gallons of diesel were released to the ground surface adjacent to the west end of the shop building on site. Initial response actions included removal of the tank and excavation of approximately 6 cubic yards of contaminated soil up to 2 feet below the ground surface. Excavation activities were limited in order to protect the structural integrity of the adjacent buildings and due to water infiltration in the excavated area. Soil samples were taken from the sidewalls of the excavation only. Diesel range organics, ethylbenzene, xylenes, 1- and 2-methylnaphthalene, 1,2,4- and 1,3,5-trimethylbenzene, and naphthalene remain in soil above DEC cleanup levels.</p>

Actions:
Action Date: 9/14/2017
Action: Potentially Responsible Party/State Interest Letter
DEC Staff: Mitzi Read
Action Description: Potentially Responsible Party / State Interest Letter sent to Bicknell, Inc. by PPRP staff Kelley Tu.

Action Date: 8/24/2018
Action: Site Characterization Report Approved
DEC Staff: Amy Rodman
Action Description: Site assessment report approval letter mailed to RP, emailed to consultant. Work plan to address groundwater contamination due on September 28, 2018.

Action Date: 8/23/2018
Action: Exposure Tracking Model Ranking
DEC Staff: Mitzi Read
Action Description: Initial ranking with ETM completed for source area id: 80274 name: Damaged Line on 500-Gallon Diesel Heating Oil Tank

Action Date: 8/22/2018
Action: Spill Transferred from Prevention Preparedness and Response Program
DEC Staff: Mitzi Read
Action Description: Spill transferred by PPRP staff Brian Doyle. Spill no. 17119925001; spill date = 9/7/17; substance = diesel; quantity = ~40 gallons; source = damaged return line on 500-gallon above ground heating oil tank.

BICKNELL (Continued) **S117718815**

Action Date: 8/22/2018
Action: Site Added to Database
DEC Staff: Mitzi Read
Action Description: A new site has been added to the database

Contaminants:
Staff: Amy Rodman, 9074655368 , amy.rodman@alaska.gov

Contaminate Name1: Bicknell Inc
Contaminate Level Description1: Not reported
Contaminate Media1: Not reported

Control Type: Not reported
Control Details Description1: Not reported
Contaminant CTD: Not reported
Contaminant CDR: Not reported
Comments: Not reported

SPILLS:
Facility ID: 17119925001
Facility Type: Salvage/Recycling/Wrecking Yard
Facilty Subject Type: Not reported
Region: Land - Juneau
Spill ID: 59608
Spill Name: Bicknell Brandy Ln 2275 Leaking HOT
Spill Date: 09/07/2017
Case Closed: **08/22/2018**
Substance ID: Noncrude Oil
Substance Subject Type: Diesel
Substance Area: Southeast Alaska
Area Name: Southeast Alaska
Quantity Released: 40
Quantity Potential: Not reported
Unit: Gallons
Cause: Human Error
Cause Type: Human Factors
Responsible Party: BICKNELL CONSTRUCTION - NO ENTRY, NO ENTRY
Response: Field Visit/s
Source Type: Tank, Heating, Aboveground
Latitude: 58.36420
Longitude: -134.6040

Facility ID: 15119906101
Facility Type: Maintenance Yard/Shop
Facilty Subject Type: Not reported
Region: Land - Juneau
Spill ID: 45362
Spill Name: Bicknell Truck Release
Spill Date: 03/02/2015
Case Closed: **03/18/2015**
Substance ID: Noncrude Oil
Substance Subject Type: Diesel
Substance Area: Southeast Alaska
Area Name: Southeast Alaska
Quantity Released: 25

BICKNELL (Continued) **S117718815**

Quantity Potential:	80
Unit:	Gallons
Cause:	Vehicle Leak, All
Cause Type:	Structural/Mechanical
Responsible Party:	BICKNELL CONSTRUCTION - NO ENTRY, NO ENTRY
Response:	Field Visit/s
Source Type:	Heavy Equipment
Latitude:	58.36420
Longitude:	-134.6040

Y101 **VALLEY TESORO** **AK SHWS** **S118973342**
NW **9102 MENDENHALL MALL ROAD** **AK LUST** **N/A**
1/2-1 **JUNEAU, AK 99801**
0.691 mi.
3649 ft. **Site 1 of 2 in cluster Y**

Relative:
Higher

Actual:
29 ft.

SHWS:

File Number:	1513.26.081
Staff:	Danielle Duncan, 9074655207 danielle.duncan@alaska.gov
Facility Status:	Active
Latitude:	58.372630
Longitude:	-134.586502
Hazard ID:	26640
Problem:	In June 2016, fill ports for four underground storage tanks (USTs) were upgraded at the Valley Tesoro in Juneau. A site assessment was conducted when it was determined that gaskets sealing the fill ports to the drop tubes had been compromised. Releases of fuel, possibly from overfills, to surrounding soil were documented at four spill buckets. Analytical samples were collected at two of the bucket locations, one of which exceeded the DEC migration to groundwater cleanup level for benzene.In late 2017, soil and groundwater on site was sampled and multiple contaminants of concern related to fueling operations were identified at concentrations above ADEC cleanup levels. The investigation is on-going.

Actions:

Action Date:	8/29/2017
Action:	Update or Other Action
DEC Staff:	Danielle Duncan
Action Description:	Consultant drilled wells and found some contamination and free product. Investigation is ongoing.
Action Date:	8/1/2018
Action:	Site Visit
DEC Staff:	Danielle Duncan
Action Description:	Site visit with ISM to discuss soil, groundwater, and potential vapor intrusion.
Action Date:	7/3/2018
Action:	Site Characterization Workplan Approved
DEC Staff:	Danielle Duncan
Action Description:	Approved the Groundwater Monitoring Work Plan prepared by Farallon Consulting LLC this date. The current work is to measure the depth to groundwater and to sample all 9 wells and analyze them for gasoline range organics (GRO), diesel range organics (DRO), residual range organics (RRO), benzene, toluene, ethylbenzene, and xylenes (BTEX), and polycyclic aromatic hydrocarbons (PAHs). Please note that according to Appendix F of the 2017 ADEC Field Sampling Guidance, the

VALLEY TESORO (Continued) **S118973342**

full suite of volatile organic compounds must be analyzed ??? this can occur during the current or a future effort.

Action Date: 6/30/2017
Action: Leaking Underground Storage Tank Cleanup Initiated - Petroleum
DEC Staff: Evonne Reese
Action Description: Administrative action addition for grant reporting purposes.

Action Date: 5/1/2018
Action: Site Characterization Report Approved
DEC Staff: Danielle Duncan
Action Description: Soil and groundwater samples were collected and contaminants above ADEC cleanup levels were documented. More investigation is needed.

Action Date: 4/14/2017
Action: Report or Workplan Review - Other
DEC Staff: Bruce Wanstall
Action Description: DEC has reviewed and approved with comment: Juneau Valley Tesoro Station: Monitor Well Installation Work Plan/Sampling & Analysis Plan (Plan), dated April, 2017. ISM Technical Services (ISM) completed the Plan for Delta Western Inc. to conduct subsurface investigation of soil and groundwater conditions at the referenced Site. DEC agreed there was not a major release but concluded that a release investigation (18 AAC 78.235) was necessary and requested actions be taken during the 2017 season. For quality assurance evaluation purposes, a field duplicate will be collected from each media (soil and water) and will be analyzed for each parameter tested and the relative per cent difference calculated on the laboratory data review checklist. The subsequent report will contain a conceptual site model evaluation of the exposure pathway risks at the site and narrative summary of data quality and usability. The Plan is approved in accordance with 18 AAC 78.260.

Action Date: 12/12/2016
Action: Site Added to Database
DEC Staff: Mitzi Read
Action Description: A new site has been added to the database

Action Date: 10/30/2017
Action: Report or Workplan Review - Other
DEC Staff: Danielle Duncan
Action Description: Approved a work plan for advancing up to 10 soil borings using a GeoProbe drill rig and installing another 3 groundwater monitoring wells. Once the soil borings have been made, field screening samples will be collected from the groundwater interface and analyzed using a photoionization detector (PID). The results will be used to determine the placement of new wells. The wells will have a &190; inch PVC casing with a 2 &188; inch screened outer casing and prepacked filter sand between the inner and outer casings. The wells will be developed and sampled as the prior work plan using a low-flow technique and a bladder pump with disposable tubing and will be analyzed for diesel range organics (DRO), residual range organics (RRO), gasoline range organics (GRO), lead, benzene, toluene, ethylbenzene, and xylenes (BTEX), and polycyclic aromatic hydrocarbons (PAHs).

Action Date: 1/19/2017
Action: Meeting or Teleconference Held

VALLEY TESORO (Continued) **S118973342**

DEC Staff: Bruce Wanstall
Action Description: DEC UST and CS staff met with Delta Western Inc. and their consultant ISM to discuss the site status. Discussion included the recent successful three year UST testing for leak detection and corrosion that prompted the replacement of the spill buckets on four USTs at the site. Due to uncertainty surrounding Delta Western finding the as-built plan for UST to dispenser piping, the location of placing several groundwater monitoring wells at the site remains uncertain. Delta Western will continue to look for these documents and will submit a work plan.

Action Date: 1/13/2017
Action: Report or Workplan Review - Other
DEC Staff: Bruce Wanstall
Action Description: DEC approved a site assessment report by IMS Technical Services for Delta Western. A letter was sent electronically to Delta Western requesting a corrective action plan be submitted for approval.

Action Date: 1/12/2017
Action: Potentially Responsible Party/State Interest Letter
DEC Staff: Bruce Wanstall
Action Description: DEC sent a letter by electronic mail notifying Delta Western of their cleanup responsibility for the Site.

Action Date: 1/12/2017
Action: Exposure Tracking Model Ranking
DEC Staff: Bruce Wanstall
Action Description: Initial ranking with ETM completed for source area id: 79996 name: UST Fill Port Upgrades

LUST:
Facility Name: VALLEY TESORO
Facility Status: Open
Record Key: Not reported
File ID: 1513.26.081
Oname: Delta Western - Seattle
Lat/Lon: 58.37263 -134.5865
Lust Event ID: Not reported
CS or Lust: LUST
Borough: Juneau
Staff: Danielle Duncan
Site Type: Gas Station
Horizontal Datum: WGS84

Y102 **VALLEY TESORO** **AK SHWS** **U004116318**
NW **9102 MENDENHALL MALL RD** **AK UST** **N/A**
1/2-1 **JUNEAU, AK 99801** **AK Financial Assurance**
0.691 mi.
3649 ft. **Site 2 of 2 in cluster Y**

Relative:
Higher

Actual:
29 ft.

SHWS:
File Number: 1513.26.035
Staff: Not reported
Facility Status: Cleanup Complete
Latitude: 58.372890
Longitude: -134.584893

VALLEY TESORO (Continued) **U004116318**

Hazard ID: 24906
Problem: SA 4/18/91,no closure notice,FacID (455), Facility Name is Valley Tesoro.Excavation/biotreatment in Biocells of 800 cu yds in 7/91. Installed network of perforated PVC pipe with vertical riser. As of 11/7/91 cells below cleanup level. Farnell was last staff assigned.

Actions:
Action Date: 4/18/1991
Action: Leaking Underground Storage Tank Cleanup Initiated - Petroleum
DEC Staff: * Not Assigned
Action Description: Not reported

Action Date: 4/18/1991
Action: Site Closure Approved
DEC Staff: * Not Assigned
Action Description: Not reported

Action Date: 4/18/1991
Action: Site Added to Database
DEC Staff: * Not Assigned
Action Description: Not reported

UST:
Facility ID: 455
Facility Type: Gas Station
Owner ID: 9520
Owner Name: Delta Western, Inc.
Owner Address: 450 Alaskan Way S, Ste 707
Owner City,St,Zip: Seattle, WA 98104

Tank ID: 1
Tank Status: Currently in Use
Tack Capacity: 12000
Tank Product: Gasoline
Installed Date: 11/01/1990
Regulated Tank: Yes

Tank ID: 2
Tank Status: Currently in Use
Tack Capacity: 12000
Tank Product: Gasoline
Installed Date: 11/01/1990
Regulated Tank: Yes

Tank ID: 3
Tank Status: Permanently Out of Use
Tack Capacity: 10000
Tank Product: Gasoline
Installed Date: 05/08/1976
Regulated Tank: Yes

Tank ID: 4
Tank Status: Permanently Out of Use

VALLEY TESORO (Continued) **U004116318**

Tack Capacity: 10000
Tank Product: Gasoline
Installed Date: 05/08/1976
Regulated Tank: Yes

Tank ID: 5
Tank Status: Permanently Out of Use
Tack Capacity: 5000
Tank Product: Gasoline
Installed Date: 05/08/1976
Regulated Tank: Yes

Tank ID: 6
Tank Status: Permanently Out of Use
Tack Capacity: 2000
Tank Product: Gasoline
Installed Date: 05/08/1976
Regulated Tank: Yes

Tank ID: 7
Tank Status: Permanently Out of Use
Tack Capacity: 2000
Tank Product: Gasoline
Installed Date: 05/08/1976
Regulated Tank: Yes

Tank ID: 8
Tank Status: Permanently Out of Use
Tack Capacity: 5000
Tank Product: Diesel
Installed Date: 05/08/1984
Regulated Tank: Yes

Tank ID: 9
Tank Status: Currently in Use
Tack Capacity: 6000
Tank Product: Diesel
Installed Date: 11/01/1990
Regulated Tank: Yes

Tank ID: 10
Tank Status: Currently in Use
Tack Capacity: 6000
Tank Product: Gasoline
Installed Date: 11/01/1990
Regulated Tank: Yes

Tank ID: 11
Tank Status: Currently in Use
Tack Capacity: 6000

VALLEY TESORO (Continued) **U004116318**

Tank Product: Gasoline
Installed Date: 11/01/1990
Regulated Tank: Yes

AK Financial Assurance 1:
Region: 1
Financial Responsibility: WITH PROOF OF FINANCIAL RESPONSIBILITY
Facility ID: 455
Facility Type: Gas Station
Owner ID: 9520
Owner Name: Delta Western, Inc.
Owner Addr: 450 Alaskan Way S, Ste 707
Owner City: Seattle
Owner State: WA
Owner Zip: 98104
Owner City,St,Zip: Seattle, WA 98104
Policy Begin Date: 07/01/2018
Policy End Date: 07/01/2019

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103 **MENDENHALL MALL HOTS** **AK SHWS** **S108670394**
NW **9105 MENDENHALL MALL ROAD** **N/A**
1/2-1 **JUNEAU, AK 99801**
0.711 mi.
3755 ft.

Relative:
Higher

Actual:
24 ft.

SHWS:
File Number: 1513.38.073
Staff: Not reported
Facility Status: Cleanup Complete
Latitude: 58.371460
Longitude: -134.589380
Hazard ID: 4448
Problem: Petroleum contamination was identified on the ground surface around fill pipes at two of three underground heating oil tanks on the south side of the Mendenhall Mall building. Cleanup excavation of contaminated material in May 2007 was coordinated with Southeast Area Response Team (SART). Soil at the excavation limits at underground storage tanks (USTs) 1 and 3 had diesel range organics (DRO) concentration below ADEC cleanup levels but for UST 2 (behind the Gottschalks generator room) electric conduits and a transformer prevented all of the contamination from being removed. Contaminated material remaining below the surface at the UST 3 site has a DRO concentration of 1,580 milligrams per kilogram (mg/kg). Groundwater contamination was also noted. Samples were not analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) constituents. There was apparently no indication that the fuel tanks were leaking but additional testing of the area is recommended.

Actions:
Action Date: 9/28/2007
Action: Exposure Tracking Model Ranking
DEC Staff: Bruce Wanstall
Action Description: A meeting was held at the site with the environmental consultant and the buried tank owner to discuss how the ADEC views the current situation and what action can be taken by the outgoing owner to eventually bring the site to unconditional closure

Action Date: 8/14/2007

MENDENHALL MALL HOTS (Continued) **S108670394**

Action:	Exposure Tracking Model Ranking
DEC Staff:	Mitzi Read
Action Description:	Initial ranking completed.
Action Date:	8/14/2007
Action:	Site Added to Database
DEC Staff:	Mitzi Read
Action Description:	Site added to the database.
Action Date:	7/30/2007
Action:	Spill Transferred from Prevention Preparedness and Response Program
DEC Staff:	Mitzi Read
Action Description:	Site transferred by PERP staff Scot Tiernan. Spill Date = 10/2/06; Spill No. 06119927502; Substance = Diesel; Quantity = unknown; PERP file number = 1513.02.324.
Action Date:	7/28/2009
Action:	Report or Workplan Review - Other
DEC Staff:	Bruce Wanstall
Action Description:	ADEC reviewed and approved a workplan to clean and close UST2 in-place, then install a new above ground fuel tank and a new ground water monitoring well. The ground water sampling plan includes four consecutive quarters of sampling and analysis of ground water for DRO and RRO.
Action Date:	5/9/2008
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	ADEC requested that the responsible party submit a workplan for sequential well sampling to establish a concentration trend for regulatory site closure.
Action Date:	5/21/2008
Action:	Report or Workplan Review - Other
DEC Staff:	Bruce Wanstall
Action Description:	CDI report/letter and laboratory report meet the Contaminated Sites Program Quality Assurance standards. Water sample analysis for DRO (1.69mg/L) is above ground water cleanup level (1.5mg/L) and RRO (4.90mg/L) is above ground water cleanup criteria (1.1mg/L). The data reflect an increase since the December sampling event at the UST2 behind the Mall. Oil stain was noted around the base of the monitoring well pipe; fouling of the monitoring well by fuel handlers is strongly suggested.
Action Date:	4/1/2010
Action:	Update or Other Action
DEC Staff:	Traci Nebeker
Action Description:	Check Received $2138.20 from Law 03/02/10
Action Date:	2/3/2010
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	DEC assisted the former owner of the Mendenhall Mall HOTs facility with cost recovery questions via electronic mail
Action Date:	2/3/2010
Action:	Exposure Tracking Model Ranking

MENDENHALL MALL HOTS (Continued) **S108670394**

DEC Staff:	Bruce Wanstall
Action Description:	A new updated ranking with ETM has been completed for source area 75435 Petroleum at HOTs 1, 2, and 3.
Action Date:	12/4/2009
Action:	Potentially Responsible Party/State Interest Letter
DEC Staff:	Bruce Wanstall
Action Description:	DEC letter was sent to potential responsible parties introducing the state statutes and regulations that outline responsibilities as landowner (or operator) to evaluate the environmental problems concerning petroleum contaminated groundwater and soil on the property and liability for costs incurred by the state in providing cleanup oversight.
Action Date:	12/12/2011
Action:	Cleanup Complete Determination Issued
DEC Staff:	Bruce Wanstall
Action Description:	The cleanup actions to date have served to excavate and adequately remove contaminated soil from the site. Based on the information available, DEC has determined no further assessment or cleanup action is required. This determination is in accordance with 18 AAC 75.380(d) and does not preclude DEC from requiring additional assessment and/or cleanup action if future information indicates that this site may pose an unacceptable risk to human health or the environment.
Action Date:	11/4/2011
Action:	Exposure Tracking Model Ranking
DEC Staff:	Bruce Wanstall
Action Description:	A new updated ranking with ETM has been completed for source area 75435 Petroleum at HOTs 1, 2, and 3.
Action Date:	10/4/2007
Action:	Site Characterization Workplan Approved
DEC Staff:	Bruce Wanstall
Action Description:	After thorough review of existing report data the ADEC approves the workplan proposed by Carson Dorn Inc for Mall PSA, LLC. Conceptual Site Model is requested and lab data quality checklist requested on all future data submitted.
Action Date:	10/16/2007
Action:	Meeting or Teleconference Held
DEC Staff:	Bruce Wanstall
Action Description:	ADEC held a discussion with the owner’s consultant about the site conceptual site model and monitoring well installation for the ground water assessment workplan at the Mall UST site.
Action Date:	1/7/2008
Action:	Report or Workplan Review - Other
DEC Staff:	Bruce Wanstall
Action Description:	ADEC received a letter/report from CDI concerning ground water well installation and sampling at UST2 at the Mendenhall Mall in December 2007. Digital images, a laboratory report and data checklist referenced in the letter/report were forwarded by email on 12/28/07. Data show that diesel and residual range hydrocarbon concentrations detected in ground water are below regulatory levels. Laboratory data is acceptable to ADEC standard; conditions appear to be stable but a

MENDENHALL MALL HOTS (Continued) **S108670394**

plan for a second sell sampling in 2009 is requested.

Contaminants:

Staff:	Not reported
Contaminate Name1:	Mendenhall Mall HOTs
Contaminate Level Description1:	Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation
Contaminate Media1:	Soil
Control Type:	No ICs Required
Control Details Description1:	Advance approval required to transport soil or groundwater off-site.
Contaminant CTD:	Not reported
Contaminant CDR:	Not reported
Comments:	The excavation of contaminated material surrounding UST #2 was limited by the presence of a transformer and electric conduits overlying the tank. The removal of contaminated soil was advanced by machine and then by hand around UST #2. Soil confirmation samples were collected at the base of the building foundation at four feet below grade, and also at the far end of the excavation three feet below grade. The laboratory results for DRO concentration in the two soil samples were 143 mg/kg and 1,580 mg/kg.
Staff:	Not reported
Contaminate Name1:	Mendenhall Mall HOTs
Contaminate Level Description1:	< Table C
Contaminate Media1:	Groundwater
Control Type:	No ICs Required
Control Details Description1:	Advance approval required to transport soil or groundwater off-site.
Contaminant CTD:	Not reported
Contaminant CDR:	Not reported
Comments:	Samples collected from the monitoring well were submitted to the laboratory for DRO and residual (RRO) hydrocarbon analysis by Alaska Methods 102 and 103. Sample MM-1 results were a DRO concentration of 0.668 mg/L and an RRO concentration of 0.763 mg/L; the duplicate sample MM-2 results were a DRO concentration of 0.551 mg/L and the RRO concentration was below instrument detection limit of 0.708 mg/L. Each of the results is below the 18 AAC 75.345, Table C groundwater cleanup levels.

104
SSW
1/2-1
0.779 mi.
4112 ft.

RESIDENCE - MISTY LANE HHOT **AK SHWS S106802261**
10648 MISTY LANE, DOUGLAS ISLAND NORTH END **AK INST CONTROL N/A**
JUNEAU, AK 99801

Relative:
Lower

Actual:
2 ft.

SHWS:

File Number:	1513.38.062
Staff:	IC Unit, 9074655229 dec.icunit@alaska.gov
Facility Status:	Cleanup Complete - Institutional Controls
Latitude:	58.337222
Longitude:	-134.595278
Hazard ID:	4063
Problem:	In October 2004, oil sheen was observed on a slough that collects

RESIDENCE - MISTY LANE HHOT (Continued) **S106802261**

drainage from properties on Misty Lane in the Bayview Subdivision located on the Gastineau Channel shoreline of Douglas Island. The sheen was traced to private property consisting of a parking deck and residence built on top of driven piling at the same level of Misty Lane. Under the deck and residence, the surface of the property among the piling is tidal grassland that is periodically flooded during elevated high tides. As the tidal waters recede, the drainage forms channels in the sediment and pools remain in the flat areas.The source of sheen observed on drainage from under the residence and parking deck was a tank that was partially buried in an embankment constructed approximately ten feet from the parking deck at the edge of the property. As long as sheen could be observed on tide pools among the piling under the residence and parking deck, sorbent boom and pads were periodically removed and replaced to collect the oil. In 2004 and 2005 an activated carbon filtration was added to a drainage channel that flows onto the undeveloped adjacent property which is also tidal grassland. The carbon filters out petroleum that does not form sheen but is dissolved in the water. No stressed vegetation is observed in the grassland.Soil sample from tank excavation analyzed for diesel range organics (DRO) reached a concentration of 28,100 milligrams per kilogram (mg/kg). Spill estimated at 25 gallons heating oil.

Actions:

Action Date:	7/8/2005
Action:	Meeting or Teleconference Held
DEC Staff:	Bruce Wanstall
Action Description:	ADEC met with the landowner representative at the property in Bayview to inspect the adequacy of the release investigation and site remedy. A standpipe was installed into the subsurface at the former buried tank site to allow the addition of fertilizer that would promote natural attenuation of the residual contaminated material. Oil impacts to wet surface soil between pilings under the house were observed. The carbon filter installed in the path of surface drainage from under the house appeared to be effective in collecting oil carried on water from under the house. Water leaving the filter unit passed through the adjacent property to the east and eventually entered Gastineau Channel marine waters. Regular updates on maintenance of the carbon filter and addition of fertilizer to the standpipe in the excavation were verbally requested from the landowner representative by the ADEC.

Action Date:	7/22/2010
Action:	Report or Workplan Review - Other
DEC Staff:	Bruce Wanstall
Action Description:	The Site Assessment Report Petropulos Spill 10648 Misty Lane, Juneau, Alaska Report by Nortech Environmental is acceptable to ADEC field and laboratory quality assurance criteria and provides additional environmental data for contaminated media at the site. The total aromatic hydrocarbons (TAH) criteria and the total aqueous hydrocarbons (TAqH) criteria are met in the three water samples collected from surface drainage from residual contaminated material among the pilings under the residence.

Action Date:	6/21/2018
Action:	Institutional Control Compliance Review
DEC Staff:	Kristin Thompson
Action Description:	IC compliance review conducted. Closure/IC Details updated. Reminder

RESIDENCE - MISTY LANE HHOT (Continued) **S106802261**

system already set for next follow-up in 2020.

Action Date: 12/7/2004
Action: Leaking Underground Storage Tank Corrective Action Underway
DEC Staff: Bruce Wanstall
Action Description: Free product on surface soil and partially buried tank were removed from the beachfront property. Sheen present along surface water drainage from the tank reportedly did not reach Gastineau Channel. Rental residence is on pilings and subsurface water beneath the building is tidally influenced. Water drainage from beneath the house is treated with a carbon filter system.

Action Date: 12/7/2004
Action: Site Ranked Using the AHRM
DEC Staff: Bruce Wanstall
Action Description: Property is on Gastineau Channel shoreline within one mile of the Mendenhall Wetlands State Game Refuge.

Action Date: 12/22/2015
Action: Institutional Control Update
DEC Staff: Kristin Thompson
Action Description: An IC reminder letter was issued to the responsible party on this date.

Action Date: 12/2/2004
Action: Site Added to Database
DEC Staff: Bruce Wanstall
Action Description: Heating oil release to surface soil from partially buried storage tank.

Action Date: 12/2/2004
Action: Spill Transferred from Prevention Preparedness and Response Program
DEC Staff: Bruce Wanstall
Action Description: PERP File no. 1513.02.283 - spill 04-11-99-277 - transferred 11-16-04. Not reported

Action Date: 11/10/2010
Action: Institutional Control Record Established
DEC Staff: Bruce Wanstall
Action Description: Soil contamination source is located in the embankment on the west side of the property and under the residence with piling foundation. Any proposal to excavate soil in this area of identified contamination shall be reported to the ADEC and a work plan describing how the soil condition will be tested and how it will be managed for remediation must be submitted for review and approval prior to excavation. Movement or use of contaminated material in a manner that results in a violation of 18 AAC water quality standards is prohibited. In addition, any proposal to transport soil or groundwater off site or installation of ground water wells on the property requires ADEC approval.

Action Date: 11/10/2010
Action: Cleanup Complete Determination Issued
DEC Staff: Bruce Wanstall
Action Description: Soil contamination remains in surface soil within two feet of ground surface but is of de-minimis extent. Sample analysis of surface water in contact with remediated soil indicates that in situ remedial

RESIDENCE - MISTY LANE HHOT (Continued) **S106802261**

treatment of contaminated soil was successful in reducing DRO concentration below human health based cleanup levels and Table C ground water screening levels and volatile compounds have not been detected. The surface water runoff that was tested is a brackish mixture of receding salt water tide pools and rainfall runoff. No streams or ground water seeps have been identified at the site and no stressed vegetation has been observed throughout the wetland. ADEC has determined that the contaminant concentrations remaining on site do not pose an unacceptable risk to human health or the environment. No future remedial action is required as long as the site complies with established institutional controls.

Action Date: 10/9/2014
Action: Institutional Control Compliance Review
DEC Staff: Kristin Thompson
Action Description: IC compliance review conducted and staff changed from Bruce Wanstall to IC Unit. Reminder system set to follow-up with the responsible party in 2015.

Action Date: 10/31/2007
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: Regular updates on maintenance of the carbon filter and addition of fertilizer to the standpipe in the excavation were verbally requested from the landowner representative by the ADEC in 2005; data has not been received. The adjacent property to the east may be impacted by off-site migration of heating oil if the site remedy has not been maintained. ADEC letter requesting current site assessment data was sent certified to the landowner 10/25/07. The letter was returned unopened; was modified and then re-sent to an address in Juneau.

Action Date: 10/29/2010
Action: Exposure Tracking Model Ranking
DEC Staff: Bruce Wanstall
Action Description: A new updated ranking with ETM has been completed for source area 75037 partially buried heating oil tank.

Action Date: 10/19/2007
Action: Exposure Tracking Model Ranking
DEC Staff: Bruce Wanstall
Action Description: Site status was evaluated using the environmental tracking module. The controlling exposure pathway is surface soil where free product was recovered using sorbent pads. Contamination of surface drainage is controlled using carbon filtration.

Action Date: 10/11/2010
Action: Exposure Tracking Model Ranking
DEC Staff: Bruce Wanstall
Action Description: A new updated ranking with ETM has been completed for source area 75037 partially buried heating oil tank.

Action Date: 1/25/2010
Action: Exposure Tracking Model Ranking
DEC Staff: Bruce Wanstall
Action Description: A new updated ranking with ETM has been completed for source area 75037 partially buried heating oil tank.

RESIDENCE - MISTY LANE HHOT (Continued) **S106802261**

Action Date: 1/16/2008
Action: Report or Workplan Review - Other
DEC Staff: Bruce Wanstall
Action Description: ADEC approves the surface water sampling report data that addresses the off-site migration pathway for heating oil contamination of inaccessible wetland soil under the residence.

Contaminants:
Staff: IC Unit, 9074655229 dec.icunit@alaska.gov

Contaminate Name1: Residence - Misty Lane HHOT
Contaminate Level Description1: Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation
Contaminate Media1: Soil

Control Type: Signed CS Determination
Control Details Description1: Movement or use of contaminated material (including on site) in a manner that res
Contaminant CTD: Peggy Petropulos will sign and return the Cleanup Complete-ICs Agreement and Signature Page within 30 days of letter reciept.
Contaminant CDR: Standard condition.
Comments: Sample analysis of surface water in contact with remediated soil indicates that in situ remedial treatment of contaminated soil was successful in reducing DRO concentration below human health based cleanup levels and Table C ground water screening levels and volatile compounds have not been detected.

Staff: IC Unit, 9074655229 dec.icunit@alaska.gov

Contaminate Name1: Residence - Misty Lane HHOT
Contaminate Level Description1: Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation
Contaminate Media1: Soil

Control Type: Signed CS Determination
Control Details Description1: Groundwater Use Restrictions
Contaminant CTD: Peggy Petropulos will sign and return the Cleanup Complete-ICs Agreement and Signature Page within 30 days of letter reciept.
Contaminant CDR: The installation of ground water wells on the property requires prior approval from ADEC.
Comments: Sample analysis of surface water in contact with remediated soil indicates that in situ remedial treatment of contaminated soil was successful in reducing DRO concentration below human health based cleanup levels and Table C ground water screening levels and volatile compounds have not been detected.

Staff: IC Unit, 9074655229 dec.icunit@alaska.gov

Contaminate Name1: Residence - Misty Lane HHOT
Contaminate Level Description1: Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation
Contaminate Media1: Soil

Control Type: Signed CS Determination
Control Details Description1: Other
Contaminant CTD: Peggy Petropulos will sign and return the Cleanup Complete-ICs Agreement and Signature Page within 30 days of letter reciept.
Contaminant CDR: Required every five years.

RESIDENCE - MISTY LANE HHOT (Continued) **S106802261**

Comments:	Sample analysis of surface water in contact with remediated soil indicates that in situ remedial treatment of contaminated soil was successful in reducing DRO concentration below human health based cleanup levels and Table C ground water screening levels and volatile compounds have not been detected.
Staff:	IC Unit, 9074655229 dec.icunit@alaska.gov
Contaminate Name1:	Residence - Misty Lane HHOT
Contaminate Level Description1:	Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation
Contaminate Media1:	Soil
Control Type:	Signed CS Determination
Control Details Description1:	New Construction Restrictions
Contaminant CTD:	Peggy Petropulos will sign and return the Cleanup Complete-ICs Agreement and Signature Page within 30 days of letter reciept.
Contaminant CDR:	Changes surface grade or hydraulic condition could release residual petroleum bound in surface material on the property. Petroleum sheen on surface water is a water quality violation. When sheen is observed, boom and sorbent pad control measures shall be applied in the area of the source where sheen is detected and the violation shall be immediately reported to the ADEC. ADEC will confirm that sheen is a petroleum source (petrogenic) and not a natural or rusting metal source (biogenic). Sheen may require a work plan for additional cleanup.
Comments:	Sample analysis of surface water in contact with remediated soil indicates that in situ remedial treatment of contaminated soil was successful in reducing DRO concentration below human health based cleanup levels and Table C ground water screening levels and volatile compounds have not been detected.
Staff:	IC Unit, 9074655229 dec.icunit@alaska.gov
Contaminate Name1:	Residence - Misty Lane HHOT
Contaminate Level Description1:	Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation
Contaminate Media1:	Soil
Control Type:	Signed CS Determination
Control Details Description1:	Advance approval required to transport soil or groundwater off-site.
Contaminant CTD:	Peggy Petropulos will sign and return the Cleanup Complete-ICs Agreement and Signature Page within 30 days of letter reciept.
Contaminant CDR:	Standard condition.
Comments:	Sample analysis of surface water in contact with remediated soil indicates that in situ remedial treatment of contaminated soil was successful in reducing DRO concentration below human health based cleanup levels and Table C ground water screening levels and volatile compounds have not been detected.
Staff:	IC Unit, 9074655229 dec.icunit@alaska.gov
Contaminate Name1:	Residence - Misty Lane HHOT
Contaminate Level Description1:	Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation
Contaminate Media1:	Soil

RESIDENCE - MISTY LANE HHOT (Continued) **S106802261**

Control Type:	Signed CS Determination
Control Details Description1:	Excavation / Soil Movement Restrictions
Contaminant CTD:	Peggy Petropulos will sign and return the Cleanup Complete-ICs Agreement and Signature Page within 30 days of letter reciept.
Contaminant CDR:	Soil contamination source is located in the embankment on the west side of the property and under the residence with piling foundation. Any proposal to excavate soil in this area of identified contamination shall be reported to ADEC and a work plan describing how the soil condition will be tested and how it will be managed for remediation must be submitted for review and approval prior to excavation.
Comments:	Sample analysis of surface water in contact with remediated soil indicates that in situ remedial treatment of contaminated soil was successful in reducing DRO concentration below human health based cleanup levels and Table C ground water screening levels and volatile compounds have not been detected.
Staff:	IC Unit, 9074655229 dec.icunit@alaska.gov
Contaminate Name1:	Residence - Misty Lane HHOT
Contaminate Level Description1:	Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation
Contaminate Media1:	Soil
Control Type:	Notice of Environmental Contamination (Deed Notice)
Control Details Description1:	Movement or use of contaminated material (including on site) in a manner that res
Contaminant CTD:	A Notice of Environmental Contamination (deed notice) shall be recorded in the State Recorder???s Office that identifies the nature and extent of contamination at the property and any conditions that the owners and operators are subject to in accordance with this decision document, and a copy of the NEC provided to ADEC within 60 days of the date of this decision document.
Contaminant CDR:	Standard condition.
Comments:	Sample analysis of surface water in contact with remediated soil indicates that in situ remedial treatment of contaminated soil was successful in reducing DRO concentration below human health based cleanup levels and Table C ground water screening levels and volatile compounds have not been detected.
Staff:	IC Unit, 9074655229 dec.icunit@alaska.gov
Contaminate Name1:	Residence - Misty Lane HHOT
Contaminate Level Description1:	Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation
Contaminate Media1:	Soil
Control Type:	Notice of Environmental Contamination (Deed Notice)
Control Details Description1:	Groundwater Use Restrictions
Contaminant CTD:	A Notice of Environmental Contamination (deed notice) shall be recorded in the State Recorder???s Office that identifies the nature and extent of contamination at the property and any conditions that the owners and operators are subject to in accordance with this decision document, and a copy of the NEC provided to ADEC within 60 days of the date of this decision document.
Contaminant CDR:	The installation of ground water wells on the property requires prior approval from ADEC.
Comments:	Sample analysis of surface water in contact with remediated soil indicates that in situ remedial treatment of contaminated soil was

RESIDENCE - MISTY LANE HHOT (Continued) **S106802261**

successful in reducing DRO concentration below human health based cleanup levels and Table C ground water screening levels and volatile compounds have not been detected.

Staff: IC Unit, 9074655229 dec.icunit@alaska.gov

Contaminate Name1: Residence - Misty Lane HHOT
Contaminate Level Description1: Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation
Contaminate Media1: Soil

Control Type: Notice of Environmental Contamination (Deed Notice)
Control Details Description1: Other
Contaminant CTD: A Notice of Environmental Contamination (deed notice) shall be recorded in the State Recorder???s Office that identifies the nature and extent of contamination at the property and any conditions that the owners and operators are subject to in accordance with this decision document, and a copy of the NEC provided to ADEC within 60 days of the date of this decision document.
Contaminant CDR: Required every five years.
Comments: Sample analysis of surface water in contact with remediated soil indicates that in situ remedial treatment of contaminated soil was successful in reducing DRO concentration below human health based cleanup levels and Table C ground water screening levels and volatile compounds have not been detected.

Staff: IC Unit, 9074655229 dec.icunit@alaska.gov

Contaminate Name1: Residence - Misty Lane HHOT
Contaminate Level Description1: Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation
Contaminate Media1: Soil

Control Type: Notice of Environmental Contamination (Deed Notice)
Control Details Description1: New Construction Restrictions
Contaminant CTD: A Notice of Environmental Contamination (deed notice) shall be recorded in the State Recorder???s Office that identifies the nature and extent of contamination at the property and any conditions that the owners and operators are subject to in accordance with this decision document, and a copy of the NEC provided to ADEC within 60 days of the date of this decision document.
Contaminant CDR: Changes surface grade or hydraulic condition could release residual petroleum bound in surface material on the property. Petroleum sheen on surface water is a water quality violation. When sheen is observed, boom and sorbent pad control measures shall be applied in the area of the source where sheen is detected and the violation shall be immediately reported to the ADEC. ADEC will confirm that sheen is a petroleum source (petrogenic) and not a natural or rusting metal source (biogenic). Sheen may require a work plan for additional cleanup.
Comments: Sample analysis of surface water in contact with remediated soil indicates that in situ remedial treatment of contaminated soil was successful in reducing DRO concentration below human health based cleanup levels and Table C ground water screening levels and volatile compounds have not been detected.

Staff: IC Unit, 9074655229 dec.icunit@alaska.gov

RESIDENCE - MISTY LANE HHOT (Continued) **S106802261**

Contaminate Name1:	Residence - Misty Lane HHOT
Contaminate Level Description1:	Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation
Contaminate Media1:	Soil
Control Type:	Notice of Environmental Contamination (Deed Notice)
Control Details Description1:	Advance approval required to transport soil or groundwater off-site.
Contaminant CTD:	A Notice of Environmental Contamination (deed notice) shall be recorded in the State Recorder???s Office that identifies the nature and extent of contamination at the property and any conditions that the owners and operators are subject to in accordance with this decision document, and a copy of the NEC provided to ADEC within 60 days of the date of this decision document.
Contaminant CDR:	Standard condition.
Comments:	Sample analysis of surface water in contact with remediated soil indicates that in situ remedial treatment of contaminated soil was successful in reducing DRO concentration below human health based cleanup levels and Table C ground water screening levels and volatile compounds have not been detected.
Staff:	IC Unit, 9074655229 dec.icunit@alaska.gov
Contaminate Name1:	Residence - Misty Lane HHOT
Contaminate Level Description1:	Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation
Contaminate Media1:	Soil
Control Type:	Notice of Environmental Contamination (Deed Notice)
Control Details Description1:	Excavation / Soil Movement Restrictions
Contaminant CTD:	A Notice of Environmental Contamination (deed notice) shall be recorded in the State Recorder???s Office that identifies the nature and extent of contamination at the property and any conditions that the owners and operators are subject to in accordance with this decision document, and a copy of the NEC provided to ADEC within 60 days of the date of this decision document.
Contaminant CDR:	Soil contamination source is located in the embankment on the west side of the property and under the residence with piling foundation. Any proposal to excavate soil in this area of identified contamination shall be reported to ADEC and a work plan describing how the soil condition will be tested and how it will be managed for remediation must be submitted for review and approval prior to excavation.
Comments:	Sample analysis of surface water in contact with remediated soil indicates that in situ remedial treatment of contaminated soil was successful in reducing DRO concentration below human health based cleanup levels and Table C ground water screening levels and volatile compounds have not been detected.

Inst Control:

Hazard ID:	4063
Facility Status:	Cleanup Complete - Institutional Controls
Action:	Institutional Control Record Established
Action Date:	11/10/2010
File Number:	1513.38.062
Hazard ID:	4063
Facility Status:	Cleanup Complete - Institutional Controls

RESIDENCE - MISTY LANE HHOT (Continued) **S106802261**

Action: Institutional Control Compliance Review
Action Date: 10/9/2014
File Number: 1513.38.062

Hazard ID: 4063
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Update
Action Date: 12/22/2015
File Number: 1513.38.062

Hazard ID: 4063
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Compliance Review
Action Date: 6/21/2018
File Number: 1513.38.062

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105 West 1/2-1 0.807 mi. 4261 ft. **E&L AUTO** **AK SHWS S104893267**
10005 CRAZY HORSE DRIVE, MENDENHALL VALLEY **AK ENG CONTROLS N/A**
JUNEAU, AK 99801 **AK INST CONTROL**

Relative: Higher
Actual: 33 ft.

SHWS:
File Number: 1513.38.022
Staff: IC Unit, 9074655229 dec.icunit@alaska.gov
Facility Status: Cleanup Complete - Institutional Controls
Latitude: 58.365556
Longitude: -134.606389
Hazard ID: 1183
Problem: The property is the site of an auto salvage facility located in the industrial zone of Mendenhall Valley. New owners of the 3.6 acre property have cleaned up and shipped out scrap and debris from the former operation and sealed the floor drain sump in the shop. A concrete pad with a containment wall was built for fuel storage. Site Assessment of the property found that areas of surface material were contaminated with lead and pockets of subsurface material were contaminated with petroleum. A volume of 4.3 cubic yards of soil were not accessible because it was under a new concrete pad that was installed during the facility upgrade. Assessment determined that concentrations of petroleum and lead above the ADEC alternative cleanup levels are present in one of the eight samples collected in the trapped soil. All other contaminated soil with concentrations of lead above the cleanup level was stockpiled on the back of the property. With DEC approval, the lead contaminated material that was stockpiled on the property was spread on the southwest corner of the property over fine material and capped with asphalt. A long-term plan requires monitoring and maintenance of the asphalt cap with inspection by the ADEC. EPA ID AKD983069055; EPA site name E & L Auto.
Not reported

Actions:
Action Date: 9/8/1999
Action: Update or Other Action
DEC Staff: Sally Schlichting
Action Description: $200 from the Robinsons.

Action Date: 9/30/1999
Action: Update or Other Action

E&L AUTO (Continued) **S104893267**

DEC Staff:	Sally Schlichting
Action Description:	$200 received from the Robinsons.
Action Date:	9/28/2005
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Capping occurred this past August.
Action Date:	9/28/1996
Action:	Update or Other Action
DEC Staff:	Sally Schlichting
Action Description:	Scrap removal commences in response to ADEC letter. 98 of automobiles removed in two days. Additional work needed to remove refuse and other non-metal debris, including large number of tires.
Action Date:	9/18/2007
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	ADEC letter dated 12/10/98 to the operator states that final soil and ground water sampling results for the shop floor sump area were well below the approved cleanup standards for the site or were not detected in the laboratory analysis. Approval was granted to fill in the shop sump as requested.
Action Date:	9/18/2000
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	EPA funded CERCLIS Site Reassessment changed ranking from High to Low Priority.
Action Date:	9/17/2007
Action:	Exposure Tracking Model Ranking
DEC Staff:	Bruce Wanstall
Action Description:	Initial ETM ranking two source areas on the property, the shop floor sump and the battery salvage debris area
Action Date:	9/12/2003
Action:	Meeting or Teleconference Held
DEC Staff:	Bill Janes
Action Description:	Telecon meeting with Ridgway to discuss asphalt emulsifcation as a treatment alternative
Action Date:	9/11/2017
Action:	Institutional Control Update
DEC Staff:	Evonne Reese
Action Description:	A cap integrity inspection was performed by DEC staff. Overall the cap is in very good condition and has been well maintained. There are a couple of areas that need some minor maintenance including some small areas of cracking in the asphalt that has weeds growing in it. A letter regarding the inspection details will follow in the near future.
Action Date:	8/27/2007
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	Payment received from Dougs Inc to cover ADEC cleanup oversight expenses ($300.00).

E&L AUTO (Continued) **S104893267**

Action Date:	8/26/1993
Action:	Site Added to Database
DEC Staff:	No Longer Assigned
Action Description:	Lead and automotive fluids.
Action Date:	8/22/1996
Action:	Update or Other Action
DEC Staff:	Sally Schlichting
Action Description:	(Old R:Base Action Code = RPL3 - RP Determined and Action Request). Demand for immediate removal of scrap metal and debris from the yard so that cleanup could proceed.
Action Date:	8/20/2004
Action:	Cleanup Plan Approved
DEC Staff:	Bill Janes
Action Description:	ADEC approved site remedy to mitigate lead-contaminated material (average lead concentration is 2,600mg/kg) on the property is spreading the material on the southwest corner of the property over a soft layer, capping it with crushed rock and sealing the surface with asphalt. Property future use institutional control requires contacting the ADEC prior to excavation that might disturb the area. The long-term monitoring plan provides access for annual ADEC inspection of cap integrity.
Action Date:	8/2/1999
Action:	Update or Other Action
DEC Staff:	Sally Schlichting
Action Description:	$500 received from the Makis.
Action Date:	7/27/1999
Action:	Update or Other Action
DEC Staff:	Sally Schlichting
Action Description:	$200 received from the Robinsons
Action Date:	6/6/2006
Action:	Meeting or Teleconference Held
DEC Staff:	Bruce Wanstall
Action Description:	Met with the owner at the site; the asphalt cap is intact; made a brief search for wells at the above ground fuel storage tank bermed area. Data gap for the fate of monitoring wells needs to be addressed. Not reported
Action Date:	6/28/1999
Action:	Update or Other Action
DEC Staff:	Sally Schlichting
Action Description:	$200 received from the Robinsons.
Action Date:	6/26/2002
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Teleconference with mark Ridgway - Planning to do another round of sampling for total lead next week. Will send.
Action Date:	6/25/2001
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Teleconference with Alan Walker. Stockpile soil results all over the

E&L AUTO (Continued) **S104893267**

board. Sampling to be conducted again. Nancy ready to actively pursue the phytoremediation option. Retaining Mark Ridgeway as the consulting engineer.

Action Date: 6/19/1998
Action: Update or Other Action
DEC Staff: Sally Schlichting
Action Description: Status of Cleanup letter sent to property owner.

Action Date: 6/16/2015
Action: Institutional Control Periodic Reporting
DEC Staff: Kristin Thompson
Action Description: In response to ADEC's IC reminder letter, the responsible party provided an update of the site including June 2015 photos of the pad. There have been no changes in site conditions. Measures have been taken each year to keep the cap clean by removing any and all debris and power washing the cap.

Action Date: 6/15/2012
Action: Institutional Control Periodic Reporting
DEC Staff: Evonne Reese
Action Description: Received a letter from the landowner stating that land use conditions have not changed and that the concrete pad is in good condition. For the 2015 reporting a photo of the pad will be required.

Action Date: 5/24/1999
Action: Update or Other Action
DEC Staff: Sally Schlichting
Action Description: Site renamed from E&L Auto to E&L Auto/Glacier Muffler.

Action Date: 5/18/2012
Action: Update or Other Action
DEC Staff: Evonne Reese
Action Description: Project manager name changed from Wanstall to IC Unit.

Action Date: 5/15/2015
Action: Institutional Control Update
DEC Staff: Kristin Thompson
Action Description: An IC reminder letter was issued to the responsible party on this date.

Action Date: 5/15/2001
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: Approximte date. Stockpile screening completed. About 300 tons of metal and other debris removed and taken to Channel Landfill. Stockpile re-sampled for lead by Sally Wanstall of Analyica Alaska.

Action Date: 5/15/1998
Action: Notice of Violation
DEC Staff: Sally Schlichting
Action Description: Due to violations stemming from a failure to report and properly dispose and cleanup hazardous waste and contamination to the satisfaction of the department, a Notice of Violation was issued to the prospective purchaser requiring participation in a voluntary compliance program, as well as investigation/sampling to determine nature and extent of contamination that may remain in the areas

E&L AUTO (Continued) **S104893267**

pertinent to the Notice of Violation.

Action Date: 4/4/2001
Action: Meeting or Teleconference Held
DEC Staff: Bill Janes
Action Description: Site visit and meeting with Nancy Maki, Alan Walker, Mark Ridgeway and Dean from Juneau Ready Mix. Latest thought is to evaluate encapsulation in a lined, sub-surface concrete vault. Next meeting scheduled 4/26 to go over compressability study results

Action Date: 4/22/2002
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: Project tickler update - Teleconference with Nancy about possibly doing asphalt incorporation and use as a subbase on property. Need to contact Analytica and get cost for total lead

Action Date: 4/11/2001
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: Email approval to screen junk and debris from the stockpiled soil sent to the Maki's thru Alan Walker. The email is in the Outlook site folder for reference.

Action Date: 4/1/2010
Action: Update or Other Action
DEC Staff: Traci Nebeker
Action Description: Check Received $300 from Law 03/18/10

Action Date: 4/1/2002
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: Project tickler update - Talked to Nancy about working with Gilfilian Engineering to combined soils from former Airport Union station now owned by Red Holloway. She will call Kris Iverson and try to meet with her while she is in town.

Action Date: 3/4/2002
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: Project tickler update - No action at this time. Wait another month to call Nancy.

Action Date: 3/2/2007
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: Met with the owner at the site; the asphalt cap is intact; discussed filiing data gaps to allow finishing the conditional closure and also about staying in touch with DOL Environmental Section.

Action Date: 3/18/1997
Action: Cleanup Plan Approved
DEC Staff: Sally Schlichting
Action Description: (Old R:Base Action Code = RAPA - Remedial Action Plan Approval). Work plan to characterize site and address lead and petroluem contamination. Plan includes test pits, monitoring wells, sampling and treatability study for solidification of lead contaminated soil.

E&L AUTO (Continued) **S104893267**

Action Date:	3/16/2012
Action:	Institutional Control Compliance Review
DEC Staff:	Bruce Wanstall
Action Description:	DEC received from the owner/operator responsible party Dougs' Inc, a signed copy of the institutional control agreement page pertaining to the cleanup complete with institutional control determination by the Contaminated Sites Program. Doug's Inc must submit a Report on property use and condition of the concrete pad and asphalt cap by May 15, 2012 and every 3 years thereafter. RP Reporting requirements are listed on page 7 of the closure wICs letter attached to the CS Database record.
Action Date:	2/7/2008
Action:	Institutional Control Record Established
DEC Staff:	Bruce Wanstall
Action Description:	Property future use institutional controls are established to ensure protection of the integrity of the site cleanup remedy that mitigates exposure to residual lead-in-soil contamination on the property. ADEC must be contacted immediately if the cap is damaged and before any planned excavation that might disturb the landspread/capping area in the southwest corner of the property or the diked fuel containment pad directly behind the main shop building. Access to subsurface soil or water on the property is prohibited under 18 AAC 75.375 unless property owner/operator coordinates said activity with ADEC.
Action Date:	12/4/2000
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	$200 received by Law.
Action Date:	12/31/1998
Action:	Update or Other Action
DEC Staff:	Sally Schlichting
Action Description:	File information sent to Kim Ogle of EPA RCRA at Region 10.
Action Date:	12/22/2011
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	Attached to the database record for E&L Auto is the Property Map Lot 4C Mendenhall Valley Industrial Park USS 1042 with marked areas of contaminated soil capped with concrete or asphalt to control access & infiltration of water. Due to total lead and minor petroleum soil contamination remaining in the two locations displayed on the map, institutional controls require the property owner to periodically submit a written report on maintenance and condition of the site control caps to the DEC IC Unit by regular or electronic mail. Plans for property ownership transfer require timely notice to the DEC. Plans to make alterations to the site control measures or to access groundwater on the property require coordination with the DEC before any related activity begins.
Action Date:	12/21/2011
Action:	Exposure Tracking Model Ranking
DEC Staff:	Bruce Wanstall
Action Description:	A new updated ranking with ETM has been completed for source area 78257 Fuel Containment Pad.

E&L AUTO (Continued) **S104893267**

Action Date:	12/21/2011
Action:	Exposure Tracking Model Ranking
DEC Staff:	Bruce Wanstall
Action Description:	A new updated ranking with ETM has been completed for source area 78256 Battery Salvage Debris.
Action Date:	12/20/2001
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Heard from Rabanco. $64/ton for transport from site to landfill where material will be used as top cover. Nancy Maki will call Teresa at Rabanco to solidify details. Quote good for 60 days.
Action Date:	12/16/2005
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	Site renamed from E&L Auto/ Glacier Muffler to E&L Auto. Glacier Muffler is a business operating at another address in Juneau. File review for cleanup final determination.
Action Date:	12/10/2001
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Called Alan Walker to re-engage project. Called Rabanco for quote for transport and disposal. Awaiting reply. Note - Phytoremediation does not look like a very promising technology for lead based on input from other project managers and the ITRC phytoremed. guidance manual
Action Date:	12/1/1994
Action:	Meeting or Teleconference Held
DEC Staff:	No Longer Assigned
Action Description:	Conference with EPA over remedial action.
Action Date:	11/9/2000
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	$200 check received by Law.
Action Date:	11/8/2000
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	$300 check received by Law.
Action Date:	11/7/2000
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Meeting with Alan Walker representing the Makis'. Timeline for project completion drafted. See site log this date for details.
Action Date:	11/6/1998
Action:	Update or Other Action
DEC Staff:	Sally Schlichting
Action Description:	Request for screening the stockpile of Pb contaminated soils.
Action Date:	11/3/2000
Action:	Update or Other Action
DEC Staff:	Bill Janes

E&L AUTO (Continued) **S104893267**

Action Description:	$200 received by Law.
Action Date:	11/28/1990
Action:	Update or Other Action
DEC Staff:	Bruce Wanstall
Action Description:	E&L Auto listed on Comprehensive Environmental Response, Compensation and Liability Act (CERCLIS) database. ID AKD983069055; not on the National Priority List (NPL).
Action Date:	11/27/2002
Action:	Meeting or Teleconference Held
DEC Staff:	Bill Janes
Action Description:	Meeting with Ridgway to go over latest soil stockpile sampling results. Five samples range from 550 ppm up to 3400 ppm. One sample at 25,000 ppm.
Action Date:	11/19/1997
Action:	Cleanup Level(s) Approved
DEC Staff:	Sally Schlichting
Action Description:	Alternative cleanup levels applying the draft petroleum standards approved conditional on groundwater sample results: 1,250 mg/kg DRO, 2,800 mg/kg RRO, screening for BTEX and PAH's will not be necessary.
Action Date:	11/14/2016
Action:	Institutional Control Update
DEC Staff:	Evonne Reese
Action Description:	The reminder system has been set for January 1, 2017 to schedule a DEC site inspection to verify that land use conditions remain protective.
Action Date:	11/10/1994
Action:	Site Ranked Using the AHRM
DEC Staff:	No Longer Assigned
Action Description:	Initial ranking.
Action Date:	10/6/2017
Action:	Institutional Control Update
DEC Staff:	Kristin Thompson
Action Description:	The site inspection follow-up letter was issued this date.
Action Date:	10/4/2000
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	$200 check received. Ongoing payments are $200/month.
Action Date:	10/4/1999
Action:	Update or Other Action
DEC Staff:	Sally Schlichting
Action Description:	$500 received from the Makis. Will make $500/month payments.
Action Date:	10/2/1996
Action:	Update or Other Action
DEC Staff:	Sally Schlichting
Action Description:	Seller and Prospective Buyer enter into a purchase agreement laying out costs, purchase price, liabilities and other issues.
Action Date:	10/15/1999

E&L AUTO (Continued) **S104893267**

Action: Site Characterization Workplan Approved
DEC Staff: Sally Schlichting
Action Description: Workplan for subsurface assessment as required in 5/14/98. The action date of this entry is not correct: need to reference the hard file to make correction.

Action Date: 10/10/2000
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: Cost Recovery Memorandum sent to Law - $4,888.43.

Action Date: 1/9/2013
Action: Update or Other Action
DEC Staff: Evonne Reese
Action Description: Received an EPA no further action approval document which specifies that they site must stay in compliance with DEC institional controls.

Action Date: 1/8/2001
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: $300 check received by Law.

Action Date: 1/5/2001
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: $200 received by Law.

Action Date: 1/27/2006
Action: Update or Other Action
DEC Staff: Bruce Wanstall
Action Description: Conceptual Site Model developed and cumulative risk evaluated for conditional closure of the site.

Action Date: 1/25/2002
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: Telcon with Nancy Maki. She has been working on details with Rabanco. They want TCLP run again. Told her to have Sally Wanstall call me regarding another round of soil sampling in screened stockpile first. Sampling to occur around March 1 when temp. is higher.

Action Date: 1/25/2001
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: Meeting with Nancy Maki and Alan Walker. Tied in Noel Spindler from SoluCorp. Revised workplan nearly complete and ready to be submitted. Should answer Dave Bartus (RCRA) concerns. Monthly status telecons scheduled. Need to check into remediation under part B of RCRA treatment rule as this could slow down process.

Action Date: 1/23/2001
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: $200 check received by Law.

Action Date: 1/20/2012
Action: Update or Other Action

E&L AUTO (Continued) **S104893267**

DEC Staff: Evonne Reese
Action Description: Deed notice filed at the Recorder's Office.

Action Date: 1/17/2012
Action: Cleanup Complete Determination Issued
DEC Staff: Bruce Wanstall
Action Description: DEC has completed a review of the environmental records associated with the E&L Auto site located at 10005 Crazy Horse Drive in Juneau, Alaska. Based on the information provided to date, DEC has determined that the contaminant concentrations remaining on site do not pose an unacceptable risk to human health or the environment and no further remedial action is required as long as the site is in compliance with established institutional controls. A letter is attached to the site record that summarizes the decision process used to determine the environmental status of this site and provides a summary of the regulatory issues considered in the Cleanup Complete with ICs determination.

Contaminants:
Staff: IC Unit, 9074655229 dec.icunit@alaska.gov

Contaminate Name1: E&L Auto
Contaminate Level Description1: Other
Contaminate Media1: Soil

Control Type: Notice of Environmental Contamination (Deed Notice)
Control Details Description1: Excavation / Soil Movement Restrictions
Contaminant CTD: The Deed Notice contains a text description of the site conditions and control measures including a site diagram and photograph show the soil cap locations. Specific maintenance and regular reporting to the DEC are requirements that the landowner is must perform in support of the institutional control agreement with the DEC.
Contaminant CDR: If soil is excavated on site, or groundwater is brought to the surface (such as for dewatering for construction), it must be characterized and managed in accordance with applicable regulations. Notification and approval of work plan is required before excavation can begin.
Comments: Not reported

Staff: IC Unit, 9074655229 dec.icunit@alaska.gov

Contaminate Name1: E&L Auto
Contaminate Level Description1: Other
Contaminate Media1: Soil

Control Type: Notice of Environmental Contamination (Deed Notice)
Control Details Description1: Advance approval required to transport soil or groundwater off-site.
Contaminant CTD: The Deed Notice contains a text description of the site conditions and control measures including a site diagram and photograph show the soil cap locations. Specific maintenance and regular reporting to the DEC are requirements that the landowner is must perform in support of the institutional control agreement with the DEC.
Contaminant CDR: In accordance with 75.325(i) transporting of soil and/or water off-site requires notification to ADEC. Standard condition.
Comments: Not reported

Staff: IC Unit, 9074655229 dec.icunit@alaska.gov

E&L AUTO (Continued) **S104893267**

Contaminate Name1:	E&L Auto
Contaminate Level Description1:	Other
Contaminate Media1:	Soil
Control Type:	Notice of Environmental Contamination (Deed Notice)
Control Details Description1:	Other
Contaminant CTD:	The Deed Notice contains a text description of the site conditions and control measures including a site diagram and photograph show the soil cap locations. Specific maintenance and regular reporting to the DEC are requirements that the landowner is must perform in support of the institutional control agreement with the DEC.
Contaminant CDR:	The current property owner and any future property owner of this site must submit a Report by May 15, 2012 and every 3 years thereafter. The Report shall include: (a) representative photos of the asphalt and concrete caps, including dates and locations of the shots; (b) a written description of the condition of the asphalt and concrete surfaces; (c) detailed description of any repairs and maintenance of the surfaces that have been undertaken since the last report; and (d) written confirmation that no change from industrial use has occurred at the property.
Comments:	Not reported
Staff:	IC Unit, 9074655229 dec.icunit@alaska.gov
Contaminate Name1:	E&L Auto
Contaminate Level Description1:	Other
Contaminate Media1:	Soil
Control Type:	Notice of Environmental Contamination (Deed Notice)
Control Details Description1:	Groundwater Use Restrictions
Contaminant CTD:	The Deed Notice contains a text description of the site conditions and control measures including a site diagram and photograph show the soil cap locations. Specific maintenance and regular reporting to the DEC are requirements that the landowner is must perform in support of the institutional control agreement with the DEC.
Contaminant CDR:	Installation of groundwater wells is prohibited without prior approval from ADEC.
Comments:	Not reported
Staff:	IC Unit, 9074655229 dec.icunit@alaska.gov
Contaminate Name1:	E&L Auto
Contaminate Level Description1:	Other
Contaminate Media1:	Soil
Control Type:	Notice of Environmental Contamination (Deed Notice)
Control Details Description1:	When Contaminated Soil is Accessible, Remediation Should Occur
Contaminant CTD:	The Deed Notice contains a text description of the site conditions and control measures including a site diagram and photograph show the soil cap locations. Specific maintenance and regular reporting to the DEC are requirements that the landowner is must perform in support of the institutional control agreement with the DEC.
Contaminant CDR:	Soil contamination is located under the 16’ X 16’ Concrete Pad in excess of approved cleanup criteria for diesel range hydrocarbons and total lead. When this pad is removed or the soil becomes accessible, the soil must be evaluated and addressed in accordance with an ADEC approved work plan.

E&L AUTO (Continued) **S104893267**

Comments:	Not reported
Staff:	IC Unit, 9074655229 dec.icunit@alaska.gov
Contaminate Name1:	E&L Auto
Contaminate Level Description1:	Other
Contaminate Media1:	Soil
Control Type:	Notice of Environmental Contamination (Deed Notice)
Control Details Description1:	Movement or use of contaminated material (including on site) in a manner that res
Contaminant CTD:	The Deed Notice contains a text description of the site conditions and control measures including a site diagram and photograph show the soil cap locations. Specific maintenance and regular reporting to the DEC are requirements that the landowner is must perform in support of the institutional control agreement with the DEC.
Contaminant CDR:	Standard condition.
Comments:	Not reported
Staff:	IC Unit, 9074655229 dec.icunit@alaska.gov
Contaminate Name1:	E&L Auto
Contaminate Level Description1:	Other
Contaminate Media1:	Soil
Control Type:	Notice of Environmental Contamination (Deed Notice)
Control Details Description1:	Restricted to Industrial / Commercial Land Use
Contaminant CTD:	The Deed Notice contains a text description of the site conditions and control measures including a site diagram and photograph show the soil cap locations. Specific maintenance and regular reporting to the DEC are requirements that the landowner is must perform in support of the institutional control agreement with the DEC.
Contaminant CDR:	Contaminated Sites Database notation provides notice to landowner (current or prospective) that future land-use cannot be changed from industrial-only. In accordance with 18 AAC 75.375, plans for a change in land-use must approved by ADEC. The current property owner must notify ADEC in writing of intent to change land use or property ownership.
Comments:	Not reported
Staff:	IC Unit, 9074655229 dec.icunit@alaska.gov
Contaminate Name1:	E&L Auto
Contaminate Level Description1:	Other
Contaminate Media1:	Soil
Control Type:	Notice of Environmental Contamination (Deed Notice)
Control Details Description1:	Maintenance / Inspection Of Engineering Controls
Contaminant CTD:	The Deed Notice contains a text description of the site conditions and control measures including a site diagram and photograph show the soil cap locations. Specific maintenance and regular reporting to the DEC are requirements that the landowner is must perform in support of the institutional control agreement with the DEC.
Contaminant CDR:	In accordance with 18 AAC 75.375(b)(2)disruption of asphalt or concrete slab soil caps on the property is not allowed without ADEC approval. ADEC must be immediately notified if the cap surface is damaged or disruption of its integrity becomes necessary.
Comments:	Not reported

E&L AUTO (Continued) **S104893267**

Staff:	IC Unit, 9074655229 dec.icunit@alaska.gov
Contaminate Name1:	E&L Auto
Contaminate Level Description1:	> Human Health/Ingestion/Inhalation
Contaminate Media1:	Soil
Control Type:	Notice of Environmental Contamination (Deed Notice)
Control Details Description1:	Excavation / Soil Movement Restrictions
Contaminant CTD:	The Deed Notice contains a text description of the site conditions and control measures including a site diagram and photograph show the soil cap locations. Specific maintenance and regular reporting to the DEC are requirements that the landowner is must perform in support of the institutional control agreement with the DEC.
Contaminant CDR:	If soil is excavated on site, or groundwater is brought to the surface (such as for dewatering for construction), it must be characterized and managed in accordance with applicable regulations. Notification and approval of work plan is required before excavation can begin.
Comments:	the greatest concentration of total lead in soil confirmation samples collected from residual soil at the site was 2,550 mg/kg.
Staff:	IC Unit, 9074655229 dec.icunit@alaska.gov
Contaminate Name1:	E&L Auto
Contaminate Level Description1:	> Human Health/Ingestion/Inhalation
Contaminate Media1:	Soil
Control Type:	Notice of Environmental Contamination (Deed Notice)
Control Details Description1:	Advance approval required to transport soil or groundwater off-site.
Contaminant CTD:	The Deed Notice contains a text description of the site conditions and control measures including a site diagram and photograph show the soil cap locations. Specific maintenance and regular reporting to the DEC are requirements that the landowner is must perform in support of the institutional control agreement with the DEC.
Contaminant CDR:	In accordance with 75.325(i) transporting of soil and/or water off-site requires notification to ADEC. Standard condition.
Comments:	the greatest concentration of total lead in soil confirmation samples collected from residual soil at the site was 2,550 mg/kg.
Staff:	IC Unit, 9074655229 dec.icunit@alaska.gov
Contaminate Name1:	E&L Auto
Contaminate Level Description1:	> Human Health/Ingestion/Inhalation
Contaminate Media1:	Soil
Control Type:	Notice of Environmental Contamination (Deed Notice)
Control Details Description1:	Other
Contaminant CTD:	The Deed Notice contains a text description of the site conditions and control measures including a site diagram and photograph show the soil cap locations. Specific maintenance and regular reporting to the DEC are requirements that the landowner is must perform in support of the institutional control agreement with the DEC.
Contaminant CDR:	The current property owner and any future property owner of this site must submit a Report by May 15, 2012 and every 3 years thereafter. The Report shall include: (a) representative photos of the asphalt and concrete caps, including dates and locations of the shots; (b) a written description of the condition of the asphalt and concrete surfaces; (c) detailed description of any repairs and maintenance of

E&L AUTO (Continued) **S104893267**

the surfaces that have been undertaken since the last report; and (d) written confirmation that no change from industrial use has occurred at the property.

Comments: the greatest concentration of total lead in soil confirmation samples collected from residual soil at the site was 2,550 mg/kg.

Staff: IC Unit, 9074655229 dec.icunit@alaska.gov

Contaminate Name1: E&L Auto
Contaminate Level Description1: > Human Health/Ingestion/Inhalation
Contaminate Media1: Soil

Control Type: Notice of Environmental Contamination (Deed Notice)
Control Details Description1: Groundwater Use Restrictions
Contaminant CTD: The Deed Notice contains a text description of the site conditions and control measures including a site diagram and photograph show the soil cap locations. Specific maintenance and regular reporting to the DEC are requirements that the landowner is must perform in support of the institutional control agreement with the DEC.
Contaminant CDR: Installation of groundwater wells is prohibited without prior approval from ADEC.
Comments: the greatest concentration of total lead in soil confirmation samples collected from residual soil at the site was 2,550 mg/kg.

Staff: IC Unit, 9074655229 dec.icunit@alaska.gov

Contaminate Name1: E&L Auto
Contaminate Level Description1: > Human Health/Ingestion/Inhalation
Contaminate Media1: Soil

Control Type: Notice of Environmental Contamination (Deed Notice)
Control Details Description1: When Contaminated Soil is Accessible, Remediation Should Occur
Contaminant CTD: The Deed Notice contains a text description of the site conditions and control measures including a site diagram and photograph show the soil cap locations. Specific maintenance and regular reporting to the DEC are requirements that the landowner is must perform in support of the institutional control agreement with the DEC.
Contaminant CDR: Soil contamination is located under the 16’ X 16’ Concrete Pad in excess of approved cleanup criteria for diesel range hydrocarbons and total lead. When this pad is removed or the soil becomes accessible, the soil must be evaluated and addressed in accordance with an ADEC approved work plan.
Comments: the greatest concentration of total lead in soil confirmation samples collected from residual soil at the site was 2,550 mg/kg.

Staff: IC Unit, 9074655229 dec.icunit@alaska.gov

Contaminate Name1: E&L Auto
Contaminate Level Description1: > Human Health/Ingestion/Inhalation
Contaminate Media1: Soil

Control Type: Notice of Environmental Contamination (Deed Notice)
Control Details Description1: Movement or use of contaminated material (including on site) in a manner that res
Contaminant CTD: The Deed Notice contains a text description of the site conditions and control measures including a site diagram and photograph show the soil cap locations. Specific maintenance and regular reporting to the DEC are requirements that the landowner is must perform in support of the

E&L AUTO (Continued) **S104893267**

institutional control agreement with the DEC.
Contaminant CDR: Standard condition.
Comments: the greatest concentration of total lead in soil confirmation samples collected from residual soil at the site was 2,550 mg/kg.

Staff: IC Unit, 9074655229 dec.icunit@alaska.gov

Contaminate Name1: E&L Auto
Contaminate Level Description1: > Human Health/Ingestion/Inhalation
Contaminate Media1: Soil

Control Type: Notice of Environmental Contamination (Deed Notice)
Control Details Description1: Restricted to Industrial / Commercial Land Use
Contaminant CTD: The Deed Notice contains a text description of the site conditions and control measures including a site diagram and photograph show the soil cap locations. Specific maintenance and regular reporting to the DEC are requirements that the landowner is must perform in support of the institutional control agreement with the DEC.
Contaminant CDR: Contaminated Sites Database notation provides notice to landowner (current or prospective) that future land-use cannot be changed from industrial-only. In accordance with 18 AAC 75.375, plans for a change in land-use must approved by ADEC. The current property owner must notify ADEC in writing of intent to change land use or property ownership.
Comments: the greatest concentration of total lead in soil confirmation samples collected from residual soil at the site was 2,550 mg/kg.

Staff: IC Unit, 9074655229 dec.icunit@alaska.gov

Contaminate Name1: E&L Auto
Contaminate Level Description1: > Human Health/Ingestion/Inhalation
Contaminate Media1: Soil

Control Type: Notice of Environmental Contamination (Deed Notice)
Control Details Description1: Maintenance / Inspection Of Engineering Controls
Contaminant CTD: The Deed Notice contains a text description of the site conditions and control measures including a site diagram and photograph show the soil cap locations. Specific maintenance and regular reporting to the DEC are requirements that the landowner is must perform in support of the institutional control agreement with the DEC.
Contaminant CDR: In accordance with 18 AAC 75.375(b)(2)disruption of asphalt or concrete slab soil caps on the property is not allowed without ADEC approval. ADEC must be immediately notified if the cap surface is damaged or disruption of its integrity becomes necessary.
Comments: the greatest concentration of total lead in soil confirmation samples collected from residual soil at the site was 2,550 mg/kg.

Staff: IC Unit, 9074655229 dec.icunit@alaska.gov

Contaminate Name1: E&L Auto
Contaminate Level Description1: > Human Health/Ingestion/Inhalation
Contaminate Media1: Soil

Control Type: Signed CS Determination
Control Details Description1: Excavation / Soil Movement Restrictions
Contaminant CTD: Contaminated Sites Database notation provides notice to landowner (current or prospective) that future land-use cannot be changed from

E&L AUTO (Continued) **S104893267**

industrial-only and disruption of subsurface soil and/or pore water on the property is not allowed without ADEC coordination.

Contaminant CDR: If soil is excavated on site, or groundwater is brought to the surface (such as for dewatering for construction), it must be characterized and managed in accordance with applicable regulations. Notification and approval of work plan is required before excavation can begin.

Comments: the greatest concentration of total lead in soil confirmation samples collected from residual soil at the site was 2,550 mg/kg.

Staff: IC Unit, 9074655229 dec.icunit@alaska.gov

Contaminate Name1: E&L Auto
Contaminate Level Description1: > Human Health/Ingestion/Inhalation
Contaminate Media1: Soil

Control Type: Signed CS Determination
Control Details Description1: Advance approval required to transport soil or groundwater off-site.
Contaminant CTD: Contaminated Sites Database notation provides notice to landowner (current or prospective) that future land-use cannot be changed from industrial-only and disruption of subsurface soil and/or pore water on the property is not allowed without ADEC coordination.

Contaminant CDR: In accordance with 75.325(i) transporting of soil and/or water off-site requires notification to ADEC. Standard condition.

Comments: the greatest concentration of total lead in soil confirmation samples collected from residual soil at the site was 2,550 mg/kg.

Staff: IC Unit, 9074655229 dec.icunit@alaska.gov

Contaminate Name1: E&L Auto
Contaminate Level Description1: > Human Health/Ingestion/Inhalation
Contaminate Media1: Soil

Control Type: Signed CS Determination
Control Details Description1: Other
Contaminant CTD: Contaminated Sites Database notation provides notice to landowner (current or prospective) that future land-use cannot be changed from industrial-only and disruption of subsurface soil and/or pore water on the property is not allowed without ADEC coordination.

Contaminant CDR: The current property owner and any future property owner of this site must submit a Report by May 15, 2012 and every 3 years thereafter. The Report shall include: (a) representative photos of the asphalt and concrete caps, including dates and locations of the shots; (b) a written description of the condition of the asphalt and concrete surfaces; (c) detailed description of any repairs and maintenance of the surfaces that have been undertaken since the last report; and (d) written confirmation that no change from industrial use has occurred at the property.

Comments: the greatest concentration of total lead in soil confirmation samples collected from residual soil at the site was 2,550 mg/kg.

Staff: IC Unit, 9074655229 dec.icunit@alaska.gov

Contaminate Name1: E&L Auto
Contaminate Level Description1: > Human Health/Ingestion/Inhalation
Contaminate Media1: Soil

Control Type: Signed CS Determination

E&L AUTO (Continued) **S104893267**

Control Details Description1:	Groundwater Use Restrictions
Contaminant CTD:	Contaminated Sites Database notation provides notice to landowner (current or prospective) that future land-use cannot be changed from industrial-only and disruption of subsurface soil and/or pore water on the property is not allowed without ADEC coordination.
Contaminant CDR:	Installation of groundwater wells is prohibited without prior approval from ADEC.
Comments:	the greatest concentration of total lead in soil confirmation samples collected from residual soil at the site was 2,550 mg/kg.
Staff:	IC Unit, 9074655229 dec.icunit@alaska.gov
Contaminate Name1:	E&L Auto
Contaminate Level Description1:	> Human Health/Ingestion/Inhalation
Contaminate Media1:	Soil
Control Type:	Signed CS Determination
Control Details Description1:	When Contaminated Soil is Accessible, Remediation Should Occur
Contaminant CTD:	Contaminated Sites Database notation provides notice to landowner (current or prospective) that future land-use cannot be changed from industrial-only and disruption of subsurface soil and/or pore water on the property is not allowed without ADEC coordination.
Contaminant CDR:	Soil contamination is located under the 16' X 16' Concrete Pad in excess of approved cleanup criteria for diesel range hydrocarbons and total lead. When this pad is removed or the soil becomes accessible, the soil must be evaluated and addressed in accordance with an ADEC approved work plan.
Comments:	the greatest concentration of total lead in soil confirmation samples collected from residual soil at the site was 2,550 mg/kg.
Staff:	IC Unit, 9074655229 dec.icunit@alaska.gov
Contaminate Name1:	E&L Auto
Contaminate Level Description1:	> Human Health/Ingestion/Inhalation
Contaminate Media1:	Soil
Control Type:	Signed CS Determination
Control Details Description1:	Movement or use of contaminated material (including on site) in a manner that res
Contaminant CTD:	Contaminated Sites Database notation provides notice to landowner (current or prospective) that future land-use cannot be changed from industrial-only and disruption of subsurface soil and/or pore water on the property is not allowed without ADEC coordination.
Contaminant CDR:	Standard condition.
Comments:	the greatest concentration of total lead in soil confirmation samples collected from residual soil at the site was 2,550 mg/kg.
Staff:	IC Unit, 9074655229 dec.icunit@alaska.gov
Contaminate Name1:	E&L Auto
Contaminate Level Description1:	> Human Health/Ingestion/Inhalation
Contaminate Media1:	Soil
Control Type:	Signed CS Determination
Control Details Description1:	Restricted to Industrial / Commercial Land Use
Contaminant CTD:	Contaminated Sites Database notation provides notice to landowner (current or prospective) that future land-use cannot be changed from industrial-only and disruption of subsurface soil and/or pore water on

E&L AUTO (Continued) **S104893267**

	the property is not allowed without ADEC coordination.
Contaminant CDR:	Contaminated Sites Database notation provides notice to landowner (current or prospective) that future land-use cannot be changed from industrial-only. In accordance with 18 AAC 75.375, plans for a change in land-use must approved by ADEC. The current property owner must notify ADEC in writing of intent to change land use or property ownership.
Comments:	the greatest concentration of total lead in soil confirmation samples collected from residual soil at the site was 2,550 mg/kg.
Staff:	IC Unit, 9074655229 dec.icunit@alaska.gov
Contaminate Name1:	E&L Auto
Contaminate Level Description1:	> Human Health/Ingestion/Inhalation
Contaminate Media1:	Soil
Control Type:	Signed CS Determination
Control Details Description1:	Maintenance / Inspection Of Engineering Controls
Contaminant CTD:	Contaminated Sites Database notation provides notice to landowner (current or prospective) that future land-use cannot be changed from industrial-only and disruption of subsurface soil and/or pore water on the property is not allowed without ADEC coordination.
Contaminant CDR:	In accordance with 18 AAC 75.375(b)(2)disruption of asphalt or concrete slab soil caps on the property is not allowed without ADEC approval. ADEC must be immediately notified if the cap surface is damaged or disruption of its integrity becomes necessary.
Comments:	the greatest concentration of total lead in soil confirmation samples collected from residual soil at the site was 2,550 mg/kg.
Staff:	IC Unit, 9074655229 dec.icunit@alaska.gov
Contaminate Name1:	E&L Auto
Contaminate Level Description1:	Other
Contaminate Media1:	Soil
Control Type:	Signed CS Determination
Control Details Description1:	Excavation / Soil Movement Restrictions
Contaminant CTD:	Contaminated Sites Database notation provides notice to landowner (current or prospective) that future land-use cannot be changed from industrial-only and disruption of subsurface soil and/or pore water on the property is not allowed without ADEC coordination.
Contaminant CDR:	If soil is excavated on site, or groundwater is brought to the surface (such as for dewatering for construction), it must be characterized and managed in accordance with applicable regulations. Notification and approval of work plan is required before excavation can begin.
Comments:	Not reported
Staff:	IC Unit, 9074655229 dec.icunit@alaska.gov
Contaminate Name1:	E&L Auto
Contaminate Level Description1:	Other
Contaminate Media1:	Soil
Control Type:	Signed CS Determination
Control Details Description1:	Advance approval required to transport soil or groundwater off-site.
Contaminant CTD:	Contaminated Sites Database notation provides notice to landowner (current or prospective) that future land-use cannot be changed from

E&L AUTO (Continued) **S104893267**

industrial-only and disruption of subsurface soil and/or pore water on the property is not allowed without ADEC coordination.

Contaminant CDR: In accordance with 75.325(i) transporting of soil and/or water off-site requires notification to ADEC. Standard condition.

Comments: Not reported

Staff: IC Unit, 9074655229 dec.icunit@alaska.gov

Contaminate Name1: E&L Auto
Contaminate Level Description1: Other
Contaminate Media1: Soil

Control Type: Signed CS Determination
Control Details Description1: Other
Contaminant CTD: Contaminated Sites Database notation provides notice to landowner (current or prospective) that future land-use cannot be changed from industrial-only and disruption of subsurface soil and/or pore water on the property is not allowed without ADEC coordination.

Contaminant CDR: The current property owner and any future property owner of this site must submit a Report by May 15, 2012 and every 3 years thereafter. The Report shall include: (a) representative photos of the asphalt and concrete caps, including dates and locations of the shots; (b) a written description of the condition of the asphalt and concrete surfaces; (c) detailed description of any repairs and maintenance of the surfaces that have been undertaken since the last report; and (d) written confirmation that no change from industrial use has occurred at the property.

Comments: Not reported

Staff: IC Unit, 9074655229 dec.icunit@alaska.gov

Contaminate Name1: E&L Auto
Contaminate Level Description1: Other
Contaminate Media1: Soil

Control Type: Signed CS Determination
Control Details Description1: Groundwater Use Restrictions
Contaminant CTD: Contaminated Sites Database notation provides notice to landowner (current or prospective) that future land-use cannot be changed from industrial-only and disruption of subsurface soil and/or pore water on the property is not allowed without ADEC coordination.

Contaminant CDR: Installation of groundwater wells is prohibited without prior approval from ADEC.

Comments: Not reported

Staff: IC Unit, 9074655229 dec.icunit@alaska.gov

Contaminate Name1: E&L Auto
Contaminate Level Description1: Other
Contaminate Media1: Soil

Control Type: Signed CS Determination
Control Details Description1: When Contaminated Soil is Accessible, Remediation Should Occur
Contaminant CTD: Contaminated Sites Database notation provides notice to landowner (current or prospective) that future land-use cannot be changed from industrial-only and disruption of subsurface soil and/or pore water on the property is not allowed without ADEC coordination.

E&L AUTO (Continued) **S104893267**

Contaminant CDR:	Soil contamination is located under the 16' X 16' Concrete Pad in excess of approved cleanup criteria for diesel range hydrocarbons and total lead. When this pad is removed or the soil becomes accessible, the soil must be evaluated and addressed in accordance with an ADEC approved work plan.
Comments:	Not reported
Staff:	IC Unit, 9074655229 dec.icunit@alaska.gov
Contaminate Name1:	E&L Auto
Contaminate Level Description1:	Other
Contaminate Media1:	Soil
Control Type:	Signed CS Determination
Control Details Description1:	Movement or use of contaminated material (including on site) in a manner that res
Contaminant CTD:	Contaminated Sites Database notation provides notice to landowner (current or prospective) that future land-use cannot be changed from industrial-only and disruption of subsurface soil and/or pore water on the property is not allowed without ADEC coordination.
Contaminant CDR:	Standard condition.
Comments:	Not reported
Staff:	IC Unit, 9074655229 dec.icunit@alaska.gov
Contaminate Name1:	E&L Auto
Contaminate Level Description1:	Other
Contaminate Media1:	Soil
Control Type:	Signed CS Determination
Control Details Description1:	Restricted to Industrial / Commercial Land Use
Contaminant CTD:	Contaminated Sites Database notation provides notice to landowner (current or prospective) that future land-use cannot be changed from industrial-only and disruption of subsurface soil and/or pore water on the property is not allowed without ADEC coordination.
Contaminant CDR:	Contaminated Sites Database notation provides notice to landowner (current or prospective) that future land-use cannot be changed from industrial-only. In accordance with 18 AAC 75.375, plans for a change in land-use must approved by ADEC. The current property owner must notify ADEC in writing of intent to change land use or property ownership.
Comments:	Not reported
Staff:	IC Unit, 9074655229 dec.icunit@alaska.gov
Contaminate Name1:	E&L Auto
Contaminate Level Description1:	Other
Contaminate Media1:	Soil
Control Type:	Signed CS Determination
Control Details Description1:	Maintenance / Inspection Of Engineering Controls
Contaminant CTD:	Contaminated Sites Database notation provides notice to landowner (current or prospective) that future land-use cannot be changed from industrial-only and disruption of subsurface soil and/or pore water on the property is not allowed without ADEC coordination.
Contaminant CDR:	In accordance with 18 AAC 75.375(b)(2)disruption of asphalt or concrete slab soil caps on the property is not allowed without ADEC approval. ADEC must be immediately notified if the cap surface is

E&L AUTO (Continued) **S104893267**

damaged or disruption of its integrity becomes necessary.
Comments: Not reported

ENG CONTROLS:
File Number: 1513.38.022
Facility Status: Cleanup Complete - Institutional Controls
Control Details Description: Maintenance / Inspection Of Engineering Controls
Hazard ID: 1183

Inst Control:
Hazard ID: 1183
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Record Established
Action Date: 2/7/2008
File Number: 1513.38.022

Hazard ID: 1183
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Compliance Review
Action Date: 3/16/2012
File Number: 1513.38.022

Hazard ID: 1183
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Periodic Reporting
Action Date: 6/15/2012
File Number: 1513.38.022

Hazard ID: 1183
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Update
Action Date: 5/15/2015
File Number: 1513.38.022

Hazard ID: 1183
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Periodic Reporting
Action Date: 6/16/2015
File Number: 1513.38.022

Hazard ID: 1183
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Update
Action Date: 11/14/2016
File Number: 1513.38.022

Hazard ID: 1183
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Update
Action Date: 9/11/2017
File Number: 1513.38.022

Hazard ID: 1183
Facility Status: Cleanup Complete - Institutional Controls
Action: Institutional Control Update

E&L AUTO (Continued) **S104893267**

Action Date: 10/6/2017
File Number: 1513.38.022

106
NNW
1/2-1
0.859 mi.
4535 ft.

RESIDENCE - NANCY STREET JNU **AK SHWS** **S107504671**
8905 NANCY STREET **N/A**
JUNEAU, AK 99801

Relative: Higher

Actual: 31 ft.

SHWS:

File Number:	1513.38.065
Staff:	Not reported
Facility Status:	Cleanup Complete
Latitude:	58.375556
Longitude:	-134.577500
Hazard ID:	3710
Problem:	Heating oil spill estimated at 300 gallons when an aboveground tank toppled over. Sixty cubic yards of contaminated soil was excavated and remediated off-site. A small amount of contaminated soil was trapped beneath the foundation of the neighboring residence.

Actions:

Action Date:	9/28/2005
Action:	Site Added to Database
DEC Staff:	Bruce Wanstall
Action Description:	surface heating oil spill estimated at 300 gallons

Action Date:	9/28/2005
Action:	GIS Position Updated
DEC Staff:	Bruce Wanstall
Action Description:	Lat long data entered for residence. Metadata include Topozone Pro web utility data projected on USGS 1:24,000 scale topographic map saved at jnusvr G:\\SPAR\\Spar-Contaminated Sites\\38 Case Files (Contaminated Sites)\\1513 Juneau\\1513.38.065 Residence Nancy Street Spill. Accuracy estimated at 100 meters.

Action Date:	9/28/2005
Action:	Spill Transferred from Prevention Preparedness and Response Program
DEC Staff:	Bruce Wanstall
Action Description:	Spill 01-1199-086-04, file1513-02-244

Action Date:	5/20/2001
Action:	Cleanup Plan Approved
DEC Staff:	Bruce Wanstall
Action Description:	The DEC approved transport of an estimated volume of two cubic yards of petroleum contaminated material to the Juneau Landfill facility where the soil was treated by incineration. Final placement of the soil was for solid waste cover material at the landfill.

Action Date:	4/10/2001
Action:	Cleanup Plan Approved
DEC Staff:	Bruce Wanstall
Action Description:	An estimated volume of 60 cubic yards of contaminated material was transported with approval of the DEC to United Soil Recycling facility in Juneau where the soil was thermally remediated and released by the DEC for final placement at a non-specified environmentally non-sensitive location.

RESIDENCE - NANCY STREET JNU (Continued) **S107504671**

Action Date:	11/3/2005
Action:	Site Characterization Report Approved
DEC Staff:	Bruce Wanstall
Action Description:	Additional Soil Removal and Site Assessment Report reviewed; Cleanup Final Report approved.
Action Date:	11/22/2005
Action:	Site Closure Approved
DEC Staff:	Bruce Wanstall
Action Description:	Site closure letter sent to responsible party; copied to consultant and neighboring residence. Letter saved at G:\\SPAR\\Spar-Contaminated Sites\\38 Case Files (Contaminated Sites)\\1513 Juneau\\1513.38.065 Residence Nancy Street Spill
Action Date:	10/21/2005
Action:	Cleanup Level(s) Approved
DEC Staff:	Bruce Wanstall
Action Description:	Recovered Cleanup Report from SART file transfer recovery project FY05; review laboratory data for QA/QC. Method Two, Tables B1 and B2, migration to groundwater for the over 40 inch zone for diesel range hydrocarbons in soil of 230mg/kg are approved for the site cleanup.
Action Date:	10/20/2005
Action:	Site Ranked Using the AHRM
DEC Staff:	Bruce Wanstall
Action Description:	Potential exposure assessment has ingestion, inhalation, and dermal pathways complete for residential land use scenario. Area serviced by the City and Borough of Juneau Public Water System.

Contaminants:

Staff:	Not reported
Contaminate Name1:	Residence - Nancy Street Jnu
Contaminate Level Description1:	Not reported
Contaminate Media1:	Not reported
Control Type:	No ICs Required
Control Details Description1:	Advance approval required to transport soil or groundwater off-site.
Contaminant CTD:	Not reported
Contaminant CDR:	Not reported
Comments:	For more information about this site, contact DEC at (907) 465-5390.

107
NW
1/2-1
0.869 mi.
4590 ft.

RIVERBEND / DIMOND PARK **AK SHWS** **S104893282**
2900 RIVERSIDE DRIVE, 1/2 MILE NORTH OF EGAN DR **AK INST CONTROL** **N/A**
JUNEAU, AK 99801

Relative: Higher

Actual: 20 ft.

SHWS:

File Number:	1513.38.007
Staff:	IC Unit, 9074655229 dec.icunit@alaska.gov
Facility Status:	Cleanup Complete
Latitude:	58.376300
Longitude:	-134.592000
Hazard ID:	299
Problem:	Buried drums of asphalt uncovered, soil contamination, sampling was

RIVERBEND / DIMOND PARK (Continued) **S104893282**

done in summer 1993 by contractor, results to be submitted. 1996-Results and site investigation work from 1993 finally submitted by CBJ. PA submitted by Tryck, Nyman, Hayes in 1987 stated that benzene and toluene were detected in the drinking water well of a nearby restaurant during 1985. No conclusive evidence was found to link the contamination to the Red Samm site. The restaurant hooked up to city water in 1986. 1996-Contamination encountered during foundation construction for elementary school. Work halted, and consultant hired to do assessment. Site name has been changed from Red Samm Construction to current. Rescored. Tract B-1 and B-2, USS 1284. Janes assigned at site closure.

Actions:

Action Date:	9/4/1996
Action:	Interim Removal Action Approved
DEC Staff:	Sally Schlichting
Action Description:	Klein and Schlichting met with CBJ's consultant Montgomery Watson and verbal approval was given to proceed immediately with limited site investigation in the foundation area of school, after contamination was encountered in a trench and worker overcome by fumes. Full-fledged workplan for investigation pending.
Action Date:	9/3/1993
Action:	Site Ranked Using the AHRM
DEC Staff:	No Longer Assigned
Action Description:	Contaminated soil at the surface was removed for disposal.
Action Date:	9/22/1998
Action:	Update or Other Action
DEC Staff:	Sally Schlichting
Action Description:	New stockpile location and request to move soils approved with confirmation and sampling at old site.
Action Date:	9/13/1993
Action:	Site Added to Database
DEC Staff:	No Longer Assigned
Action Description:	Buried drums of asphalt. Site ownership and responsibility not known and under dispute.
Action Date:	8/8/2018
Action:	Update or Other Action
DEC Staff:	Danielle Duncan
Action Description:	The minor excavation on the playground was completed. Approximately 3/4 yards of soil was excavated that had some asphalt but was less extensive than what was observed on the ball field.
Action Date:	8/26/1999
Action:	Update or Other Action
DEC Staff:	Sally Schlichting
Action Description:	Workplan to sample stockpiled soils formerly from property and now located at Glacier Properties near Montana Creek.
Action Date:	8/20/1993
Action:	Interim Removal Action Approved
DEC Staff:	No Longer Assigned
Action Description:	(Old R:Base Action Code = SC - Site Control (Emergency Response)). ADEC responded to a report of buried drums at the site. Contaminated soil (asphalt) was stockpiled and later removed. 8 drums were

RIVERBEND / DIMOND PARK (Continued) **S104893282**

removed. Additional excavation was put on hold until negotiations of ownership were resolved between buyer and seller.

Action Date: 8/15/1997
Action: Update or Other Action
DEC Staff: Sally Schlichting
Action Description: Public information fact sheet distributed to parents and public.

Action Date: 8/1/1996
Action: Update or Other Action
DEC Staff: Sally Schlichting
Action Description: Formal approval for temporary stockpile (90days). Plan included good liner, berm, fence and cover. Additional soils from other areas of the site were added to this pile, located on the property. Expected total was 1200 cubic yards.

Action Date: 7/7/1999
Action: Update or Other Action
DEC Staff: Sally Schlichting
Action Description: Final verification from Coleman Metals disposal facility in Salem Oregon, that all transformers associated with Red Samm, previously stored at the Dimond Park property and later at Anka Street in Lemon Creek were received for final disposition.

Action Date: 7/3/1997
Action: Update or Other Action
DEC Staff: Sally Schlichting
Action Description: Revised approval of CAP.

Action Date: 7/27/2018
Action: Site Visit
DEC Staff: Danielle Duncan
Action Description: Visited the site while Nortech excavation was underway. Buried, solid asphalt fill was observed in addition to tacky, tar/chip seal material. Approved the use of solid, asphalt as fill, but required that the tacky material be excavated to a depth of 3 feet to prevent direct contact by the public. Below the asphalt materials, contaminated soil of unknown composition was observed and sampled. The excavation was lined and backfilled. Pending analytical results, the material will likely be excavated and disposed of appropriately.

Action Date: 7/24/2018
Action: Site Characterization Workplan Approved
DEC Staff: Danielle Duncan
Action Description: The work plan describes spot excavations using mechanical equipment and/or manually as necessary between ballfields 1 and 4 and at the Riverbend Elementary School playground. The excavations will proceed to the extent practicable taking care not to disrupt utilities and other site features. Laboratory samples will be analyzed for diesel range organics (DRO), gasoline range organics (GRO), residual range organics (RRO), volatile organic compounds (VOCs), and polycyclic aromatic hydrocarbons (PAHs).

Action Date: 7/24/2002
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: CR check received by Law for $399.57.

RIVERBEND / DIMOND PARK (Continued) **S104893282**

Action Date: 7/23/2018
Action: Meeting or Teleconference Held
DEC Staff: Danielle Duncan
Action Description: Met with J. Ginter of Nortech to discuss the work plan to excavate tar seep locations. Work planned for this Friday.

Action Date: 7/22/1999
Action: Update or Other Action
DEC Staff: Sally Schlichting
Action Description: June 99 test pit data; January 99 geophysical survey results received. Not reported

Action Date: 6/30/2000
Action: Site Characterization Workplan Approved
DEC Staff: Bill Janes
Action Description: Agency review draft submitted to department on June 5. Letter is at G:\\SPAR\\Spar-Contaminated Sites\\SITES\\RivBend Site Char Wrkpln Approval.DOC.

Action Date: 6/25/2018
Action: Workplan Requested
DEC Staff: Danielle Duncan
Action Description: Site re-opened and a work plan has been requested.

Action Date: 6/25/2018
Action: Site Visit
DEC Staff: Danielle Duncan
Action Description: Site visit to check that a fence has been put up to prevent public access to the area where the tar was surfacing.

Action Date: 6/25/1996
Action: Interim Removal Action Approved
DEC Staff: Sally Schlichting
Action Description: At Kegler's request, visited site with Kegler and Doug Toland following report by city of buried waste encountered during site prep work for the new Riverbend Elementary school. Batteries, asphalt material, container of oil and other debris was found in this old burial mound near the western edge of the proposed school site. ADEC gave verbal instructions/approval to temporarily stockpile material and have the area and soils sampled.

Action Date: 6/24/1998
Action: Update or Other Action
DEC Staff: Sally Schlichting
Action Description: Final cleanup report approved; approximately 30 cubic yards of diesel contaminated soil around buried culvert remains with concentrations less than 600 mg/kg. Institutional control/deed notice may need to be required, but as of 11/30/99 no notice of recorded deed has been provided to ADEC.

Action Date: 6/21/2018
Action: Site Reopened
DEC Staff: Danielle Duncan
Action Description: Report by Parks and Rec that potential asphalt balls have been seeping out of the baseball filed in between fields 3 and 4. The material has been containerized and an investigation will be made as to the extent and a removal will occur if needed

RIVERBEND / DIMOND PARK (Continued) **S104893282**

Action Date: 6/2/1997
Action: Update or Other Action
DEC Staff: Sally Schlichting
Action Description: Letter to CBJ contractor approving no further action for TCE contaminated soil.

Action Date: 6/11/2003
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: Close-out site log sent to CR Unit for period 9/02 through 5/03.

Action Date: 5/8/2003
Action: Long Term Monitoring Established
DEC Staff: Bill Janes
Action Description: Not reported

Action Date: 5/8/2003
Action: Institutional Control Record Established
DEC Staff: Bill Janes
Action Description: City and Borough of Juneau property development tag placed on CBJ permits database. No drinking water wells allowed due to what appears to be DRO near the west side of the property. Reference NFRAP decision for exact tag language. No deed notice required.

Action Date: 5/8/2003
Action: Conditional Closure Approved
DEC Staff: Bill Janes
Action Description: Conditional closure decision document on file.

Action Date: 5/22/1997
Action: Cleanup Plan Approved
DEC Staff: Sally Schlichting
Action Description: Approval to treat soils in biocell.

Action Date: 4/9/1999
Action: Update or Other Action
DEC Staff: Sally Schlichting
Action Description: Preliminary soil and GW assessment received.

Action Date: 4/7/1997
Action: Update or Other Action
DEC Staff: Sally Schlichting
Action Description: Status letter to CBJ on cleanup.

Action Date: 4/27/2000
Action: Meeting or Teleconference Held
DEC Staff: Bill Janes
Action Description: Teleconference with Emerald, CBJ, Minter and Baxter regarding comments on draft workplan and Minter's April 24 reply letter.

Action Date: 4/2/1998
Action: Update or Other Action
DEC Staff: Sally Schlichting
Action Description: Remediation plan and pilot study to evaluate effectiveness of Enzyme Treatment Technology approved.

Action Date: 4/13/2000

RIVERBEND / DIMOND PARK (Continued) **S104893282**

Action: Update or Other Action
DEC Staff: Sally Schlichting
Action Description: Letter requesting changes to November 1, 1999 draft workplan sent to Minter.

Action Date: 3/8/2001
Action: Update or Other Action
DEC Staff: Mike Jaynes
Action Description: Cost Recovery received for $1439.01 from Red Samm Construction.

Action Date: 3/3/2004
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: Email to CBJ telling them that property development tag may be removed at this time. Asked for response on their decision.

Action Date: 2/5/2003
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: Final cleanup report received from Steve Minter incorporating requested modifications to the draft.

Action Date: 2/3/2003
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: Commissioner's Office received anonymous note about construction waste surfacing in the playground. I sent an email to CBJ recommending exploratory excavation work and solid waste cleanup this summer.

Action Date: 2/28/2003
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: Called Lands and Resources for correct email address for Gilbertson. Sent the draft NFRAP requesting he look at the proposed ICs. Requested response by mid-March.

Action Date: 2/22/2002
Action: Update or Other Action
DEC Staff: Mike Jaynes
Action Description: Visited Riverbend school facility to view metal rising out of schoolyard at request of Fred Wilson, maintenance supervisor. None seen due to snow on ground. Told him to call me with updates on situation. Also mentioned to have people call me if they have any concerns.

Action Date: 2/19/2004
Action: Long Term Monitoring Complete
DEC Staff: Bill Janes
Action Description: GW monitoring results from 2/10/04 received. DRO still above cleanup levels w/o silica gel cleanup but below with silica gel. Natural biogenic interference indicated. Monitoring program will be terminated and site closed.

Action Date: 2/13/2003
Action: Update or Other Action
DEC Staff: Bill Janes

RIVERBEND / DIMOND PARK (Continued) **S104893282**

Action Description:	Re-sent above email to Steve Gilbertson at CBJ. Email kicked back due to incorrect address.
Action Date:	12/18/1998
Action:	Update or Other Action
DEC Staff:	Sally Schlichting
Action Description:	Stockpile plan II approval to move and stockpile soil at property near Montana Creek.
Action Date:	12/17/1993
Action:	Update or Other Action
DEC Staff:	Sally Schlichting
Action Description:	Supplementary site assessment by Bayliss further defined areas of contamination previously reported in the 10/20/93 report. This report was submitted by the city to ADEC in 9/96.
Action Date:	12/13/2013
Action:	Institutional Control Compliance Review
DEC Staff:	Evonne Reese
Action Description:	IC review conducted. According to the 2/19/2004 action regarding groundwater sampling, the ICs can be removed.
Action Date:	12/13/2013
Action:	Institutional Control Record Removed
DEC Staff:	Evonne Reese
Action Description:	The conditions at this site meet the 2009 closure policy, therefore ICs can be removed. The information included in the 2003 conditional closure decision document is still applicable along with the default requirement of no offsite transport of soil or groundwater without prior approval from ADEC. In accordance with 18 AAC 75.380(d)(2), ADEC may require additional site assessment, monitoring, remediation, and/or other necessary actions at this facility should new information become available that indicates contamination at this site may pose a threat to human health or the environment.
Action Date:	11/16/2000
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Test pitting in several potential source areas (borrow pits and equipment storage) based on historic uses and air photos. Field screening did not indicate any problems except in the area of some buried asphalt slabs. Boring and wells to follow.
Action Date:	10/8/1996
Action:	Update or Other Action
DEC Staff:	Sally Schlichting
Action Description:	Score updated on database to reflect new information.
Action Date:	10/7/1999
Action:	Update or Other Action
DEC Staff:	Sally Schlichting
Action Description:	FOIA request from an Alan Stanhope for file copy was filled.
Action Date:	10/4/2000
Action:	Update or Other Action
DEC Staff:	Bill Janes
Action Description:	Discussed plan with Minter. See details on my site log this date.

RIVERBEND / DIMOND PARK (Continued) **S104893282**

Action Date: 10/23/2003
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: GW monitoring results from late September sampling received. DRO above cleanup levels w/o silica gel cleanup but below with silica gel. Next monitoring scheduled late January or early February 04.

Action Date: 10/20/1999
Action: Meeting or Teleconference Held
DEC Staff: Sally Schlichting
Action Description: Meeting with CBJ, contractors, attorneys, parks and recreation and responsible parties to discuss long-range plans for both site characterization, cleanup and site development.

Action Date: 10/20/1993
Action: Update or Other Action
DEC Staff: Sally Schlichting
Action Description: Site assessment done by Bayliss for the City indicated contamination in the vicinity of the maintenance buildings and greenhouse. This document was not submitted by the city to ADEC until 9/96.

Action Date: 10/2/1996
Action: Update or Other Action
DEC Staff: Sally Schlichting
Action Description: (Old R:Base Action Code = SA2A - Phase II SA Approval / Release Investigation). Workplan defines areas to be investigated, approach. Includes widespread test pits, sampling and analysis, site safety, groundwater monitoring.

Action Date: 10/15/1999
Action: Update or Other Action
DEC Staff: Sally Schlichting
Action Description: Undated draft workplan (September 99) received from Steve Minter.

Action Date: 10/1/1987
Action: Preliminary Assessment Approved
DEC Staff: No Longer Assigned
Action Description: Conclusions: Possibility of hazardous wastes deposited in the pit at this site is considered unlikely. Benzene and lead detected at nearby restaurant not attributed to this site. Transformers at the site were not leaking and were removed. Toluene was measured in the water of Pit A at 286 ug/L, but not at on-site drinking water well. Source not known.

Action Date: 1/27/2003
Action: Update or Other Action
DEC Staff: Bill Janes
Action Description: Emailed CBJ Community Development Director for input regarding the need for ICs at the site.

Action Date: 1/26/1998
Action: Update or Other Action
DEC Staff: Sally Schlichting
Action Description: ADEC request for CAP addressing a number of issues.

Contaminants:
Staff: IC Unit, 9074655229 dec.icunit@alaska.gov

RIVERBEND / DIMOND PARK (Continued) **S104893282**

Contaminate Name1: Riverbend / Dimond Park
Contaminate Level Description1: < Table C
Contaminate Media1: Groundwater

Control Type: No ICs Required
Control Details Description1: Advance approval required to transport soil or groundwater off-site.
Contaminant CTD: Not reported
Contaminant CDR: Not reported
Comments: Not reported

Inst Control:
Hazard ID: 299
Facility Status: Cleanup Complete
Action: Institutional Control Record Established
Action Date: 5/8/2003
File Number: 1513.38.007

Hazard ID: 299
Facility Status: Cleanup Complete
Action: Institutional Control Compliance Review
Action Date: 12/13/2013
File Number: 1513.38.007

Hazard ID: 299
Facility Status: Cleanup Complete
Action: Institutional Control Record Removed
Action Date: 12/13/2013
File Number: 1513.38.007

108
NW
1/2-1
0.902 mi.
4762 ft.

RESIDENCE - 2822 MARSHA AVENUE **AK SHWS** **S118454846**
2822 MARSHA AVENUE **N/A**
JUNEAU, AK 99801

Relative:
Higher

Actual:
25 ft.

SHWS:
File Number: 1513.38.097
Staff: Amy Rodman, 9074655368 amy.rodman@alaska.gov
Facility Status: Active
Latitude: 58.375368
Longitude: -134.583907
Hazard ID: 26468
Problem: In July 2013 a leak was discovered in a fuel line to an aboveground heating oil tank. The property was purchased in 2012 and the existing underground storage tank was replaced with an aboveground storage tank at that time, but the existing fuel lines were connected to the new tank. An undetermined amount of diesel was released to the ground adjacent to the residential structure. Seasonal high groundwater events caused contaminated groundwater to flood the crawlspace. Initial remediation efforts included excavation inside and outside the crawlspace and installation of a sump pump with an oil-water separator to remove contaminated groundwater. Additionally, a sealed vapor barrier was installed in the crawlspace to mitigate contaminant vapors migrating into the structure. Contaminants remain in soil and groundwater beneath the residence.

RESIDENCE - 2822 MARSHA AVENUE (Continued) **S118454846**

Actions:

Action Date:	7/23/2013
Action:	Potentially Responsible Party/State Interest Letter
DEC Staff:	Mitzi Read
Action Description:	Potentially responsible party / state interest letter sent to landowner by PPR staff Bob Mattson.
Action Date:	4/23/2018
Action:	Workplan Requested
DEC Staff:	Amy Rodman
Action Description:	Work plan request letter mailed to RP via USPS Certified mail. Work plan due on updated deadline of September 17, 2018.
Action Date:	2/27/2017
Action:	Potentially Responsible Party/State Interest Letter
DEC Staff:	Christy Howard
Action Description:	Potentially responsible party/state interest letter send to landowner with request for updated information.
Action Date:	11/6/2015
Action:	Spill Transferred from Prevention Preparedness and Response Program
DEC Staff:	Mitzi Read
Action Description:	Spill transferred by PPR staff Bob Mattson. Spill no. 13119919601; spill date = 7/15/13; substance = diesel; quantity = ~250 gallons; source = fuel line from heating oil tank.
Action Date:	11/10/2015
Action:	Site Added to Database
DEC Staff:	Mitzi Read
Action Description:	A new site has been added to the database
Action Date:	11/10/2015
Action:	Exposure Tracking Model Ranking
DEC Staff:	Mitzi Read
Action Description:	Initial ranking with ETM completed for source area id: 79837 name: Heating Oil Tank Fuel Line

Contaminants:

Staff:	Amy Rodman, 9074655368 amy.rodman@alaska.gov
Contaminate Name1:	Residence - 2822 Marsha Avenue
Contaminate Level Description1:	Not reported
Contaminate Media1:	Not reported
Control Type:	Not reported
Control Details Description1:	Not reported
Contaminant CTD:	Not reported
Contaminant CDR:	Not reported
Comments:	Not reported

109
NW
1/2-1
0.933 mi.
4925 ft.

RESIDENCE - 2921 GLACIERWOOD COURT
2921 GLACIERWOOD COURT
JUNEAU, AK 99801

AK SHWS **S117849273**
N/A

Relative:
Higher

Actual:
23 ft.

SHWS:

File Number:	1513.38.094
Staff:	Danielle Duncan, 9074655207 danielle.duncan@alaska.gov
Facility Status:	Active
Latitude:	58.375628
Longitude:	-134.589056
Hazard ID:	26331
Problem:	On November 26, 2013 a 550-gallon aboveground heating oil tank was removed from the residence at 2921 Glacierwood Court in Juneau. Upon inspection the tank was determined to have several pinhole leaks. The tank had been filled but then was out a couple months later - not sure if it was stolen or leaked out. The aboveground storage tank (AST) was replaced with another AST. Approximately 24 cubic yards of petroleum-contaminated soil were removed and sample results indicate remaining soil contamination is below DEC cleanup levels. Groundwater analysis indicates diesel range organics (DRO) and benzene are present above the DEC groundwater cleanup levels.On June 22, 2015 Nortech mobilized to the site and collected three groundwater samples from the three monitoring wells. The results of these analyses indicated that monitoring wells TSP-1 and TSP-3 were free from petroleum contamination above ADEC cleanup levels. However, monitoring well TSP-2, west of the footprint of the old AST had about 6 inches of free product in it and had a concentration of DRO (1,420 mg/L) greatly exceeding the ADEC cleanup level of 1.5 mg/L. These data indicate that the groundwater on site has substantial DRO contamination and requires more time and/or treatment before the site can be closed out on the ADEC database. Update: 1/25/17: Groundwater monitoring continues and product is still being recovered. A petroleum skimmer will be installed this spring.

Actions:

Action Date:	9/20/2016
Action:	Update or Other Action
DEC Staff:	Danielle Duncan
Action Description:	Rec'd an email from the RP stating that Nortech is writing up a report on groundwater flow at the site.

Action Date:	8/7/2015
Action:	Report or Workplan Review - Other
DEC Staff:	Danielle Duncan
Action Description:	Rec'd Nortech's report titled RE: 2921 Glacierwood Court, Juneau, Alaska Heating Oil Release.

Action Date:	8/7/2015
Action:	Exposure Tracking Model Ranking
DEC Staff:	Danielle Duncan
Action Description:	A new updated ranking with ETM has been completed for source area 79725 550-Gallon Heating Oil AST.

Action Date:	8/7/2015
Action:	Site Characterization Report Approved
DEC Staff:	Danielle Duncan
Action Description:	Approved Nortech's groundwater monitoring report titled RE: 2921 Glacierwood Court, Juneau, Alaska Heating Oil Release. The results

RESIDENCE - 2921 GLACIERWOOD COURT (Continued) **S117849273**

indicate that there is substantial groundwater contamination on site on the order of 1,420 mg/L DRO. Groundwater monitoring will continue and RegenOx has been approved to aid remediation. Also sampling events may occur biannually if the RP desires rather than quarterly.

Action Date: 7/7/2016
Action: Update or Other Action
DEC Staff: Danielle Duncan
Action Description: Spoke to the homeowner and they will request a groundwater flow direction study. Also, product is still being removed using sorbents from the monitoring well closest to the street.

Action Date: 7/3/2018
Action: Site Characterization Report Approved
DEC Staff: Danielle Duncan
Action Description: Approved the Nortech RE: 2921 Glacierwood Court, Juneau, Alaska, Monitoring Well Activities report this date. Further delineation of the petroleum contamination groundwater plume in the direction of Riverside Drive by installing three additional groundwater monitoring wells using direct-push drilling. Monitoring wells (MW) -4, 5, and 6 were installed opposite Riverside Drive within the right-of-way. All six of the monitoring wells were sampled and analyzed for gasoline range organics (GRO), diesel range organics (DRO), and volatile organic compounds (VOCs). Polycyclic aromatic hydrocarbons (PAHs) were analyzed on TSP-2 only. Free product was observed in TSP-2.

Action Date: 7/13/2015
Action: Update or Other Action
DEC Staff: Danielle Duncan
Action Description: Spoke to RP and they have had the groundwater sampled by Nortech. Some of the water had to be disposed of as hazardous waste - likely that the groundwater contamination has not decreased significantly. I discussed the possibility of adding fertilizer to speed up remediation. Will wait for Nortech report.

Action Date: 5/8/2018
Action: Update or Other Action
DEC Staff: Danielle Duncan
Action Description: Site/right-of-way access has been granted and additional groundwater monitoring wells will be installed.

Action Date: 5/2/2017
Action: Site Characterization Report Approved
DEC Staff: Danielle Duncan
Action Description: Approved the report consisting of a laboratory report of samples from groundwater monitoring wells TSP-2 and TSP-3 from SGS Laboratories. TSP-2 had free product and the other monitoring well samples had diesel range organics (DRO) at concentrations above the ADEC cleanup level of 1.5 milligrams per liter (mg/L). These concentrations ranged from 2.4 - 288 mg/L DRO.

Action Date: 5/16/2016
Action: Update or Other Action
DEC Staff: Danielle Duncan
Action Description: Sent a letter today requesting that a groundwater flow investigation be completed.

RESIDENCE - 2921 GLACIERWOOD COURT (Continued) **S117849273**

Action Date:	4/5/2016
Action:	Site Visit
DEC Staff:	Danielle Duncan
Action Description:	Visited the site today with Nortech and observed the locations of the monitoring wells in addition to the excavation site and trees. Currently working on a plan to better understand the groundwater flow on the property.
Action Date:	4/2/2018
Action:	Report or Workplan Review - Other
DEC Staff:	Danielle Duncan
Action Description:	Approved the Plume Delineation Work Plan this date. Approved actions:1.Install a skimmer in groundwater monitoring well TSP-2 to recover free petroleum product.2.Complete Appendix H of the ADEC Vapor Intrusion Guidance for Contaminated Sites dated November 2017 to the extent practicable, but including photoionization detector (PID) measurements in the crawlspace.3.Documentation that the groundwater well ID 5910 is not in use. 4.Further delineation of the petroleum contamination groundwater plume in the direction of 2931 Glacierwood Court and Riverside Drive by installing groundwater monitoring wells. Five wells are proposed for Riverside Drive and although not expressly stated, the assumption is that one groundwater monitoring well will be placed at 2931 Glacierwood Drive.
Action Date:	4/10/2018
Action:	Update or Other Action
DEC Staff:	Danielle Duncan
Action Description:	NORTECH arranged for utility locates along the CBJ right of way between RiversideDrive and 2931 Glacierwood Court and between Riverbend Elementary School and Riverside Drive inorder to determine if installation of the ADEC requested off Site groundwater monitoring wells could occur. Utility locates indicated the area between Riverside Drive and the bike path adjacent to Riverbend Elementary School property was suitable for installation of the three planned groundwater monitoring wells. However, the presence of an 18 inch high pressure water main located under the sidewalk between Riverside Drive and Glacierwood Court properties means that installation of monitoring wells will not occur along the property line of 2931 Glacierwood Court and Riverside Drive. NORTECH has not received approval from either the Millers (responsible party) or the neighbors at 2931 Glacierwood Court to proceed with ADEC requested work. If approval is given for any or part of the ADEC requested work, NORTECH will seek a permit to conduct work within the CBJ right of way between Riverside Drive and the bike path adjacent to Riverbend Elementary School property.
Action Date:	3/8/2016
Action:	Update or Other Action
DEC Staff:	Danielle Duncan
Action Description:	Spoke to RP today - they plan on having the trees cut down to access contaminated soil in the yard and will coordinate with Nortech on the excavation.
Action Date:	3/6/2017
Action:	Update or Other Action
DEC Staff:	Danielle Duncan
Action Description:	Approved the letter report received 2/20/17 - Removal of petroleum

RESIDENCE - 2921 GLACIERWOOD COURT (Continued) **S117849273**

product from the groundwater is continuing in addition to monitoring/sampling. Results from this report indicate that while diesel range organics (DRO) concentrations are fluctuating, a general decrease may be occurring. The ADEC concurs with Nortech???s recommendation that product removal and monitoring continue and that there is no need to continue sampling monitoring well TSP-1 because DRO concentrations have been below ADEC Method 2 cleanup levels since June of 2014 when it was first sampled.

Action Date: 2/8/2016
Action: Report or Workplan Review - Other
DEC Staff: Danielle Duncan
Action Description: Sent approval letter for the last 2 groundwater product removal letter reports. Weekly field activities to remove free product from groundwater monitoring wells TSP-2 and TSP-3 are on-going. Due to the large amount of product being retrieved from TSP-2, Nortech has increased the frequency of site visits to pump the product from TSP-2 and replace sorbent pads in TSP-3.

Action Date: 2/7/2018
Action: Meeting or Teleconference Held
DEC Staff: Danielle Duncan
Action Description: Meeting today with Nortech to discuss next steps. ADEC will have a work plan by 3/16/18 to install a skimmer, do a prelim vapor intrusion investigation, and delineate the extent of the contaminated groundwater plume.

Action Date: 2/5/2016
Action: Report or Workplan Review - Other
DEC Staff: Danielle Duncan
Action Description: Rec'd 14-1043 Product Removal January16...this date submitted by Nortech.

Action Date: 2/5/2015
Action: Update or Other Action
DEC Staff: Danielle Duncan
Action Description: Introduced myself to RP and discussed decreasing groundwater contamination and future quarterly sampling.

Action Date: 12/1/2015
Action: Report or Workplan Review - Other
DEC Staff: Danielle Duncan
Action Description: Rec'd RE: 2921 Glacierwood Court, Juneau, Alaska, Monitoring Well Activities this date.

Action Date: 11/4/2015
Action: Report or Workplan Review - Other
DEC Staff: Danielle Duncan
Action Description: Rec'd quarterly report October 2015, this date.

Action Date: 11/27/2013
Action: Potentially Responsible Party/State Interest Letter
DEC Staff: Mitzi Read
Action Description: Potentially responsible party / State interest letter sent to landowner by PERP staff Bob Mattson.

Action Date: 11/20/2015

RESIDENCE - 2921 GLACIERWOOD COURT (Continued) **S117849273**

Action:	Site Characterization Report Approved
DEC Staff:	Danielle Duncan
Action Description:	Sent approval letter re: Nortech's RE: 2921 Glacierwood Court, Juneau, Alaska Monitoring Well Activities, dated November 4th 2015. The report documents that during the month of October, Nortech visited the site on five occasions. During these visits, Nortech replaced sorbent pads that are effectively removing free product from monitoring wells. DRO is still present in TSP-2 and TSP-3 at concentrations exceeding ADEC cleanup levels. TSP-3 had a concentration of 5.1 mg/L and TSP-2 had a concentration of 120 mg/L. The high result for TSP-2 is likely the result of the presence of product in the sample and indicates that the groundwater contamination has or is moving downgradient from the original spill footprint. Quarterly groundwater monitoring and free product removal will continue until data indicates that the contamination has decreased to below ADEC cleanup levels.
Action Date:	11/2/2017
Action:	Update or Other Action
DEC Staff:	Danielle Duncan
Action Description:	Reviewed and approved the Quarterly Sampling Report received on October 30, 2017. During the current sampling event, TSP-2 again had free product but TSP-3 did not. TSP-3 had a DRO concentration (1.2 mg/L) approaching the cleanup of 1.5 mg/L and TSP-2 had a concentration of 480 mg/L. The ADEC approves of the installation of a skimmer in TSP-2 this spring to facilitate remediation. The ADEC concurs with Nortech that sampling should only occur for the wells that do not have free product in them. Please continue product recovery in TSP-3 when and if necessary. Note that delineation of the groundwater contamination plume remains a data gap for the site. Please submit a work plan to delineate the groundwater contamination plume by January 30, 2018.
Action Date:	11/10/2016
Action:	Update or Other Action
DEC Staff:	Danielle Duncan
Action Description:	Removal of petroleum product from the groundwater has been occurring on site for over a year using both passive and active methods including physically pumping petroleum out of the wells and placing petroleum sorbents inside the wells. The latest report from Nortech indicates that there is still petroleum product in 2/3 groundwater monitoring wells and at this time, the ADEC recommended that a more active product removal occur such as the use of a light non-aqueous phase liquid (LNAPL) skimmer or similar active removal method in addition to delineation of the groundwater contamination plume.
Action Date:	11/1/2017
Action:	Exposure Tracking Model Ranking
DEC Staff:	Danielle Duncan
Action Description:	A new updated ranking with ETM has been completed for source area 79725 550-Gallon Heating Oil AST.
Action Date:	10/1/2015
Action:	Site Characterization Report Approved
DEC Staff:	Danielle Duncan
Action Description:	Rec'd the letter report titled: RE: 2921 Glacierwood Court, Juneau, Alaska Monitoring Well Activities, dated October 1st 2015, and

RESIDENCE - 2921 GLACIERWOOD COURT (Continued) **S117849273**

received by our office on the September 28th 2015 by electronic mail. Nortech collected product from monitoring well TSP-2 on four occasions during September of 2015 and found between 0 and 1.0 inch of free product each time. The ADEC concurs with Nortech and would like to continue weekly groundwater monitoring/product removal from well TSP-2. The use of sorbents to aid in product recovery is beneficial and approved. Although the ADEC previously stated in a letter dated August 7th 2015 that groundwater sampling of the other two wells (TSP-1 and TSP-3) could be done biannually, the ADEC now requires that these wells and TSP-3 be sampled quarterly and tested for diesel range organics (DRO) due to the repeated presence of product in TSP-2 and the extensive groundwater contamination present (on the order of 1,420 mg/L DRO). Once a year, these samples will also be tested for benzene, toluene, ethylbenzene, and xylene (BTEX).

Action Date: 1/8/2016
Action: Report or Workplan Review - Other
DEC Staff: Danielle Duncan
Action Description: Rec'd RE: 2921 Glacierwood Court, Juneau, Alaska, Monitoring Well Activities this date.

Action Date: 1/6/2016
Action: Update or Other Action
DEC Staff: Danielle Duncan
Action Description: The initial (past) excavation at the site was conducted to the extent of the house foundation and was limited by trees/roots.

Action Date: 1/5/2016
Action: Report or Workplan Review - Other
DEC Staff: Danielle Duncan
Action Description: Product continues to be recovered from TSP 2 and TSP 3 (monitoring wells). Weekly sorbent changes will continue in addition to monthly groundwater monitoring. I suggested that an excavation take place to enhance and speed up cleanup.

Action Date: 1/5/2015
Action: Spill Transferred from Prevention Preparedness and Response Program
DEC Staff: Mitzi Read
Action Description: Spill transferred by PERP staff Bob Mattson. Spill no. 13119933001; spill date = 11/26/13; substance = diesel; quantity = ~200-300 gallons; source = 550-gallon heating oil above ground storage tank.

Action Date: 1/25/2018
Action: Report or Workplan Review - Other
DEC Staff: Danielle Duncan
Action Description: Approved the 4th quarter groundwater monitoring report. There are 3 groundwater monitoring wells on site (TSP-1, TSP-2, TSP-3). TSP-1 is in the front yard, TSP-2 is near the property line and Riverside Drive, and TSP-3 is near the aboveground storage tank where the spill occurred. TSP-1 was not sampled because prior data indicated that the well was free of petroleum contamination exceeding ADEC cleanup levels. During the sampling, petroleum product was observed in TSP-2 and TSP-3. An active petroleum skimmer will be placed in TSP-2 once weather conditions permit. Only TSP-3 was sampled and analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) and DRO. The results were above ADEC cleanup levels (6.7 mg/L DRO).

RESIDENCE - 2921 GLACIERWOOD COURT (Continued) **S117849273**

Action Date:	1/14/2015
Action:	Exposure Tracking Model Ranking
DEC Staff:	Mitzi Read
Action Description:	Initial ranking with ETM completed for source area id: 79725 name: 550-Gallon Heating Oil AST

Action Date:	1/13/2015
Action:	Site Added to Database
DEC Staff:	Mitzi Read
Action Description:	A new site has been added to the database

Contaminants:

Staff:	Danielle Duncan, 9074655207 danielle.duncan@alaska.gov
Contaminate Name1:	Residence - 2921 Glacierwood Court
Contaminate Level Description1:	Not reported
Contaminate Media1:	Not reported
Control Type:	Not reported
Control Details Description1:	Not reported
Contaminant CTD:	Not reported
Contaminant CDR:	Not reported
Comments:	Not reported

Count: 24 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
JUNEAU	S108185311	JUNEAU -JIA- TAXIWAY REHABILITATIO	AIRPORT	99801	AK NPDES
JUNEAU	S116466155	DELTA WESTERN JUNEAU AIRPORT FUEL	ALEX HOLDEN WAY; JUNEAU AIRPOR		AK RGA LUST
JUNEAU	S116466154	DELTA WESTERN JUNEAU AIRPORT FUEL	ALEX HOLDEN WAY JUNEAU AIRPORT		AK RGA LUST
JUNEAU	S108185327	JUNEAU EGAN DRIVE-10TH STREET INTE	EGAN DRIVE/10TH STREET	0	AK NPDES
JUNEAU	U004115842	AT&T - JUNEAU TOLL CENTER	1448 EGAN DR	99801	AK UST
JUNEAU	S116463844	AERO SERVICES, JUNEAU AIRPORT	FGATE 9203 SHELL SIMMONS DRIVE		AK RGA LUST
JUNEAU	S116463845	AERO SERVICES, JUNEAU AIRPORT	FGATE, 9203 SHELL SIMMONS DR		AK RGA LUST
JUNEAU	S116469425	JUNEAU READY MIX INCORPORATED	5717 GLACIER HIGHWAY; POB 0202		AK RGA LUST
JUNEAU	S116469424	JUNEAU READY MIX INCORPORATED	5717 GLACIER HIGHWAY; POB 0202		AK RGA LUST
JUNEAU	S116469423	JUNEAU READY MIX INCORPORATED	5717 GLACIER HIGHWAY POB 02027		AK RGA LUST
JUNEAU	S116464314	ALASKA LAUNDRY AND CLEANERS - JUNE	1114 GLACIER HIGHWAY AT 12TH S		AK RGA LUST
JUNEAU	S116464313	ALASKA LAUNDRY AND CLEANERS - JUNE	1114 GLACIER HIGHWAY AT 12TH S		AK RGA LUST
JUNEAU	1003880109	JUNEAU LDFL	GLACIER HWY, MI 5.5	99801	SEMS-ARCHIVE
JUNEAU	S116466156	DELTA WESTERN JUNEAU AIRPORT FUEL	JUNEAU AIRPORT ALEX HOLDEN WAY		AK RGA LUST
JUNEAU	2009052770	JUNEAU AIRPORT	JUNEAU AIRPORT	99801	HMIRS
JUNEAU	S116464877	AUKE BAY HARBOR - JUNEAU	11.8 MILE GLACIER HWY		AK RGA LUST
JUNEAU	S116464876	AUKE BAY HARBOR - JUNEAU	11.8 MILE GLACIER HWY,		AK RGA LUST
JUNEAU	S108185355	JUNEAU - OLD DAIRY ROAD SHOULDER W	OLD DAIRY ROAD	0	AK NPDES
JUNEAU	S116467485	FAA - JUNEAU	POINT LENA/JUNEAU AIRPORT		AK RGA LUST
JUNEAU	S116469409	JUNEAU AIRPORT	SHELL SIMMONS DR AT NORTH APRO		AK RGA LUST
JUNEAU	S116465445	CBJ JUNEAU AIRPORT MAINTENANCE FAC	SHELL SIMMONS DRIVE AT NORTH A		AK RGA LUST
JUNEAU	S116465444	CBJ JUNEAU AIRPORT MAINTENANCE FAC	SHELL SIMMONS DRIVE AT NORTH A		AK RGA LUST
JUNEAU	S116465443	CBJ JUNEAU AIRPORT MAINTENANCE FAC	SHELL SIMMONS DR AT N APRON		AK RGA LUST
JUNEAU	S116465442	CBJ JUNEAU AIRPORT MAINTENANCE FAC	SHELL SIMMONS DR AT N APRON		AK RGA LUST

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 11/14/2018
Date Data Arrived at EDR: 11/27/2018
Date Made Active in Reports: 12/07/2018
Number of Days to Update: 10

Source: EPA
Telephone: N/A
Last EDR Contact: 11/27/2018
Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 11/14/2018
Date Data Arrived at EDR: 11/27/2018
Date Made Active in Reports: 12/07/2018
Number of Days to Update: 10

Source: EPA
Telephone: N/A
Last EDR Contact: 11/27/2018
Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 11/14/2018
Date Data Arrived at EDR: 11/27/2018
Date Made Active in Reports: 12/07/2018
Number of Days to Update: 10

Source: EPA
Telephone: N/A
Last EDR Contact: 11/27/2018
Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/07/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 92

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 07/06/2018
Next Scheduled EDR Contact: 10/15/2018
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 11/14/2018
Date Data Arrived at EDR: 11/27/2018
Date Made Active in Reports: 12/07/2018
Number of Days to Update: 10

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 11/27/2018
Next Scheduled EDR Contact: 01/28/2019
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: 11/14/2018
Date Data Arrived at EDR: 11/28/2018
Date Made Active in Reports: 12/07/2018
Number of Days to Update: 9

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 11/28/2018
Next Scheduled EDR Contact: 01/28/2019
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/28/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 86

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 12/03/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/28/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: (206) 553-1200
Last EDR Contact: 12/03/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/28/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: (206) 553-1200
Last EDR Contact: 12/03/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/28/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: (206) 553-1200
Last EDR Contact: 12/03/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/28/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: (206) 553-1200
Last EDR Contact: 12/03/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 10/17/2018
Date Data Arrived at EDR: 10/25/2018
Date Made Active in Reports: 12/07/2018
Number of Days to Update: 43

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 10/15/2018
Next Scheduled EDR Contact: 02/25/2019
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 07/31/2018
Date Data Arrived at EDR: 08/28/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 17

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 11/28/2018
Next Scheduled EDR Contact: 03/11/2019
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: 07/31/2018
Date Data Arrived at EDR: 08/28/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 17

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 11/28/2018
Next Scheduled EDR Contact: 03/11/2019
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: 09/24/2018
Date Data Arrived at EDR: 09/25/2018
Date Made Active in Reports: 11/09/2018
Number of Days to Update: 45

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 09/25/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

SHWS: Contaminated Sites Database

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 09/25/2018
Date Data Arrived at EDR: 09/27/2018
Date Made Active in Reports: 10/24/2018
Number of Days to Update: 27

Source: Department of Environmental Conservation
Telephone: 907-451-2143
Last EDR Contact: 11/07/2018
Next Scheduled EDR Contact: 02/25/2019
Data Release Frequency: Semi-Annually

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: Solid Waste Facilities

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: 09/06/2018
Date Data Arrived at EDR: 09/25/2018
Date Made Active in Reports: 09/27/2018
Number of Days to Update: 2

Source: Department of Environmental Conservation
Telephone: 907-269-7632
Last EDR Contact: 09/24/2018
Next Scheduled EDR Contact: 01/09/2047
Data Release Frequency: Semi-Annually

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank Database

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: 08/09/2018
Date Data Arrived at EDR: 08/10/2018
Date Made Active in Reports: 08/20/2018
Number of Days to Update: 10

Source: Department of Environmental Conservation
Telephone: 907-465-5301
Last EDR Contact: 11/14/2018
Next Scheduled EDR Contact: 02/25/2019
Data Release Frequency: Semi-Annually

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/12/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 10/26/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/12/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/26/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 05/08/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 10/26/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/10/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 10/26/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/24/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/26/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/01/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 10/26/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/25/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 10/26/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/13/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 10/26/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 05/15/2017
Date Data Arrived at EDR: 05/30/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 136
Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 10/10/2018
Next Scheduled EDR Contact: 01/21/2019
Data Release Frequency: Varies

UST: Underground Storage Tank Database
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: 11/12/2018
Date Data Arrived at EDR: 11/14/2018
Date Made Active in Reports: 11/28/2018
Number of Days to Update: 14
Source: Department of Environmental Conservation
Telephone: 907-269-7504
Last EDR Contact: 11/14/2018
Next Scheduled EDR Contact: 02/25/2019
Data Release Frequency: Semi-Annually

AST: Regulated Aboveground Storage Tanks
The list covers "regulated" facilities with storage capacities above 10,000 barrels (or 5,000 barrels of crude).

Date of Government Version: 01/05/2005
Date Data Arrived at EDR: 01/06/2005
Date Made Active in Reports: 02/02/2005
Number of Days to Update: 27
Source: Department of Environmental Conservation
Telephone: 907-465-5231
Last EDR Contact: 12/06/2018
Next Scheduled EDR Contact: 03/11/2019
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/12/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/26/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/10/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 10/26/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 04/25/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 10/26/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/01/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 10/26/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/12/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 10/26/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 05/08/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 10/26/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/13/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 10/26/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/24/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/26/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

ENG CONTROLS: Engineering Controls Site Listing

A listing of sites with engineering controls in place included in the Contaminated Sites.

Date of Government Version: 09/25/2018
Date Data Arrived at EDR: 09/27/2018
Date Made Active in Reports: 10/24/2018
Number of Days to Update: 27

Source: Department of Environmental Conservation
Telephone: 907-451-2143
Last EDR Contact: 11/07/2018
Next Scheduled EDR Contact: 02/25/2019
Data Release Frequency: Semi-Annually

Inst Control: Contaminated Sites with Institutional Controls
Contaminated sites that have institutional controls.

Date of Government Version: 09/25/2018
Date Data Arrived at EDR: 09/27/2018
Date Made Active in Reports: 10/24/2018
Number of Days to Update: 27

Source: Department of Environmental Conservation
Telephone: 907-451-2143
Last EDR Contact: 11/07/2018
Next Scheduled EDR Contact: 02/25/2019
Data Release Frequency: Semi-Annually

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 09/24/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program sites
Sites involved in the Voluntary Cleanup Program.

Date of Government Version: 11/26/2018
Date Data Arrived at EDR: 11/27/2018
Date Made Active in Reports: 11/28/2018
Number of Days to Update: 1

Source: Department of Environmental Conservation
Telephone: 907-451-2143
Last EDR Contact: 11/26/2018
Next Scheduled EDR Contact: 03/11/2019
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Identified and/or Proposed Brownfields Sites
Brownfield properties are defined by U.S Environmental Protection Agency (EPA) as "real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contamination." DEC is developing resources to assist eligible entities in Alaska in applying for EPA brownfields grants. The program also will provide technical assistance and perform some site assessments, The purpose of these assessments is to assist local redevelopment efforts on previously contaminated properties that are vacant or underused.

Date of Government Version: 09/25/2018
Date Data Arrived at EDR: 09/27/2018
Date Made Active in Reports: 10/24/2018
Number of Days to Update: 27

Source: Department of Environmental Conservation
Telephone: 907-451-2166
Last EDR Contact: 11/07/2018
Next Scheduled EDR Contact: 02/25/2019
Data Release Frequency: Semi-Annually

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: 09/18/2018
Date Data Arrived at EDR: 09/18/2018
Date Made Active in Reports: 11/09/2018
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 09/18/2018
Next Scheduled EDR Contact: 12/31/2018
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY: Recycling Facilities
A listing of Recycling centers in the state of Alaska.

Date of Government Version: 12/29/2014
Date Data Arrived at EDR: 12/30/2014
Date Made Active in Reports: 02/02/2015
Number of Days to Update: 34

Source: Department of Environmental Conservation
Telephone: 907-269-7802
Last EDR Contact: 09/24/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 10/25/2018
Next Scheduled EDR Contact: 02/11/2019
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: 10/22/2018
Next Scheduled EDR Contact: 02/04/2019
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: 11/02/2018
Next Scheduled EDR Contact: 02/11/2019
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: 09/21/2018
Date Data Arrived at EDR: 09/21/2018
Date Made Active in Reports: 11/09/2018
Number of Days to Update: 49

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 11/26/2018
Next Scheduled EDR Contact: 03/11/2019
Data Release Frequency: No Update Planned

CDL: Illegal Drug Manufacturing Sites

A list of properties that have been determined to be illegal drug manufacturing sites.

Date of Government Version: 02/12/2018
Date Data Arrived at EDR: 02/13/2018
Date Made Active in Reports: 03/21/2018
Number of Days to Update: 36

Source: Department of Environmental Conservation
Telephone: 907-269-7543
Last EDR Contact: 11/16/2018
Next Scheduled EDR Contact: 02/25/2019
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: 09/21/2018
Date Data Arrived at EDR: 09/21/2018
Date Made Active in Reports: 11/09/2018
Number of Days to Update: 49

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 11/26/2018
Next Scheduled EDR Contact: 03/11/2019
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: 08/13/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/16/2018
Number of Days to Update: 43

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 11/27/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 03/26/2018
Date Data Arrived at EDR: 03/27/2018
Date Made Active in Reports: 06/08/2018
Number of Days to Update: 73

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 09/25/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Quarterly

SPILLS: Spills Database

Oil and hazardous substance releases to be reported to the Department of Environmental Conservation.

Date of Government Version: 10/16/2018
Date Data Arrived at EDR: 10/18/2018
Date Made Active in Reports: 10/24/2018
Number of Days to Update: 6

Source: Department of Environmental Conservation
Telephone: 907-465-5242
Last EDR Contact: 10/15/2018
Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: Semi-Annually

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 07/21/2010
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/08/2013
Number of Days to Update: 36

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/28/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: (206) 553-1200
Last EDR Contact: 12/03/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015
Date Data Arrived at EDR: 07/08/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 11/19/2018
Next Scheduled EDR Contact: 03/04/2019
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: 10/12/2018
Next Scheduled EDR Contact: 01/21/2019
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 10/12/2018
Next Scheduled EDR Contact: 01/21/2019
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: 11/16/2018
Next Scheduled EDR Contact: 02/25/2019
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: 08/31/2018
Date Data Arrived at EDR: 09/25/2018
Date Made Active in Reports: 11/09/2018
Number of Days to Update: 45

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 09/25/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 11/05/2018
Next Scheduled EDR Contact: 02/18/2019
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: 11/09/2018
Next Scheduled EDR Contact: 02/18/2019
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/21/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 198

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 09/21/2018
Next Scheduled EDR Contact: 12/31/2018
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 01/10/2018
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 2

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 11/16/2018
Next Scheduled EDR Contact: 03/04/2019
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: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 10/24/2018
Next Scheduled EDR Contact: 02/04/2019
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: 08/13/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/16/2018
Number of Days to Update: 43

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 11/27/2018
Next Scheduled EDR Contact: 03/18/2019
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 08/01/2018
Date Data Arrived at EDR: 08/22/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 10/23/2018
Next Scheduled EDR Contact: 02/04/2019
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: 08/13/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/09/2018
Number of Days to Update: 36
Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 10/04/2018
Next Scheduled EDR Contact: 02/18/2019
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: 09/14/2018
Date Data Arrived at EDR: 10/11/2018
Date Made Active in Reports: 12/07/2018
Number of Days to Update: 57
Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 10/11/2018
Next Scheduled EDR Contact: 01/21/2019
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: 10/09/2018
Next Scheduled EDR Contact: 01/21/2019
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016
Date Data Arrived at EDR: 09/08/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 43
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 10/11/2018
Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 12/05/2018
Next Scheduled EDR Contact: 03/18/2019
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: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 12/03/2018
Next Scheduled EDR Contact: 03/18/2019
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: 10/26/2018
Next Scheduled EDR Contact: 02/04/2019
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: 10/02/2018
Date Data Arrived at EDR: 10/03/2018
Date Made Active in Reports: 11/09/2018
Number of Days to Update: 37

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 10/03/2018
Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 10/30/2018
Next Scheduled EDR Contact: 02/11/2019
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 09/30/2018
Date Data Arrived at EDR: 10/12/2018
Date Made Active in Reports: 12/07/2018
Number of Days to Update: 56

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 10/01/2018
Next Scheduled EDR Contact: 12/31/2018
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 09/28/2017
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 11/21/2018
Next Scheduled EDR Contact: 03/04/2019
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: 10/09/2018
Next Scheduled EDR Contact: 01/21/2019
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: 11/01/2018
Next Scheduled EDR Contact: 02/18/2019
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 06/23/2017
Date Data Arrived at EDR: 10/11/2017
Date Made Active in Reports: 11/03/2017
Number of Days to Update: 23

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 11/16/2018
Next Scheduled EDR Contact: 03/04/2019
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 08/13/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/16/2018
Number of Days to Update: 43

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 11/27/2018
Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/01/2018
Date Data Arrived at EDR: 08/29/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 37

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 11/30/2018
Next Scheduled EDR Contact: 03/11/2019
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: 11/30/2018
Next Scheduled EDR Contact: 03/11/2019
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: 11/30/2018
Next Scheduled EDR Contact: 03/11/2019
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: 09/10/2018
Date Data Arrived at EDR: 09/11/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 3

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 12/06/2018
Next Scheduled EDR Contact: 03/25/2019
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: 08/07/2018
Date Data Arrived at EDR: 09/05/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 30

Source: EPA
Telephone: (206) 553-1200
Last EDR Contact: 12/05/2018
Next Scheduled EDR Contact: 03/18/2019
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 06/19/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 87

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 10/15/2018
Next Scheduled EDR Contact: 01/28/2019
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: 09/02/2018
Date Data Arrived at EDR: 09/05/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 9

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 12/31/2018
Next Scheduled EDR Contact: 03/18/2019
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 11/30/2018
Next Scheduled EDR Contact: 03/11/2019
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing
This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 08/22/2018
Date Data Arrived at EDR: 08/22/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 44
Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 11/19/2018
Next Scheduled EDR Contact: 03/04/2019
Data Release Frequency: Quarterly

AIRS: AIRS Facility Listing
A listing of permitted airs facilities.

Date of Government Version: 07/09/2018
Date Data Arrived at EDR: 07/13/2018
Date Made Active in Reports: 08/20/2018
Number of Days to Update: 38
Source: Department of Environmental Conservation
Telephone: 907-451-2103
Last EDR Contact: 10/22/2018
Next Scheduled EDR Contact: 01/21/2019
Data Release Frequency: Varies

COAL ASH: Coal Ash Disposal Sites
A listing of coal ash disposal site locations.

Date of Government Version: 03/08/2018
Date Data Arrived at EDR: 03/27/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 17
Source: Department of Environmental Conservation
Telephone: 907-451-2135
Last EDR Contact: 09/17/2018
Next Scheduled EDR Contact: 12/31/2018
Data Release Frequency: Varies

DRYCLEANERS: Drycleaner Facility Listing
A listing of drycleaning facilities in Alaska.

Date of Government Version: 02/15/2006
Date Data Arrived at EDR: 02/16/2006
Date Made Active in Reports: 03/15/2006
Number of Days to Update: 27
Source: Department of Environmental Conservation
Telephone: 907-269-7577
Last EDR Contact: 09/24/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: No Update Planned

Financial Assurance 1: Financial Assurance Information Listing
Financial assurance information for underground storage tank 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: 11/12/2018
Date Data Arrived at EDR: 11/14/2018
Date Made Active in Reports: 11/28/2018
Number of Days to Update: 14
Source: Department of Environmental Conservation
Telephone: 907-269-8149
Last EDR Contact: 11/14/2018
Next Scheduled EDR Contact: 02/25/2019
Data Release Frequency: Quarterly

Financial Assurance 2: Financial Assurance Information Listing
Financial Assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 04/24/2007
Date Data Arrived at EDR: 04/26/2007
Date Made Active in Reports: 05/14/2007
Number of Days to Update: 18

Source: Department of Environmental Conservation
Telephone: 907-269-7802
Last EDR Contact: 09/24/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Varies

NPDES: Wastwater Discharge Permit Listing
A listing of permitted wastewater facilities.

Date of Government Version: 09/17/2018
Date Data Arrived at EDR: 09/18/2018
Date Made Active in Reports: 09/27/2018
Number of Days to Update: 9

Source: Department of Environmental Conservation
Telephone: 907-465-5480
Last EDR Contact: 09/18/2018
Next Scheduled EDR Contact: 12/31/2018
Data Release Frequency: Varies

UIC: UIC Information
A listing of underground injection control wells.

Date of Government Version: 11/12/2018
Date Data Arrived at EDR: 11/14/2018
Date Made Active in Reports: 11/28/2018
Number of Days to Update: 14

Source: Oil & Gas Conservation Commission
Telephone: 907-793-1224
Last EDR Contact: 11/14/2018
Next Scheduled EDR Contact: 02/25/2019
Data Release Frequency: Quarterly

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations
EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA 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 Department of Environmental Conservation in Alaska.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/17/2014
Number of Days to Update: 200

Source: Department of Environmental Conservation
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists.Compiled from Records formerly available from the Department of Environmental Conservation in Alaska.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/04/2014
Number of Days to Update: 187

Source: Department of Environmental Conservation
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.

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 07/01/2018
Date Data Arrived at EDR: 08/01/2018
Date Made Active in Reports: 08/31/2018
Number of Days to Update: 30

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 10/31/2018
Next Scheduled EDR Contact: 02/11/2019
Data Release Frequency: Quarterly

Oil/Gas Pipelines
Source: PennWell Corporation
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data
Source: PennWell Corporation
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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: Child Care Facilities Database
Source: Department of Education & Early Development
Telephone: 907-465-2800

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 Classification and Mapping
Source: Alaska Natural Heritage Program
Telephone: 907-235-2218

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

JUNEAU
8425 LIVINGSTON WAY
JUNEAU, AK 99801

TARGET PROPERTY COORDINATES

Latitude (North):	58.35764 - 58° 21' 27.50''
Longitude (West):	134.568524 - 134° 34' 6.69''
Universal Tranverse Mercator:	Zone 8
UTM X (Meters):	525250.2
UTM Y (Meters):	6468399.5
Elevation:	11 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property:	N/A
Source:	USGS 7.5 min quad index

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

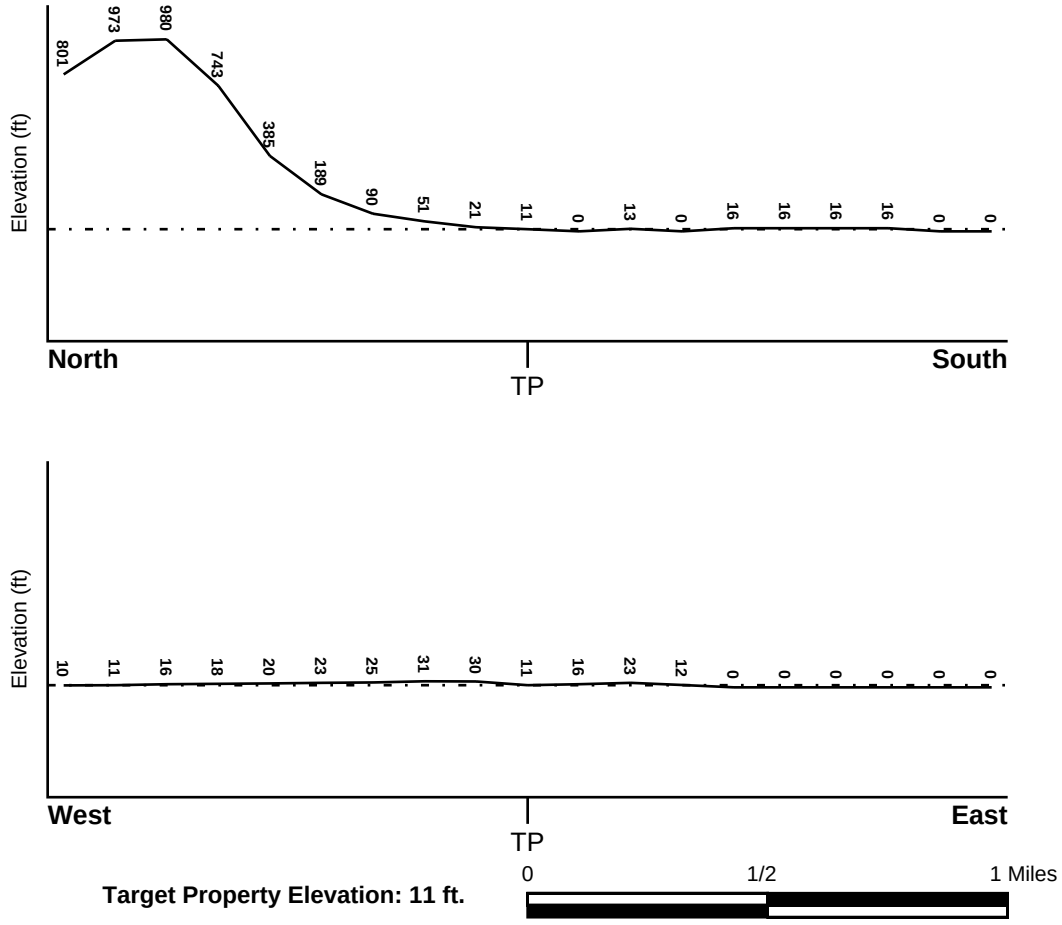
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General South

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Target Property Elevation: 11 ft.

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
02110C1527D	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
02110C1531D	FEMA FIRM Flood data
02110C1526D	FEMA FIRM Flood data
02110C1533D	FEMA FIRM Flood data
02110C1529D	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
Not Reported	N

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.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era:	-
System:	-
Series:	-
Code:	N/A *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: -

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:	TYPIC HUMICRYODS
Soil Surface Texture:	very gravelly - 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:	Well drained. Soils have intermediate water holding capacity. Depth to water table is more than 6 feet.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: HIGH

Depth to Bedrock Min: > 60 inches

Depth to Bedrock Max: > 60 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	3 inches	very gravelly - silt loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel	Max: 2.00 Min: 0.60	Max: 0.00 Min: 0.00
2	3 inches	8 inches	gravelly - sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 2.00 Min: 0.60	Max: 5.50 Min: 3.60
3	8 inches	22 inches	very gravelly - coarse sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 6.00 Min: 2.00	Max: 5.50 Min: 4.50
4	22 inches	60 inches	very cobbly - sandy loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 6.00 Min: 2.00	Max: 5.50 Min: 5.10

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: peat
silt loam
gravelly - silt loam

Surficial Soil Types: peat
silt loam
gravelly - silt loam

Shallow Soil Types: gravelly - silt loam
very gravelly - silt loam
silt loam
mucky-peat
muck
stratified
fine sandy loam

Deeper Soil Types: unweathered bedrock

very gravelly - sandy loam
hemic material
very gravelly - silty clay loam
extremely gravelly - silt loam
mucky-peat
very gravelly - sand
stratified
gravelly - coarse sand

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

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	USGS40000010708	1/8 - 1/4 Mile WNW
2	USGS40000010698	1/8 - 1/4 Mile West
3	USGS40000010688	1/4 - 1/2 Mile WSW
4	USGS40000010716	1/4 - 1/2 Mile NW
5	USGS40000010699	1/4 - 1/2 Mile West
A6	USGS40000010709	1/2 - 1 Mile West
A7	USGS40000010710	1/2 - 1 Mile West
A8	USGS40000010704	1/2 - 1 Mile West
B9	USGS40000010749	1/2 - 1 Mile NW
B10	USGS40000010750	1/2 - 1 Mile NW
C11	USGS40000010725	1/2 - 1 Mile WNW
12	USGS40000010747	1/2 - 1 Mile WNW
13	USGS40000010762	1/2 - 1 Mile NW
C14	USGS40000010727	1/2 - 1 Mile WNW
C15	USGS40000010739	1/2 - 1 Mile WNW
D16	USGS40000010769	1/2 - 1 Mile NW
D17	USGS40000010764	1/2 - 1 Mile NW
18	USGS40000010751	1/2 - 1 Mile WNW
19	USGS40000010740	1/2 - 1 Mile WNW
E20	USGS40000010754	1/2 - 1 Mile WNW
F21	USGS40000010721	1/2 - 1 Mile West
G22	USGS40000010743	1/2 - 1 Mile West
E23	USGS40000010753	1/2 - 1 Mile WNW
G24	USGS40000010741	1/2 - 1 Mile West
F25	USGS40000010728	1/2 - 1 Mile West

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

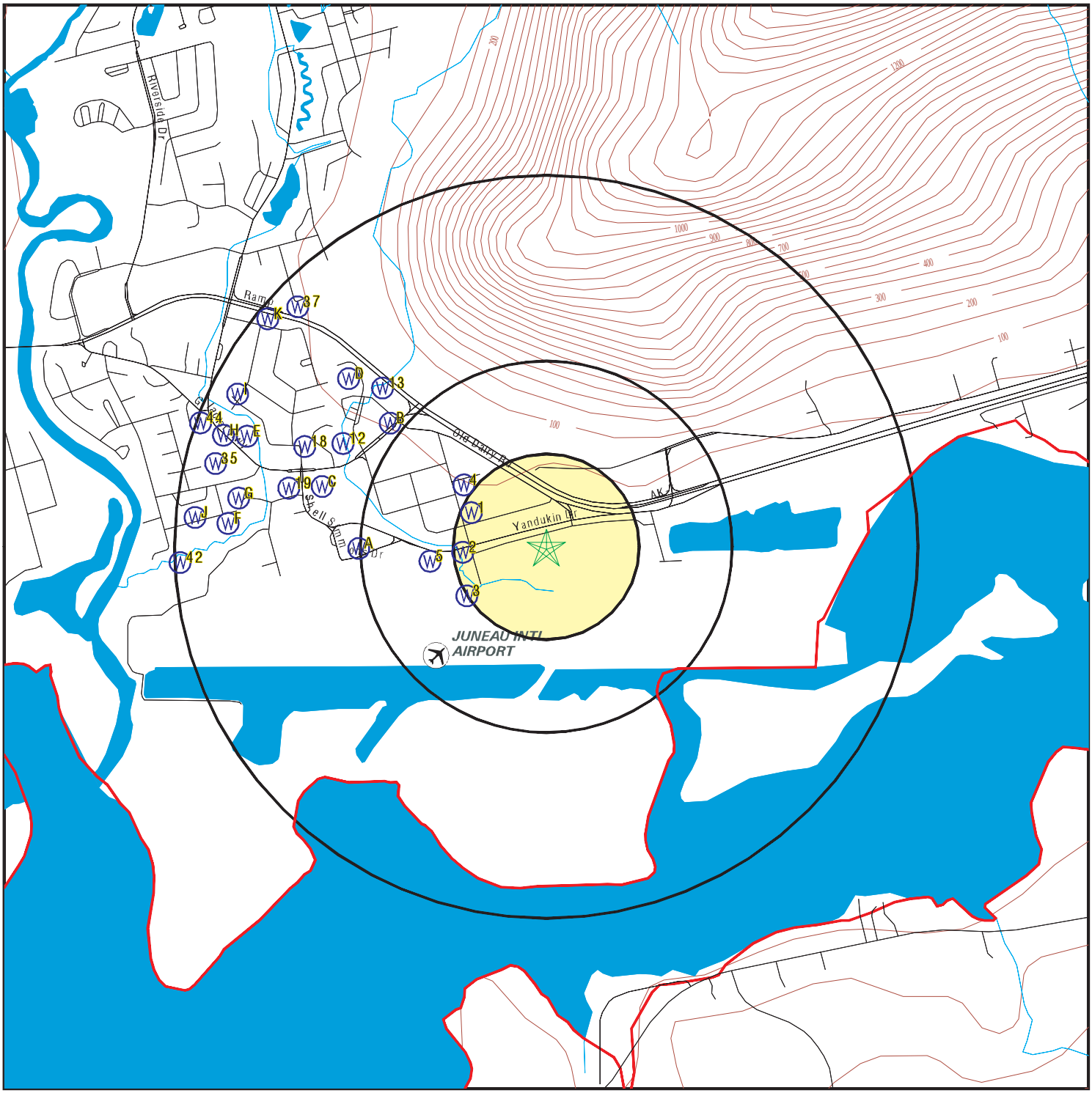
MAP ID	WELL ID	LOCATION FROM TP
F26	USGS40000010729	1/2 - 1 Mile West
E27	USGS40000010757	1/2 - 1 Mile WNW
E28	USGS40000010758	1/2 - 1 Mile WNW
E29	USGS40000010755	1/2 - 1 Mile WNW
E30	USGS40000010756	1/2 - 1 Mile WNW
F31	USGS40000010722	1/2 - 1 Mile West
H32	USGS40000010759	1/2 - 1 Mile WNW
I33	USGS40000010773	1/2 - 1 Mile WNW
J34	USGS40000010730	1/2 - 1 Mile West
35	USGS40000010752	1/2 - 1 Mile WNW
J36	USGS40000010723	1/2 - 1 Mile West
37	USGS40000010792	1/2 - 1 Mile NW
H38	USGS40000010763	1/2 - 1 Mile WNW
I39	USGS40000010771	1/2 - 1 Mile WNW
K40	USGS40000010787	1/2 - 1 Mile NW
J41	USGS40000010745	1/2 - 1 Mile West
42	USGS40000010717	1/2 - 1 Mile West
J43	USGS40000010744	1/2 - 1 Mile West
44	USGS40000010765	1/2 - 1 Mile WNW
K45	USGS40000010794	1/2 - 1 Mile NW

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

PHYSICAL SETTING SOURCE MAP - 5509586.2s



- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- Oil, gas or related wells

SITE NAME: Juneau	CLIENT: AECOM
ADDRESS: 8425 Livingston Way Juneau AK 99801	CONTACT: Brittany Kirchmann INQUIRY #: 5509586.2s
LAT/LONG: 58.35764 / 134.568524	DATE: December 12, 2018 9:59 am

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

1
WNW
1/8 - 1/4 Mile
Higher

FED USGS **USGS40000010708**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006631ACDA1 003	Type:	Well
Description:	Not Reported	HUC:	19010301
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19730127
Well Depth:	40	Well Depth Units:	ft
Well Hole Depth:	41	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	1	Level reading date:	1973-01-27
Feet below surface:	12.00	Feet to sea level:	Not Reported
Note:	Not Reported		

2
West
1/8 - 1/4 Mile
Higher

FED USGS **USGS40000010698**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006631ACDC1 002	Type:	Well
Description:	Not Reported	HUC:	19010301
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	1960
Well Depth:	43.5	Well Depth Units:	ft
Well Hole Depth:	43.5	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	31	Level reading date:	1984-04-11
Feet below surface:	10.16	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1984-04-06	Feet below surface:	9.07
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-03-22	Feet below surface:	8.65
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-03-16	Feet below surface:	9.15
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-03-12	Feet below surface:	9.11
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-03-01	Feet below surface:	8.79
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-02-09	Feet below surface:	8.38
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-02-02	Feet below surface:	8.36

Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-01-27	Feet below surface:	9.68
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-01-13	Feet below surface:	9.64
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-01-06	Feet below surface:	9.18
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-12-29	Feet below surface:	10.10
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-12-05	Feet below surface:	9.22
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-11-23	Feet below surface:	9.18
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-11-10	Feet below surface:	8.91
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-11-07	Feet below surface:	8.54
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-10-28	Feet below surface:	8.29
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-09-29	Feet below surface:	8.72
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-09-23	Feet below surface:	7.92
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-09-08	Feet below surface:	8.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-09-01	Feet below surface:	8.69
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-08-26	Feet below surface:	7.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-08-19	Feet below surface:	8.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-08-15	Feet below surface:	8.10
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-08-05	Feet below surface:	9.64
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-07-29	Feet below surface:	6.30
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-07-21	Feet below surface:	9.35
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-07-15	Feet below surface:	9.25
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1983-07-06	Feet below surface:	9.59
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-07-01	Feet below surface:	9.39
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-06-22	Feet below surface:	9.18
Feet to sea level:	Not Reported	Note:	Not Reported

3
WSW **FED USGS** **USGS40000010688**
1/4 - 1/2 Mile
Higher

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006631DBAD1 022	Type:	Well
Description:	OBS WELL DRIVEN INTO STREAMBED BY USGS-DUCK CR 19		
HUC:	19010301	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Quaternary System	Aquifer Type:	Unconfined single aquifer
Construction Date:	19990629	Well Depth:	3.06
Well Depth Units:	ft	Well Hole Depth:	3.06
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	2	Level reading date:	2001-04-10
Feet below surface:	-1.83	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1999-06-29	Feet below surface:	-1.63
Feet to sea level:	Not Reported	Note:	Not Reported

4
NW **FED USGS** **USGS40000010716**
1/4 - 1/2 Mile
Higher

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006631ADBD1 019	Type:	Well
Description:	BEHIND USFS OFFICE, OLD DAIRY RD.		
HUC:	19010301	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Quaternary System	Aquifer Type:	Not Reported
Construction Date:	199704	Well Depth:	13.96
Well Depth Units:	ft	Well Hole Depth:	15
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	2	Level reading date:	1998-03-12
Feet below surface:	0.71	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1997-07-16	Feet below surface:	0.75
Feet to sea level:	Not Reported	Note:	Not Reported

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

5
West
1/4 - 1/2 Mile
Higher

FED USGS **USGS40000010699**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006631ACDC2 002	Type:	Well
Description:	OBS WELL DRIVEN INTO STREAMBED BY USGS-DUCK CR 20		
HUC:	19010301	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Quaternary System	Aquifer Type:	Unconfined single aquifer
Construction Date:	19990629	Well Depth:	3.15
Well Depth Units:	ft	Well Hole Depth:	3.15
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	4	Level reading date:	2001-04-10
Feet below surface:	-1.35	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	2000-03-14	Feet below surface:	0.35
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	2000-03-10	Feet below surface:	0.02
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1999-06-29	Feet below surface:	-1.37
Feet to sea level:	Not Reported	Note:	Not Reported

A6
West
1/2 - 1 Mile
Higher

FED USGS **USGS40000010709**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006631BDAC1 012	Type:	Well
Description:	Not Reported	HUC:	19010301
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19840425
Well Depth:	9	Well Depth Units:	ft
Well Hole Depth:	15	Well Hole Depth Units:	ft

A7
West
1/2 - 1 Mile
Higher

FED USGS **USGS40000010710**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006631ACBC1 015	Type:	Well
Description:	JORDAN AVE NR JORDAN CREEK FOOTBRIDGE		
HUC:	19010301	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Quaternary System	Aquifer Type:	Not Reported

Construction Date:	199705	Well Depth:	8
Well Depth Units:	ft	Well Hole Depth:	8
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	41	Level reading date:	2003-11-08
Feet below surface:	2.36	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	2003-09-27	Feet below surface:	0.52
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-08-20	Feet below surface:	2.77
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-06-11	Feet below surface:	3.96
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-06-02	Feet below surface:	3.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-05-25	Feet below surface:	3.48
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-05-17	Feet below surface:	3.41
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-05-14	Feet below surface:	3.54
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-05-08	Feet below surface:	3.70
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-05-03	Feet below surface:	3.53
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-04-26	Feet below surface:	3.32
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2002-03-22	Feet below surface:	3.08
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-08-15	Feet below surface:	2.41
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-04-24	Feet below surface:	2.79
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-04-12	Feet below surface:	2.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-04-10	Feet below surface:	2.47
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-11-04	Feet below surface:	1.22
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-10-27	Feet below surface:	1.05
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-09-24	Feet below surface:	0.72
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	2000-09-07	Feet below surface:	0.14
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-12-26	Feet below surface:	2.59
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-10-21	Feet below surface:	0.39
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-10-09	Feet below surface:	0.25
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-07-07	Feet below surface:	2.19
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-05-02	Feet below surface:	0.83
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1998-03-12	Feet below surface:	3.28
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-08-14	Feet below surface:	0.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-08-06	Feet below surface:	1.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-07-16	Feet below surface:	0.51
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-07-13	Feet below surface:	-1.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-06-29	Feet below surface:	1.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-06-26	Feet below surface:	1.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-06-24	Feet below surface:	1.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-06-22	Feet below surface:	1.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-06-19	Feet below surface:	1.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-06-16	Feet below surface:	1.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-06-13	Feet below surface:	1.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-06-11	Feet below surface:	1.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-06-08	Feet below surface:	1.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-06-01	Feet below surface:	1.4

Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-05-29	Feet below surface:	1.2
Feet to sea level:	Not Reported	Note:	Not Reported

A8
West
1/2 - 1 Mile
Higher

FED USGS **USGS40000010704**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006631BDDB1 013	Type:	Well
Description:	Not Reported	HUC:	19010301
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19840325
Well Depth:	8	Well Depth Units:	ft
Well Hole Depth:	30	Well Hole Depth Units:	ft

B9
NW
1/2 - 1 Mile
Higher

FED USGS **USGS40000010749**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006631ABBD2 008	Type:	Well
Description:	Not Reported	HUC:	19010301
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19650917
Well Depth:	100	Well Depth Units:	ft
Well Hole Depth:	100	Well Hole Depth Units:	ft

B10
NW
1/2 - 1 Mile
Higher

FED USGS **USGS40000010750**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006631ABBD1 008	Type:	Well
Description:	Not Reported	HUC:	19010301
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19600101
Well Depth:	36	Well Depth Units:	ft
Well Hole Depth:	36	Well Hole Depth Units:	ft

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

C11
WNW
1/2 - 1 Mile
Higher | **FED USGS** | **USGS40000010725**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006631BACD3 006	Type:	Well
Description:	Not Reported	HUC:	19010301
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19660203
Well Depth:	70	Well Depth Units:	ft
Well Hole Depth:	70	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	1	Level reading date:	1966-02-03
Feet below surface:	14.00	Feet to sea level:	Not Reported
Note:	Not Reported		

12
WNW
1/2 - 1 Mile
Higher | **FED USGS** | **USGS40000010747**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006631BAAD1 021	Type:	Well
Description:	OBS WELL DRIVEN INTO STREAMBED BY USGS-DUCK CR 21		
HUC:	19010301	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Quaternary System	Aquifer Type:	Unconfined single aquifer
Construction Date:	19990806	Well Depth:	6
Well Depth Units:	ft	Well Hole Depth:	6
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	3	Level reading date:	2001-10-11
Feet below surface:	2.62	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	2001-04-12	Feet below surface:	4.61
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-03-14	Feet below surface:	Not Reported
Feet to sea level:	Not Reported		
Note:	The site was dry (no water level recorded).		

13
NW
1/2 - 1 Mile
Higher | **FED USGS** | **USGS40000010762**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006631ABBA1 020	Type:	Well
Description:	MAP NO. CHANGED FROM 015 TO 020 3/31/99		
HUC:	19010301	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported

Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19831016	Well Depth:	34.8
Well Depth Units:	ft	Well Hole Depth:	35
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1983-10-16
Feet below surface:	5.90	Feet to sea level:	Not Reported
Note:	Not Reported		

C14
WNW
1/2 - 1 Mile
Higher

FED USGS **USGS40000010727**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006631BACD2 006	Type:	Well
Description:	Not Reported	HUC:	19010301
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19790506
Well Depth:	71	Well Depth Units:	ft
Well Hole Depth:	71	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	1	Level reading date:	1979-05-06
Feet below surface:	7.00	Feet to sea level:	Not Reported
Note:	Not Reported		

C15
WNW
1/2 - 1 Mile
Higher

FED USGS **USGS40000010739**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006631BACD1 006	Type:	Well
Description:	Not Reported	HUC:	19010301
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19630710
Well Depth:	52	Well Depth Units:	ft
Well Hole Depth:	52	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	1	Level reading date:	1963-07-10
Feet below surface:	8.00	Feet to sea level:	Not Reported
Note:	Not Reported		

D16
NW
1/2 - 1 Mile
Higher

FED USGS **USGS40000010769**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006630DCCA1 035	Type:	Well
Description:	OBS WELL DRIVEN INTO STREAMBED BY USGS-DUCK CR 23		

HUC:	19010301	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Quaternary System	Aquifer Type:	Unconfined single aquifer
Construction Date:	19990629	Well Depth:	3.97
Well Depth Units:	ft	Well Hole Depth:	3.97
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	3	Level reading date:	2001-10-11
Feet below surface:	0.26	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	2000-03-14	Feet below surface:	0.05
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-06-29	Feet below surface:	-0.38
Feet to sea level:	Not Reported	Note:	Not Reported

D17
NW
1/2 - 1 Mile
Higher

FED USGS **USGS40000010764**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006630DCCC1 034	Type:	Well
Description:	OBS WELL DRIVEN INTO STREAMBED BY USGS-DUCK CR 22		
HUC:	19010301	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Quaternary System	Aquifer Type:	Unconfined single aquifer
Construction Date:	19990806	Well Depth:	5.4
Well Depth Units:	ft	Well Hole Depth:	5.4
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	5	Level reading date:	2001-10-11
Feet below surface:	1.35	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	2001-04-12	Feet below surface:	3.58
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-04-10	Feet below surface:	3.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-03-14	Feet below surface:	Not Reported
Feet to sea level:	Not Reported		
Note:	The site was dry (no water level recorded).		
Level reading date:	1999-12-30	Feet below surface:	1.13
Feet to sea level:	Not Reported	Note:	Not Reported

18
WNW
1/2 - 1 Mile
Higher

FED USGS **USGS40000010751**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006631BABD1 010	Type:	Well

Description:	Not Reported	HUC:	19010301
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19650918
Well Depth:	42	Well Depth Units:	ft
Well Hole Depth:	42	Well Hole Depth Units:	ft

19
WNW
1/2 - 1 Mile
Higher

FED USGS **USGS40000010740**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006631BACB1 005	Type:	Well
Description:	Not Reported	HUC:	19010301
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19600616
Well Depth:	80	Well Depth Units:	ft
Well Hole Depth:	120	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	1	Level reading date:	1960-06-16
Feet below surface:	5.00	Feet to sea level:	Not Reported
Note:	Not Reported		

E20
WNW
1/2 - 1 Mile
Higher

FED USGS **USGS40000010754**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006630CDCB1 027	Type:	Well
Description:	KA-SEE-AN DRIVE BEHIND FIRST CHURCH OF GOD		
HUC:	19010301	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Quaternary System	Aquifer Type:	Not Reported
Construction Date:	199706	Well Depth:	17.5
Well Depth Units:	ft	Well Hole Depth:	18
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	43	Level reading date:	2003-12-27
Feet below surface:	5.92	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	2003-11-08	Feet below surface:	7.86
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-09-27	Feet below surface:	5.53
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-08-20	Feet below surface:	7.95
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-08-10	Feet below surface:	8.66

Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-07-06	Feet below surface:	9.28
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-06-21	Feet below surface:	9.80
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-06-11	Feet below surface:	10.33
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-06-02	Feet below surface:	10.25
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-05-25	Feet below surface:	10.22
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-05-17	Feet below surface:	10.19
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-05-14	Feet below surface:	10.38
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-05-08	Feet below surface:	10.43
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-05-03	Feet below surface:	10.29
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-04-26	Feet below surface:	10.14
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-04-19	Feet below surface:	10.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2002-03-22	Feet below surface:	9.44
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-10-11	Feet below surface:	6.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-08-15	Feet below surface:	8.05
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-04-24	Feet below surface:	9.45
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-04-12	Feet below surface:	8.67
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-04-10	Feet below surface:	8.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-11-04	Feet below surface:	6.31
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-10-27	Feet below surface:	6.06
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-09-24	Feet below surface:	Not Reported
Feet to sea level:	Not Reported		
Note:	An obstruction was encountered in the well above the water surface (no water level recorded).		

Level reading date:	2000-05-15	Feet below surface:	Not Reported
Feet to sea level:	Not Reported		
Note:	An obstruction was encountered in the well above the water surface (no water level recorded).		

Level reading date:	2000-04-16	Feet below surface:	Not Reported
Feet to sea level:	Not Reported		
Note:	An obstruction was encountered in the well above the water surface (no water level recorded).		

Level reading date:	2000-04-08	Feet below surface:	Not Reported
Feet to sea level:	Not Reported		
Note:	An obstruction was encountered in the well above the water surface (no water level recorded).		

Level reading date:	1999-12-26	Feet below surface:	5.00
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1999-10-23	Feet below surface:	4.41
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1999-10-09	Feet below surface:	5.01
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1999-07-06	Feet below surface:	7.96
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1999-05-02	Feet below surface:	5.78
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1998-06-18	Feet below surface:	8.74
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1998-03-12	Feet below surface:	9.62
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1997-08-06	Feet below surface:	5.70
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1997-07-16	Feet below surface:	5.04
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1997-07-13	Feet below surface:	5.3
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1997-06-29	Feet below surface:	6.8
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1997-06-26	Feet below surface:	6.3
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1997-06-24	Feet below surface:	6.3
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1997-06-22	Feet below surface:	6.2
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1997-06-19	Feet below surface:	6.6
Feet to sea level:	Not Reported	Note:	Not Reported

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

F21
West
1/2 - 1 Mile
Higher

FED USGS **USGS40000010721**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006631DCBD1 024	Type:	Well
Description:	AW-3, DC-3	HUC:	19010301
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Quaternary System
Aquifer Type:	Unconfined single aquifer	Construction Date:	1993
Well Depth:	10.5	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Ground water levels,Number of Measurements:	8	Level reading date:	2000-07-12
Feet below surface:	4.77	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	2000-07-05	Feet below surface:	4.42
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-06-27	Feet below surface:	4.75
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-06-18	Feet below surface:	4.98
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-06-11	Feet below surface:	4.98
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-06-01	Feet below surface:	4.99
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-05-25	Feet below surface:	4.80
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-05-16	Feet below surface:	5.28
Feet to sea level:	Not Reported	Note:	Not Reported

G22
West
1/2 - 1 Mile
Higher

FED USGS **USGS40000010743**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006631BBDB1 017	Type:	Well
Description:	NEAR CORNER BERNERS AVE AND OLD GLACIER HIGHWAY		
HUC:	19010301	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Quaternary System	Aquifer Type:	Not Reported
Construction Date:	199706	Well Depth:	8.8
Well Depth Units:	ft	Well Hole Depth:	15
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	76	Level reading date:	2004-01-14

Feet below surface:	1.70	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	2003-12-27	Feet below surface:	1.43
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-11-08	Feet below surface:	2.72
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-09-28	Feet below surface:	0.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-09-27	Feet below surface:	0.77
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-08-20	Feet below surface:	2.65
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-08-10	Feet below surface:	3.22
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-07-06	Feet below surface:	3.70
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-06-21	Feet below surface:	3.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-06-11	Feet below surface:	4.55
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-06-02	Feet below surface:	4.34
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-05-25	Feet below surface:	4.34
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-05-17	Feet below surface:	4.18
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-05-14	Feet below surface:	4.36
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-05-08	Feet below surface:	4.58
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-05-03	Feet below surface:	4.44
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-04-26	Feet below surface:	4.24
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-04-19	Feet below surface:	3.87
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2002-07-02	Feet below surface:	2.71
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2002-06-26	Feet below surface:	2.86
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2002-06-25	Feet below surface:	2.89
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	2002-06-13	Feet below surface:	2.59
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2002-06-12	Feet below surface:	2.66
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2002-06-06	Feet below surface:	3.26
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2002-03-22	Feet below surface:	3.81
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-10-11	Feet below surface:	1.65
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-08-14	Feet below surface:	2.75
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-04-24	Feet below surface:	3.92
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-04-12	Feet below surface:	3.41
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-04-10	Feet below surface:	3.25
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-11-04	Feet below surface:	1.80
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-10-27	Feet below surface:	1.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-09-07	Feet below surface:	0.69
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-08-16	Feet below surface:	1.65
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-08-06	Feet below surface:	1.44
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-07-30	Feet below surface:	1.08
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-07-24	Feet below surface:	1.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-07-20	Feet below surface:	2.32
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-07-12	Feet below surface:	2.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-07-05	Feet below surface:	1.81
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-06-26	Feet below surface:	2.26
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-06-18	Feet below surface:	2.82
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	2000-06-11	Feet below surface:	2.78
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-05-30	Feet below surface:	2.48
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-05-15	Feet below surface:	3.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-04-16	Feet below surface:	2.31
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-04-08	Feet below surface:	1.66
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-03-21	Feet below surface:	4.12
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-12-30	Feet below surface:	1.56
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-12-26	Feet below surface:	0.75
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-12-05	Feet below surface:	1.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-11-20	Feet below surface:	1.54
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-10-23	Feet below surface:	0.44
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-10-09	Feet below surface:	0.87
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-07-06	Feet below surface:	2.72
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-05-02	Feet below surface:	1.53
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1998-09-03	Feet below surface:	0.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1998-08-04	Feet below surface:	2.64
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1998-07-02	Feet below surface:	3.53
Feet to sea level:	Not Reported		
Note:	A nearby site that taps the same aquifer was being pumped.		
Level reading date:	1998-06-17	Feet below surface:	3.25
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1998-03-12	Feet below surface:	3.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1998-01-29	Feet below surface:	2.91
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1997-09-09	Feet below surface:	2.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-09-05	Feet below surface:	2.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-08-14	Feet below surface:	1.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-08-08	Feet below surface:	1.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-08-06	Feet below surface:	1.52
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-07-16	Feet below surface:	0.92
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-07-13	Feet below surface:	0.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-07-10	Feet below surface:	1.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-07-03	Feet below surface:	2.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-06-29	Feet below surface:	1.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-06-26	Feet below surface:	1.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-06-24	Feet below surface:	1.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-06-22	Feet below surface:	1.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-06-19	Feet below surface:	1.8
Feet to sea level:	Not Reported	Note:	Not Reported

E23
WNW
1/2 - 1 Mile
Higher

FED USGS **USGS40000010753**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006631BBAA5 007	Type:	Well
Description:	Not Reported	HUC:	19010301
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19590101
Well Depth:	60	Well Depth Units:	ft
Well Hole Depth:	60	Well Hole Depth Units:	ft

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

G24
West
1/2 - 1 Mile
Higher | **FED USGS** | **USGS40000010741**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006631BBDD1 016	Type:	Well
Description:	Corner Cessna&Alex Holden,left bank	Duck Creek	
HUC:	19010301	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Quaternary System	Aquifer Type:	Not Reported
Construction Date:	199705	Well Depth:	12
Well Depth Units:	ft	Well Hole Depth:	12
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	62	Level reading date:	2003-12-27
Feet below surface:	7.97	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	2003-11-08	Feet below surface:	8.87
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-09-27	Feet below surface:	7.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-08-20	Feet below surface:	8.92
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-08-10	Feet below surface:	9.38
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-07-06	Feet below surface:	9.80
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-06-21	Feet below surface:	9.94
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-06-02	Feet below surface:	10.35
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-05-25	Feet below surface:	10.32
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-05-17	Feet below surface:	10.04
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-05-14	Feet below surface:	10.32
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-05-08	Feet below surface:	10.54
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-05-03	Feet below surface:	10.42
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-04-26	Feet below surface:	10.19
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	2003-04-19	Feet below surface:	9.78
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2002-07-02	Feet below surface:	8.32
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2002-06-13	Feet below surface:	8.81
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2002-06-06	Feet below surface:	9.32
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2002-03-22	Feet below surface:	9.80
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-10-11	Feet below surface:	8.12
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-08-15	Feet below surface:	8.94
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-04-24	Feet below surface:	9.86
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-04-12	Feet below surface:	9.33
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-04-10	Feet below surface:	9.27
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-11-04	Feet below surface:	8.24
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-10-27	Feet below surface:	8.14
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-09-24	Feet below surface:	8.01
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-09-07	Feet below surface:	7.46
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-08-17	Feet below surface:	8.24
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-08-06	Feet below surface:	8.06
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-07-30	Feet below surface:	7.72
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-07-20	Feet below surface:	8.62
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-07-12	Feet below surface:	8.65
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-07-05	Feet below surface:	8.39
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-06-26	Feet below surface:	8.60
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	2000-06-18	Feet below surface:	8.91
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-06-11	Feet below surface:	8.81
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-05-30	Feet below surface:	8.67
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-05-15	Feet below surface:	9.16
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-04-08	Feet below surface:	8.14
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-03-14	Feet below surface:	9.99
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-03-10	Feet below surface:	9.78
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-02-21	Feet below surface:	10.06
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-12-30	Feet below surface:	8.16
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-12-26	Feet below surface:	7.33
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-11-20	Feet below surface:	8.02
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-10-23	Feet below surface:	7.10
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-10-09	Feet below surface:	7.53
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-07-07	Feet below surface:	8.89
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-07-06	Feet below surface:	8.82
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-05-02	Feet below surface:	8.09
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1998-03-12	Feet below surface:	9.86
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-08-06	Feet below surface:	8.04
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-07-16	Feet below surface:	7.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-07-13	Feet below surface:	6.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-07-10	Feet below surface:	8.4
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1997-07-03	Feet below surface:	8.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-06-29	Feet below surface:	8.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-06-26	Feet below surface:	8.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-06-24	Feet below surface:	8.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-06-22	Feet below surface:	8.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-06-19	Feet below surface:	8.3
Feet to sea level:	Not Reported	Note:	Not Reported

F25
West
1/2 - 1 Mile
Higher

FED USGS **USGS40000010728**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006631BBCD1 001	Type:	Well
Description:	Not Reported	HUC:	19010301
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	Not Reported
Well Depth:	43.6	Well Depth Units:	ft
Well Hole Depth:	43.6	Well Hole Depth Units:	ft

F26
West
1/2 - 1 Mile
Higher

FED USGS **USGS40000010729**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006631BBCD2 001	Type:	Well
Description:	Not Reported	HUC:	19010301
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19680510
Well Depth:	78	Well Depth Units:	ft
Well Hole Depth:	85	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	1	Level reading date:	1968-05-10
Feet below surface:	7.40	Feet to sea level:	Not Reported
Note:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

E27
WNW
1/2 - 1 Mile
Higher

FED USGS **USGS40000010757**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006631BBAA3 007	Type:	Well
Description:	Not Reported	HUC:	19010301
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19550101
Well Depth:	45	Well Depth Units:	ft
Well Hole Depth:	45	Well Hole Depth Units:	ft

E28
WNW
1/2 - 1 Mile
Higher

FED USGS **USGS40000010758**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006631BBAA4 007	Type:	Well
Description:	Not Reported	HUC:	19010301
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19630529
Well Depth:	50	Well Depth Units:	ft
Well Hole Depth:	66	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	1	Level reading date:	1963-05-29
Feet below surface:	5.30	Feet to sea level:	Not Reported
Note:	Not Reported		

E29
WNW
1/2 - 1 Mile
Higher

FED USGS **USGS40000010755**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006631BBAA1 007	Type:	Well
Description:	Not Reported	HUC:	19010301
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19631201
Well Depth:	43	Well Depth Units:	ft
Well Hole Depth:	43	Well Hole Depth Units:	ft

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

E30
WNW
1/2 - 1 Mile
Higher

FED USGS **USGS40000010756**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006631BBAA2 007	Type:	Well
Description:	Not Reported	HUC:	19010301
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19630513
Well Depth:	262	Well Depth Units:	ft
Well Hole Depth:	262	Well Hole Depth Units:	ft

F31
West
1/2 - 1 Mile
Higher

FED USGS **USGS40000010722**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006631CDAD1 023	Type:	Well
Description:	AW-2, DC-2	HUC:	19010301
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Quaternary System
Aquifer Type:	Unconfined single aquifer	Construction Date:	1993
Well Depth:	17.9	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Ground water levels,Number of Measurements:	8	Level reading date:	2000-07-12
Feet below surface:	8.7	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	2000-07-05	Feet below surface:	8.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-06-27	Feet below surface:	8.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-06-18	Feet below surface:	8.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-06-11	Feet below surface:	8.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-06-01	Feet below surface:	9.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-05-25	Feet below surface:	8.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-05-16	Feet below surface:	9.36
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database | EDR ID Number

H32
WNW
1/2 - 1 Mile
Higher

FED USGS **USGS40000010759**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006631BBAB1 004	Type:	Well
Description:	Not Reported	HUC:	19010301
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19711229
Well Depth:	46	Well Depth Units:	ft
Well Hole Depth:	46	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	1	Level reading date:	1971-12-29
Feet below surface:	8.00	Feet to sea level:	Not Reported
Note:	Not Reported		

I33
WNW
1/2 - 1 Mile
Higher

FED USGS **USGS40000010773**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006630CCDA1 018	Type:	Well
Description:	Not Reported	HUC:	19010301
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19620101
Well Depth:	42	Well Depth Units:	ft
Well Hole Depth:	42	Well Hole Depth Units:	ft

J34
West
1/2 - 1 Mile
Higher

FED USGS **USGS40000010730**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006631BBCC1 011	Type:	Well
Description:	Not Reported	HUC:	19010301
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19680511
Well Depth:	36.5	Well Depth Units:	ft
Well Hole Depth:	55	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	1	Level reading date:	1968-06-27
Feet below surface:	7.63	Feet to sea level:	Not Reported
Note:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

35
WNW
1/2 - 1 Mile
Higher

FED USGS **USGS40000010752**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006631BBBD1 009	Type:	Well
Description:	Not Reported	HUC:	19010301
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19820807
Well Depth:	39.5	Well Depth Units:	ft
Well Hole Depth:	47	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	1	Level reading date:	1982-08-07
Feet below surface:	10.80	Feet to sea level:	Not Reported
Note:	Not Reported		

J36
West
1/2 - 1 Mile
Higher

FED USGS **USGS40000010723**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006631DDAD1 025	Type:	Well
Description:	AW-6, DC-6	HUC:	19010301
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Quaternary System
Aquifer Type:	Unconfined single aquifer	Construction Date:	1993
Well Depth:	17.8	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Ground water levels,Number of Measurements:	8	Level reading date:	2000-07-12
Feet below surface:	8.52	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	2000-07-05	Feet below surface:	7.68
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-06-27	Feet below surface:	8.74
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-06-18	Feet below surface:	8.74
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-06-11	Feet below surface:	8.84
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-06-01	Feet below surface:	8.98
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-05-25	Feet below surface:	8.84
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-05-16	Feet below surface:	9.22

Feet to sea level:	Not Reported	Note:	Not Reported

37
NW
1/2 - 1 Mile
Higher

FED USGS **USGS40000010792**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006630CADC1 002	Type:	Well
Description:	Not Reported	HUC:	19010301
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	1960
Well Depth:	50	Well Depth Units:	ft
Well Hole Depth:	50	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	29	Level reading date:	1984-04-11
Feet below surface:	5.61	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1984-04-06	Feet below surface:	5.38
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-03-22	Feet below surface:	5.36
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-03-16	Feet below surface:	5.55
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-03-12	Feet below surface:	5.25
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-03-01	Feet below surface:	5.44
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-02-09	Feet below surface:	4.39
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-02-02	Feet below surface:	5.23
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-01-27	Feet below surface:	8.51
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-01-13	Feet below surface:	8.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-01-06	Feet below surface:	8.38
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-12-29	Feet below surface:	10.24
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-12-05	Feet below surface:	7.94
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-11-23	Feet below surface:	5.71
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1983-11-10	Feet below surface:	5.74
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-10-28	Feet below surface:	4.62
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-09-29	Feet below surface:	4.78
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-09-23	Feet below surface:	3.81
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-09-08	Feet below surface:	4.45
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-09-01	Feet below surface:	4.61
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-08-26	Feet below surface:	3.76
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-08-19	Feet below surface:	5.76
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-08-15	Feet below surface:	4.94
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-08-05	Feet below surface:	6.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-07-29	Feet below surface:	7.56
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-07-21	Feet below surface:	6.54
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-07-15	Feet below surface:	6.96
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-07-06	Feet below surface:	6.58
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-07-01	Feet below surface:	6.24
Feet to sea level:	Not Reported	Note:	Not Reported

H38
WNW
1/2 - 1 Mile
Higher

FED USGS **USGS40000010763**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006631BBBA1 018	Type:	Well
Description:	OLD GLACIER HWY,DOWNSTREAM FRM FAA DRIVEWAY		
HUC:	19010301	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Quaternary System	Aquifer Type:	Not Reported
Construction Date:	199705	Well Depth:	11
Well Depth Units:	ft	Well Hole Depth:	11
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	55	Level reading date:	2003-08-20
Feet below surface:	0.94	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	2003-08-10	Feet below surface:	1.78
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-07-06	Feet below surface:	2.72
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-06-21	Feet below surface:	3.22
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-06-11	Feet below surface:	3.88
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-06-02	Feet below surface:	3.78
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-05-25	Feet below surface:	3.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-05-17	Feet below surface:	3.83
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-05-14	Feet below surface:	3.75
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-05-08	Feet below surface:	3.72
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-05-03	Feet below surface:	3.75
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-04-26	Feet below surface:	3.82
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-04-19	Feet below surface:	3.75
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2002-07-02	Feet below surface:	1.63
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2002-06-13	Feet below surface:	-0.12
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2002-03-22	Feet below surface:	-1.51
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-04-24	Feet below surface:	3.37
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-04-12	Feet below surface:	2.55
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-04-10	Feet below surface:	2.54
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-07-30	Feet below surface:	Not Reported
Feet to sea level:	Not Reported		
Note:	The site was flowing, but the head could not be measured without additional equipment.		

Level reading date: 2000-07-20 Feet below surface: Not Reported
Feet to sea level: Not Reported
Note: The site was flowing, but the head could not be measured without additional equipment.

Level reading date: 2000-07-12 Feet below surface: 0.45
Feet to sea level: Not Reported Note: Not Reported

Level reading date: 2000-07-05 Feet below surface: Not Reported
Feet to sea level: Not Reported
Note: The site was flowing, but the head could not be measured without additional equipment.

Level reading date: 2000-06-26 Feet below surface: 0.71
Feet to sea level: Not Reported Note: Not Reported

Level reading date: 2000-06-18 Feet below surface: 1.82
Feet to sea level: Not Reported Note: Not Reported

Level reading date: 2000-06-11 Feet below surface: Not Reported
Feet to sea level: Not Reported
Note: The site was flowing, but the head could not be measured without additional equipment.

Level reading date: 2000-05-30 Feet below surface: Not Reported
Feet to sea level: Not Reported
Note: The site was flowing, but the head could not be measured without additional equipment.

Level reading date: 2000-05-15 Feet below surface: 2.60
Feet to sea level: Not Reported Note: Not Reported

Level reading date: 2000-04-16 Feet below surface: 0.06
Feet to sea level: Not Reported Note: Not Reported

Level reading date: 2000-04-08 Feet below surface: Not Reported
Feet to sea level: Not Reported
Note: The site was flowing, but the head could not be measured without additional equipment.

Level reading date: 2000-03-21 Feet below surface: 3.60
Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1999-12-30 Feet below surface: Not Reported
Feet to sea level: Not Reported
Note: The site was flowing, but the head could not be measured without additional equipment.

Level reading date: 1999-12-25 Feet below surface: Not Reported
Feet to sea level: Not Reported
Note: The site was flowing, but the head could not be measured without additional equipment.

Level reading date: 1999-10-23 Feet below surface: Not Reported
Feet to sea level: Not Reported
Note: The site was flowing, but the head could not be measured without additional equipment.

Level reading date: 1999-10-09 Feet below surface: Not Reported
Feet to sea level: Not Reported
Note: The site was flowing, but the head could not be measured without additional equipment.

Level reading date: 1999-07-06 Feet below surface: 1.78
Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1999-05-02 Feet below surface: -1.86
Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1998-08-04 Feet below surface: 1.76
Feet to sea level: Not Reported Note: Not Reported

Level reading date:	1998-06-18	Feet below surface:	2.81
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1998-03-13	Feet below surface:	3.62
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-08-14	Feet below surface:	-3.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-07-13	Feet below surface:	-3.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-07-10	Feet below surface:	0.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-07-02	Feet below surface:	2.83
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-06-29	Feet below surface:	0.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-06-16	Feet below surface:	0.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-06-13	Feet below surface:	1.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-06-11	Feet below surface:	1.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-06-08	Feet below surface:	1.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-06-01	Feet below surface:	1.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-05-29	Feet below surface:	1.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-05-27	Feet below surface:	1.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-05-23	Feet below surface:	0.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-05-21	Feet below surface:	0.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-05-08	Feet below surface:	2.26
Feet to sea level:	Not Reported	Note:	Not Reported

I39
WNW
1/2 - 1 Mile
Higher

FED USGS **USGS40000010771**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006630CCDA2 018	Type:	Well
Description:	Not Reported	HUC:	19010301
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported

Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	Not Reported
Well Depth:	53	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

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K40
NW
1/2 - 1 Mile
Higher

FED USGS **USGS40000010787**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006630CDBA1 019	Type:	Well
Description:	Not Reported	HUC:	19010301
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19650101
Well Depth:	70	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

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J41
West
1/2 - 1 Mile
Higher

FED USGS **USGS40000010745**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006536AADA1 003	Type:	Well
Description:	Not Reported	HUC:	19010301
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19650101
Well Depth:	38	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Ground water levels,Number of Measurements:	1	Level reading date:	1965-09-24
Feet below surface:	6.72	Feet to sea level:	Not Reported
Note:	Not Reported		

42
West
1/2 - 1 Mile
Lower

FED USGS **USGS40000010717**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006636CCBC1 001	Type:	Well
Description:	AW-7, DC-7	HUC:	19010301
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Quaternary System
Aquifer Type:	Unconfined single aquifer	Construction Date:	1993
Well Depth:	16	Well Depth Units:	ft
Well Hole Depth:	16	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	8	Level reading date:	2000-07-12

Feet below surface:	9.99	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	2000-07-05	Feet below surface:	9.01
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-06-27	Feet below surface:	10.30
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-06-18	Feet below surface:	10.02
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-06-11	Feet below surface:	10.30
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-06-01	Feet below surface:	10.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-05-25	Feet below surface:	10.49
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-05-16	Feet below surface:	10.63
Feet to sea level:	Not Reported	Note:	Not Reported

J43
West
1/2 - 1 Mile
Lower

FED USGS **USGS40000010744**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006631BBCB1 014	Type:	Well
Description:	Map Number changed from -BBCB1-10 on 9/25/97		
HUC:	19010301	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19650101	Well Depth:	42
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		
Ground water levels,Number of Measurements:	1	Level reading date:	1965-07-01
Feet below surface:	7.26	Feet to sea level:	Not Reported
Note:	Not Reported		

44
WNW
1/2 - 1 Mile
Higher

FED USGS **USGS40000010765**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006630CCCD2 017	Type:	Well
Description:	OLD GLACIER HWY UPSTREAM FRM FAA DRIVEWAY		
HUC:	19010301	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Quaternary System	Aquifer Type:	Not Reported
Construction Date:	19970508	Well Depth:	12
Well Depth Units:	ft	Well Hole Depth:	12
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	63	Level reading date:	2003-11-08
Feet below surface:	2.12	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	2003-08-20	Feet below surface:	3.10
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	2003-08-10	Feet below surface:	4.06
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	2003-07-06	Feet below surface:	4.36
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	2003-06-21	Feet below surface:	4.74
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	2003-06-11	Feet below surface:	4.89
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	2003-06-02	Feet below surface:	4.84
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	2003-05-25	Feet below surface:	4.88
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	2003-05-17	Feet below surface:	4.78
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	2003-05-14	Feet below surface:	4.75
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	2003-05-08	Feet below surface:	4.53
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	2003-05-03	Feet below surface:	4.30
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	2003-04-26	Feet below surface:	3.89
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	2003-04-19	Feet below surface:	3.42
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	2002-07-02	Feet below surface:	1.98
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	2002-06-13	Feet below surface:	-0.74
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	2002-03-22	Feet below surface:	Not Reported
Feet to sea level:	Not Reported		
Note:	An obstruction was encountered in the well above the water surface (no water level recorded).		

Level reading date:	2001-10-11	Feet below surface:	Not Reported
Feet to sea level:	Not Reported		
Note:	The site was flowing, but the head could not be measured without additional equipment.		

Level reading date:	2001-04-24	Feet below surface:	2.94
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	2001-04-12	Feet below surface:	1.81
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	2001-04-10	Feet below surface:	1.62
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	2000-11-04	Feet below surface:	Not Reported
Feet to sea level:	Not Reported		
Note:	The site was flowing, but the head could not be measured without additional equipment.		

Level reading date:	2000-10-27	Feet below surface:	Not Reported
Feet to sea level:	Not Reported		
Note:	The site was flowing, but the head could not be measured without additional equipment.		

Level reading date:	2000-09-24	Feet below surface:	Not Reported
Feet to sea level:	Not Reported		
Note:	The site was flowing, but the head could not be measured without additional equipment.		

Level reading date:	2000-09-07	Feet below surface:	Not Reported
Feet to sea level:	Not Reported		
Note:	The site was flowing, but the head could not be measured without additional equipment.		

Level reading date:	2000-08-16	Feet below surface:	Not Reported
Feet to sea level:	Not Reported		
Note:	The site was flowing, but the head could not be measured without additional equipment.		

Level reading date:	2000-08-06	Feet below surface:	Not Reported
Feet to sea level:	Not Reported		
Note:	The site was flowing, but the head could not be measured without additional equipment.		

Level reading date:	2000-07-30	Feet below surface:	Not Reported
Feet to sea level:	Not Reported		
Note:	The site was flowing, but the head could not be measured without additional equipment.		

Level reading date:	2000-07-20	Feet below surface:	Not Reported
Feet to sea level:	Not Reported		
Note:	The site was flowing, but the head could not be measured without additional equipment.		

Level reading date:	2000-07-12	Feet below surface:	Not Reported
Feet to sea level:	Not Reported		
Note:	The site was flowing, but the head could not be measured without additional equipment.		

Level reading date:	2000-07-05	Feet below surface:	-1.30
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	2000-06-26	Feet below surface:	-1.11
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	2000-06-11	Feet below surface:	0.68
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	2000-05-30	Feet below surface:	-1.20
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	2000-05-15	Feet below surface:	1.87
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	2000-04-16	Feet below surface:	-1.93
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	2000-04-08	Feet below surface:	Not Reported
Feet to sea level:	Not Reported		
Note:	The site was flowing, but the head could not be measured without additional equipment.		

Level reading date:	2000-03-21	Feet below surface:	2.99

Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-12-30	Feet below surface:	Not Reported
Feet to sea level:	Not Reported		
Note:	The site was flowing, but the head could not be measured without additional equipment.		
Level reading date:	1999-12-25	Feet below surface:	Not Reported
Feet to sea level:	Not Reported		
Note:	The site was flowing, but the head could not be measured without additional equipment.		
Level reading date:	1999-10-23	Feet below surface:	Not Reported
Feet to sea level:	Not Reported		
Note:	The site was flowing, but the head could not be measured without additional equipment.		
Level reading date:	1999-10-09	Feet below surface:	Not Reported
Feet to sea level:	Not Reported		
Note:	The site was flowing, but the head could not be measured without additional equipment.		
Level reading date:	1999-07-06	Feet below surface:	0.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-05-02	Feet below surface:	-1.72
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1998-08-04	Feet below surface:	0.02
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1998-07-02	Feet below surface:	3.63
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1998-06-18	Feet below surface:	3.48
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1998-03-13	Feet below surface:	2.85
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-08-14	Feet below surface:	-2.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-07-16	Feet below surface:	-1.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-07-13	Feet below surface:	-2.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-07-10	Feet below surface:	-2.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-06-29	Feet below surface:	-0.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-06-16	Feet below surface:	0.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-06-13	Feet below surface:	0.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-06-11	Feet below surface:	0.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-06-08	Feet below surface:	0.5
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1997-06-01	Feet below surface:	0.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-05-29	Feet below surface:	-0.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-05-27	Feet below surface:	-0.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-05-23	Feet below surface:	-0.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-05-21	Feet below surface:	0.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-05-08	Feet below surface:	3.22
Feet to sea level:	Not Reported	Note:	Not Reported

K45
NW
1/2 - 1 Mile
Higher

FED USGS **USGS40000010794**

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006630CACD1 021	Type:	Well
Description:	Not Reported	HUC:	19010301
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19750210
Well Depth:	39.5	Well Depth Units:	ft
Well Hole Depth:	41	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	1	Level reading date:	1975-02-10
Feet below surface:	12.50	Feet to sea level:	Not Reported
Note:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: AK Radon

Radon Test Results

Num Tests	< 0.5 pCi/L	0.5 - 2.0	2.1 - 4.0	4.1 - 10	10-20	> 20 pCi/L
95	69	23	2	1	0	0

Federal EPA Radon Zone for JUNEAU County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 99801

Number of sites tested: 62

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.303 pCi/L	100%	0%	0%
Living Area - 2nd Floor	0.100 pCi/L	100%	0%	0%
Basement	1.053 pCi/L	95%	5%	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 Classification and Mapping
Source: Alaska Natural Heritage Program
Telephone: 907-235-2218

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 Well Database
Source: Department of Administration, Oil & Gas Conservation Commission
Telephone:
Oil and gas well locations in the state.

RADON

State Database: AK Radon
Source: University of Alaska Fairbanks
Telephone: 907-474-7201
Radon Information

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.

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

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STREET AND ADDRESS INFORMATION

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Juneau
8425 Livingston Way
Juneau, AK 99801

Inquiry Number: 5509586.2s
December 12, 2018

EDR Summary Radius Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

8425 LIVINGSTON WAY
JUNEAU, AK 99801

COORDINATES

Latitude (North):	58.3576400 - 58° 21' 27.50''
Longitude (West):	134.5685240 - 134° 34' 6.68''
Universal Tranverse Mercator:	Zone 8
UTM X (Meters):	525250.2
UTM Y (Meters):	6468399.5
Elevation:	11 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	N/A
Source:	U.S. Geological Survey

MAPPED SITES SUMMARY

Target Property Address:
8425 LIVINGSTON WAY
JUNEAU, AK 99801

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	JUNEAU AAOF 300-GAL	8425 LIVINGSTON DR	AK RGA LUST		TP
A2	JUNEAU AAOF 300-GAL	8425 LIVINGSTON DR.	AK RGA LUST		TP
A3	ALASKA AIR NATIONAL	8425 LIVINGSTON WAY	RCRA-CESQG, FINDS, ECHO		TP
A4	JUNEAU AAOF 300-GAL	8425 LIVINGSTON DR.	AK SHWS		TP
A5	JUNEAU ARMY AVIATION	8425 LIVINGSTON WAY	AK UST		TP
A6	JUNEAU AAOF 300-GAL	8425 LIVINGSTON DR.,	AK RGA LUST		TP
A7	JUNEAU AAOF 300-GAL	8425 LIVINGSTON DR.	AK LUST		TP
B8	MENDENHALL CHRYSLER	8345 OLD DAIRY RD	AK UST	Higher	1 ft.
C9	CBJ GLACIER VALLEY F	1700 CREST DRIVE	AK LUST	Higher	1 ft.
D10	L A B FLYING SVC	JUNEAU INTL ARPRT BL	RCRA-CESQG	Higher	1 ft.
B11	LOVE BROS	8345 OLD DAIRY RD	RCRA NonGen / NLR, FINDS, ECHO	Higher	1 ft.
E12	JAKE'S INC. (HONDA H	8602 TEAL ST	AK UST	Higher	1 ft.
F13	CHANNEL FLYING	8995 YANDUKIN DR	RCRA-CESQG, FINDS, ECHO	Higher	1 ft.
G14	FAA JUNEAU STATION	JUNEAU AIRPORT	AK SHWS	Higher	1 ft.
H15	DOUGLAS TRUCKING INC	8400 AIRPORT BLVD	AK LUST, AK UST	Higher	1 ft.
F16	CHANNEL FLYING JUNEA	8995 YANDUKIN DRIVE,	AK SHWS	Higher	1 ft.
C17	CBJ GLACIER VALLEY F	1700 CREST DRIVE	AK SHWS	Higher	1 ft.
I18	HALS BODY SHOP	1990 ALPINE AVE	RCRA NonGen / NLR, FINDS, ECHO	Higher	1 ft.
C19	GLACIER FIRE STATION	1700 CREST DR	AK UST	Higher	1 ft.
20	HALS BODY SHOP	P. O. BOX 2177, 1990	AK UST	Higher	1 ft.
J21	FORMER CAPITAL CITY	2092 JORDAN AVE. SUI	AK SHWS	Higher	1 ft.
J22	CAPITAL CITY CLEANER	2092 JORDAN AVE STE	EDR Hist Cleaner	Higher	1 ft.
K23	CBJ - LEMON CREEK LI	ADJ. TO TIA INSURANC	AK LUST	Higher	1 ft.
K24	CBJ - LEMON CREEK LI	ADJ. TO TIA INSURANC	AK SHWS	Higher	1 ft.
L25	VALLEY LUMBER	8525 OLD DAIRY RD	RCRA-CESQG, FINDS, ECHO	Higher	1 ft.
M26	CAPITAL CITY CLEANER	8745 GLACIER HWY STE	RCRA NonGen / NLR, FINDS, ECHO	Higher	1 ft.
M27	RITZ CAMERA CENTERS	8745 GLACIER HWY #43	RCRA NonGen / NLR, FINDS, ECHO	Higher	1 ft.
M28	STARHILL ENTERPRISES	8745 GLACIER HWY STE	EDR Hist Cleaner	Higher	1 ft.
L29	USDA FS OLD DAIRY RD	8465 OLD DAIRY RD	RCRA-CESQG, FINDS, ECHO, CA HAZNET	Higher	1 ft.
L30	USFS JUNEAU RANGER D	8465 OLD DAIRY ROAD	AK SHWS	Higher	1 ft.
J31	YUKON OFFICE SUPPLY	2075 JORDAN AVE	RCRA NonGen / NLR, FINDS, ECHO	Higher	1 ft.
D32	CIVIL AIR PATROL HAN	JUNEAU AIRPORT, W RA	AK UST	Higher	1 ft.
I33	MENDENHALL AUTO CENT	8725 MALLARD ST	AK UST	Higher	1 ft.
B34	T & S WELDING INC.	8355 OLD DAIRY RD	AK UST	Higher	1 ft.
I35	MENDENHALL AUTO CTR	8725 MALLARD ST	RCRA-CESQG, FINDS, ECHO	Higher	1 ft.
G36	ALASKA AIRLINES - JU	1873 SHELL SIMMONS D	AK UST	Higher	1 ft.
G37	JUNEAU AIRFIELD AND	1873 SHELL-SIMMONS D	SEMS-ARCHIVE	Higher	1 ft.
G38	JUNEAU INTL ARPRT MA	1873 SHELL SIMMONS D	RCRA-CESQG	Higher	1 ft.
D39	DELTA AIR LINES JUNE	JUNEAU INTL ARPRT	RCRA NonGen / NLR	Higher	1 ft.

MAPPED SITES SUMMARY

Target Property Address:
8425 LIVINGSTON WAY
JUNEAU, AK 99801

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
J40	PACIFIC TELECOM, INC	2075 JORDAN AVE	AK UST	Higher	1 ft.
E41	CAMERON PLUMBING AND	1850 CREST STREET, N	AK SHWS, AK LUST, AK INST CONTROL	Higher	1 ft.
42	N C MACHINERY CO JUN	8850 AIRPORT BLVD	RCRA-CESQG, AK LUST, AK UST, FINDS, ECHO	Higher	1 ft.
H43	PETROLEUM SVCS INC	8401 AIRPORT BLVD	RCRA NonGen / NLR, FINDS, ECHO	Higher	1 ft.
44	JUNEAU AIRPORT	SHELL SIMMONS DR AT	AK LUST, AK UST	Higher	1 ft.
H45	NC MACHINERY COMPANY	8550 AIRPORT BLVD;	AK SHWS	Higher	1 ft.
H46	JUNEAU DAIRIES DISTR	8403 AIRPORT BLVD.,	AK SHWS	Higher	1 ft.
E47	CAMERON PLUMBING & H	1850 CREST ST	AK UST	Higher	1 ft.
H48	DOUGLAS TRUCKING	8400 AIRPORT BLVD	AK SHWS	Higher	1 ft.
F49	WARD AIR	WARD AIR	AK SHWS	Higher	1 ft.
F50	WARD AIR INC	8991 YANDUKIN DR	RCRA-CESQG, AK LUST, AK UST, FINDS, ECHO	Higher	1 ft.
51	SILVER BAY AVIATION	8892 YANDUKIN DR	RCRA-CESQG, FINDS, ECHO	Higher	1 ft.
H52	JUNEAU DAIRIES DISTR	8403 AIRPORT BLVD.	AK LUST	Higher	1 ft.
H53	JUNEAU DAIRIES DISTR	8403 AIRPORT BLVD	AK UST	Higher	1 ft.
N54	CBJ JUNEAU AIRPORT M	SHELL SIMMONS DRIVE	AK SHWS, AK INST CONTROL	Higher	52, 0.010, West
55	FRED MEYER #158 FUEL	8181 GLACIER HWY	AK UST, AK Financial Assurance, AK NPDES	Higher	55, 0.010, NE
O56	DELTA AIR CARGO	JUNEAU INTERNATIONAL	AK LUST	Higher	75, 0.014, West
O57	DELTA AIR CARGO	JUNEAU INTERNATIONAL	AK SHWS	Higher	82, 0.016, West
P58	CHEVRON - AIRPORT (P	9151 GLACIER HWY	AK LUST	Higher	116, 0.022, WNW
P59	PAUL'S CHEVRON	9151 GLACIER HWY	AK UST	Higher	116, 0.022, WNW
P60	CHEVRON - AIRPORT (P	9151 GLACIER HWY;	AK SHWS, AK ENG CONTROLS, AK INST CONTROL	Higher	116, 0.022, WNW
P61	EMIGS CHEVRON	9151 GLACIER HWY	EDR Hist Auto	Higher	116, 0.022, WNW
Q62	FAA JUNEAU	9230 CESSNA DR	AK UST	Higher	119, 0.023, WNW
Q63	DELTA WESTERN JUNEAU	9203 CESSNA DRIVE; J	AK SHWS, AK LUST	Higher	141, 0.027, West
R64	TEMSCO HELICOPTERS -	1650 MAPLESDEN WAY	AK VCP	Lower	175, 0.033, East
R65	TEMSCO HELICOPTERS	1650 MAPLEADEN WAY	AK LUST	Lower	175, 0.033, East
R66	TEMSCO HELICOPTERS,	1650 MAPLESDEN WAY	AK UST, AK Financial Assurance	Lower	175, 0.033, East
R67	TEMSCO HELICOPTERS	1650 MAPLEADEN WAY;	AK SHWS	Lower	175, 0.033, East
R68	TEMSCO HELICOPTERS -	1650 MAPLESDEN WAY	AK LUST	Lower	175, 0.033, East
R69	TEMSCO HELICOPTERS -	1650 MAPLESDEN WAY	AK SHWS, AK INST CONTROL	Lower	175, 0.033, East
N70	AERO SERVICES, JUNEA	"F"GATE 9203 SHELL S	AK SHWS, AK LUST	Higher	189, 0.036, West
Q71	JUNEAU & DOUGLAS TEL	9229 CESSNA DR	AK UST	Higher	191, 0.036, West
Q72	PTI- JUNEAU CESSNA D	9225 CESSNA DRIVE	AK SHWS, AK INST CONTROL, AK VCP	Higher	342, 0.065, West
Q73	PTI- JUNEAU CESSNA D	9225 CESSNA DRIVE	AK LUST	Higher	342, 0.065, West
S74	MIKE'S AIRPORT EXPRE	9190 GLACIER HWY	AK UST, AK Financial Assurance	Higher	399, 0.076, WNW
S75	MIKES AIRPORT UNION	9190 GLACIER HWY	EDR Hist Auto	Higher	399, 0.076, WNW
S76	UNOCAL - #5785- AIRP	9190 GLACIER HIGHWAY	AK SHWS, AK LUST, AK INST CONTROL	Higher	399, 0.076, WNW
S77	JUNEAU AIRPORT TRAVE	9200 GLACIER HIGHWAY	AK SHWS, AK INST CONTROL	Higher	594, 0.112, WNW
T78	ALASKA AIRLINES - JU	1915 ALEX HOLDEN WAY	AK SHWS, AK LUST	Higher	636, 0.120, West

MAPPED SITES SUMMARY

Target Property Address:
8425 LIVINGSTON WAY
JUNEAU, AK 99801

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
T79	ALASKA AIRLINES - JU	1915 ALEX HOLDEN WAY	AK LUST	Higher	636, 0.120, West
80	JUNEAU AIRPORT FUELI	2085 ALEX HOLDEN WAY	AK SHWS	Higher	670, 0.127, West
U81	MILLER CONSTRUCTION	2207 NORTH JORDAN AV	ABANDONED MINES	Higher	691, 0.131, WNW
82	ALASKA COASTAL AIRLI	JUNEAU INTL ARPRT BL	RCRA-CESQG	Lower	716, 0.136, WSW
T83	AERO SERVICES, INC.	1890 RENSHAW WAY	AK UST	Higher	721, 0.137, West
T84	NORTHSTAR TREKKING D	1910 RENSHAW WAY	RCRA NonGen / NLR	Higher	730, 0.138, West
U85	CHANNEL CONSTRUCTION	2223 NORTH JORDAN AV	RCRA NonGen / NLR, PADS	Higher	909, 0.172, NW
U86	PORTABLE 191	2223 N. JORDAN AVE.	ABANDONED MINES	Higher	909, 0.172, NW
U87	CHANNEL CONSTRUCTION		US MINES	Higher	922, 0.175, NW
88	T W HALL	9393 LA PEROUSE AVE	RCRA NonGen / NLR, FINDS, ECHO	Higher	1013, 0.192, West
V89	CHANNEL CONSTRUCTION		US MINES	Higher	1025, 0.194, NW
V90	MILLER CONSTRUCTION		US MINES	Higher	1025, 0.194, NW
W91	FAA JUNEAU SFOP	9341 GLACIER HIGHWAY	AK SHWS, AK LUST	Higher	1458, 0.276, WNW
W92	USDOT FAA JUNEAU	9341 GLACIER HWY NAV	SEMS-ARCHIVE, RCRA NonGen / NLR, PADS, FINDS, ECHO	Higher	1458, 0.276, WNW
93	COMMERCIAL PROPERTY	9351 GLACIER HIGHWAY	AK SHWS, AK INST CONTROL	Higher	1839, 0.348, WNW
94	MENDENHALL WW TREATM	2009 RADCLIFFE ROAD,	AK SHWS	Lower	2007, 0.380, West
95	SKATEBOARD PARK	MENDENHALL LOOP ROAD	AK SHWS, AK INST CONTROL, AK VCP	Higher	2071, 0.392, WNW
96	GLACIER GARDENS RAIN	7600 GLACIER HIGHWAY	AK SHWS	Higher	2430, 0.460, ENE
X97	BRUCE D. MORLEY, INC	9128 N. DOUGLAS HIGH	AK LUST	Higher	2475, 0.469, SE
X98	BRUCE D. MORLEY, INC	9128 N. DOUGLAS HIGH	AK SHWS	Higher	2475, 0.469, SE
99	USFS DUCK CREEK ADMI	NW CORNER OF ATLIN D	AK SHWS	Higher	3466, 0.656, NW
100	BICKNELL	2275 BRANDY LANE	AK SHWS, AK SPILLS	Higher	3488, 0.661, West
Y101	VALLEY TESORO	9102 MENDENHALL MALL	AK SHWS, AK LUST	Higher	3649, 0.691, NW
Y102	VALLEY TESORO	9102 MENDENHALL MALL	AK SHWS, AK UST, AK Financial Assurance	Higher	3649, 0.691, NW
103	MENDENHALL MALL HOTS	9105 MENDENHALL MALL	AK SHWS	Higher	3755, 0.711, NW
104	RESIDENCE - MISTY LA	10648 MISTY LANE, DO	AK SHWS, AK INST CONTROL	Lower	4112, 0.779, SSW
105	E&L AUTO	10005 CRAZY HORSE DR	AK SHWS, AK ENG CONTROLS, AK INST CONTROL	Higher	4261, 0.807, West
106	RESIDENCE - NANCY ST	8905 NANCY STREET	AK SHWS	Higher	4535, 0.859, NNW
107	RIVERBEND / DIMOND P	2900 RIVERSIDE DRIVE	AK SHWS, AK INST CONTROL	Higher	4590, 0.869, NW
108	RESIDENCE - 2822 MAR	2822 MARSHA AVENUE	AK SHWS	Higher	4762, 0.902, NW
109	RESIDENCE - 2921 GLA	2921 GLACIERWOOD COU	AK SHWS	Higher	4925, 0.933, NW

EXECUTIVE SUMMARY

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
JUNEAU AAOF 300-GAL 8425 LIVINGSTON DR JUNEAU, AK	AK RGA LUST	N/A
JUNEAU AAOF 300-GAL 8425 LIVINGSTON DR. JUNEAU, AK	AK RGA LUST	N/A
ALASKA AIR NATIONAL 8425 LIVINGSTON WAY JUNEAU, AK 99801	RCRA-CESQG EPA ID:: AKD983073321 FINDS Registry ID:: 110003039809 ECHO Registry ID: 110003039809	AKD983073321
JUNEAU AAOF 300-GAL 8425 LIVINGSTON DR. JUNEAU, AK 99801	AK SHWS Facility Status: Cleanup Complete Hazard ID: 2534 Hazard ID: 23037	N/A
JUNEAU ARMY AVIATION 8425 LIVINGSTON WAY JUNEAU, AK 99801	AK UST Facility Id: 3223 Tank Status: Permanently Out of Use	N/A
JUNEAU AAOF 300-GAL 8425 LIVINGSTON DR., JUNEAU, AK	AK RGA LUST	N/A
JUNEAU AAOF 300-GAL 8425 LIVINGSTON DR. JUNEAU, AK 99801	AK LUST eventid: 23037 Facility Status: Cleanup Complete	N/A

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

EXECUTIVE SUMMARY

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: A review of the SEMS-ARCHIVE list, as provided by EDR, and dated 11/14/2018 has revealed that there are 2 SEMS-ARCHIVE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
JUNEAU AIRFIELD AND Site ID: 1002180 EPA Id: AKSFN1002180	1873 SHELL-SIMMONS D	0 - 1/8 (0.000 mi.)	G37	17
USDOT FAA JUNEAU Site ID: 1001753 EPA Id: AK9690500179	***9341 GLACIER HWY NAV***	***WNW 1/4 - 1/2 (0.276 mi.)***	***W92***	***31***

Federal RCRA generators list

RCRA-CESQG: A review of the RCRA-CESQG list, as provided by EDR, and dated 03/01/2018 has revealed that there are 10 RCRA-CESQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
L A B FLYING SVC EPA ID:: AK0000385609	JUNEAU INTL ARPRT BL	0 - 1/8 (0.000 mi.)	D10	10
CHANNEL FLYING EPA ID:: AK0000385583	***8995 YANDUKIN DR***	***0 - 1/8 (0.000 mi.)***	***F13***	***10***
VALLEY LUMBER EPA ID:: AKR000002238	***8525 OLD DAIRY RD***	***0 - 1/8 (0.000 mi.)***	***L25***	***13***
USDA FS OLD DAIRY RD EPA ID:: AK4122300151	***8465 OLD DAIRY RD***	***0 - 1/8 (0.000 mi.)***	***L29***	***14***
MENDENHALL AUTO CTR EPA ID:: AK0000001115	***8725 MALLARD ST***	***0 - 1/8 (0.000 mi.)***	***I35***	***16***
JUNEAU INTL ARPRT MA EPA ID:: AK0000084020	1873 SHELL SIMMONS D	0 - 1/8 (0.000 mi.)	G38	17
N C MACHINERY CO JUN EPA ID:: AKD035418979	***8850 AIRPORT BLVD***	***0 - 1/8 (0.000 mi.)***	***42***	***18***
WARD AIR INC	***8991 YANDUKIN DR***	***0 - 1/8 (0.000 mi.)***	***F50***	***20***

EPA ID:: AK0000385625

SILVER BAY AVIATION	***8892 YANDUKIN DR***	***0 - 1/8 (0.000 mi.)***	***51***	***21***
EPA ID:: AK0000385617				

Lower Elevation	Address	Direction / Distance	Map ID	Page
ALASKA COASTAL AIRLI EPA ID:: AK0000444174	JUNEAU INTL ARPRT BL	WSW 1/8 - 1/4 (0.136 mi.)	82	29

State- and tribal - equivalent CERCLIS

AK SHWS: A review of the AK SHWS list, as provided by EDR, and dated 09/25/2018 has revealed that there are 40 AK SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FAA JUNEAU STATION Facility Status: Cleanup Complete Facility Status: Active Hazard ID: 2975 Hazard ID: 1450	JUNEAU AIRPORT	0 - 1/8 (0.000 mi.)	G14	11
CHANNEL FLYING JUNEA Facility Status: Active Hazard ID: 26362	8995 YANDUKIN DRIVE,	0 - 1/8 (0.000 mi.)	F16	11
CBJ GLACIER VALLEY F Facility Status: Cleanup Complete Hazard ID: 25160	1700 CREST DRIVE	0 - 1/8 (0.000 mi.)	C17	11
FORMER CAPITAL CITY Facility Status: Active Hazard ID: 26537	2092 JORDAN AVE. SUI	0 - 1/8 (0.000 mi.)	J21	12
CBJ - LEMON CREEK LI Facility Status: Cleanup Complete Hazard ID: 24631	ADJ. TO TIA INSURANC	0 - 1/8 (0.000 mi.)	K24	13
USFS JUNEAU RANGER D Facility Status: Cleanup Complete Hazard ID: 4391	8465 OLD DAIRY ROAD	0 - 1/8 (0.000 mi.)	L30	15
CAMERON PLUMBING AND Facility Status: Cleanup Complete - Institutional Controls Facility Status: Cleanup Complete Hazard ID: 1755 Hazard ID: 24385	***1850 CREST STREET, N***	***0 - 1/8 (0.000 mi.)***	***E41***	***17***
NC MACHINERY COMPANY Facility Status: Cleanup Complete Hazard ID: 24505	8550 AIRPORT BLVD;	0 - 1/8 (0.000 mi.)	H45	19
JUNEAU DAIRIES DISTR Facility Status: Cleanup Complete Hazard ID: 24490	8403 AIRPORT BLVD.,	0 - 1/8 (0.000 mi.)	H46	19
DOUGLAS TRUCKING	8400 AIRPORT BLVD	0 - 1/8 (0.000 mi.)	H48	20

Facility Status: Cleanup Complete Hazard ID: 24917				
WARD AIR Facility Status: Cleanup Complete Hazard ID: 24697	WARD AIR	0 - 1/8 (0.000 mi.)	F49	20
CBJ JUNEAU AIRPORT M Facility Status: Cleanup Complete - Institutional Controls Hazard ID: 25156	***SHELL SIMMONS DRIVE***	***W 0 - 1/8 (0.010 mi.)***	***N54***	***21***
DELTA AIR CARGO Facility Status: Cleanup Complete Hazard ID: 24902	JUNEAU INTERNATIONAL	W 0 - 1/8 (0.016 mi.)	O57	22
CHEVRON - AIRPORT (P Facility Status: Cleanup Complete - Institutional Controls Hazard ID: 24532	***9151 GLACIER HWY;***	***WNW 0 - 1/8 (0.022 mi.)***	***P60***	***23***
DELTA WESTERN JUNEAU Facility Status: Cleanup Complete Hazard ID: 23308	***9203 CESSNA DRIVE; J***	***W 0 - 1/8 (0.027 mi.)***	***Q63***	***24***
AERO SERVICES, JUNEA Facility Status: Cleanup Complete Hazard ID: 23170	***"F"GATE 9203 SHELL S***	***W 0 - 1/8 (0.036 mi.)***	***N70***	***25***
PTI- JUNEAU CESSNA D Facility Status: Cleanup Complete - Institutional Controls Hazard ID: 24743	***9225 CESSNA DRIVE***	***W 0 - 1/8 (0.065 mi.)***	***Q72***	***26***
UNOCAL - #5785- AIRP Facility Status: Cleanup Complete - Institutional Controls Hazard ID: 2984 Hazard ID: 23568	***9190 GLACIER HIGHWAY***	***WNW 0 - 1/8 (0.076 mi.)***	***S76***	***27***
JUNEAU AIRPORT TRAVE Facility Status: Cleanup Complete - Institutional Controls Hazard ID: 4517	***9200 GLACIER HIGHWAY***	***WNW 0 - 1/8 (0.112 mi.)***	***S77***	***27***
ALASKA AIRLINES - JU Facility Status: Active Facility Status: Cleanup Complete Hazard ID: 22996 Hazard ID: 24525	***1915 ALEX HOLDEN WAY***	***W 0 - 1/8 (0.120 mi.)***	***T78***	***28***
JUNEAU AIRPORT FUELI Facility Status: Active Hazard ID: 2987	2085 ALEX HOLDEN WAY	W 1/8 - 1/4 (0.127 mi.)	80	28
FAA JUNEAU SFOP Facility Status: Active Hazard ID: 24941	***9341 GLACIER HIGHWAY***	***WNW 1/4 - 1/2 (0.276 mi.)***	***W91***	***31***
COMMERCIAL PROPERTY Facility Status: Cleanup Complete Hazard ID: 25608	***9351 GLACIER HIGHWAY***	***WNW 1/4 - 1/2 (0.348 mi.)***	***93***	***31***
SKATEBOARD PARK Facility Status: Cleanup Complete Facility Status: Cleanup Complete - Institutional Controls Hazard ID: 2696 Hazard ID: 2697	***MENDENHALL LOOP ROAD***	***WNW 1/4 - 1/2 (0.392 mi.)***	***95***	***32***
GLACIER GARDENS RAIN	7600 GLACIER HIGHWAY	ENE 1/4 - 1/2 (0.460 mi.)	96	32

Facility Status: Cleanup Complete Hazard ID: 3709				
BRUCE D. MORLEY, INC Facility Status: Cleanup Complete Hazard ID: 24560	9128 N. DOUGLAS HIGH	SE 1/4 - 1/2 (0.469 mi.)	X98	33
USFS DUCK CREEK ADMI Facility Status: Cleanup Complete Hazard ID: 4389	NW CORNER OF ATLIN D	NW 1/2 - 1 (0.656 mi.)	99	33
BICKNELL Facility Status: Active Hazard ID: 26908	***2275 BRANDY LANE***	***W 1/2 - 1 (0.661 mi.)***	***100***	***33***
VALLEY TESORO Facility Status: Active Hazard ID: 26640	***9102 MENDENHALL MALL***	***NW 1/2 - 1 (0.691 mi.)***	***Y101***	***33***
VALLEY TESORO Facility Status: Cleanup Complete Hazard ID: 24906	***9102 MENDENHALL MALL***	***NW 1/2 - 1 (0.691 mi.)***	***Y102***	***34***
MENDENHALL MALL HOTS Facility Status: Cleanup Complete Hazard ID: 4448	9105 MENDENHALL MALL	NW 1/2 - 1 (0.711 mi.)	103	34
E&L AUTO Facility Status: Cleanup Complete - Institutional Controls Hazard ID: 1183	***10005 CRAZY HORSE DR***	***W 1/2 - 1 (0.807 mi.)***	***105***	***34***
RESIDENCE - NANCY ST Facility Status: Cleanup Complete Hazard ID: 3710	8905 NANCY STREET	NNW 1/2 - 1 (0.859 mi.)	106	35
RIVERBEND / DIMOND P Facility Status: Cleanup Complete Hazard ID: 299	***2900 RIVERSIDE DRIVE***	***NW 1/2 - 1 (0.869 mi.)***	***107***	***35***
RESIDENCE - 2822 MAR Facility Status: Active Hazard ID: 26468	2822 MARSHA AVENUE	NW 1/2 - 1 (0.902 mi.)	108	35
RESIDENCE - 2921 GLA Facility Status: Active Hazard ID: 26331	2921 GLACIERWOOD COU	NW 1/2 - 1 (0.933 mi.)	109	36

Lower Elevation	Address	Direction / Distance	Map ID	Page
TEMSCO HELICOPTERS Facility Status: Cleanup Complete Hazard ID: 24507	1650 MAPLEADEN WAY;	E 0 - 1/8 (0.033 mi.)	R67	25
TEMSCO HELICOPTERS - Facility Status: Cleanup Complete - Institutional Controls Hazard ID: 24511	***1650 MAPLESDEN WAY***	***E 0 - 1/8 (0.033 mi.)***	***R69***	***25***
MENDENHALL WW TREATM Facility Status: Active Hazard ID: 3863	2009 RADCLIFFE ROAD,	W 1/4 - 1/2 (0.380 mi.)	94	32
RESIDENCE - MISTY LA Facility Status: Cleanup Complete - Institutional Controls Hazard ID: 4063	***10648 MISTY LANE, DO***	***SSW 1/2 - 1 (0.779 mi.)***	***104***	***34***

EXECUTIVE SUMMARY

State and tribal leaking storage tank lists

AK LUST: A review of the AK LUST list, as provided by EDR, and dated 08/09/2018 has revealed that there are 20 AK LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CBJ GLACIER VALLEY F eventid: 25160 Facility Status: Cleanup Complete	1700 CREST DRIVE	0 - 1/8 (0.000 mi.)	C9	9
DOUGLAS TRUCKING INC eventid: 24917 Facility Status: Cleanup Complete	***8400 AIRPORT BLVD***	***0 - 1/8 (0.000 mi.)***	***H15***	***11***
CBJ - LEMON CREEK LI eventid: 24631 Facility Status: Cleanup Complete	ADJ. TO TIA INSURANC	0 - 1/8 (0.000 mi.)	K23	13
CAMERON PLUMBING AND eventid: 24385 Facility Status: Cleanup Complete	***1850 CREST STREET, N***	***0 - 1/8 (0.000 mi.)***	***E41***	***17***
N C MACHINERY CO JUN eventid: 24505 Facility Status: Cleanup Complete	***8850 AIRPORT BLVD***	***0 - 1/8 (0.000 mi.)***	***42***	***18***
JUNEAU AIRPORT eventid: 25156 Facility Status: Cleanup Complete - Institutional Controls	***SHELL SIMMONS DR AT***	***0 - 1/8 (0.000 mi.)***	***44***	***19***
WARD AIR INC eventid: 24697 Facility Status: Cleanup Complete	***8991 YANDUKIN DR***	***0 - 1/8 (0.000 mi.)***	***F50***	***20***
JUNEAU DAIRIES DISTR eventid: 24490 Facility Status: Cleanup Complete	8403 AIRPORT BLVD.	0 - 1/8 (0.000 mi.)	H52	21
DELTA AIR CARGO eventid: 24902 Facility Status: Cleanup Complete	JUNEAU INTERNATIONAL	W 0 - 1/8 (0.014 mi.)	O56	22
CHEVRON - AIRPORT (P eventid: 24532 Facility Status: Cleanup Complete - Institutional Controls	9151 GLACIER HWY	WNW 0 - 1/8 (0.022 mi.)	P58	22
DELTA WESTERN JUNEAU eventid: 23308 Facility Status: Cleanup Complete	***9203 CESSNA DRIVE; J***	***W 0 - 1/8 (0.027 mi.)***	***Q63***	***24***
AERO SERVICES, JUNEA eventid: 23170 Facility Status: Cleanup Complete	***"F"GATE 9203 SHELL S***	***W 0 - 1/8 (0.036 mi.)***	***N70***	***25***
PTI- JUNEAU CESSNA D eventid: 24743 Facility Status: Cleanup Complete - Institutional Controls	9225 CESSNA DRIVE	W 0 - 1/8 (0.065 mi.)	Q73	26
UNOCAL - #5785- AIRP eventid: 23568 Facility Status: Cleanup Complete - Institutional Controls	***9190 GLACIER HIGHWAY***	***WNW 0 - 1/8 (0.076 mi.)***	***S76***	***27***
ALASKA AIRLINES - JU	***1915 ALEX HOLDEN WAY***	***W 0 - 1/8 (0.120 mi.)***	***T78***	***28***

eventid: 22996 Facility Status: Open				
ALASKA AIRLINES - JU eventid: 24525 Facility Status: Cleanup Complete	1915 ALEX HOLDEN WAY	W 0 - 1/8 (0.120 mi.)	T79	28
FAA JUNEAU SFOP eventid: 24941 Facility Status: Open	***9341 GLACIER HIGHWAY***	***WNW 1/4 - 1/2 (0.276 mi.)***	***W91***	***31***
BRUCE D. MORLEY, INC eventid: 24560 Facility Status: Cleanup Complete	9128 N. DOUGLAS HIGH	SE 1/4 - 1/2 (0.469 mi.)	X97	32

Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
TEMSCO HELICOPTERS eventid: 24507 Facility Status: Cleanup Complete	1650 MAPLEADEN WAY	E 0 - 1/8 (0.033 mi.)	R65	24
TEMSCO HELICOPTERS - eventid: 24511 Facility Status: Cleanup Complete - Institutional Controls	1650 MAPLESDEN WAY	E 0 - 1/8 (0.033 mi.)	R68	25

State and tribal registered storage tank lists

AK UST: A review of the AK UST list, as provided by EDR, and dated 11/12/2018 has revealed that there are 22 AK UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
MENDENHALL CHRYSLER Facility Id: 2711 Tank Status: Permanently Out of Use	8345 OLD DAIRY RD	0 - 1/8 (0.000 mi.)	B8	9
JAKE'S INC. (HONDA H Facility Id: 1533 Tank Status: Permanently Out of Use	8602 TEAL ST	0 - 1/8 (0.000 mi.)	E12	10
DOUGLAS TRUCKING INC Facility Id: 1266 Tank Status: Permanently Out of Use	***8400 AIRPORT BLVD***	***0 - 1/8 (0.000 mi.)***	***H15***	***11***
GLACIER FIRE STATION Facility Id: 2167 Tank Status: Permanently Out of Use	1700 CREST DR	0 - 1/8 (0.000 mi.)	C19	12
HALS BODY SHOP Facility Id: 944 Tank Status: Permanently Out of Use	P. O. BOX 2177, 1990	0 - 1/8 (0.000 mi.)	20	12
CIVIL AIR PATROL HAN Facility Id: 2891 Tank Status: Permanently Out of Use	JUNEAU AIRPORT, W RA	0 - 1/8 (0.000 mi.)	D32	15
MENDENHALL AUTO CENT Facility Id: 2146	8725 MALLARD ST	0 - 1/8 (0.000 mi.)	I33	16

Tank Status: Permanently Out of Use				
T & S WELDING INC. Facility Id: 1192 Tank Status: Permanently Out of Use	8355 OLD DAIRY RD	0 - 1/8 (0.000 mi.)	B34	16
ALASKA AIRLINES - JU Facility Id: 1570 Tank Status: Permanently Out of Use	1873 SHELL SIMMONS D	0 - 1/8 (0.000 mi.)	G36	16
PACIFIC TELECOM, INC Facility Id: 2687 Tank Status: Permanently Out of Use	2075 JORDAN AVE	0 - 1/8 (0.000 mi.)	J40	17
N C MACHINERY CO JUN Facility Id: 828 Tank Status: Permanently Out of Use	***8850 AIRPORT BLVD***	***0 - 1/8 (0.000 mi.)***	***42***	***18***
JUNEAU AIRPORT Facility Id: 2157 Tank Status: Permanently Out of Use	***SHELL SIMMONS DR AT***	***0 - 1/8 (0.000 mi.)***	***44***	***19***
CAMERON PLUMBING & H Facility Id: 2726 Tank Status: Permanently Out of Use	1850 CREST ST	0 - 1/8 (0.000 mi.)	E47	19
WARD AIR INC Facility Id: 2725 Tank Status: Permanently Out of Use	***8991 YANDUKIN DR***	***0 - 1/8 (0.000 mi.)***	***F50***	***20***
JUNEAU DAIRIES DISTR Facility Id: 51 Tank Status: Permanently Out of Use	8403 AIRPORT BLVD	0 - 1/8 (0.000 mi.)	H53	21
FRED MEYER #158 FUEL Facility Id: 716 Tank Status: Permanently Out of Use Tank Status: Currently in Use	***8181 GLACIER HWY***	***NE 0 - 1/8 (0.010 mi.)***	***55***	***22***
PAUL'S CHEVRON Facility Id: 928 Tank Status: Permanently Out of Use	9151 GLACIER HWY	WNW 0 - 1/8 (0.022 mi.)	P59	23
FAA JUNEAU Facility Id: 1020 Tank Status: Permanently Out of Use	9230 CESSNA DR	WNW 0 - 1/8 (0.023 mi.)	Q62	23
JUNEAU & DOUGLAS TEL Facility Id: 143 Tank Status: Permanently Out of Use	9229 CESSNA DR	W 0 - 1/8 (0.036 mi.)	Q71	26
MIKE'S AIRPORT EXPRE Facility Id: 816 Tank Status: Permanently Out of Use Tank Status: Currently in Use	***9190 GLACIER HWY***	***WNW 0 - 1/8 (0.076 mi.)***	***S74***	***26***
AERO SERVICES, INC. Facility Id: 1375 Tank Status: Permanently Out of Use	1890 RENSHAW WAY	W 1/8 - 1/4 (0.137 mi.)	T83	29

Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
TEMSCO HELICOPTERS, Facility Id: 270	***1650 MAPLESDEN WAY***	***E 0 - 1/8 (0.033 mi.)***	***R66***	***24***

Tank Status: Permanently Out of Use
Tank Status: Currently in Use

State and tribal institutional control / engineering control registries

AK ENG CONTROLS: A review of the AK ENG CONTROLS list, as provided by EDR, and dated 09/25/2018 has revealed that there is 1 AK ENG CONTROLS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CHEVRON - AIRPORT (P	***9151 GLACIER HWY;***	***WNW 0 - 1/8 (0.022 mi.)***	***P60***	***23***
Facility Status: Cleanup Complete - Institutional Controls Hazard ID: 24532				

AK INST CONTROL: A review of the AK INST CONTROL list, as provided by EDR, and dated 09/25/2018 has revealed that there are 9 AK INST CONTROL sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CAMERON PLUMBING AND	***1850 CREST STREET, N***	***0 - 1/8 (0.000 mi.)***	***E41***	***17***
Facility Status: Cleanup Complete - Institutional Controls Hazard ID: 1755				
CBJ JUNEAU AIRPORT M	***SHELL SIMMONS DRIVE***	***W 0 - 1/8 (0.010 mi.)***	***N54***	***21***
Facility Status: Cleanup Complete - Institutional Controls Hazard ID: 25156				
CHEVRON - AIRPORT (P	***9151 GLACIER HWY;***	***WNW 0 - 1/8 (0.022 mi.)***	***P60***	***23***
Facility Status: Cleanup Complete - Institutional Controls Hazard ID: 24532				
PTI- JUNEAU CESSNA D	***9225 CESSNA DRIVE***	***W 0 - 1/8 (0.065 mi.)***	***Q72***	***26***
Facility Status: Cleanup Complete - Institutional Controls Hazard ID: 24743				
UNOCAL - #5785- AIRP	***9190 GLACIER HIGHWAY***	***WNW 0 - 1/8 (0.076 mi.)***	***S76***	***27***
Facility Status: Cleanup Complete - Institutional Controls Hazard ID: 2984 Hazard ID: 23568				
JUNEAU AIRPORT TRAVE	***9200 GLACIER HIGHWAY***	***WNW 0 - 1/8 (0.112 mi.)***	***S77***	***27***
Facility Status: Cleanup Complete - Institutional Controls Hazard ID: 4517				
COMMERCIAL PROPERTY	***9351 GLACIER HIGHWAY***	***WNW 1/4 - 1/2 (0.348 mi.)***	***93***	***31***
Facility Status: Cleanup Complete Hazard ID: 25608				
SKATEBOARD PARK	***MENDENHALL LOOP ROAD***	***WNW 1/4 - 1/2 (0.392 mi.)***	***95***	***32***
Facility Status: Cleanup Complete - Institutional Controls Hazard ID: 2697				

Lower Elevation	Address	Direction / Distance	Map ID	Page
TEMSCO HELICOPTERS -	***1650 MAPLESDEN WAY***	***E 0 - 1/8 (0.033 mi.)***	***R69***	***25***

Facility Status: Cleanup Complete - Institutional Controls
Hazard ID: 24511

State and tribal voluntary cleanup sites

AK VCP: A review of the AK VCP list, as provided by EDR, and dated 11/26/2018 has revealed that there are 3 AK VCP sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PTI- JUNEAU CESSNA D	***9225 CESSNA DRIVE***	***W 0 - 1/8 (0.065 mi.)***	***Q72***	***26***
DEC File Number: 1513.26.056 Facility Status: Cleanup Complete - Institutional Controls Hazard Id: 24743				
SKATEBOARD PARK	***MENDENHALL LOOP ROAD***	***WNW 1/4 - 1/2 (0.392 mi.)***	***95***	***32***
DEC File Number: 1513.38.038 Facility Status: Cleanup Complete Hazard Id: 2696				

Lower Elevation	Address	Direction / Distance	Map ID	Page
TEMSCO HELICOPTERS -	1650 MAPLESDEN WAY	E 0 - 1/8 (0.033 mi.)	R64	24
DEC File Number: 1513.26.053 Facility Status: Cleanup Complete - Institutional Controls Hazard Id: 24511				

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

RCRA NonGen / NLR: A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 03/01/2018 has revealed that there are 10 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LOVE BROS	***8345 OLD DAIRY RD***	***0 - 1/8 (0.000 mi.)***	***B11***	***10***
EPA ID:: AKD983068669				
HALS BODY SHOP	***1990 ALPINE AVE***	***0 - 1/8 (0.000 mi.)***	***I18***	***12***
EPA ID:: AKR000000919				
CAPITAL CITY CLEANER	***8745 GLACIER HWY STE***	***0 - 1/8 (0.000 mi.)***	***M26***	***14***
EPA ID:: AKD983071887				
RITZ CAMERA CENTERS	***8745 GLACIER HWY #43***	***0 - 1/8 (0.000 mi.)***	***M27***	***14***
EPA ID:: AKR000003186				
YUKON OFFICE SUPPLY	***2075 JORDAN AVE***	***0 - 1/8 (0.000 mi.)***	***J31***	***15***
EPA ID:: AKD983075037				
DELTA AIR LINES JUNE	JUNEAU INTL ARPRT	0 - 1/8 (0.000 mi.)	D39	17

EPA ID:: AKD152465670				
PETROLEUM SVCS INC EPA ID:: AKD983069121	***8401 AIRPORT BLVD***	***0 - 1/8 (0.000 mi.)***	***H43***	***18***
NORTHSTAR TREKKING D EPA ID:: AKR000201368	1910 RENSHAW WAY	W 1/8 - 1/4 (0.138 mi.)	T84	29
CHANNEL CONSTRUCTION EPA ID:: AKR000002378	***2223 NORTH JORDAN AV***	***NW 1/8 - 1/4 (0.172 mi.)***	***U85***	***29***
T W HALL EPA ID:: AKR000004283	***9393 LA PEROUSE AVE***	***W 1/8 - 1/4 (0.192 mi.)***	***88***	***30***

US MINES: A review of the US MINES list, as provided by EDR, has revealed that there are 3 US MINES sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CHANNEL CONSTRUCTION Database: US MINES, Date of Government Version: 08/01/2018 Mine ID:: 5001723		NW 1/8 - 1/4 (0.175 mi.)	U87	30
CHANNEL CONSTRUCTION Database: US MINES, Date of Government Version: 08/01/2018 Mine ID:: 5001722		NW 1/8 - 1/4 (0.194 mi.)	V89	30
MILLER CONSTRUCTION Database: US MINES, Date of Government Version: 08/01/2018 Mine ID:: 5001746		NW 1/8 - 1/4 (0.194 mi.)	V90	30

ABANDONED MINES: A review of the ABANDONED MINES list, as provided by EDR, and dated 09/10/2018 has revealed that there are 2 ABANDONED MINES sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MILLER CONSTRUCTION	2207 NORTH JORDAN AV	WNW 1/8 - 1/4 (0.131 mi.)	U81	28
PORTABLE 191	2223 N. JORDAN AVE.	NW 1/8 - 1/4 (0.172 mi.)	U86	29

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto: A review of the EDR Hist Auto list, as provided by EDR, has revealed that there are 2 EDR Hist Auto sites within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EMIGS CHEVRON	9151 GLACIER HWY	WNW 0 - 1/8 (0.022 mi.)	P61	23
MIKES AIRPORT UNION	9190 GLACIER HWY	WNW 0 - 1/8 (0.076 mi.)	S75	27

EXECUTIVE SUMMARY

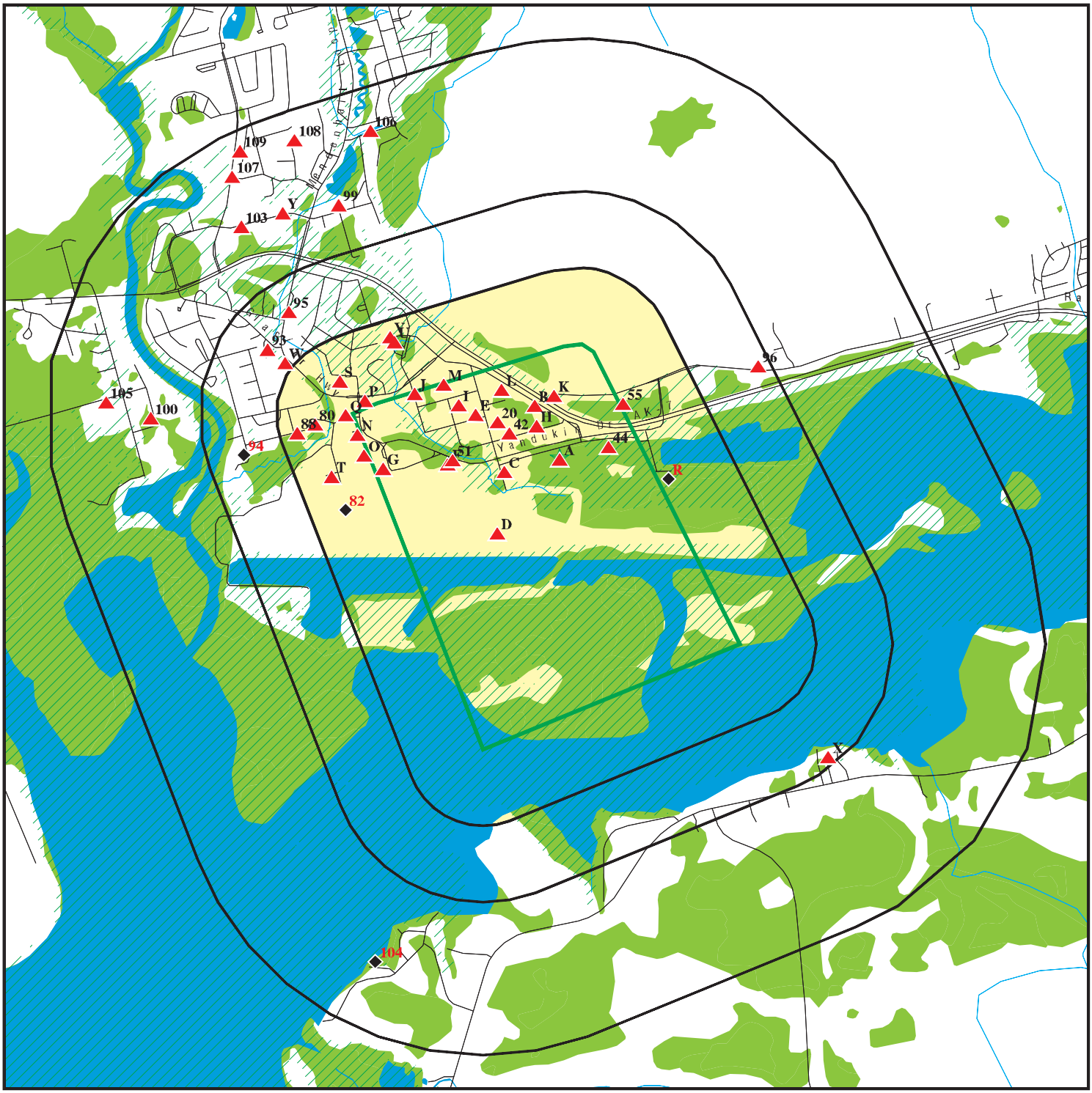
EDR Hist Cleaner: A review of the EDR Hist Cleaner list, as provided by EDR, has revealed that there are 2 EDR Hist Cleaner sites within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CAPITAL CITY CLEANER	2092 JORDAN AVE STE	0 - 1/8 (0.000 mi.)	J22	13
STARHILL ENTERPRISES	8745 GLACIER HWY STE	0 - 1/8 (0.000 mi.)	M28	14

Count: 24 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
JUNEAU	S108185311	JUNEAU -JIA- TAXIWAY REHABILITATIO	AIRPORT	99801	AK NPDES
JUNEAU	S116466155	DELTA WESTERN JUNEAU AIRPORT FUEL	ALEX HOLDEN WAY; JUNEAU AIRPOR		AK RGA LUST
JUNEAU	S116466154	DELTA WESTERN JUNEAU AIRPORT FUEL	ALEX HOLDEN WAY JUNEAU AIRPORT		AK RGA LUST
JUNEAU	S108185327	JUNEAU EGAN DRIVE-10TH STREET INTE	EGAN DRIVE/10TH STREET	0	AK NPDES
JUNEAU	U004115842	AT&T - JUNEAU TOLL CENTER	1448 EGAN DR	99801	AK UST
JUNEAU	S116463844	AERO SERVICES, JUNEAU AIRPORT	FGATE 9203 SHELL SIMMONS DRIVE		AK RGA LUST
JUNEAU	S116463845	AERO SERVICES, JUNEAU AIRPORT	FGATE, 9203 SHELL SIMMONS DR		AK RGA LUST
JUNEAU	S116469425	JUNEAU READY MIX INCORPORATED	5717 GLACIER HIGHWAY; POB 0202		AK RGA LUST
JUNEAU	S116469424	JUNEAU READY MIX INCORPORATED	5717 GLACIER HIGHWAY; POB 0202		AK RGA LUST
JUNEAU	S116469423	JUNEAU READY MIX INCORPORATED	5717 GLACIER HIGHWAY POB 02027		AK RGA LUST
JUNEAU	S116464314	ALASKA LAUNDRY AND CLEANERS - JUNE	1114 GLACIER HIGHWAY AT 12TH S		AK RGA LUST
JUNEAU	S116464313	ALASKA LAUNDRY AND CLEANERS - JUNE	1114 GLACIER HIGHWAY AT 12TH S		AK RGA LUST
JUNEAU	1003880109	JUNEAU LDFL	GLACIER HWY, MI 5.5	99801	SEMS-ARCHIVE
JUNEAU	S116466156	DELTA WESTERN JUNEAU AIRPORT FUEL	JUNEAU AIRPORT ALEX HOLDEN WAY		AK RGA LUST
JUNEAU	2009052770	JUNEAU AIRPORT	JUNEAU AIRPORT	99801	HMIRS
JUNEAU	S116464877	AUKE BAY HARBOR - JUNEAU	11.8 MILE GLACIER HWY		AK RGA LUST
JUNEAU	S116464876	AUKE BAY HARBOR - JUNEAU	11.8 MILE GLACIER HWY,		AK RGA LUST
JUNEAU	S108185355	JUNEAU - OLD DAIRY ROAD SHOULDER W	OLD DAIRY ROAD	0	AK NPDES
JUNEAU	S116467485	FAA - JUNEAU	POINT LENA/JUNEAU AIRPORT		AK RGA LUST
JUNEAU	S116469409	JUNEAU AIRPORT	SHELL SIMMONS DR AT NORTH APRO		AK RGA LUST
JUNEAU	S116465445	CBJ JUNEAU AIRPORT MAINTENANCE FAC	SHELL SIMMONS DRIVE AT NORTH A		AK RGA LUST
JUNEAU	S116465444	CBJ JUNEAU AIRPORT MAINTENANCE FAC	SHELL SIMMONS DRIVE AT NORTH A		AK RGA LUST
JUNEAU	S116465443	CBJ JUNEAU AIRPORT MAINTENANCE FAC	SHELL SIMMONS DR AT N APRON		AK RGA LUST
JUNEAU	S116465442	CBJ JUNEAU AIRPORT MAINTENANCE FAC	SHELL SIMMONS DR AT N APRON		AK RGA LUST

OVERVIEW MAP - 5509586.2S



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: Juneau	CLIENT: AECOM
ADDRESS: 8425 Livingston Way Juneau AK 99801	CONTACT: Brittany Kirchmann INQUIRY #: 5509586.2s
LAT/LONG: 58.35764 / 134.568524	DATE: December 12, 2018 9:59 am

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DETAIL MAP - 5509586.2S

Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

0 1/8 1/4 1/2 Miles

Indian Reservations BIA

100-year flood zone

500-year flood zone

National Wetland Inventory

State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Juneau	CLIENT: AECOM
ADDRESS: 8425 Livingston Way Juneau AK 99801	CONTACT: Brittany Kirchmann
LAT/LONG: 58.35764 / 134.568524	INQUIRY #: 5509586.2s DATE: December 12, 2018 9:59 am

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		1	0	1	NR	NR	2
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250	1	9	1	NR	NR	NR	11
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
AK SHWS	1.000	1	22	1	6	11	NR	41
State and tribal landfill and/or solid waste disposal site lists								
AK SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
AK LUST	0.500	1	18	0	2	NR	NR	21
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
AK UST	0.250	1	21	1	NR	NR	NR	23
AK AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
AK ENG CONTROLS	0.500		1	0	0	NR	NR	1
AK INST CONTROL	0.500		7	0	2	NR	NR	9
State and tribal voluntary cleanup sites								
AK VCP	0.500		2	0	1	NR	NR	3
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
AK BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
AK SWRCY	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
AK CDL	TP		NR	NR	NR	NR	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
AK SPILLS	TP		NR	NR	NR	NR	NR	0
AK SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		7	3	NR	NR	NR	10
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
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

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
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	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
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	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	3	NR	NR	NR	3
ABANDONED MINES	0.250		0	2	NR	NR	NR	2
FINDS	TP	1	NR	NR	NR	NR	NR	1
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
ECHO	TP	1	NR	NR	NR	NR	NR	1
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
AK AIRS	TP		NR	NR	NR	NR	NR	0
AK COAL ASH	0.500		0	0	0	NR	NR	0
AK DRYCLEANERS	0.250		0	0	NR	NR	NR	0
AK Financial Assurance	TP		NR	NR	NR	NR	NR	0
CA HAZNET	TP		NR	NR	NR	NR	NR	0
AK NPDES	TP		NR	NR	NR	NR	NR	0
AK UIC	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		2	NR	NR	NR	NR	2
EDR Hist Cleaner	0.125		2	NR	NR	NR	NR	2
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
AK RGA LF	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
AK RGA LUST	TP	3	NR	NR	NR	NR	NR	3
- Totals --		9	92	11	12	11	0	135

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1
Target Property

JUNEAU AAOF 300-GAL USED OIL TANK
8425 LIVINGSTON DR
JUNEAU, AK

AK RGA LUST

S116469408
N/A

Actual:
11 ft.

Click here for full text details

A2
Target Property

JUNEAU AAOF 300-GAL USED OIL TANK
8425 LIVINGSTON DR.
JUNEAU, AK

AK RGA LUST

S116469407
N/A

Actual:
11 ft.

Click here for full text details

A3
Target Property

ALASKA AIR NATIONAL GUARD AAOF JUNEAU
8425 LIVINGSTON WAY
JUNEAU, AK 99801

RCRA-CESQG
FINDS
ECHO

1000586263
AKD983073321

Actual:
11 ft.

Click here for full text details

RCRA-CESQG
EPA Id: AKD983073321

FINDS
Registry ID:: 110003039809

ECHO
Registry ID: 110003039809

A4
Target Property

JUNEAU AAOF 300-GAL USED OIL TANK
8425 LIVINGSTON DR.
JUNEAU, AK 99801

AK SHWS

S109255556
N/A

Actual:
11 ft.

Click here for full text details

AK SHWS
Hazard ID: 2534
Hazard ID: 23037
Facility Status: Cleanup Complete

A5
Target Property
Actual: 11 ft.

JUNEAU ARMY AVIATION OPERATING FACILTY
8425 LIVINGSTON WAY
JUNEAU, AK 99801

AK UST
U004116156
N/A

Click here for full text details

AK UST
Facility Id: 3223
Tank Status: Permanently Out of Use

A6
Target Property
Actual: 11 ft.

JUNEAU AAOF 300-GAL USED OIL TANK
8425 LIVINGSTON DR.,
JUNEAU, AK

AK RGA LUST
S116469406
N/A

Click here for full text details

A7
Target Property
Actual: 11 ft.

JUNEAU AAOF 300-GAL USED OIL TANK
8425 LIVINGSTON DR.
JUNEAU, AK 99801

AK LUST
S105096403
N/A

Click here for full text details

AK LUST
eventid: 23037
Facility Status: Cleanup Complete

B8
< 1/8
1 ft.
Relative: Higher

MENDENHALL CHRYSLER (OLD SITE)
8345 OLD DAIRY RD
JUNEAU, AK 99801

AK UST
U003951987
N/A

Click here for full text details

AK UST
Facility Id: 2711
Tank Status: Permanently Out of Use

C9
< 1/8
1 ft.
Relative: Higher

CBJ GLACIER VALLEY FIRE STATION
1700 CREST DRIVE
JUNEAU, AK 99801

AK LUST
S105096375
N/A

Click here for full text details

AK LUST
eventid: 25160
Facility Status: Cleanup Complete

D10
< 1/8
1 ft.

L A B FLYING SVC
JUNEAU INTL ARPRT BLK D LOT 1
JUNEAU, AK 99801

RCRA-CESQG

1000904397
AK0000385609

Relative: Higher

Click here for full text details

RCRA-CESQG
EPA Id: AK0000385609

B11
< 1/8
1 ft.

LOVE BROS
8345 OLD DAIRY RD
JUNEAU, AK 99801

RCRA NonGen / NLR
FINDS
ECHO

1000456197
AKD983068669

Relative: Higher

Click here for full text details

RCRA NonGen / NLR
EPA Id: AKD983068669

FINDS
Registry ID:: 110003041075

ECHO
Registry ID: 110003041075

E12
< 1/8
1 ft.

JAKE'S INC. (HONDA HUT)
8602 TEAL ST
JUNEAU, AK 99801

AK UST

U003765215
N/A

Relative: Higher

Click here for full text details

AK UST
Facility Id: 1533
Tank Status: Permanently Out of Use

F13
< 1/8
1 ft.

CHANNEL FLYING
8995 YANDUKIN DR
JUNEAU, AK 99801

RCRA-CESQG
FINDS
ECHO

1000904395
AK0000385583

Relative: Higher

Click here for full text details

RCRA-CESQG
EPA Id: AK0000385583

FINDS
Registry ID:: 110003044900

ECHO
Registry ID: 110003044900

G14 **FAA JUNEAU STATION** **AK SHWS** **S107504829**
JUNEAU AIRPORT **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Relative: Higher

Click here for full text details

AK SHWS
Hazard ID: 2975
Hazard ID: 1450
Facility Status: Cleanup Complete
Facility Status: Active

H15 **DOUGLAS TRUCKING INC.** **AK LUST** **U003330829**
8400 AIRPORT BLVD **AK UST** **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Relative: Higher

Click here for full text details

AK LUST
eventid: 24917
Facility Status: Cleanup Complete

AK UST
Facility Id: 1266
Tank Status: Permanently Out of Use

F16 **CHANNEL FLYING JUNEAU AIRPORT** **AK SHWS** **S117849292**
8995 YANDUKIN DRIVE, JUNEAU AIRPORT **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Relative: Higher

Click here for full text details

AK SHWS
Hazard ID: 26362
Facility Status: Active

C17 **CBJ GLACIER VALLEY FIRE STATION** **AK SHWS** **S109255392**
1700 CREST DRIVE **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Relative: Higher

Click here for full text details

AK SHWS
Hazard ID: 25160
Facility Status: Cleanup Complete

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
I18 **< 1/8** **1 ft.**	**HALS BODY SHOP** **1990 ALPINE AVE** **JUNEAU, AK 99801**	**RCRA NonGen / NLR** **FINDS** **ECHO**	**1001085225** **AKR000000919**
Relative: Higher	**Click here for full text details** **RCRA NonGen / NLR** EPA Id: AKR000000919 **FINDS** Registry ID:: 110003038533 **ECHO** Registry ID: 110003038533		
C19 **< 1/8** **1 ft.**	**GLACIER FIRE STATION** **1700 CREST DR** **JUNEAU, AK 99801**	**AK UST**	**U003140262** **N/A**
Relative: Higher	**Click here for full text details** **AK UST** Facility Id: 2167 Tank Status: Permanently Out of Use		
20 **< 1/8** **1 ft.**	**HALS BODY SHOP** **P. O. BOX 2177, 1990 ALPINE AVE** **JUNEAU, AK 99803**	**AK UST**	**U003141425** **N/A**
Relative: Higher	**Click here for full text details** **AK UST** Facility Id: 944 Tank Status: Permanently Out of Use		
J21 **< 1/8** **1 ft.**	**FORMER CAPITAL CITY CLEANERS NUGGET MALL** **2092 JORDAN AVE. SUITE 595 NUGGET MALL** **JUNEAU, AK 99801**	**AK SHWS**	**S118659598** **N/A**
Relative: Higher	**Click here for full text details** **AK SHWS** Hazard ID: 26537 Facility Status: Active		

J22 **CAPITAL CITY CLEANERS** **EDR Hist Cleaner** **1019948324**
2092 JORDAN AVE STE 595 **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Relative: Higher

Click here for full text details

K23 **CBJ - LEMON CREEK LIFT STATION** **AK LUST** **S105246771**
ADJ. TO TIA INSURANCE BLDG. & THE BIKE PATH ALONG EGAN HIGHW **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Relative: Higher

Click here for full text details

AK LUST
eventid: 24631
Facility Status: Cleanup Complete

K24 **CBJ - LEMON CREEK LIFT STATION** **AK SHWS** **S109255309**
ADJ. TO TIA INSURANCE BLDG. & THE BIKE PATH ALONG EGAN HIGHW **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Relative: Higher

Click here for full text details

AK SHWS
Hazard ID: 24631
Facility Status: Cleanup Complete

L25 **VALLEY LUMBER** **RCRA-CESQG** **1004670276**
8525 OLD DAIRY RD **FINDS** **AKR000002238**
< 1/8 **JUNEAU, AK 99801** **ECHO**
1 ft.

Relative: Higher

Click here for full text details

RCRA-CESQG
EPA Id: AKR000002238

FINDS
Registry ID:: 110003038203

ECHO
Registry ID: 110003038203

M26 **CAPITAL CITY CLEANERS** **RCRA NonGen / NLR** **1000264307**
8745 GLACIER HWY STE 595 **FINDS** **AKD983071887**
< 1/8 **JUNEAU, AK 99801** **ECHO**
1 ft.

Relative: Higher

Click here for full text details

RCRA NonGen / NLR
EPA Id: AKD983071887

FINDS
Registry ID:: 110003040236

ECHO
Registry ID: 110003040236

M27 **RITZ CAMERA CENTERS #40** **RCRA NonGen / NLR** **1004670295**
8745 GLACIER HWY #432 **FINDS** **AKR000003186**
< 1/8 **JUNEAU, AK 99803** **ECHO**
1 ft.

Relative: Higher

Click here for full text details

RCRA NonGen / NLR
EPA Id: AKR000003186

FINDS
Registry ID:: 110006852405

ECHO
Registry ID: 110006852405

M28 **STARHILL ENTERPRISES** **EDR Hist Cleaner** **1018602095**
8745 GLACIER HWY STE 295 **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Relative: Higher

Click here for full text details

L29 **USDA FS OLD DAIRY RD** **RCRA-CESQG** **1004433687**
8465 OLD DAIRY RD **FINDS** **AK4122300151**
< 1/8 **JUNEAU, AK 99801** **ECHO**
1 ft. **CA HAZNET**

Relative: Higher

Click here for full text details

RCRA-CESQG
EPA Id: AK4122300151

FINDS

USDA FS OLD DAIRY RD (Continued) **1004433687**

Registry ID:: 110003044287

ECHO
Registry ID: 110003044287

CA HAZNET
GEPAID: AK4122300151

L30
< 1/8
1 ft.

USFS JUNEAU RANGER DISTRICT WAREHOUSE **AK SHWS** **S108540255**
8465 OLD DAIRY ROAD **N/A**
JUNEAU, AK 99801

Relative: Higher

Click here for full text details

AK SHWS
Hazard ID: 4391
Facility Status: Cleanup Complete

J31
< 1/8
1 ft.

YUKON OFFICE SUPPLY **RCRA NonGen / NLR** **1000817139**
2075 JORDAN AVE **FINDS** **AKD983075037**
JUNEAU, AK 99801 **ECHO**

Relative: Higher

Click here for full text details

RCRA NonGen / NLR
EPA Id: AKD983075037

FINDS
Registry ID:: 110003039550
Registry ID:: 110013319113

ECHO
Registry ID: 110003039550

D32
< 1/8
1 ft.

CIVIL AIR PATROL HANGAR **AK UST** **U003331115**
JUNEAU AIRPORT, W RAMP MILE 9 GLACIER HWY **N/A**
JUNEAU, AK 99801

Relative: Higher

Click here for full text details

AK UST
Facility Id: 2891
Tank Status: Permanently Out of Use

I33 **MENDENHALL AUTO CENTER** **AK UST** **U001960041**
8725 MALLARD ST **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Relative: Higher

Click here for full text details

AK UST
Facility Id: 2146
Tank Status: Permanently Out of Use

B34 **T & S WELDING INC.** **AK UST** **U003139523**
8355 OLD DAIRY RD **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Relative: Higher

Click here for full text details

AK UST
Facility Id: 1192
Tank Status: Permanently Out of Use

I35 **MENDENHALL AUTO CTR** **RCRA-CESQG** **1004670123**
8725 MALLARD ST **FINDS** **AK0000001115**
< 1/8 **JUNEAU, AK 99801** **ECHO**
1 ft.

Relative: Higher

Click here for full text details

RCRA-CESQG
EPA Id: AK0000001115

FINDS
Registry ID:: 110003371440

ECHO
Registry ID: 110003371440

G36 **ALASKA AIRLINES - JUNEAU CARGO BUILDI** **AK UST** **U004115643**
1873 SHELL SIMMONS DR JUNEAU CARGO BUILDING **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Relative: Higher

Click here for full text details

AK UST
Facility Id: 1570
Tank Status: Permanently Out of Use

G37 **JUNEAU AIRFIELD AND GARRISON** **SEMS-ARCHIVE** **1001814646**
1873 SHELL-SIMMONS DRIVE **AKSFN1002180**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Relative: Higher

Click here for full text details

SEMS-ARCHIVE
Site ID: 1002180
EPA Id: AKSFN1002180

G38 **JUNEAU INTL ARPRT MAINT SVCS BLDG** **RCRA-CESQG** **1000856046**
1873 SHELL SIMMONS DR #200 **AK0000084020**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Relative: Higher

Click here for full text details

RCRA-CESQG
EPA Id: AK0000084020

D39 **DELTA AIR LINES JUNEAU** **RCRA NonGen / NLR** **1000394869**
JUNEAU INTL ARPRT **AKD152465670**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Relative: Higher

Click here for full text details

RCRA NonGen / NLR
EPA Id: AKD152465670

J40 **PACIFIC TELECOM, INC** **AK UST** **U004115942**
2075 JORDAN AVE **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Relative: Higher

Click here for full text details

AK UST
Facility Id: 2687
Tank Status: Permanently Out of Use

E41 **CAMERON PLUMBING AND HEATING** **AK SHWS** **S105273790**
1850 CREST STREET, NEAR YANDUKIN DRIVE **AK LUST** **N/A**
< 1/8 **JUNEAU, AK 99801** **AK INST CONTROL**
1 ft.

Relative: Higher

Click here for full text details

AK SHWS
Hazard ID: 1755
Hazard ID: 24385
Facility Status: Cleanup Complete - Institutional Controls
Facility Status: Cleanup Complete

AK LUST

CAMERON PLUMBING AND HEATING (Continued) **S105273790**

eventid: 24385
Facility Status: Cleanup Complete

AK INST CONTROL
Hazard ID: 1755
Facility Status: Cleanup Complete - Institutional Controls

42
< 1/8
1 ft.

N C MACHINERY CO JUNEAU **RCRA-CESQG** **1000123250**
8850 AIRPORT BLVD **AK LUST** **AKD035418979**
JUNEAU, AK 99803 **AK UST**
FINDS
ECHO

Relative: Higher

Click here for full text details

RCRA-CESQG
EPA Id: AKD035418979

AK LUST
eventid: 24505
Facility Status: Cleanup Complete

AK UST
Facility Id: 828
Tank Status: Permanently Out of Use

FINDS
Registry ID:: 110003043448

ECHO
Registry ID: 110003043448

H43
< 1/8
1 ft.

PETROLEUM SVCS INC **RCRA NonGen / NLR** **1000473430**
8401 AIRPORT BLVD **FINDS** **AKD983069121**
JUNEAU, AK 99803 **ECHO**

Relative: Higher

Click here for full text details

RCRA NonGen / NLR
EPA Id: AKD983069121

FINDS
Registry ID:: 110003040780

ECHO
Registry ID: 110003040780

44 **JUNEAU AIRPORT** **AK LUST** **U003140252**
SHELL SIMMONS DR AT N APRON **AK UST** **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Relative: Higher

Click here for full text details

AK LUST
eventid: 25156
Facility Status: Cleanup Complete - Institutional Controls

AK UST
Facility Id: 2157
Tank Status: Permanently Out of Use

H45 **NC MACHINERY COMPANY** **AK SHWS** **S109256445**
8550 AIRPORT BLVD; **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Relative: Higher

Click here for full text details

AK SHWS
Hazard ID: 24505
Facility Status: Cleanup Complete

H46 **JUNEAU DAIRIES DISTRICT, INCORPORATED** **AK SHWS** **S109256439**
8403 AIRPORT BLVD., LOTS 20, 21 & 22 BLOCK M VALLEY CENTRE S **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Relative: Higher

Click here for full text details

AK SHWS
Hazard ID: 24490
Facility Status: Cleanup Complete

E47 **CAMERON PLUMBING & HEATING, INC.** **AK UST** **U000730012**
1850 CREST ST **N/A**
< 1/8 **JUNEAU, AK 99801**
1 ft.

Relative: Higher

Click here for full text details

AK UST
Facility Id: 2726
Tank Status: Permanently Out of Use

H48
< 1/8
1 ft.

DOUGLAS TRUCKING
8400 AIRPORT BLVD
JUNEAU, AK 99801

AK SHWS **S109256725**
N/A

Relative: Higher

Click here for full text details

AK SHWS
Hazard ID: 24917
Facility Status: Cleanup Complete

F49
< 1/8
1 ft.

WARD AIR
WARD AIR
JUNEAU, AK 99801

AK SHWS **S109256577**
N/A

Relative: Higher

Click here for full text details

AK SHWS
Hazard ID: 24697
Facility Status: Cleanup Complete

F50
< 1/8
1 ft.

WARD AIR INC
8991 YANDUKIN DR
JUNEAU, AK 99801

RCRA-CESQG **1000904399**
AK LUST **AK0000385625**
AK UST
FINDS
ECHO

Relative: Higher

Click here for full text details

RCRA-CESQG
EPA Id: AK0000385625

AK LUST
eventid: 24697
Facility Status: Cleanup Complete

AK UST
Facility Id: 2725
Tank Status: Permanently Out of Use

FINDS
Registry ID:: 110003044777

ECHO
Registry ID: 110003044777

51
< 1/8
1 ft.

SILVER BAY AVIATION
8892 YANDUKIN DR
JUNEAU, AK 99801

RCRA-CESQG
FINDS
ECHO

1000904398
AK0000385617

Relative: Higher

Click here for full text details

RCRA-CESQG
EPA Id: AK0000385617

FINDS
Registry ID:: 110003044768

ECHO
Registry ID: 110003044768

H52
< 1/8
1 ft.

JUNEAU DAIRIES DISTRICT, INCORPORATED
8403 AIRPORT BLVD.
JUNEAU, AK 99801

AK LUST

S109261083
N/A

Relative: Higher

Click here for full text details

AK LUST
eventid: 24490
Facility Status: Cleanup Complete

H53
< 1/8
1 ft.

JUNEAU DAIRIES DISTRICT, INC.
8403 AIRPORT BLVD
JUNEAU, AK 99801

AK UST

U000001067
N/A

Relative: Higher

Click here for full text details

AK UST
Facility Id: 51
Tank Status: Permanently Out of Use

N54
West
< 1/8
0.010 mi.
52 ft.

CBJ JUNEAU AIRPORT MAINTENANCE FACILITY
SHELL SIMMONS DRIVE AT NORTH APRON
JUNEAU, AK 99801

AK SHWS
AK INST CONTROL

S109254538
N/A

Relative: Higher

Click here for full text details

AK SHWS
Hazard ID: 25156
Facility Status: Cleanup Complete - Institutional Controls

AK INST CONTROL
Hazard ID: 25156
Facility Status: Cleanup Complete - Institutional Controls

55
NE
< 1/8
0.010 mi.
55 ft.

Relative:
Higher

FRED MEYER #158 FUEL STOP
8181 GLACIER HWY
JUNEAU, AK 99801

AK UST
AK Financial Assurance
AK NPDES

U004116415
N/A

Click here for full text details

AK UST
Facility Id: 716
Tank Status: Permanently Out of Use
Tank Status: Currently in Use

AK Financial Assurance
Facility Id: 716

AK NPDES
Permit Number: 06-3P-072-068

O56
West
< 1/8
0.014 mi.
75 ft.

Relative:
Higher

DELTA AIR CARGO
JUNEAU INTERNATIONAL AIRPORT
JUNEAU, AK 99801

AK LUST

U003140141
N/A

Click here for full text details

AK LUST
eventid: 24902
Facility Status: Cleanup Complete

O57
West
< 1/8
0.016 mi.
82 ft.

Relative:
Higher

DELTA AIR CARGO
JUNEAU INTERNATIONAL AIRPORT
JUNEAU, AK 99801

AK SHWS

S109256693
N/A

Click here for full text details

AK SHWS
Hazard ID: 24902
Facility Status: Cleanup Complete

P58
WNW
< 1/8
0.022 mi.
116 ft.

Relative:
Higher

CHEVRON - AIRPORT (PAUL'S CHEVRON)
9151 GLACIER HWY
JUNEAU, AK 99801

AK LUST

S104891675
N/A

Click here for full text details

AK LUST
eventid: 24532
Facility Status: Cleanup Complete - Institutional Controls

P59
WNW
< 1/8
0.022 mi.
116 ft.

Relative:
Higher

PAUL'S CHEVRON
9151 GLACIER HWY
JUNEAU, AK 99801

AK UST | **U003141408**
N/A

Click here for full text details

AK UST
Facility Id: 928
Tank Status: Permanently Out of Use

P60
WNW
< 1/8
0.022 mi.
116 ft.

Relative:
Higher

CHEVRON - AIRPORT (PAUL'S CHEVRON)
9151 GLACIER HWY;
JUNEAU, AK 99801

AK SHWS
AK ENG CONTROLS
AK INST CONTROL

S109254667
N/A

Click here for full text details

AK SHWS
Hazard ID: 24532
Facility Status: Cleanup Complete - Institutional Controls

AK ENG CONTROLS
Hazard ID: 24532
Facility Status: Cleanup Complete - Institutional Controls

AK INST CONTROL
Hazard ID: 24532
Facility Status: Cleanup Complete - Institutional Controls

P61
WNW
< 1/8
0.022 mi.
116 ft.

Relative:
Higher

EMIGS CHEVRON
9151 GLACIER HWY
JUNEAU, AK 99801

EDR Hist Auto

1021462288
N/A

Click here for full text details

Q62
WNW
< 1/8
0.023 mi.
119 ft.

Relative:
Higher

FAA JUNEAU
9230 CESSNA DR
JUNEAU, AK 99801

AK UST

U004115416
N/A

Click here for full text details

AK UST
Facility Id: 1020
Tank Status: Permanently Out of Use

Q63
West
< 1/8
0.027 mi.
141 ft.

Relative:
Higher

DELTA WESTERN JUNEAU AIRPORT FUEL STORAGE
9203 CESSNA DRIVE; JUNEAU INTERNATIONAL AIRPORT
JUNEAU, AK 99801

AK SHWS
AK LUST

S109255032
N/A

Click here for full text details

AK SHWS
Hazard ID: 23308
Facility Status: Cleanup Complete

AK LUST
eventid: 23308
Facility Status: Cleanup Complete

R64
East
< 1/8
0.033 mi.
175 ft.

Relative:
Lower

TEMSCO HELICOPTERS - JNU HELIPORT
1650 MAPLESDEN WAY
JUNEAU, AK

AK VCP

S109254664
N/A

Click here for full text details

AK VCP
Facility Status: Cleanup Complete - Institutional Controls
Hazard Id: 24511
DEC File Number: 1513.26.053

R65
East
< 1/8
0.033 mi.
175 ft.

Relative:
Lower

TEMSCO HELICOPTERS
1650 MAPLEADEN WAY
JUNEAU, AK 99801

AK LUST

S122315768
N/A

Click here for full text details

AK LUST
eventid: 24507
Facility Status: Cleanup Complete

R66
East
< 1/8
0.033 mi.
175 ft.

Relative:
Lower

TEMSCO HELICOPTERS, INC.
1650 MAPLESDEN WAY
JUNEAU, AK 99801

AK UST
AK Financial Assurance

U004115945
N/A

Click here for full text details

AK UST
Facility Id: 270
Tank Status: Permanently Out of Use
Tank Status: Currently in Use

AK Financial Assurance
Facility Id: 270

R67
East
< 1/8
0.033 mi.
175 ft.

Relative:
Lower

TEMSCO HELICOPTERS
1650 MAPLEADEN WAY;
JUNEAU, AK 99801

AK SHWS **S109256446**
N/A

Click here for full text details

AK SHWS
Hazard ID: 24507
Facility Status: Cleanup Complete

R68
East
< 1/8
0.033 mi.
175 ft.

Relative:
Lower

TEMSCO HELICOPTERS - JUNEAU HELIPORT
1650 MAPLESDEN WAY
JUNEAU, AK 99801

AK LUST **S122315769**
N/A

Click here for full text details

AK LUST
eventid: 24511
Facility Status: Cleanup Complete - Institutional Controls

R69
East
< 1/8
0.033 mi.
175 ft.

Relative:
Lower

TEMSCO HELICOPTERS - JUNEAU HELIPORT
1650 MAPLESDEN WAY
JUNEAU, AK 99801

AK SHWS **U003331078**
AK INST CONTROL **N/A**

Click here for full text details

AK SHWS
Hazard ID: 24511
Facility Status: Cleanup Complete - Institutional Controls

AK INST CONTROL
Hazard ID: 24511
Facility Status: Cleanup Complete - Institutional Controls

N70
West
< 1/8
0.036 mi.
189 ft.

Relative:
Higher

AERO SERVICES, JUNEAU AIRPORT
"F"GATE 9203 SHELL SIMMONS DRIVE
JUNEAU, AK 99801

AK SHWS **S109349499**
AK LUST **N/A**

Click here for full text details

AK SHWS
Hazard ID: 23170
Facility Status: Cleanup Complete

AK LUST
eventid: 23170
Facility Status: Cleanup Complete

Q71
West
< 1/8
0.036 mi.
191 ft.

Relative:
Higher

JUNEAU & DOUGLAS TELCO.
9229 CESSNA DR
JUNEAU, AK 99803

AK UST **U004115583**
N/A

Click here for full text details

AK UST
Facility Id: 143
Tank Status: Permanently Out of Use

Q72
West
< 1/8
0.065 mi.
342 ft.

Relative:
Higher

PTI- JUNEAU CESSNA DRIVE
9225 CESSNA DRIVE
JUNEAU, AK 99803

AK SHWS **S109254684**
AK INST CONTROL **N/A**
AK VCP

Click here for full text details

AK SHWS
Hazard ID: 24743
Facility Status: Cleanup Complete - Institutional Controls

AK INST CONTROL
Hazard ID: 24743
Facility Status: Cleanup Complete - Institutional Controls

AK VCP
Facility Status: Cleanup Complete - Institutional Controls
Hazard Id: 24743
DEC File Number: 1513.26.056

Q73
West
< 1/8
0.065 mi.
342 ft.

Relative:
Higher

PTI- JUNEAU CESSNA DRIVE
9225 CESSNA DRIVE
JUNEAU, AK 99803

AK LUST **S105096354**
N/A

Click here for full text details

AK LUST
eventid: 24743
Facility Status: Cleanup Complete - Institutional Controls

S74
WNW
< 1/8
0.076 mi.
399 ft.

Relative:
Higher

MIKE'S AIRPORT EXPRESS
9190 GLACIER HWY
JUNEAU, AK 99801

AK UST **U003141313**
AK Financial Assurance **N/A**

Click here for full text details

AK UST
Facility Id: 816
Tank Status: Permanently Out of Use
Tank Status: Currently in Use

AK Financial Assurance

MIKE'S AIRPORT EXPRESS (Continued) **U003141313**

Facility Id: 816

S75
WNW
< 1/8
0.076 mi.
399 ft.

Relative:
Higher

MIKES AIRPORT UNION **EDR Hist Auto** **1022106396**
9190 GLACIER HWY **N/A**
JUNEAU, AK 99801

Click here for full text details

S76
WNW
< 1/8
0.076 mi.
399 ft.

Relative:
Higher

UNOCAL - #5785- AIRPORT UNION **AK SHWS** **S104893243**
9190 GLACIER HIGHWAY **AK LUST** **N/A**
JUNEAU, AK 99801 **AK INST CONTROL**

Click here for full text details

AK SHWS
Hazard ID: 2984
Hazard ID: 23568
Facility Status: Cleanup Complete - Institutional Controls

AK LUST
eventid: 23568
Facility Status: Cleanup Complete - Institutional Controls

AK INST CONTROL
Hazard ID: 2984
Hazard ID: 23568
Facility Status: Cleanup Complete - Institutional Controls

S77
WNW
< 1/8
0.112 mi.
594 ft.

Relative:
Higher

JUNEAU AIRPORT TRAVELODGE HOTEL **AK SHWS** **S108940957**
9200 GLACIER HIGHWAY, TRAVELODGE HOTEL **AK INST CONTROL** **N/A**
JUNEAU, AK 99803

Click here for full text details

AK SHWS
Hazard ID: 4517
Facility Status: Cleanup Complete - Institutional Controls

AK INST CONTROL
Hazard ID: 4517
Facility Status: Cleanup Complete - Institutional Controls

T78
West
< 1/8
0.120 mi.
636 ft.

Relative:
Higher

ALASKA AIRLINES - JUNEAU CARGO FACILITY
1915 ALEX HOLDEN WAY JUNEAU INTERNATIONAL AIRPORT, SOURCE AR
JUNEAU, AK 99801

AK SHWS **S109254969**
AK LUST **N/A**

Click here for full text details

AK SHWS
Hazard ID: 22996
Hazard ID: 24525
Facility Status: Active
Facility Status: Cleanup Complete

AK LUST
eventid: 22996
Facility Status: Open

T79
West
< 1/8
0.120 mi.
636 ft.

Relative:
Higher

ALASKA AIRLINES - JUNEAU CARGO BUILDING
1915 ALEX HOLDEN WAY
JUNEAU, AK 99801

AK LUST **S105453951**
N/A

Click here for full text details

AK LUST
eventid: 24525
Facility Status: Cleanup Complete

80
West
1/8-1/4
0.127 mi.
670 ft.

Relative:
Higher

JUNEAU AIRPORT FUELING FACILITY
2085 ALEX HOLDEN WAY
JUNEAU, AK 99801

AK SHWS **S104893281**
N/A

Click here for full text details

AK SHWS
Hazard ID: 2987
Facility Status: Active

U81
WNW
1/8-1/4
0.131 mi.
691 ft.

Relative:
Higher

MILLER CONSTRUCTION CO LTD
2207 NORTH JORDAN AVE.
JUNEAU, AK 99801

ABANDONED MINES **1024248009**
N/A

Click here for full text details

82
WSW
1/8-1/4
0.136 mi.
716 ft.

Relative:
Lower

ALASKA COASTAL AIRLINES
JUNEAU INTL ARPRT BLK H LOT 7
JUNEAU, AK 99801

RCRA-CESQG
1000904403
AK0000444174

Click here for full text details

RCRA-CESQG
EPA Id: AK0000444174

T83
West
1/8-1/4
0.137 mi.
721 ft.

Relative:
Higher

AERO SERVICES, INC.
1890 RENSHAW WAY
JUNEAU, AK 99801

AK UST
U003998651
N/A

Click here for full text details

AK UST
Facility Id: 1375
Tank Status: Permanently Out of Use

T84
West
1/8-1/4
0.138 mi.
730 ft.

Relative:
Higher

NORTHSTAR TREKKING DBA N.STAR HELICOPTER
1910 RENSHAW WAY
JUNEAU, AK 99801

RCRA NonGen / NLR
1007879133
AKR000201368

Click here for full text details

RCRA NonGen / NLR
EPA Id: AKR000201368

U85
NW
1/8-1/4
0.172 mi.
909 ft.

Relative:
Higher

CHANNEL CONSTRUCTION INC
2223 NORTH JORDAN AVE
JUNEAU, AK 99801

RCRA NonGen / NLR
PADS
1015757153
AKR000002378

Click here for full text details

RCRA NonGen / NLR
EPA Id: AKR000002378

PADS
EPAID:: AKR000002378

U86
NW
1/8-1/4
0.172 mi.
909 ft.

Relative:
Higher

PORTABLE 191
2223 N. JORDAN AVE.
JUNEAU, AK 99801

ABANDONED MINES
1018260304
N/A

Click here for full text details

U87
NW
1/8-1/4
0.175 mi.
922 ft.

Relative:
Higher

CHANNEL CONSTRUCTION INC

JUNEAU (County), AK

Click here for full text details

US MINES
Mine ID:: 5001723

US MINES **1001195071**
N/A

88
West
1/8-1/4
0.192 mi.
1013 ft.

Relative:
Higher

T W HALL
9393 LA PEROUSE AVE
JUNEAU, AK 99801

Click here for full text details

RCRA NonGen / NLR
EPA Id: AKR000004283

FINDS
Registry ID:: 110003036946

ECHO
Registry ID: 110003036946

RCRA NonGen / NLR **1004670314**
FINDS **AKR000004283**
ECHO

V89
NW
1/8-1/4
0.194 mi.
1025 ft.

Relative:
Higher

CHANNEL CONSTRUCTION INC

JUNEAU (County), AK

Click here for full text details

US MINES
Mine ID:: 5001722

US MINES **1016521834**
N/A

V90
NW
1/8-1/4
0.194 mi.
1025 ft.

Relative:
Higher

MILLER CONSTRUCTION CO LTD

JUNEAU (County), AK

Click here for full text details

US MINES
Mine ID:: 5001746

US MINES **1016521846**
N/A

W91
WNW
1/4-1/2
0.276 mi.
1458 ft.

Relative:
Higher

FAA JUNEAU SFOP
9341 GLACIER HIGHWAY
JUNEAU, AK 99801

AK SHWS **S109255355**
AK LUST **N/A**

Click here for full text details

AK SHWS
Hazard ID: 24941
Facility Status: Active

AK LUST
eventid: 24941
Facility Status: Open

W92
WNW
1/4-1/2
0.276 mi.
1458 ft.

Relative:
Higher

USDOT FAA JUNEAU
9341 GLACIER HWY NAV AIDS
JUNEAU, AK 99801

SEMS-ARCHIVE **1000456199**
RCRA NonGen / NLR **AK9690500179**
PADS
FINDS
ECHO

Click here for full text details

SEMS-ARCHIVE
Site ID: 1001753
EPA Id: AK9690500179

RCRA NonGen / NLR
EPA Id: AK9690500179

PADS
EPAID:: AK9690500179

FINDS
Registry ID:: 110003044036

ECHO
Registry ID: 110003044036

93
WNW
1/4-1/2
0.348 mi.
1839 ft.

Relative:
Higher

COMMERCIAL PROPERTY - 9351 GLACIER HIGHWAY
9351 GLACIER HIGHWAY
JUNEAU, AK 99801

AK SHWS **S110762070**
AK INST CONTROL **N/A**

Click here for full text details

AK SHWS
Hazard ID: 25608
Facility Status: Cleanup Complete

AK INST CONTROL
Hazard ID: 25608
Facility Status: Cleanup Complete

94
West
1/4-1/2
0.380 mi.
2007 ft.

Relative:
Lower

MENDENHALL WW TREATMENT PLANT
2009 RADCLIFFE ROAD, ADJACENT TO JUNEAU INTERNATIONAL AIRPOR
JUNEAU, AK 99801

AK SHWS **S108033073**
N/A

Click here for full text details

AK SHWS
Hazard ID: 3863
Facility Status: Active

95
WNW
1/4-1/2
0.392 mi.
2071 ft.

Relative:
Higher

SKATEBOARD PARK
MENDENHALL LOOP ROAD, 1/4 MILE SOUTH OF EGAN
JUNEAU, AK 99801

AK SHWS **S105464279**
AK INST CONTROL **N/A**
AK VCP

Click here for full text details

AK SHWS
Hazard ID: 2696
Hazard ID: 2697
Facility Status: Cleanup Complete
Facility Status: Cleanup Complete - Institutional Controls

AK INST CONTROL
Hazard ID: 2697
Facility Status: Cleanup Complete - Institutional Controls

AK VCP
Facility Status: Cleanup Complete
Hazard Id: 2696
DEC File Number: 1513.38.038

96
ENE
1/4-1/2
0.460 mi.
2430 ft.

Relative:
Higher

GLACIER GARDENS RAINFOREST ADVENTURES AST SPILL
7600 GLACIER HIGHWAY
JUNEAU, AK 99801

AK SHWS **S105273792**
N/A

Click here for full text details

AK SHWS
Hazard ID: 3709
Facility Status: Cleanup Complete

X97
SE
1/4-1/2
0.469 mi.
2475 ft.

Relative:
Higher

BRUCE D. MORLEY, INCORPORATED
9128 N. DOUGLAS HIGHWAY
JUNEAU, AK 99801

AK LUST **S106166020**
N/A

Click here for full text details

AK LUST
eventid: 24560
Facility Status: Cleanup Complete

X98
SE
1/4-1/2
0.469 mi.
2475 ft.

Relative:
Higher

BRUCE D. MORLEY, INCORPORATED
9128 N. DOUGLAS HIGHWAY;
JUNEAU, AK 99801

AK SHWS **S109256489**
N/A

Click here for full text details

AK SHWS
Hazard ID: 24560
Facility Status: Cleanup Complete

99
NW
1/2-1
0.656 mi.
3466 ft.

Relative:
Higher

USFS DUCK CREEK ADMINISTRATION
NW CORNER OF ATLIN DRIVE & TESLIN STREET
JUNEAU, AK 99801

AK SHWS **S108540253**
N/A

Click here for full text details

AK SHWS
Hazard ID: 4389
Facility Status: Cleanup Complete

100
West
1/2-1
0.661 mi.
3488 ft.

Relative:
Higher

BICKNELL
2275 BRANDY LANE
JUNEAU / DOUGLAS, AK 99801

AK SHWS **S117718815**
AK SPILLS **N/A**

Click here for full text details

AK SHWS
Hazard ID: 26908
Facility Status: Active

AK SPILLS
Case Closed: 08/22/2018
Case Closed: 03/18/2015
Spill ID: 59608
Spill ID: 45362
Facility Id: 17119925001
Facility Id: 15119906101

Y101
NW
1/2-1
0.691 mi.
3649 ft.

Relative:
Higher

VALLEY TESORO
9102 MENDENHALL MALL ROAD
JUNEAU, AK 99801

AK SHWS **S118973342**
AK LUST **N/A**

Click here for full text details

AK SHWS
Hazard ID: 26640
Facility Status: Active

AK LUST
eventid: 26640
Facility Status: Open

Y102
NW
1/2-1
0.691 mi.
3649 ft.

Relative:
Higher

VALLEY TESORO
9102 MENDENHALL MALL RD
JUNEAU, AK 99801

AK SHWS **U004116318**
AK UST **N/A**
AK Financial Assurance

Click here for full text details

AK SHWS
Hazard ID: 24906
Facility Status: Cleanup Complete

AK UST
Facility Id: 455
Tank Status: Currently in Use
Tank Status: Permanently Out of Use

AK Financial Assurance
Facility Id: 455

103
NW
1/2-1
0.711 mi.
3755 ft.

Relative:
Higher

MENDENHALL MALL HOTS
9105 MENDENHALL MALL ROAD
JUNEAU, AK 99801

AK SHWS **S108670394**
N/A

Click here for full text details

AK SHWS
Hazard ID: 4448
Facility Status: Cleanup Complete

104
SSW
1/2-1
0.779 mi.
4112 ft.

Relative:
Lower

RESIDENCE - MISTY LANE HHOT
10648 MISTY LANE, DOUGLAS ISLAND NORTH END
JUNEAU, AK 99801

AK SHWS **S106802261**
AK INST CONTROL **N/A**

Click here for full text details

AK SHWS
Hazard ID: 4063
Facility Status: Cleanup Complete - Institutional Controls

AK INST CONTROL
Hazard ID: 4063
Facility Status: Cleanup Complete - Institutional Controls

105
West
1/2-1
0.807 mi.
4261 ft.

Relative:
Higher

E&L AUTO
10005 CRAZY HORSE DRIVE, MENDENHALL VALLEY
JUNEAU, AK 99801

AK SHWS **S104893267**
AK ENG CONTROLS **N/A**
AK INST CONTROL

Click here for full text details

AK SHWS
Hazard ID: 1183

E&L AUTO (Continued) **S104893267**

Facility Status: Cleanup Complete - Institutional Controls

AK ENG CONTROLS
Hazard ID: 1183
Facility Status: Cleanup Complete - Institutional Controls

AK INST CONTROL
Hazard ID: 1183
Facility Status: Cleanup Complete - Institutional Controls

106
NNW
1/2-1
0.859 mi.
4535 ft.

Relative: Higher

RESIDENCE - NANCY STREET JNU **AK SHWS** **S107504671**
8905 NANCY STREET **N/A**
JUNEAU, AK 99801

Click here for full text details

AK SHWS
Hazard ID: 3710
Facility Status: Cleanup Complete

107
NW
1/2-1
0.869 mi.
4590 ft.

Relative: Higher

RIVERBEND / DIMOND PARK **AK SHWS** **S104893282**
2900 RIVERSIDE DRIVE, 1/2 MILE NORTH OF EGAN DR **AK INST CONTROL** **N/A**
JUNEAU, AK 99801

Click here for full text details

AK SHWS
Hazard ID: 299
Facility Status: Cleanup Complete

AK INST CONTROL
Hazard ID: 299
Facility Status: Cleanup Complete

108
NW
1/2-1
0.902 mi.
4762 ft.

Relative: Higher

RESIDENCE - 2822 MARSHA AVENUE **AK SHWS** **S118454846**
2822 MARSHA AVENUE **N/A**
JUNEAU, AK 99801

Click here for full text details

AK SHWS
Hazard ID: 26468
Facility Status: Active

109
NW
1/2-1
0.933 mi.
4925 ft.

Relative:
Higher

RESIDENCE - 2921 GLACIERWOOD COURT
2921 GLACIERWOOD COURT
JUNEAU, AK 99801

AK SHWS **S117849273**
N/A

Click here for full text details

AK SHWS
Hazard ID: 26331
Facility Status: Active

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
AK	AIRS	AIRS Facility Listing	Department of Environmental Conservation	07/09/2018	07/13/2018	08/20/2018
AK	AST	Regulated Aboveground Storage Tanks	Department of Environmental Conservation	01/05/2005	01/06/2005	02/02/2005
AK	BROWNFIELDS	Identified and/or Proposed Brownfields Sites	Department of Environmental Conservation	09/25/2018	09/27/2018	10/24/2018
AK	CDL	Illegal Drug Manufacturing Sites	Department of Environmental Conservation	02/12/2018	02/13/2018	03/21/2018
AK	COAL ASH	Coal Ash Disposal Sites	Department of Environmental Conservation	03/08/2018	03/27/2018	04/13/2018
AK	DRYCLEANERS	Drycleaner Facility Listing	Department of Environmental Conservation	02/15/2006	02/16/2006	03/15/2006
AK	ENG CONTROLS	Engineering Controls Site Listing	Department of Environmental Conservation	09/25/2018	09/27/2018	10/24/2018
AK	Financial Assurance 1	Financial Assurance Information Listing	Department of Environmental Conservation	11/12/2018	11/14/2018	11/28/2018
AK	Financial Assurance 2	Financial Assurance Information Listing	Department of Environmental Conservation	04/24/2007	04/26/2007	05/14/2007
AK	Inst Control	Contaminated Sites with Institutional Controls	Department of Environmental Conservation	09/25/2018	09/27/2018	10/24/2018
AK	LUST	Leaking Underground Storage Tank Database	Department of Environmental Conservation	08/09/2018	08/10/2018	08/20/2018
AK	NPDES	Wastwater Discharge Permit Listing	Department of Environmental Conservation	09/17/2018	09/18/2018	09/27/2018
AK	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Environmental Conservation		07/01/2013	01/17/2014
AK	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Environmental Conservation		07/01/2013	01/04/2014
AK	SHWS	Contaminated Sites Database	Department of Environmental Conservation	09/25/2018	09/27/2018	10/24/2018
AK	SPILLS	Spills Database	Department of Environmental Conservation	10/16/2018	10/18/2018	10/24/2018
AK	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	07/21/2010	01/03/2013	02/08/2013
AK	SWF/LF	Solid Waste Facilities	Department of Environmental Conservation	09/06/2018	09/25/2018	09/27/2018
AK	SWRCY	Recycling Facilities	Department of Environmental Conservation	12/29/2014	12/30/2014	02/02/2015
AK	UIC	UIC Information	Oil & Gas Conservation Commission	11/12/2018	11/14/2018	11/28/2018
AK	UST	Underground Storage Tank Database	Department of Environmental Conservation	11/12/2018	11/14/2018	11/28/2018
AK	VCP	Voluntary Cleanup Program sites	Department of Environmental Conservation	11/26/2018	11/27/2018	11/28/2018
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	09/30/2017	05/08/2018	07/20/2018
US	ABANDONED MINES	Abandoned Mines	Department of Interior	09/10/2018	09/11/2018	09/14/2018
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2015	02/22/2017	09/28/2017
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	09/30/2018	10/12/2018	12/07/2018
US	CORRACTS	Corrective Action Report	EPA	03/01/2018	03/28/2018	06/22/2018
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DOCKET HWC	Hazardous Waste Compliance Docket Listing	Environmental Protection Agency	05/31/2018	07/26/2018	10/05/2018
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	Delisted NPL	National Priority List Deletions	EPA	11/14/2018	11/27/2018	12/07/2018
US	ECHO	Enforcement & Compliance History Information	Environmental Protection Agency	09/02/2018	09/05/2018	09/14/2018
US	EDR Hist Auto	EDR Exclusive Historical Auto Stations	EDR, Inc.			
US	EDR Hist Cleaner	EDR Exclusive Historical Cleaners	EDR, Inc.			
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	09/24/2018	09/25/2018	11/09/2018
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	11/07/2016	01/05/2017	04/07/2017
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	05/15/2017	05/30/2017	10/13/2017
US	FINDS	Facility Index System/Facility Registry System	EPA	08/07/2018	09/05/2018	10/05/2018
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	01/31/2015	07/08/2015	10/13/2015

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	FUELS PROGRAM	EPA Fuels Program Registered Listing	EPA	08/22/2018	08/22/2018	10/05/2018
US	FUSRAP	Formerly Utilized Sites Remedial Action Program	Department of Energy	08/08/2017	09/11/2018	09/14/2018
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	03/26/2018	03/27/2018	06/08/2018
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	11/18/2016	11/23/2016	02/10/2017
US	IHS OPEN DUMPS	Open Dumps on Indian Land	Department of Health & Human Serivces, Indian	04/01/2014	08/06/2014	01/29/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	04/13/2018	05/18/2018	07/20/2018
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	04/12/2018	05/18/2018	07/20/2018
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	05/08/2018	05/18/2018	07/20/2018
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	04/12/2018	05/18/2018	07/20/2018
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	04/01/2018	05/18/2018	07/20/2018
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	04/24/2018	05/18/2018	07/20/2018
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	04/25/2018	05/18/2018	07/20/2018
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	04/10/2018	05/18/2018	07/20/2018
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2014	07/14/2015	01/10/2017
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	04/13/2018	05/18/2018	07/20/2018
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	04/12/2018	05/18/2018	07/20/2018
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	05/08/2018	05/18/2018	07/20/2018
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	04/12/2018	05/18/2018	07/20/2018
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	04/01/2018	05/18/2018	07/20/2018
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	04/24/2018	05/18/2018	07/20/2018
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	04/25/2018	05/18/2018	07/20/2018
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	04/10/2018	05/18/2018	07/20/2018
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	07/27/2015	09/29/2015	02/18/2016
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	08/13/2018	10/04/2018	11/16/2018
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	08/13/2018	10/04/2018	11/16/2018
US	LUCIS	Land Use Control Information System	Department of the Navy	10/17/2018	10/25/2018	12/07/2018
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	08/30/2016	09/08/2016	10/21/2016
US	NPL	National Priority List	EPA	11/14/2018	11/27/2018	12/07/2018
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	09/14/2018	10/11/2018	12/07/2018
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	05/24/2017	11/30/2017	12/15/2017
US	PRP	Potentially Responsible Parties	EPA	08/13/2018	10/04/2018	11/09/2018
US	Proposed NPL	Proposed National Priority List Sites	EPA	11/14/2018	11/27/2018	12/07/2018
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	10/02/2018	10/03/2018	11/09/2018
US	RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated	Environmental Protection Agency	03/01/2018	03/28/2018	06/22/2018
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	03/01/2018	03/28/2018	06/22/2018
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	03/01/2018	03/28/2018	06/22/2018
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	03/01/2018	03/28/2018	06/22/2018
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	03/01/2018	03/28/2018	06/22/2018
US	RMP	Risk Management Plans	Environmental Protection Agency	08/01/2018	08/22/2018	10/05/2018

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	ROD	Records Of Decision	EPA	08/13/2018	10/04/2018	11/16/2018
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	01/01/2017	02/03/2017	04/07/2017
US	SEMS	Superfund Enterprise Management System	EPA	11/14/2018	11/27/2018	12/07/2018
US	SEMS-ARCHIVE	Superfund Enterprise Management System Archive	EPA	11/14/2018	11/28/2018	12/07/2018
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2016	01/10/2018	01/12/2018
US	TSCA	Toxic Substances Control Act	EPA	12/31/2016	06/21/2017	01/05/2018
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	06/23/2017	10/11/2017	11/03/2017
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/12/2016	10/26/2016	02/03/2017
US	US AIRS MINOR	Air Facility System Data	EPA	10/12/2016	10/26/2016	02/03/2017
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	09/18/2018	09/18/2018	11/09/2018
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	09/21/2018	09/21/2018	11/09/2018
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	07/31/2018	08/28/2018	09/14/2018
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	08/31/2018	09/25/2018	11/09/2018
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	09/21/2018	09/21/2018	11/09/2018
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	07/31/2018	08/28/2018	09/14/2018
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	08/01/2018	08/29/2018	10/05/2018
US	US MINES 2	Ferrous and Nonferrous Metal Mines Database Listing	USGS	12/05/2005	02/29/2008	04/18/2008
US	US MINES 3	Active Mines & Mineral Plants Database Listing	USGS	04/14/2011	06/08/2011	09/13/2011
US	UXO	Unexploded Ordnance Sites	Department of Defense	09/30/2017	06/19/2018	09/14/2018
NY	NY MANIFEST	Facility and Manifest Data	Department of Environmental Conservation	07/01/2018	08/01/2018	08/31/2018
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
AK	Daycare Centers	Sensitive Receptor: Child Care Facilities Database	Department of Education & Early Development			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
AK	State Wetlands	Wetland Classification and Mapping	Alaska Natural Heritage Program			
US	Topographic Map		U.S. Geological Survey			
US	Oil/Gas Pipelines		PennWell Corporation			
US	Electric Power Transmission Line Data		PennWell Corporation			

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

JUNEAU
8425 LIVINGSTON WAY
JUNEAU, AK 99801

TARGET PROPERTY COORDINATES

Latitude (North):	58.35764 - 58° 21' 27.50''
Longitude (West):	134.568524 - 134° 34' 6.69''
Universal Tranverse Mercator:	Zone 8
UTM X (Meters):	525250.2
UTM Y (Meters):	6468399.5
Elevation:	11 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property:	N/A
Source:	USGS 7.5 min quad index

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

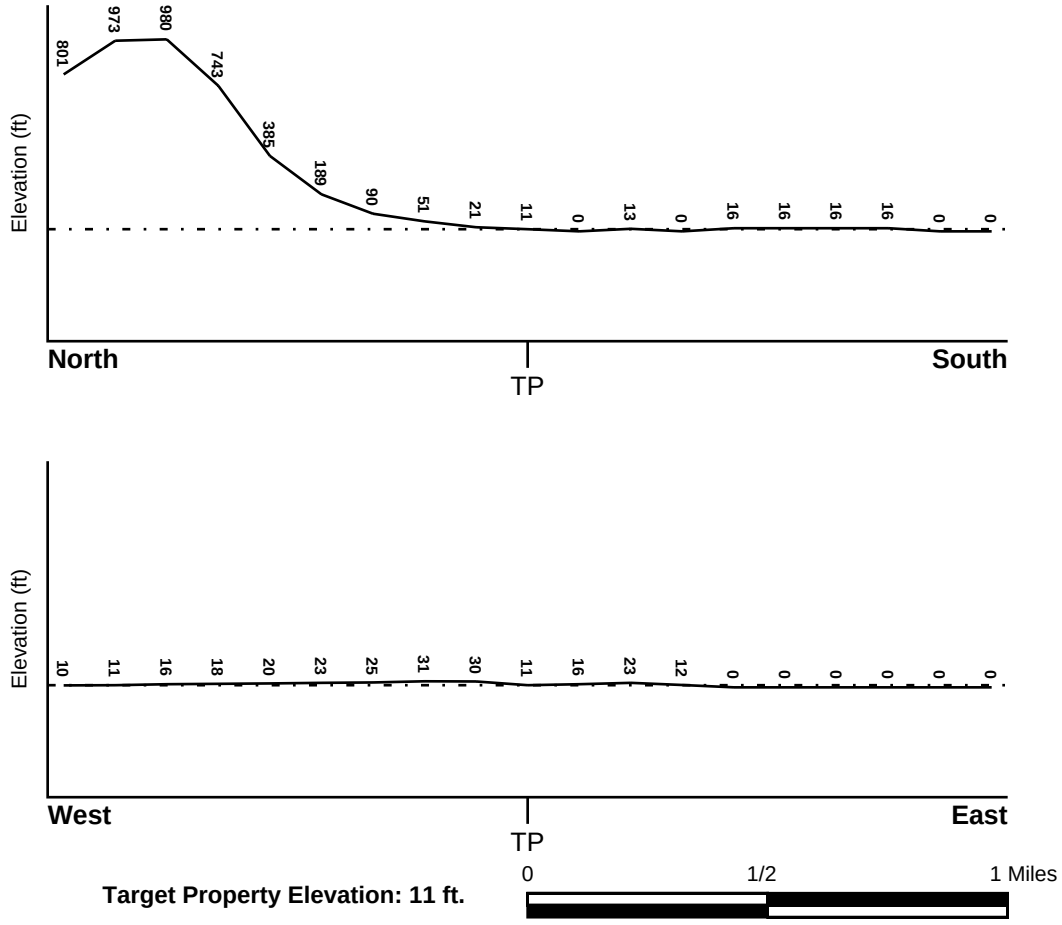
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General South

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Target Property Elevation: 11 ft.

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
02110C1527D	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
02110C1531D	FEMA FIRM Flood data
02110C1526D	FEMA FIRM Flood data
02110C1533D	FEMA FIRM Flood data
02110C1529D	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
Not Reported	N

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.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era:	-
System:	-
Series:	-
Code:	N/A *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: -

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:	TYPIC HUMICRYODS
Soil Surface Texture:	very gravelly - 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:	Well drained. Soils have intermediate water holding capacity. Depth to water table is more than 6 feet.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: HIGH

Depth to Bedrock Min: > 60 inches

Depth to Bedrock Max: > 60 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	3 inches	very gravelly - silt loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel	Max: 2.00 Min: 0.60	Max: 0.00 Min: 0.00
2	3 inches	8 inches	gravelly - sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 2.00 Min: 0.60	Max: 5.50 Min: 3.60
3	8 inches	22 inches	very gravelly - coarse sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 6.00 Min: 2.00	Max: 5.50 Min: 4.50
4	22 inches	60 inches	very cobbly - sandy loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 6.00 Min: 2.00	Max: 5.50 Min: 5.10

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: peat
silt loam
gravelly - silt loam

Surficial Soil Types: peat
silt loam
gravelly - silt loam

Shallow Soil Types: gravelly - silt loam
very gravelly - silt loam
silt loam
mucky-peat
muck
stratified
fine sandy loam

Deeper Soil Types: unweathered bedrock

very gravelly - sandy loam
hemic material
very gravelly - silty clay loam
extremely gravelly - silt loam
mucky-peat
very gravelly - sand
stratified
gravelly - coarse sand

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

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	USGS40000010708	1/8 - 1/4 Mile WNW
2	USGS40000010698	1/8 - 1/4 Mile West
3	USGS40000010688	1/4 - 1/2 Mile WSW
4	USGS40000010716	1/4 - 1/2 Mile NW
5	USGS40000010699	1/4 - 1/2 Mile West
A6	USGS40000010709	1/2 - 1 Mile West
A7	USGS40000010710	1/2 - 1 Mile West
A8	USGS40000010704	1/2 - 1 Mile West
B9	USGS40000010749	1/2 - 1 Mile NW
B10	USGS40000010750	1/2 - 1 Mile NW
C11	USGS40000010725	1/2 - 1 Mile WNW
12	USGS40000010747	1/2 - 1 Mile WNW
13	USGS40000010762	1/2 - 1 Mile NW
C14	USGS40000010727	1/2 - 1 Mile WNW
C15	USGS40000010739	1/2 - 1 Mile WNW
D16	USGS40000010769	1/2 - 1 Mile NW
D17	USGS40000010764	1/2 - 1 Mile NW
18	USGS40000010751	1/2 - 1 Mile WNW
19	USGS40000010740	1/2 - 1 Mile WNW
E20	USGS40000010754	1/2 - 1 Mile WNW
F21	USGS40000010721	1/2 - 1 Mile West
G22	USGS40000010743	1/2 - 1 Mile West
E23	USGS40000010753	1/2 - 1 Mile WNW
G24	USGS40000010741	1/2 - 1 Mile West
F25	USGS40000010728	1/2 - 1 Mile West

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

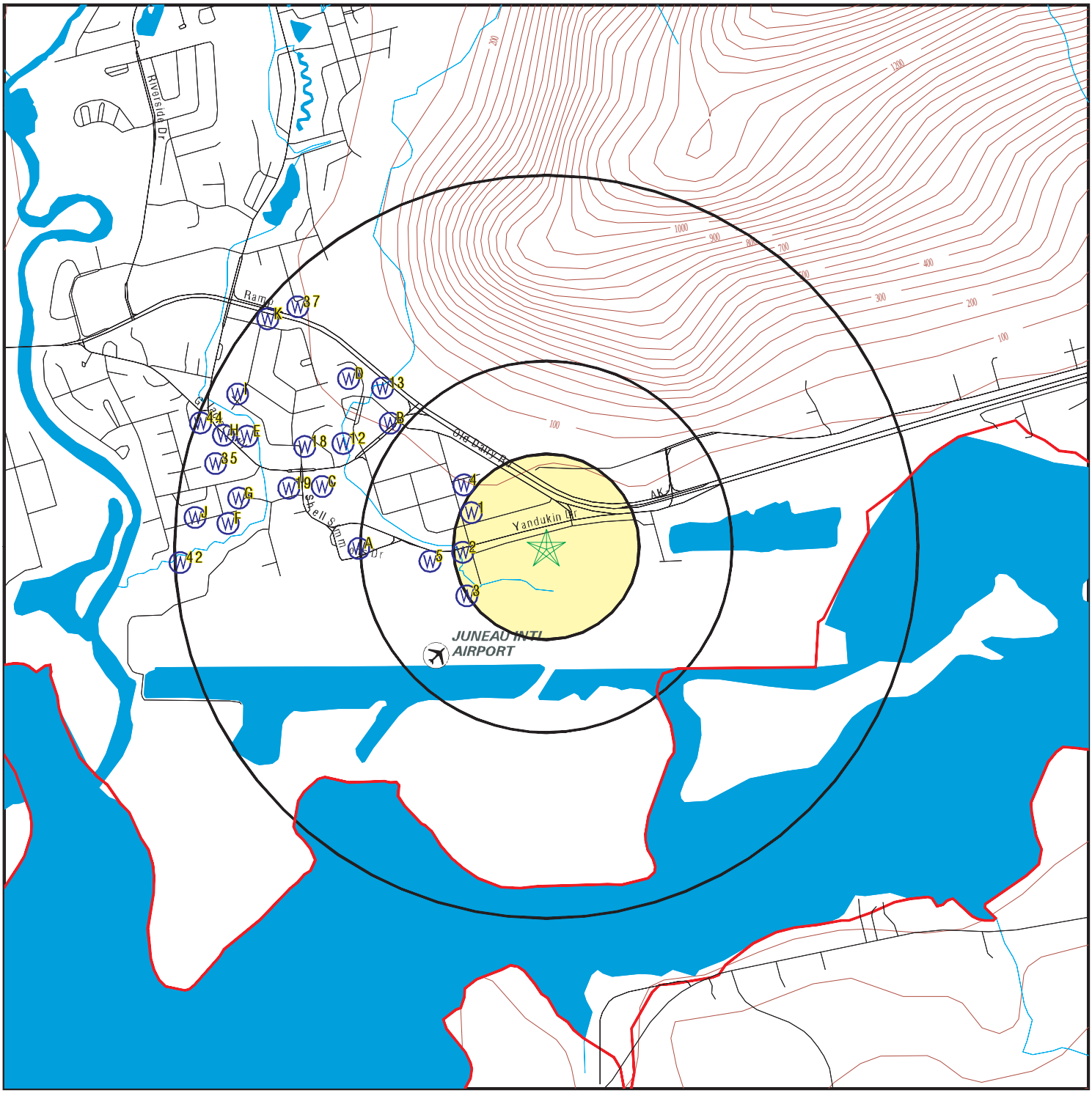
MAP ID	WELL ID	LOCATION FROM TP
F26	USGS40000010729	1/2 - 1 Mile West
E27	USGS40000010757	1/2 - 1 Mile WNW
E28	USGS40000010758	1/2 - 1 Mile WNW
E29	USGS40000010755	1/2 - 1 Mile WNW
E30	USGS40000010756	1/2 - 1 Mile WNW
F31	USGS40000010722	1/2 - 1 Mile West
H32	USGS40000010759	1/2 - 1 Mile WNW
I33	USGS40000010773	1/2 - 1 Mile WNW
J34	USGS40000010730	1/2 - 1 Mile West
35	USGS40000010752	1/2 - 1 Mile WNW
J36	USGS40000010723	1/2 - 1 Mile West
37	USGS40000010792	1/2 - 1 Mile NW
H38	USGS40000010763	1/2 - 1 Mile WNW
I39	USGS40000010771	1/2 - 1 Mile WNW
K40	USGS40000010787	1/2 - 1 Mile NW
J41	USGS40000010745	1/2 - 1 Mile West
42	USGS40000010717	1/2 - 1 Mile West
J43	USGS40000010744	1/2 - 1 Mile West
44	USGS40000010765	1/2 - 1 Mile WNW
K45	USGS40000010794	1/2 - 1 Mile NW

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

PHYSICAL SETTING SOURCE MAP - 5509586.2s



- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- Oil, gas or related wells

SITE NAME: Juneau	CLIENT: AECOM
ADDRESS: 8425 Livingston Way Juneau AK 99801	CONTACT: Brittany Kirchmann INQUIRY #: 5509586.2s
LAT/LONG: 58.35764 / 134.568524	DATE: December 12, 2018 9:59 am

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
1 **WNW** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010708**
2 **West** **1/8 - 1/4 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010698**
3 **WSW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010688**
4 **NW** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010716**
5 **West** **1/4 - 1/2 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010699**
A6 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010709**
A7 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010710**
A8 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010704**
B9 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010749**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
B10 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010750**
C11 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010725**
12 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010747**
13 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010762**
C14 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010727**
C15 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010739**
D16 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010769**
D17 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010764**
18 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010751**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
19 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010740**
E20 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010754**
F21 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010721**
G22 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010743**
E23 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010753**
G24 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010741**
F25 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010728**
F26 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010729**
E27 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010757**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
E28 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010758**
E29 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010755**
E30 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010756**
F31 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010722**
H32 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010759**
I33 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010773**
J34 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010730**
35 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010752**
J36 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010723**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
37 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010792**
H38 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010763**
I39 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010771**
K40 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010787**
J41 **West** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010745**
42 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000010717**
J43 **West** **1/2 - 1 Mile** **Lower**	Click here for full text details	**FED USGS**	**USGS40000010744**
44 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010765**
K45 **NW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**FED USGS**	**USGS40000010794**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: AK Radon

Radon Test Results

Num Tests	< 0.5 pCi/L	0.5 - 2.0	2.1 - 4.0	4.1 - 10	10-20	> 20 pCi/L
95	69	23	2	1	0	0

Federal EPA Radon Zone for JUNEAU County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 99801

Number of sites tested: 62

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.303 pCi/L	100%	0%	0%
Living Area - 2nd Floor	0.100 pCi/L	100%	0%	0%
Basement	1.053 pCi/L	95%	5%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Classification and Mapping
Source: Alaska Natural Heritage Program
Telephone: 907-235-2218

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 Well Database
Source: Department of Administration, Oil & Gas Conservation Commission
Telephone:
Oil and gas well locations in the state.

RADON

State Database: AK Radon
Source: University of Alaska Fairbanks
Telephone: 907-474-7201
Radon Information

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.

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

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STREET AND ADDRESS INFORMATION

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Appendix B
Preliminary Assessment Documentation

Appendix B.1
Interview Records

PA Interview Questionnaire - Other

Facility: F.D.
Interviewer: [redacted]
Date/Time: 9/4/18

Interviewee: [redacted] **Title:** F.D. Assistant Fire Chief **Phone Number:** **Email:**	Can your name/role be used in the PA Report? (Y) or N Can you recommend anyone we can interview? Y or N

Roles or activities with the Facility/Years working at the Facility:

ARF Chief, talking w/ manufacturer, well versed.
→ in charge of ARF Firefighting division.
Knows history since
Been here since '79, Station Built in 86.
ARF Trucks were on these locations.
see map.

PFAS Use: Identify accidental/intentional release locations, time frame of release, frequency of releases, storage container size (maintenance, fire training, firefighting, buildings with suppression systems (as builts), fueling stations, crash sites, pest management, recreational, dining facilities, metals plating, or waterproofing). How are materials ordered/purchased/disposed/shared with others?

	Known Uses
Use 6 carbon chain ChemGuard CM6	Use
all for class b foam.	Procurement
Do use Class A : B for trainy	Disposition
Use foam for testing ; trainy	Storage (Mixed)
- 2601 Sharrod Lane Training Center	Storage (Solution)
on Airport grounds.	Inventory, Off-Spec
ChemGuard have used in the past	Containment
→ Testing ARF truck into settling pond	SOP on Filling
400 gal container in truck	Leaking Vehicles
the Float plane pond	Nozzle and Suppression System Testing
	Dining Facilities
Don't empty of Rocks. Stays in tank.	Vehicle Washing
Trucks get flushed out - the pipes,	Ramp Washing
to locations on map - settling pond	Fuel Spill Washing and Fueling Stations
	Chrome Plating or Waterproofing

Airport tests run off (not for PFOS)

→ Airport Rescue Firefighting = ARF.

[redacted] P2/2

PA Interview Questionnaire - Other

Facility: F.D.
Interviewer: [redacted]
Date/Time: 9/4/18

concrete ~~underground~~ @ burn pit, settles goes into tank underground & slowly in to city waste, who treats it. DEC knows all this - [redacted]

→ No Accidents since 1979 ~~for~~ @ when foam was used on airport grounds.

→ Army Guard did not have their own trucks.
OLD F.S. ~~on~~ now a Bank

→ was a vol. FF @ old station.
↳ from 70-80 - used protein foam.
Because of smell.

Recc: [redacted] OLD Fire Chief 19 -

→ late 80s, early 90s stopped using protein foam

"well" in tank is just a cistern used for trucks

Q → On pond, does it foam? pond scum yes. does not froth

JUNEAU P1/1

PA Interview Questionnaire - Other

Facility: AAOF
Interviewer [redacted]
Date/Time: 9/4/18

Interviewee: [redacted] **Title:** Facility Commander **Phone Number:** **Email:**	Can your name/role be used in the PA Report? (Y) or N Can you recommend anyone we can interview? (Y) or N [redacted] (retired) AIRPORT [redacted] - F.D. [redacted]

Roles or activities with the Facility/Years working at the Facility:

Since 2009, Full time Fran support pilot, last was A pilot, Facility Commander

OCT 2010 - OCT 2011 (NOT here)

PFAS Use: Identify accidental/intentional release locations, time frame of release, frequency of releases, storage container size (maintenance, fire training, firefighting, buildings with suppression systems (as builts), fueling stations, crash sites, pest management, recreational, dining facilities, metals plating, or waterproofing). How are materials ordered/purchased/disposed/shared with others?

	Known Uses
→ Never been discharged or used here (1) Trimax is only source (2) Don't use or discharge.	Use
	Procurement
	Disposition
→ Before '89 guard had another Hangar, does not own property "the blue hangar" marked on (general location) map; below secured area	Storage (Mixed)
	Storage (Solution)
	Inventory, Off-Spec
	Containment
	SOP on Filling
	Leaking Vehicles
→ NO Crashes on Airport	Nozzle and Suppression System Testing
	Dining Facilities
→ Never seen users of hangar show up w/ own Fire fighting equipment	Vehicle Washing
	Ramp Washing
	Fuel Spill Washing and Fueling Stations
→ Deicing - Aeroservices; AK Air	Chrome Plating or Waterproofing

→ Salmon Creek Dam → community H_2O intake "in the mountains"

P1/2

PA Interview Questionnaire - Other

Facility: JUNEAU AAOF
Interviewer: [redacted]
Date/Time: 8/14/18

Interviewee: [redacted]
Title: Support pilot/Aviator Officer
Phone Number:
Email:

Can your name/role be used in the PA Report? (Y) or N

Can you recommend anyone we can interview?

Y or N

Roles or activities with the Facility/Years working at the Facility:

18 months @ this hangar

→ Over 10 yrs in this hangar before that, in none

→ Aircraft Mechanic

2003 here, 2005-06-2009-2011-Current

Deployed 2004

None in 96-2000

PFAS Use: Identify accidental/intentional release locations, time frame of release, frequency of releases, storage container size (maintenance, fire training, firefighting, buildings with suppression systems (as builts), fueling stations, crash sites, pest management, recreational, dining facilities, metals plating, or waterproofing). How are materials ordered/purchased/disposed/shared with others?

water fire Suppsy stem
1.5 yrs Trimax been in same location

Fac. Built in mid-80's

[redacted] - haz waste - had no AFFF

Never trained w/ Foam

→ There was "training foam" that was never used, they took it back. Was stored in 2005 on site. Commanders @ the time took it away so it wouldn't freeze

Known Uses
Use
Procurement
Disposition
Storage (Mixed)
Storage (Solution)
Inventory, Off-Spec
Containment
SOP on Filling
Leaking Vehicles
Nozzle and Suppression System Testing
Dining Facilities
Vehicle Washing
Ramp Washing
Fuel Spill Washing and Fueling Stations
Chrome Plating or Waterproofing

photo E trimax in arctic backentry →
E undertrimax

PA Interview Questionnaire - Other

Facility: JNEOU AADF
Interviewer: [redacted]
Date/Time: 9/4/18

[redacted] had talked about training, never did. The "Tracking Trimax" Never had pressure gauge down.

→ if the ones were stored here, they were outside where the other ones, but it doesn't always have a roof

[redacted] F.D. is a city lawn
Have an exercises w/ F.D., only H_2O.

Appendix B.2
Visual Site Inspection Checklists

Visual Site Inspection Checklist

Names(s) of people performing VSI: [redacted]

Recorded by: [redacted]

ARNG Contact:

Date and Time: 9/4/15

Method of visit (walking, driving, adjacent): Drive/walk

Source/Release Information

Site Name / Area Name / Unique ID: JNEAU AAOF

Site / Area Acreage: Real Estate DOCs

Historic Site Use (Brief Description): let coast guard; Alaska State troopers use it last it has been Arm'Nat'Guard's.,

Current Site Use (Brief Description):

Physical barriers or access restrictions: yes

1. Was PFAS used (or spilled) at the site/area? Y / (N)

1a. If yes, document how PFAS was used and usage time (e.g., fire fighting training 2001 to 2014):

2. Has usage been documented? Y / (N)

2a. If yes, keep a record (place electronic files on a disk):

3. What types of businesses are located near the site? **Industrial / Commercial / Plating / Waterproofing / Residential**

3a. Indicate what businesses are located near the site

Airport

4. Is this site located at an airport/flightline? (Y) N

4a. If yes, provide a description of the airport/flightline tenants:

Visual Survey Inspection Log

Other Significant Site Features:

1. Does the facility have a fire suppression system? (Y) N water

1a. If yes, indicate which type of AFFF has been used:

1b. If yes, describe maintenance schedule/leaks:

1c. If yes, how often is the AFFF replaced:

1d. If yes, does the facility have floor drains and where do they lead? Can we obtain an as built drawing?

Deicing has been performed on Ramps.

Transport / Pathway Information

Migration Potential:

1. Does site/area drainage flow off installation? Y / N

1a. If so, note observation and location: Flat, see map of drain Stormdrain runway is high point

2. Is there channelized flow within the site/area? Y / N

2a. If so, please note observation and location:

Drainage ditch out Front

3. Are monitoring or drinking water wells located near the site? (Y) N

3a. If so, please note the location: Airport on City Water

~~City~~ No Drinking Use wells.

[redacted] one time sample, covered w/ cement

4. Are surface water [redacted] near the site? Y (N)

4a. If so, please note the location:

5. Can wind dispersion information be obtained? Y / N

5a. If so, please note and observe the location.

Wind goes to North

6. Does an adjacent non-ARNG PFAS source exist? Y / N

6a. If so, please note the source and location.

6b. Will off-site reconnaissance be conducted? Y / N

Visual Survey Inspection Log

Significant Topographical Features:

1. Has the infrastructure changed at the site/area? **Y / N**

1a. If so, please describe change (ex. Structures no longer exist):

~~Bulk~~ Fuel is now stored in out Building

2. Is the site/area vegetated? **Y / N**

2a. If not vegetated, briefly describe the site/area composition:

3. Does the site or area exhibit evidence of erosion? **Y / N**

3a. If yes, describe the location and extent of the erosion:

4. Does the site/area exhibit any areas of ponding or standing water? **Y / N**

4a. If yes, describe the location and extent of the ponding: some puddle!

Float pond for aircraft, controlled.

Receptor Information

1. Is access to the site restricted? **Y / N**

1a. If so, please note to what extent:

2. Who can access the site? **Site Workers / Construction Workers / Trespassers / Residential / Recreational Users / Ecological** Visitors

2a. Circle all that apply, note any not covered above:

3. Are residential areas located near the site? **Y / N**

3a. If so, please note the location/distance:

Level w/, to N. Not a lot of well in area.

4. Are any schools/day care centers located near the site? **Y / N**

4a. If so, please note the location/distance/type:

Quit on Fritz Road Tea Harbor has some wells.

daycare ? on map

5. Are any wetlands located near the site? **Y / N**

5a. If so, please note the location/distance/type:

Float plane pond, River

Visual Survey Inspection Log

Additional Notes

Photographic Log

Photo ID/Name	Date & Location	Photograph Description

@ least 3/4 FULL

E 3 Drums

Appendix B.3
Conceptual Site Model Information

Preliminary Assessment – Conceptual Site Model Information

Site Name: Juneau AAOF

Why has this location been identified as a site?

Historical PFAS storage onsite.

Are there any other activities nearby that could also impact this location? Adjacent sites with possible PFAS contamination include the FTA at the seaplane base at the Juneau International Airport.

Training Events

Have any training events with AFFF occurred at this site? Possible release of training foam outside the hangar

If so, how often? Once ever

How much material was used? Is it documented? Unknown

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? Surface water is believed to flow south/southeast to the Gastineau Channel

Average rainfall? Approximately 120 to 150 inches of precipitation per year, 40% of which is snowfall.

Any flooding during rainy season? The AAOF is not considered to be within the 0.2% or 1% annual floodplains (FEMA)

Direct or indirect pathway to ditches? Drainage outside the hanger flows away from the building in all directions. Various storm drains and ditches catch surficial drainage in each direction, directing the water to proper catchments.

Direct or indirect pathway to larger bodies of water? Indirect pathways exist to the Gastineau Channel and the

Does surface water pond any place on site? Possibly in ditches during rain and melting seasons

Any impoundment areas or retention ponds? No

Any NPDES location points near the site? Yes. The Juneau AAOF held the NPDES Tracking No. AKR05CA95 from January 2010 to 2013. It was terminated because any tenants for JNU are covered by the JNU SWPPP and the AAOF does not have offsite discharge. The Mendenhall WWTP holds the NPDES Permit No. AK-002295-1.

How does surface water drain on and around the flight line? It is believed to drain south.

Preliminary Assessment – Conceptual Site Model Information

Groundwater:

Groundwater flow direction? Groundwater flow is believed to be south/southeast directly into the Gastineau Channel, and the underlying aquifer is not accessed for water.

Depth to groundwater? Due to the coastal proximity and seasonal glacial meltwater, the water table varies from 6 to 12 feet bgs (EDR, 2018) and includes a marine/freshwater interface whose depth and inland transgression changes with the tides and the variably available glacial meltwater (SI). Groundwater at levels at a USGS monitoring station 2.75 miles to the north were just below 11.10 ft bgs in December of 2018 (water data usgs, 2018). Groundwater is expected to be shallower with increasing proximity to the shore.

Uses (agricultural, drinking water, irrigation)? The aquifer below the facility is unpotable.

Any groundwater treatment systems? The City and Borough of Juneau have two locations that supply water to the area, one is a well field and the other is a filtration plant. Both are at least 5 miles from JIA and the AAOF.

Any groundwater monitoring well locations near the site? There are wells of unknown use upgradient

Is groundwater used for drinking water? The aquifer below the facility is unpotable.

Are there drinking water supply wells on installation? No

Do they serve off-post populations? NA

Are there off-post drinking water wells downgradient? No

Waste Water Treatment Plant:

Has the installation ever had a WWTP, past or present? Unknown, but unlikely for one building.

If so, do we understand the process and which water is/was treated at the plant? NA

Do we understand the fate of sludge waste? Yes

Is surface water from potential contaminated sites treated? Unknown

Nearby Mendenhall WWTP: *"The original activated biofilter plant was upgraded to a sequencing batch reactor facility in 1989. MWWTP discharges treated wastewater effluent through a diffuser system to the Mendenhall River at latitude 58° 21' 48" N and longitude 134° 20' 08" W under NPDES Permit No. AK-002295-1 and is subject to the requirements of the Clean Water Act (33 U.S.C.) and a National Pollutant Discharge Elimination System permit (40 CFR 136)."* – CBJ website

Treatment at all of the CBJ WWTPS include: *"Preliminary treatment (headworks) removes large debris, solids, and grit; secondary (biological) treatment utilizes microbes to break down waste products; disinfection inactivates any remaining pathogenic organisms in the liquid stream before discharging; solids handling includes separating the solids from the liquid stream and dewatering (removing free liquid) in preparation for disposal."* – CBJ Website

Preliminary Assessment – Conceptual Site Model Information

Equipment Rinse Water

1. Is firefighting equipment washed? Where does the rinse water go? N/A. City and Borough of Juneau provides fire services to the airport. The AK ARNG has no fire trucks at this location.

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? N/A

3. Other?

Identify Potential Receptors:

Site Worker **X**

Construction Worker **X**

Recreational User/ Trespasser **X**

Residential

Child

Ecological **X**

Note what is located near by the site (e.g. daycare, schools, hospitals, churches, agricultural, livestock)? Mostly commercial business and a Family center. A few daycares are in proximity, but not downgradient.

Documentation

Ask for Engineering drawings (if applicable).

Has there been a reconstruction or changes to the drainage system? When did that occur? Unknown

Appendix C
Photographic Log

APPENDIX C – Photographic Log

Army National Guard, Preliminary Assessment for PFAS	Juneau AAOF	Juneau, Alaska

Photograph No. 1

Description:

Front (street side) of Juneau AAOF hangar, facing south.

Date Taken:

20 August 2018

(Source: AKARNG Files)

Photograph No. 2

Description:

Runway side of Juneau AAOF, facing northwest. The white addition on the east side of the building is the TRI-MAX storage area.

Date Taken:

20 August 2018

(Source: AKARNG Files)

APPENDIX C – Photographic Log

Army National Guard, Preliminary Assessment for PFAS	Juneau AAOF	Juneau, Alaska

Photograph No. 3

Description:

TRI-MAX inside the storage area on the east side of the Juneau AAOF, facing east.

Date Taken:

4 September 2018

Photograph No. 4

Description:

Outside the east side of the Juneau AAOF, looking southeast.

Date Taken:

4 September 2018

APPENDIX C – Photographic Log

Army National Guard, Preliminary Assessment for PFAS	Juneau AAOF	Juneau, Alaska

Photograph No. 5

Description:

City and Borough of Juneau Station 3: Glacier Valley Fire Station located at Juneau International Airport (JIA), facing east.

Date Taken:

4 September 2018

Photograph No. 6

Description:

Gate to JIA runway, west side of Glacier Valley Fire Station, looking south towards runway.

Date Taken:

4 September 2018