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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Contract Number: W912DR-12-D-0014 Delivery Order: W912DR17F0192

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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

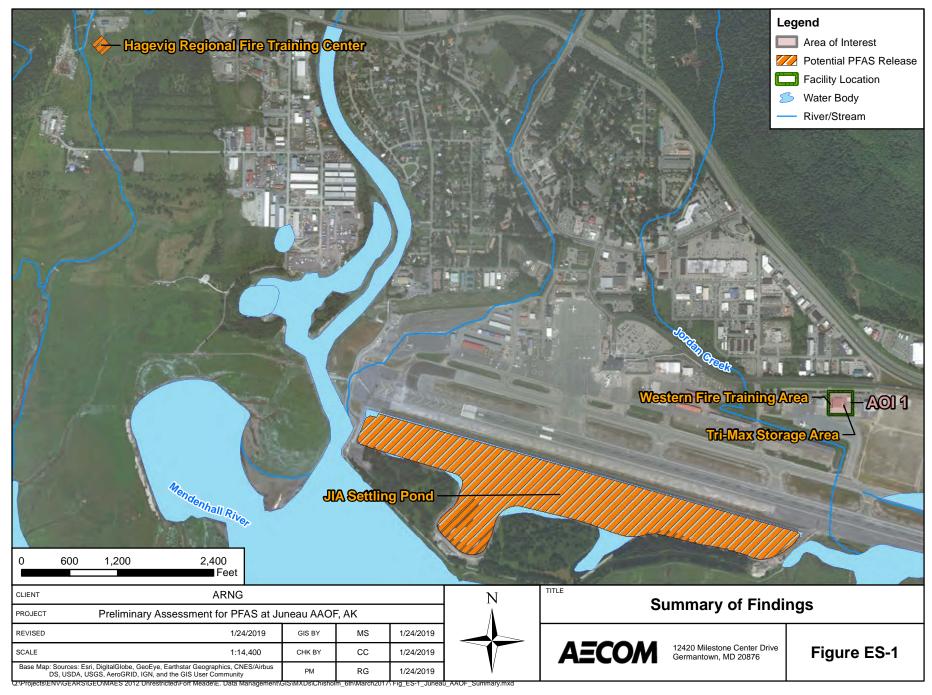
One area of interest (AOI) related to potential PFAS releases was identified at the Juneau AAOF during the PA. The dates of release for the AOI elements are estimated based on secondary information sources, exact dates of use are unknown. The AOI is shown on **Figure ES-1** and described in the table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

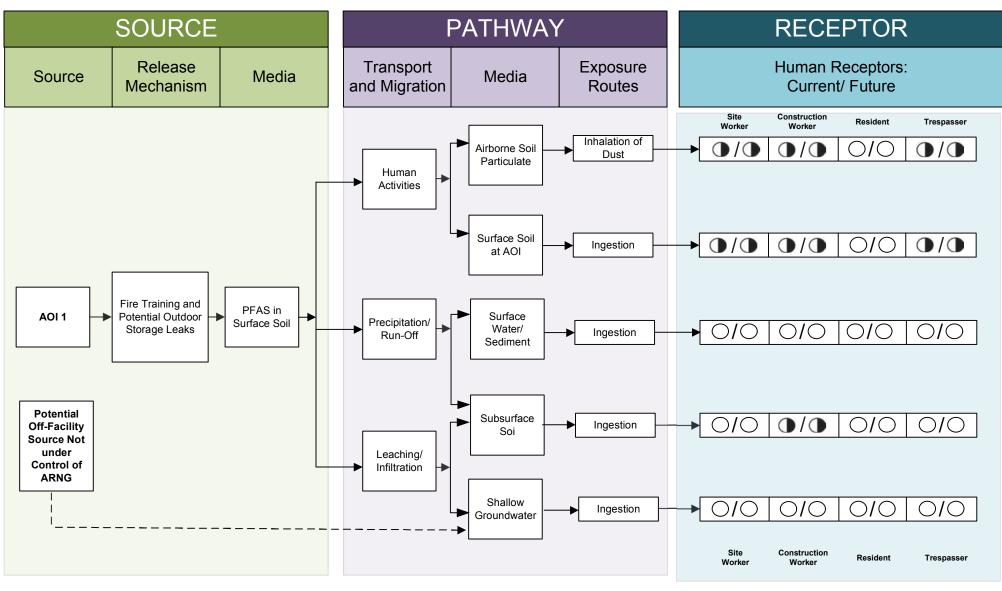
Table ES-1: AOIs at Juneau AAOF

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**.





LEGEND

Flow-Chart Stops

Flow-Chart Continues

Partial / Possible Flow

Notes:

incomplete for PFAS.

1. Dermal contact exposure pathway is

) Incomplete Pathway

Potentially Complete Pathway

Complete Pathway

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

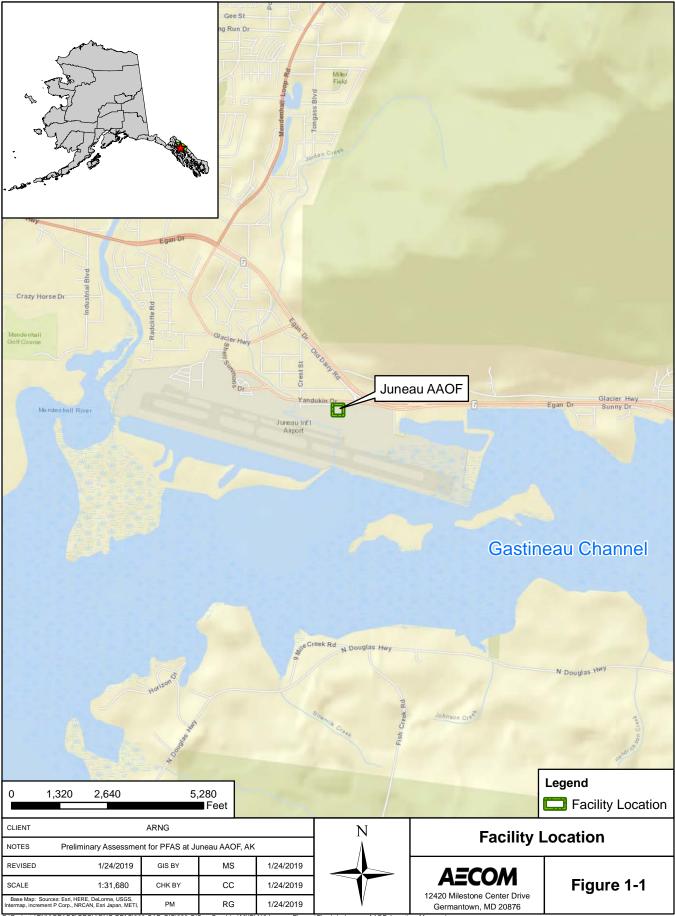
Because of its proximal distance to the Pacific Ocean, which carries warm tropical water up from the south, Juneau and the surrounding area enjoy a warm, Humid Continental Climate despite its northerly latitudes.

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.

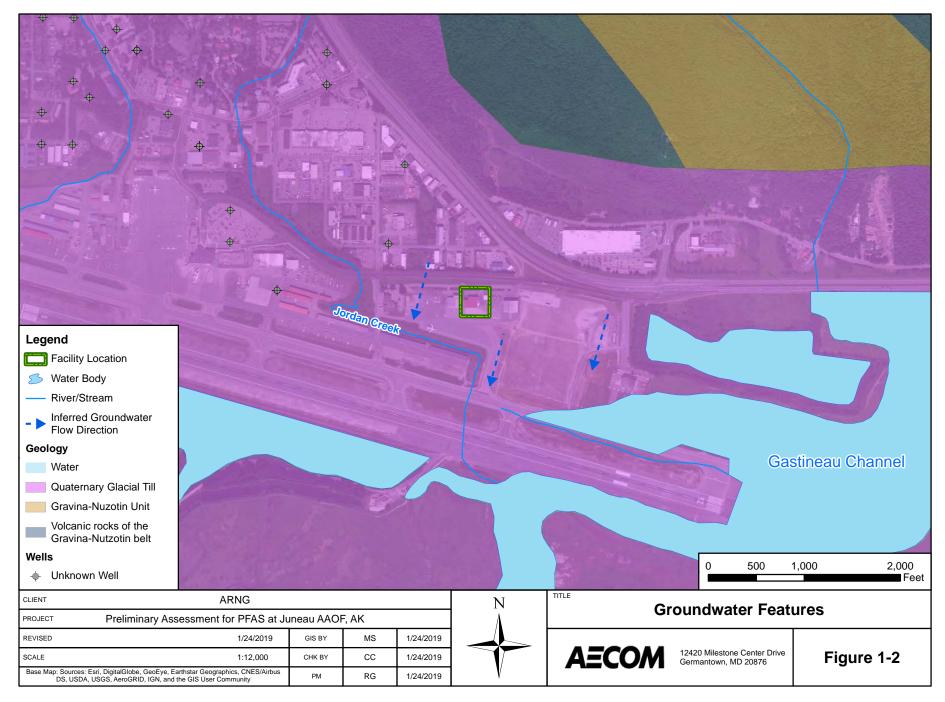
Total annual precipitation ranges from approximately 120 to 150 inches, with about 40% occurring as snowfall. Rainfall is fairly evenly distributed throughout the year with an average annual rainfall of 5 inches per month. Snowfall begins as early as October and continues well into April, with most months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

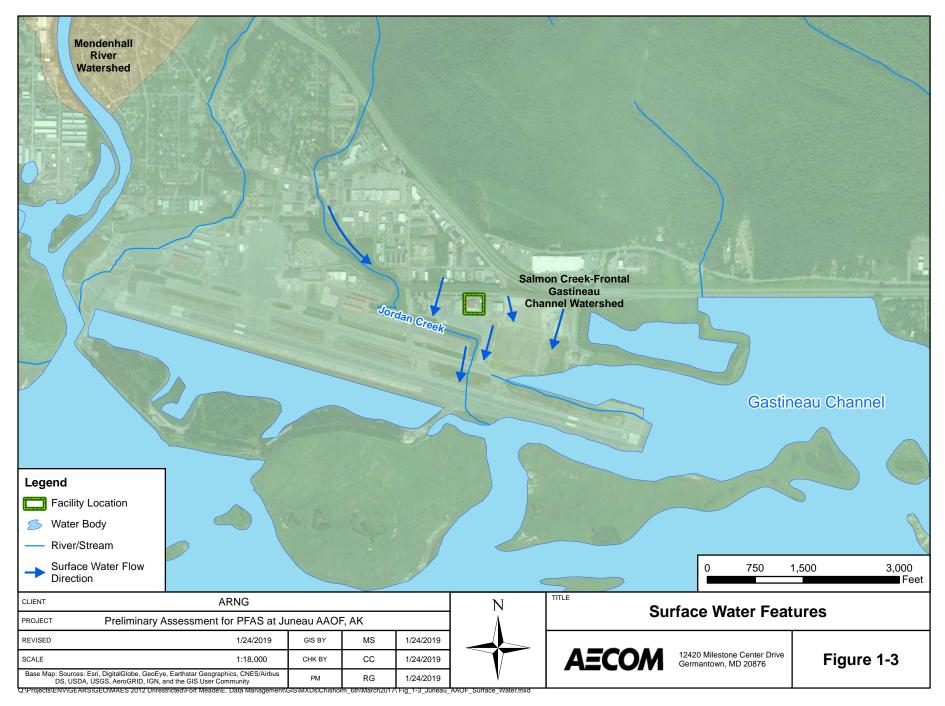
1.5.5 Current and Future Land Use

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.



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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.

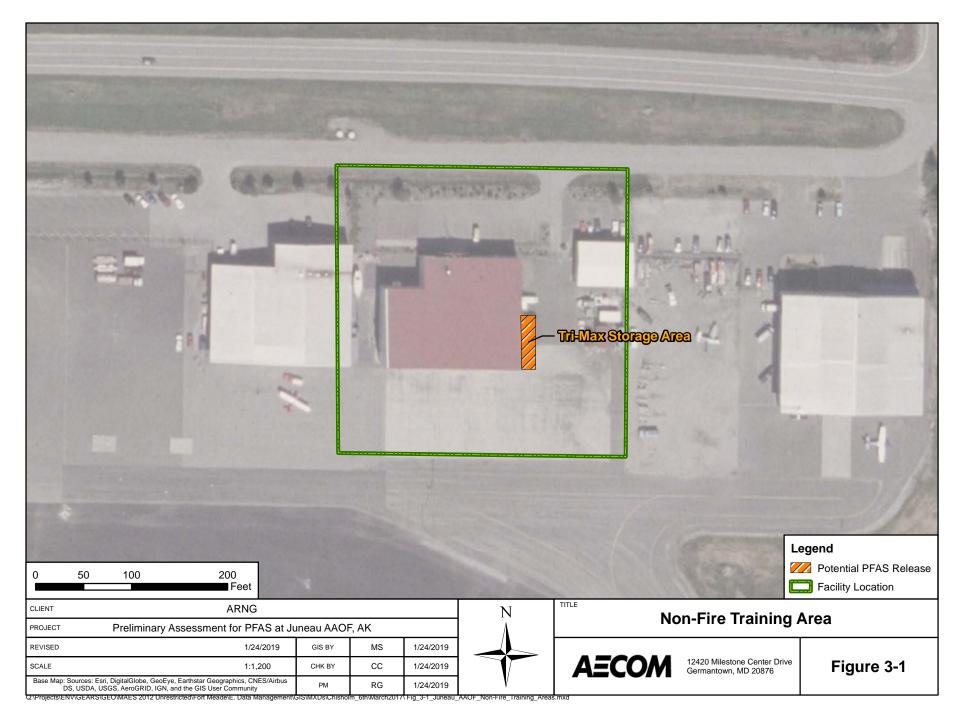


3. Non-Fire Training Areas

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.



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

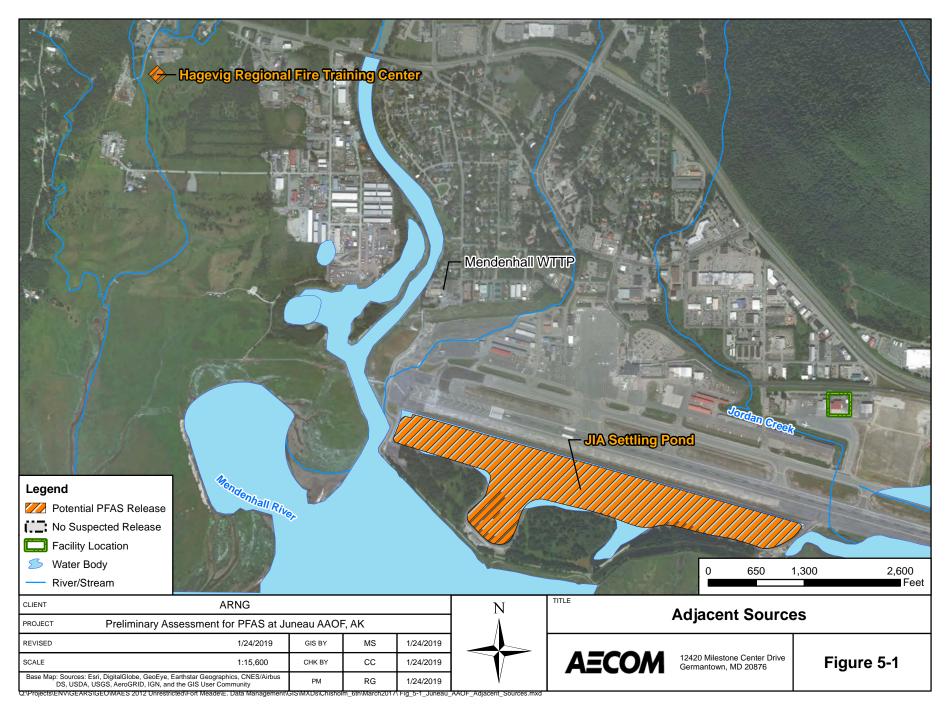
The Assistant Fire Chief indicated that the JIA Settling Pond is used by CBJ for AFFF training and testing of the ARFF trucks. The JIA Settling Pond also functions as the seaplane runway. The JIA Settling Pond is a lined containment area, but no additional information was available on the liner design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



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.

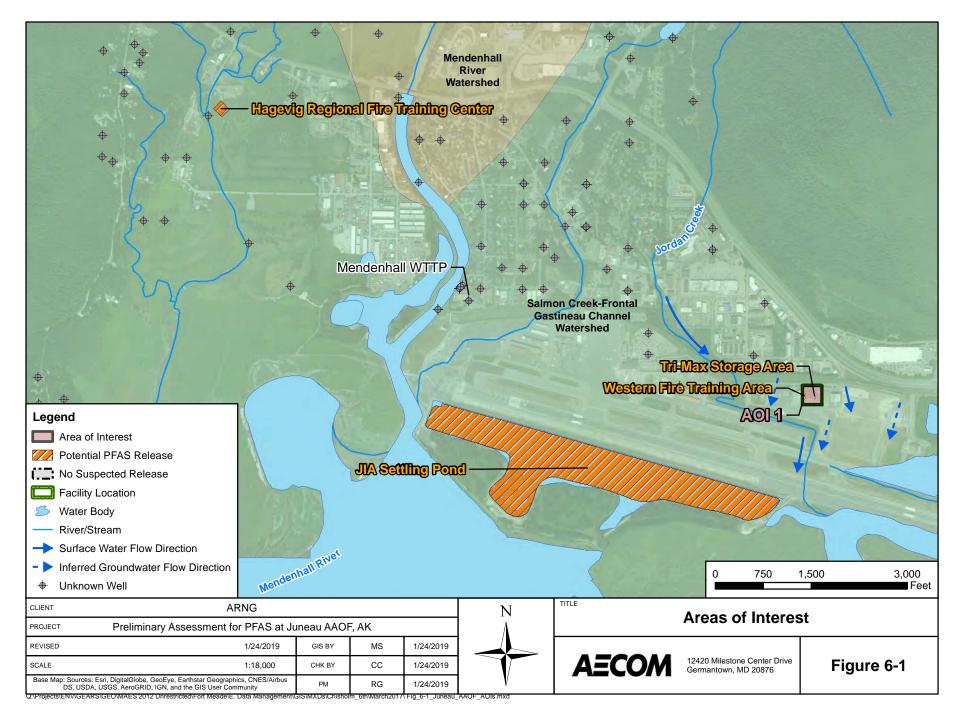
In general, the potential PFAS exposure pathways are ingestion and inhalation. Human exposure via the dermal contact pathway may occur, and current risk practice suggests it is an insignificant pathway compared to ingestion; however, exposure data for dermal pathways is sparse and continues to be the 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**.

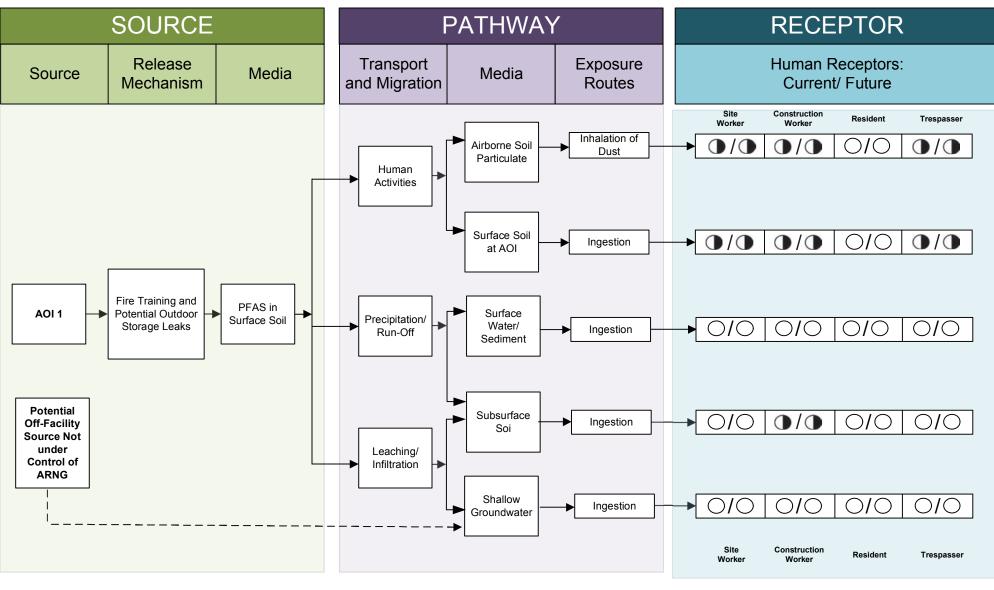
6.1 AOI 1 Juneau AAOF

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**.





LEGEND

Flow-Chart Stops

Flow-Chart Continues

Partial / Possible Flow

Notes:

incomplete for PFAS.

1. Dermal contact exposure pathway is

) Incomplete Pathway

Potentially Complete Pathway

Complete Pathway

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.

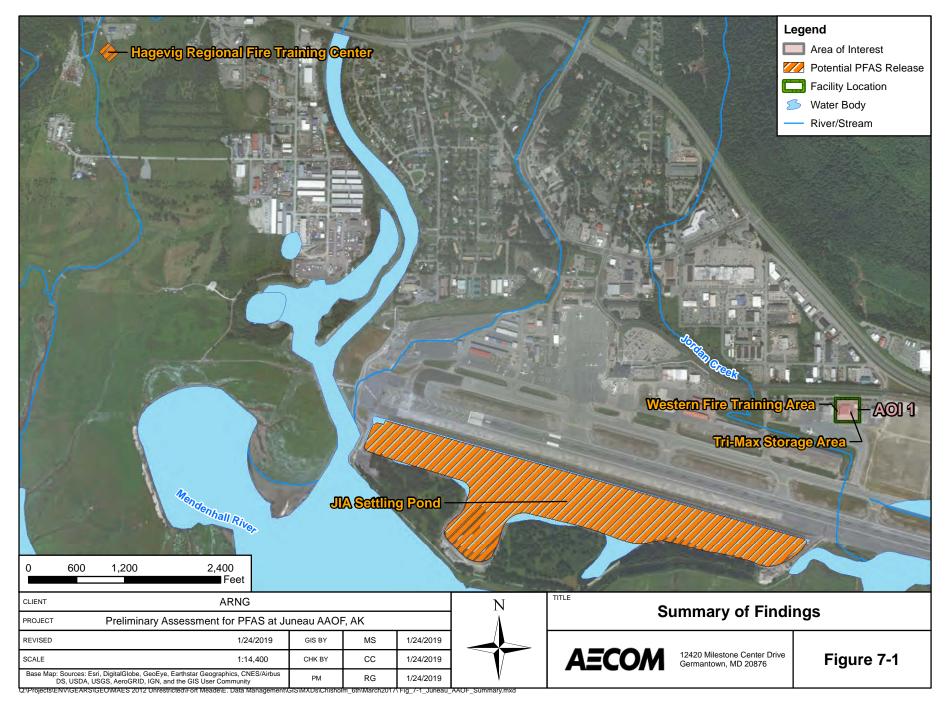
7.3 Potential Future Actions

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



8. References

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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 <u>17th</u> day of <u>September</u>, 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").

WITNESSETH:

1. <u>AUTHORITY</u>. 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. <u>PREREQUISITE</u>. 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. <u>LEASED PREMISES</u>. 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. <u>USE RESTRICTION</u>. 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 The initial facility shall be housed in a single National Guard. 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. <u>TERM</u>. The term of this lease shall be for a period of <u>fifty (50) years</u> commencing on January 1, 1988, and terminating on December 31, 2038.

6. <u>HOLDING OVER</u>. 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. <u>RENT</u>. The annual rent shall be one dollar (\$1.00) and other good and valuable considerations.

8. <u>ASSESSMENTS AND CHARGES</u>. 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. <u>RELOCATION</u>. 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.

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10. <u>EASEMENTS</u>. 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. <u>SUBLEASE</u>. 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. <u>ASSIGNMENT</u>. 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. <u>AMENDMENT</u>. This lease may be amended only by an agreement in writing signed by both parties.

14. <u>TERMINATION</u>. 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. <u>WASTE</u>. 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.

The receipt of rent by the Lessor with 16. FAILURE TO ENFORCE TERMS. 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

JUNEAU INTERNATIONAL AIRPORT LEASE PAGE 4

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

17. <u>ABANDONMENT</u>. 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. <u>SNOW REMOVAL ON LEASED PREMISES</u>. 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. <u>PEACEABLE SURRENDER</u>. 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. <u>REMOVAL OF IMPROVEMENTS</u>. 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. <u>RENEWAL</u>. 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.

JUNEAU INTERNATIONAL AIRPORT LEASE

23. <u>NONDISCRIMINATION</u>. 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. <u>STATE DISCRIMINATION LAWS</u>. 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. <u>COMPLIANCE WITH LAWS</u>. 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. <u>LAWFUL AND REASONABLE USE</u>. 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. <u>RESERVATION OF EASEMENT</u>. 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 entitled only to damages for all Lesseeowned improvements destroyed or physically damaged thereby. Damages shall be limited to the cost of repair.

28. <u>HOLD HARMLESS</u>. 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. <u>INSURANCE</u>. Lessee understands that Lessor carries no fire insurance on the Leased Premises or improvements located thereon belonging to Lessee or Lessor.

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

31. <u>NOTICE</u>. 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. <u>AIRPORT MANAGER AUTHORITY</u>. The Airport Manager may act on behalf of the Lessor except where otherwise specifically provided.

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

34. <u>ENTIRE AGREEMENT, AMENDMENTS</u>. 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 By: Ritchie, Manager

Approved as to form.

City-Borough Attorney

JUNEAU INTERNATIONAL AIRPORT LEASE PAGE 8

LESSEE:

ALASKA DEPARTMENT OF MILITARY AND VETERANS AFFAIRS

Guna JOHN W. SCHNEFFF R٧ The Adjutant General

ACKNOWLEDGMENT BY LESSOR

) ss.

ì) ss.

STATE OF ALASKA

FIRST JUDICIAL DISTRICT

THIS IS TO CERTIFY that on this 17 th 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.

Notary Public, State of Alaska

My commission expires: 7-23-88

ACKNOWLEDGMENT BY LESSEE

STATE OF ALASKA

FTRST JUDICIAL DISTRICT

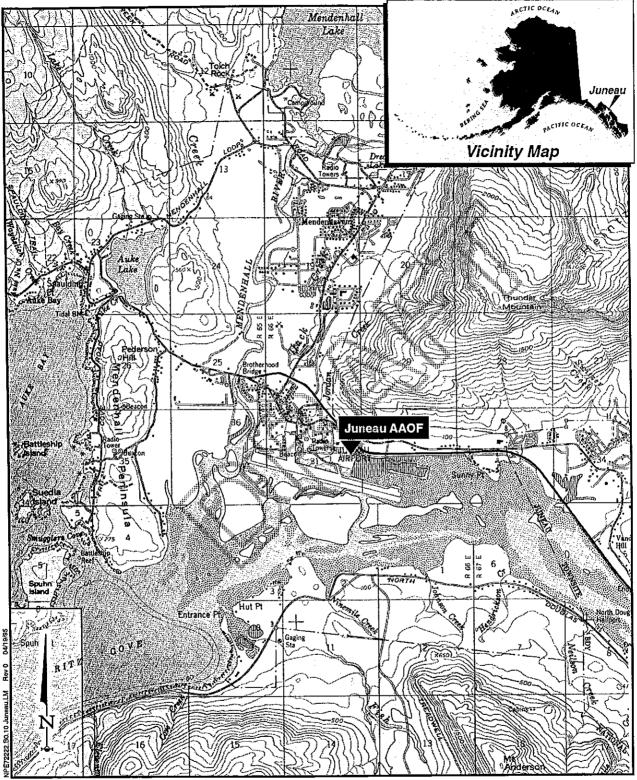
THIS IS TO CERTIFY that on this $2/\frac{1}{2}$ day of $\frac{1}{1}$ before me, the undersigned, a Notary Public in and for the State of Alaska, duly commissioned and sworn, personally appeared John W. Schaeffer of to me known and known to me to be the _____ Adjutant General AK DEPT OF MILITARY AFFAIRS 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.

Notary Public, State of Alaska,

My commission expires:

JUNEAU INTERNATIONAL AIRPORT LEASE PAGE 9



From U.S.G.S. Quadrangle: Juneau (B-2), Alaska

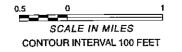
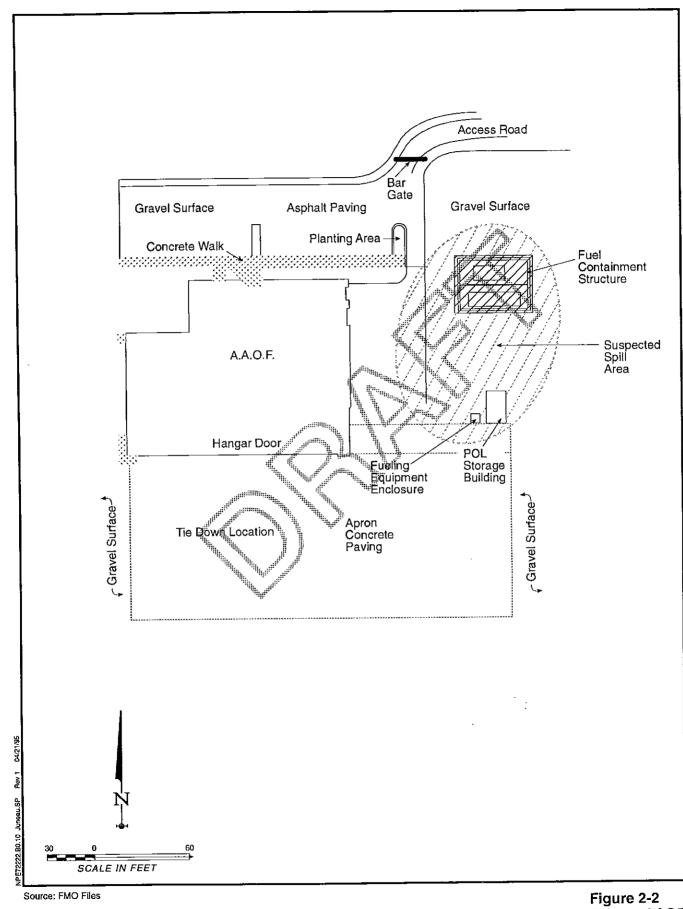


Figure 2-1 Location Map Juneau AAOF



2-4

Figure 2-2 Juneau AAOF Site Map

8/88 FORM JOST

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 Nationa) 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 DF TRACTS 14 AND 15, LANO 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 OISTRICT, CITY AND BOROUGH OF JUNEAU, ALASKA, BEING MORE PARTICULARLY BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT LAND MDNUMENT 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 FOLLOW-ING 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.

Approved as to form? Asl -ficroush Atterney Atte By:

end

LESSOR: CITY AND BOROUGH OF UNEAU Kevin Ritchie, Manager

LESSEE:

ALASKA DEPARTMENT OF MILITARY AND VETERANS AFFAIRS

By: Title:		
Ti+10.		
11616.	·	

Borough Clerk

CITY ACKNOWLEDGEMENT

SS:

STATE OF ALASKA

FIRST JUDICIAL DISTRICT

THIS IS TO CERTIFY THAT ON THIS 14th day of 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 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

Donna K Norman NOTARY PUBLIC FOR ALASKA

(SEAL)

8-20-91 My Commission Expires:

ACKNOWLEDGEMENT BY LESSEE

SS:

STATE OF ALASKA

FIRST JUDICIAL DISTRICT

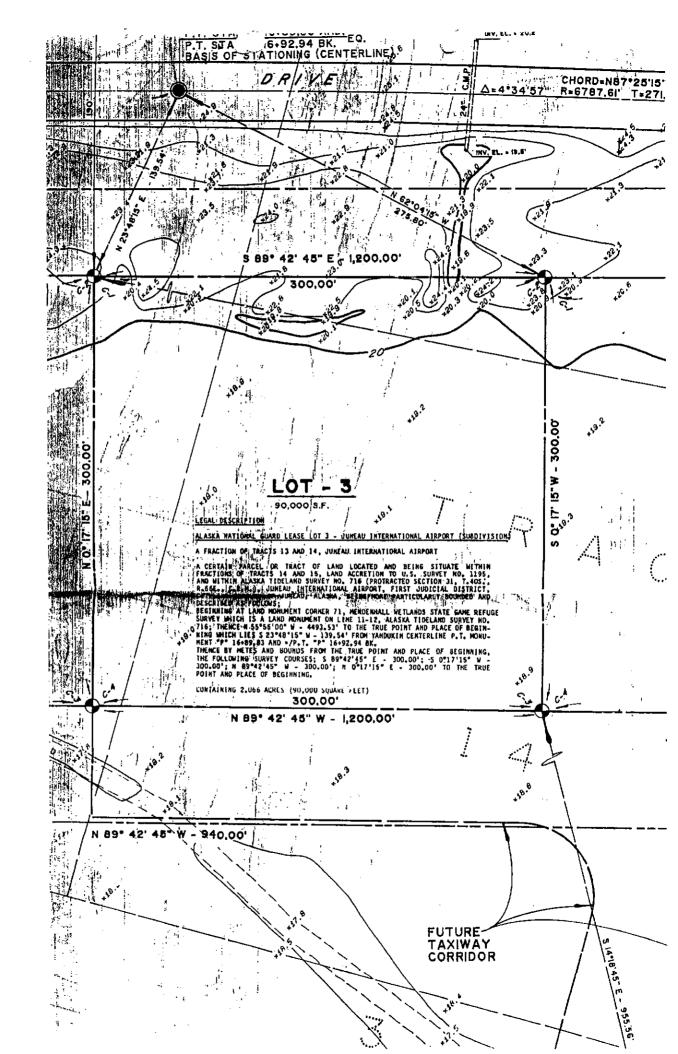
THIS IS TO CERTIFY THAT ON THIS _____ day of _____, 19__, before me, the undersigned, a Notary Public in and for the State of Alaska, duly commissioned and sworn, personally appeared _____

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.

 ${\sf WITNESS}$ my hand and official seal the day and year in this certificate above written.

(SEAL)

NOTARY PUBLIC FDR STATE OF ALASKA My Commission Expires:



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



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

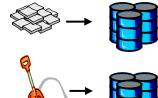


Put on personal protective equipment, such as gloves and goggles, found in the spill response kit.

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.

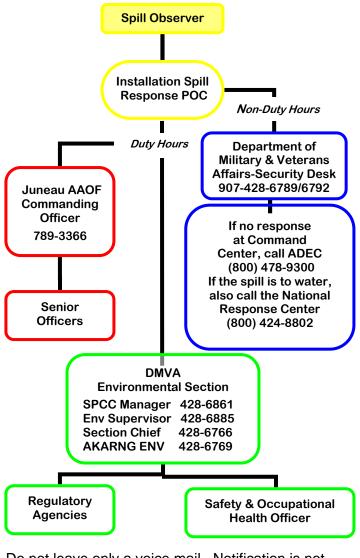
NO

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 (3 rd Battalion Headquarters)	(907) 465-4564				
Juneau Field Maintenance Shop	(907) 465-4573				
Facilities Maintenance Division (FMD) Anchorage Shop Deputy Director	(907) 428-6772 (907) 428-6770				
Environmental Office SPCC Manager Environmental Supervisor Haz-Waste Manager Section Chief	(907) 428-6861 (907) 428-6885 (907) 428-6898 (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	-				
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.

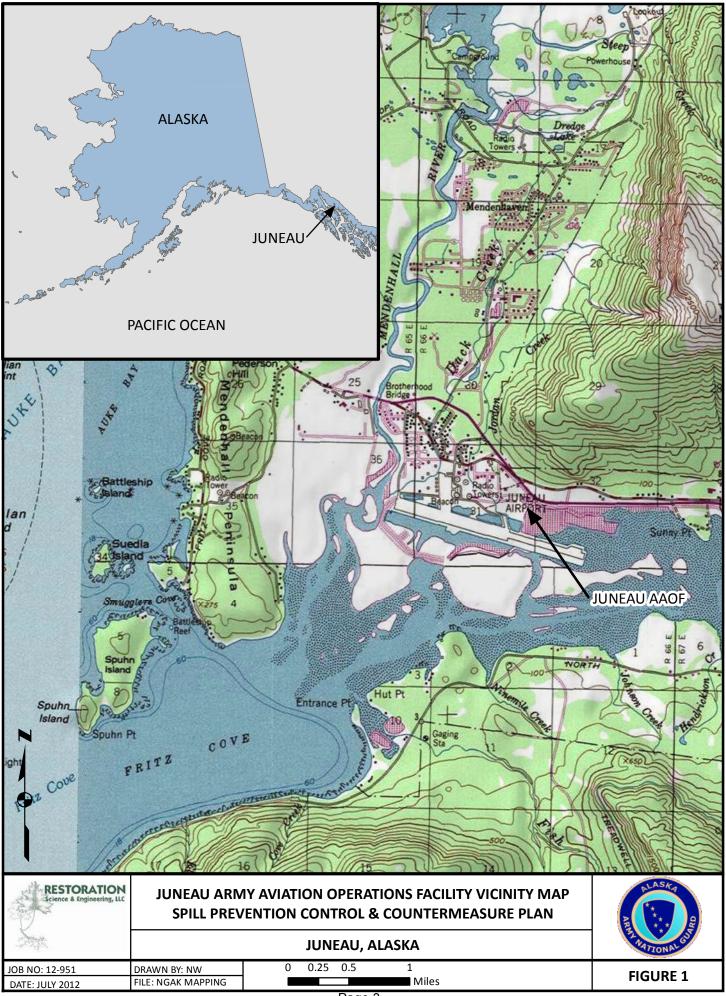
The spill response POC should conduct spill notification following the flow chart on page 1. In addition, the Environmental Office will need the information on the form at the back of this SPCC Plan completed in order to document the spill, report to regulatory agencies, and prevent reoccurrence.

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

SPILI	NOTIFI	RTMENT OF ENVIRONMENTAL CONSERVATION CATION FOR OIL AND HAZARDOUS MATERIALS Fritice reports required by 18AAC 75307)
Mailing Address:	P.O.1 midz	a Army National Gaint Ious 5800 chambure, AK 99505
Name of Operator of Contact Phone Num Face		Department of Military and Veterani' Affain Pacifics Maintenance Office Environmental Office (907) 428-6861 (007) 425-6557
		Phater
Date of notification:		
Person reporting dis	harge	
Date and time of dis	tharps:	
Discharge source:		
Cause of discharges,		
Type and oncount of	uil or lura	ardsos valotance(s) discharged:
Estimated amount o	bastello	as substances or oil cleaned ap:
Estimated amount o	Thesardo	as waste generated
Description of any a	wironne	ntal damage caused:
Description of clean	ų activo	takee:
Description of action	is taken ti	prevent recurrence of the discharget
Method of ultimate	thposal o	e current location of material
Names of individual	s and org	artizations contacted:
		sportment may require to fully assess the cause and impact of the

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

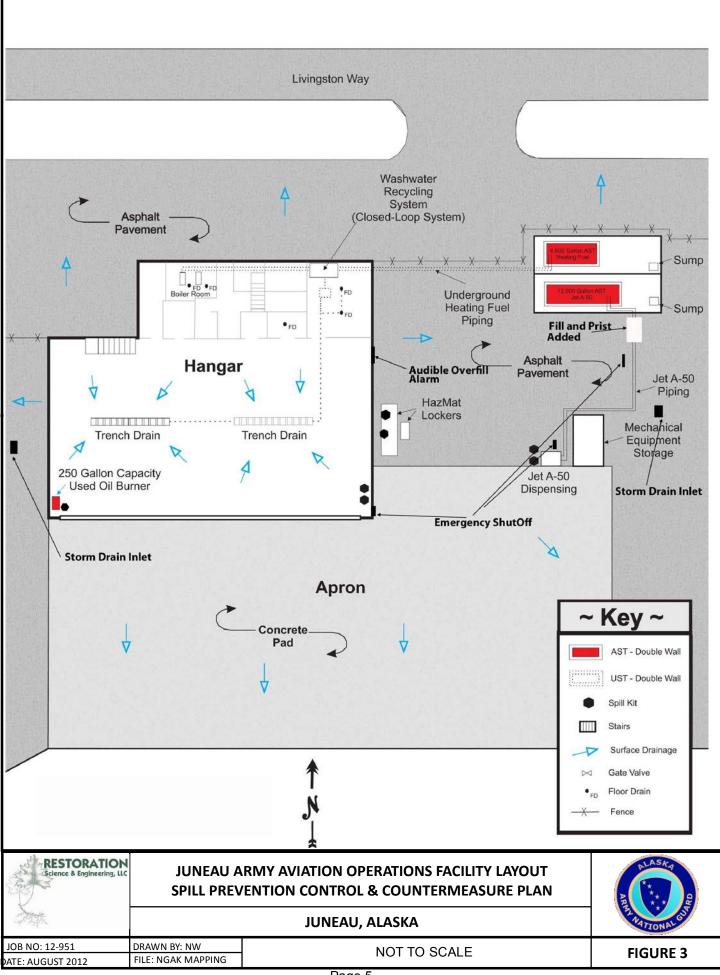
JUNEAU AAOF



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JUNEAU AAOF



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

REZNOR USED OIL

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 concretelined 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

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.

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.

- 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 SM² washwater recycling system.

Treated washwater is reused for the first wash

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

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. 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.

are pumped from a delivery truck to the ASTs. Spills would be contained within the concretelined revetment.



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

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.

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

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.



- 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.

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), oilhandling 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
	Integrity testing of aboveground containers	Page 12
§112.8(c)(6)	Integrity testing of aboveground containers Leak detection and control of internal heating coils	Page 12 Not Applicable
§112.8(c)(6) §112.8(c)(7)	Leak detection and control of internal heating coils	Not Applicable
§112.8(c)(6) §112.8(c)(7) §112.8(c)(8)	Leak detection and control of internal heating coils Overfill protection (liquid level detection) for containers	-
§112.8(c)(6) §112.8(c)(7) §112.8(c)(8) §112.8(c)(9)	Leak detection and control of internal heating coils Overfill protection (liquid level detection) for containers Inspection of effluent treatment facilities	Not Applicable Page 7-8 Not Applicable
§112.8(c)(6) §112.8(c)(7) §112.8(c)(8) §112.8(c)(9) §112.8(c)(10)	Leak detection and control of internal heating coils Overfill protection (liquid level detection) for containers Inspection of effluent treatment facilities Clean-up of discharge accumulations in diked areas	Not Applicable Page 7-8 Not Applicable Page 12
§112.8(c)(6) §112.8(c)(7) §112.8(c)(8) §112.8(c)(9) §112.8(c)(9) §112.8(c)(10) §112.8(c)(11)	Leak detection and control of internal heating coils Overfill protection (liquid level detection) for containers Inspection of effluent treatment facilities Clean-up of discharge accumulations in diked areas Positioning and secondary containment for mobile or portable containers	Not Applicable Page 7-8 Not Applicable Page 12 Page 8
§112.8(c)(6) §112.8(c)(7) §112.8(c)(8) §112.8(c)(9) §112.8(c)(10) §112.8(c)(11) §112.8(d)(1)	Leak detection and control of internal heating coils Overfill protection (liquid level detection) for containers Inspection of effluent treatment facilities Clean-up of discharge accumulations in diked areas Positioning and secondary containment for mobile or portable containers Wrapping or coating and cathodic protection for buried oil transfer piping, and inspection	Not Applicable Page 7-8 Not Applicable Page 12 Page 8 Not Applicable
§112.8(c)(6) §112.8(c)(7) §112.8(c)(8) §112.8(c)(9) §112.8(c)(10) §112.8(c)(11) §112.8(d)(1) §112.8(d)(2)	Leak detection and control of internal heating coils Overfill protection (liquid level detection) for containers Inspection of effluent treatment facilities Clean-up of discharge accumulations in diked areas Positioning and secondary containment for mobile or portable containers Wrapping or coating and cathodic protection for buried oil transfer piping, and inspection Out-of-service buried oil transfer piping	Not Applicable Page 7-8 Not Applicable Page 12 Page 8 Not Applicable Not Applicable
§112.8(c)(6) §112.8(c)(7) §112.8(c)(8) §112.8(c)(9) §112.8(c)(10) §112.8(c)(11) §112.8(d)(1) §112.8(d)(2) §112.8(d)(3) §112.8(d)(4)	Leak detection and control of internal heating coils Overfill protection (liquid level detection) for containers Inspection of effluent treatment facilities Clean-up of discharge accumulations in diked areas Positioning and secondary containment for mobile or portable containers Wrapping or coating and cathodic protection for buried oil transfer piping, and inspection	Not Applicable Page 7-8 Not Applicable Page 12 Page 8 Not Applicable

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.

<u>Authorized</u> <u>Representative</u>	Signature	<u>Title</u>	Date
Joel T. Gilbert, LTC-	Willie W Balitt	Construction & Facilities Management Officer	60CT 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?

No	Х
	No

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 formula¹) 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 formula¹) such that a discharge from the facility would shut down a public drinking water intake²?

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	Х	

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 Joel T. Gilbert Title Construction and Facilities Management Officer				
Signature Willie Butt Date 60ct 14				
¹ If a comparable formula is used, documentation of the reliability and analytical soundness of the				

' 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 N P.O. Box 5800 Bldg. 49000 Ft. Richardson,			
Name of Operator of	Facility:	Department of Military and Veterans' Affairs Facilities Management Office		
Contact Phone Numb	ber:	Environmental Office (907) 428-6861 (907) 428-6767		
Name of facility:		Phone:		
Date of notification:				
Person reporting disch	arge:			
Date and time of discha	arge:			
Discharge source:				
Cause of discharge:				
Type and amount of oil	or hazardous su	ibstance(s) discharged:		
Description of cleanup	actions taken:			
Estimated amount of ha	azardous substa	nces or oil cleaned up:		
Estimated amount of hazardous waste generated:				
Description of any environmental damage caused:				
Description of actions t	aken 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 r	nay require to fully assess the cause and impact of the		
discharge:				

National Guard Alaska Containment Dewatering Log

Facility:

	Estimated Amount	Comments and AST ID
Date	Drained (Gallons)	

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)*
Image: Sector of the sector				
Image: Constraint of the second se				

* 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

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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.

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ACRONYMS AND ABBREVIATIONS

AACAlaska Administrative Code
AAOFArmy Aviation Operating Facility
ADECAlaska Department of Environmental Conservation
AKAlaska Method
AKARNGAlaska Army National Guard
AOCArea of Concern
BSIBethel Services, Inc.
bgsbelow ground surface
BTEXBenzene, toluene, ethylbenzene, and xylenes
CSMConceptual Site Model
DODissolved Oxygen
DOTDepartment of Transportation
DRODiesel Range Organics
EPAEnvironmental Protection Agency
°Fdegrees Fahrenheit
GROGasoline Range Organics
JNUJuneau International Airport
mg/kgmilligrams per kilogram
mg/lmilligrams per liter
NAPLnon-aqueous phase liquid
NOAANational Oceanic and Atmospheric Administration
ORPOxidation Reduction Potential
PAHPolycyclic Aromatic Hydrocarbons
pHpotential hydrogen
PIDPhotoionization detector
ppmparts per million
ROWright-of-way
RROResidual Range Organics
SIMSelected Ion Monitoring
TAHTotal Aromatic Hydrocarbons
TAqHTotal Aqueous Hydrocarbons
μg/kgmicrograms per kilogram
μg/1micrograms per liter
USGSUnited States Geological Survey
WELTSWell Log Tracking System

E.

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





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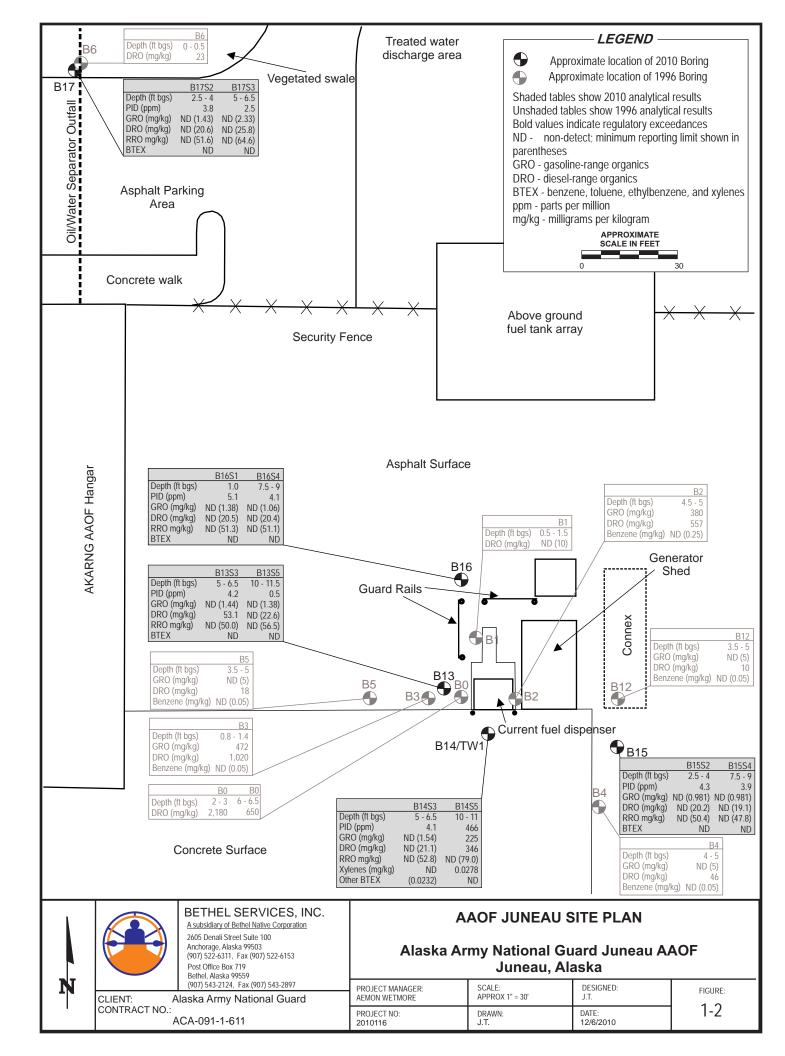
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CLIENT: CONTRACT NO.: Alaska Army National Guard ACA-091-1-611

AAOF JUNEAU VICINITY MAP

Alaska Army National Guard Juneau AAOF Juneau, Alaska

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

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

Table 1-1:	ADEC Cleanup Levels
------------	----------------------------

¹Method 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; residualrange 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.

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

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

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.

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

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

mg/l = milligrams per liter

NTUs = Nephelometric turbidity units

ORP = oxidation-reduction potential

pH = potential hydrogen

 μ S/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, 1methylnaphthalene, 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. $\mu g/l = micrograms$ 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

	Field Screening				
Sample Number	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) 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

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

Sample Number	Field Screening result (ppm)	Naphthalen e	2- Methylnaph- thalene	1- Methylnaph- thanene	Acenaphthe ne	Fluorene	Other PAHs
10JUNAAOFB17S 3	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 nonpotable 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 ($\mu g/l$) and 15 $\mu g/l$, 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 $\mu g/l$ 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 fuelimpacted 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.

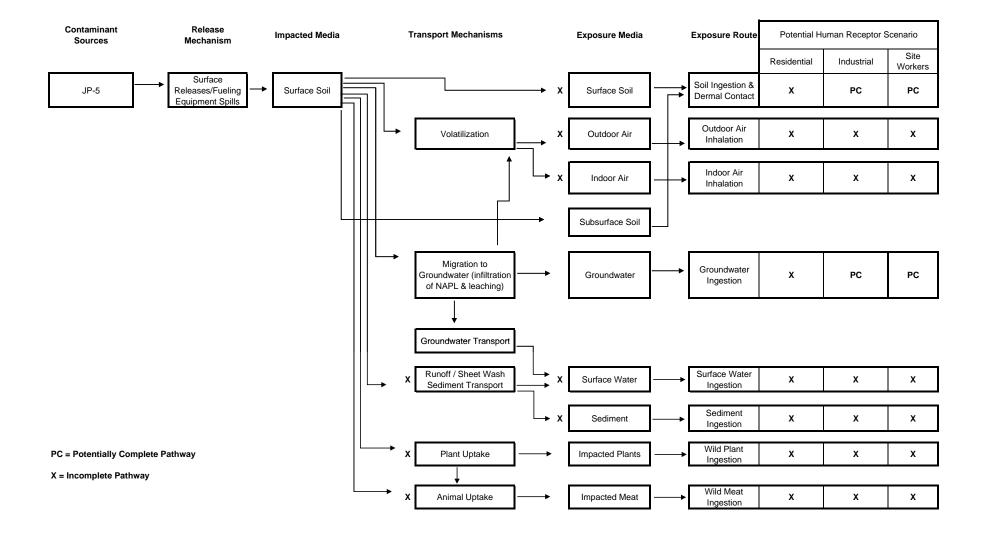


Table 6-1 Juneau AAOF, Human Health Conceptual Site Model

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.

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- ADEC. 2008. *Oil and Other Hazardous Substance Pollution Control Regulations:* Title 18, Alaska Administrative Code (AAC), Chapter 75. October 9, 2008.
- ADEC. 2009. Water Quality Standards: Title 18, AAC, Chapter 70. October 19, 2009
- ADEC. Contaminated Sites Database. http://www.dec.state.ak.us/spar/csp/search/IC_Tracking/Site_Report.aspx?Hazard_ID=25 34. Accessed September 7, 2010.
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- National Oceanic and Atmospheric Administration (NOAA) Western Regional Climate Center. <u>http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ak4100</u>. Accessed September 7, 2010.
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- Wallace Drilling Company. 1979, Daily Drilling Report for Juneau Fire Station Airport. May 24, 1979.

APPENDIX A

PHOTOGRAPHIC LOG



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."



HORIZONTAL LINE

All-Weather Notebook No. 391

Juneau Decision Docum 20/01/6

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



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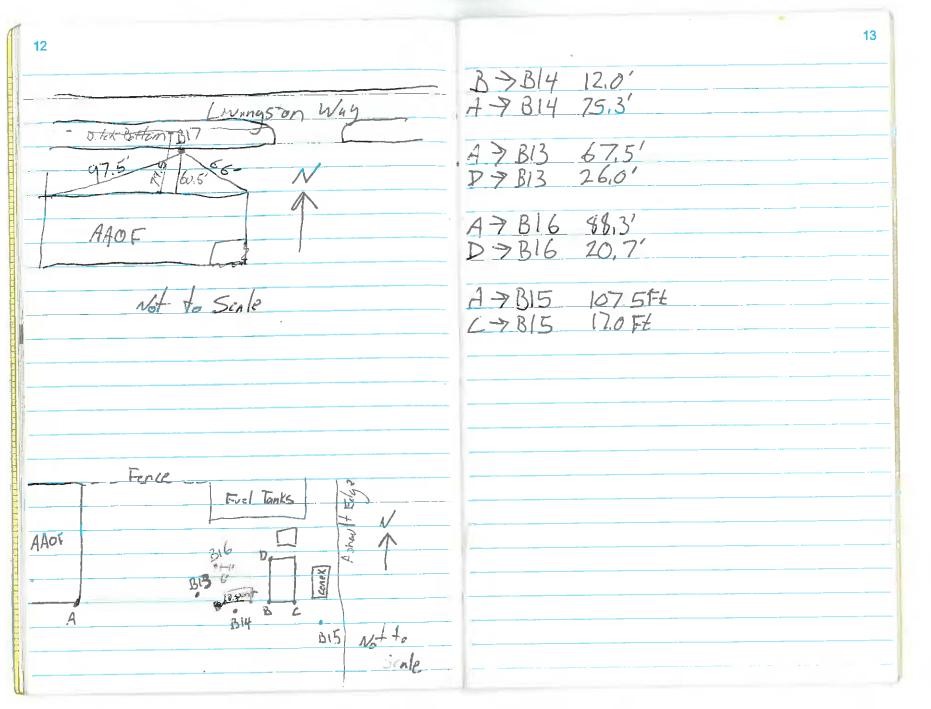
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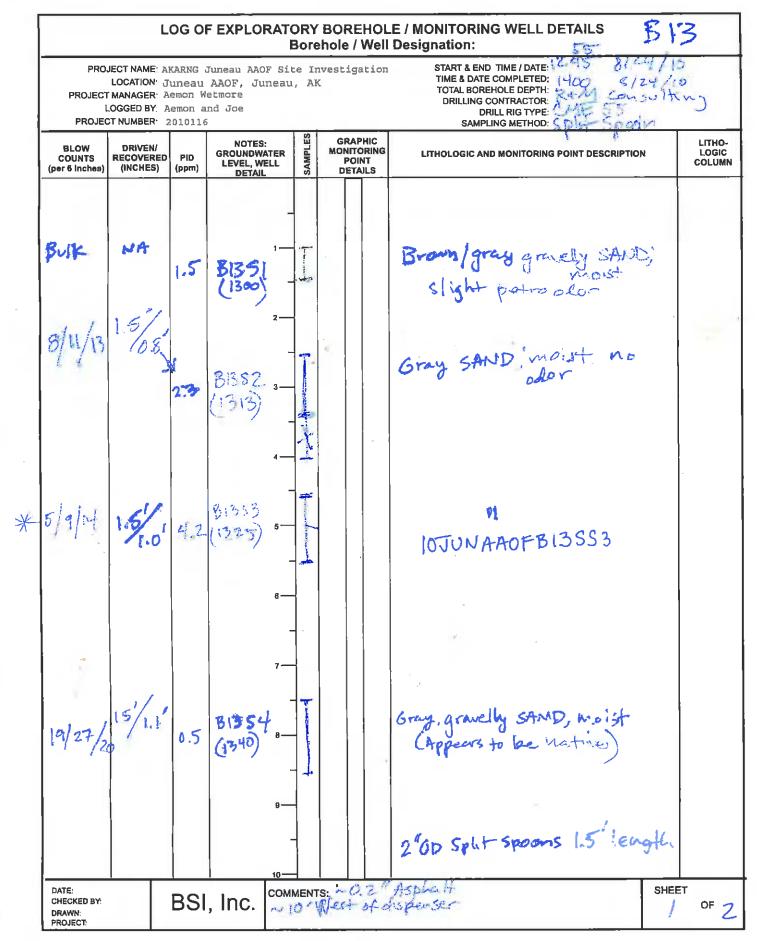
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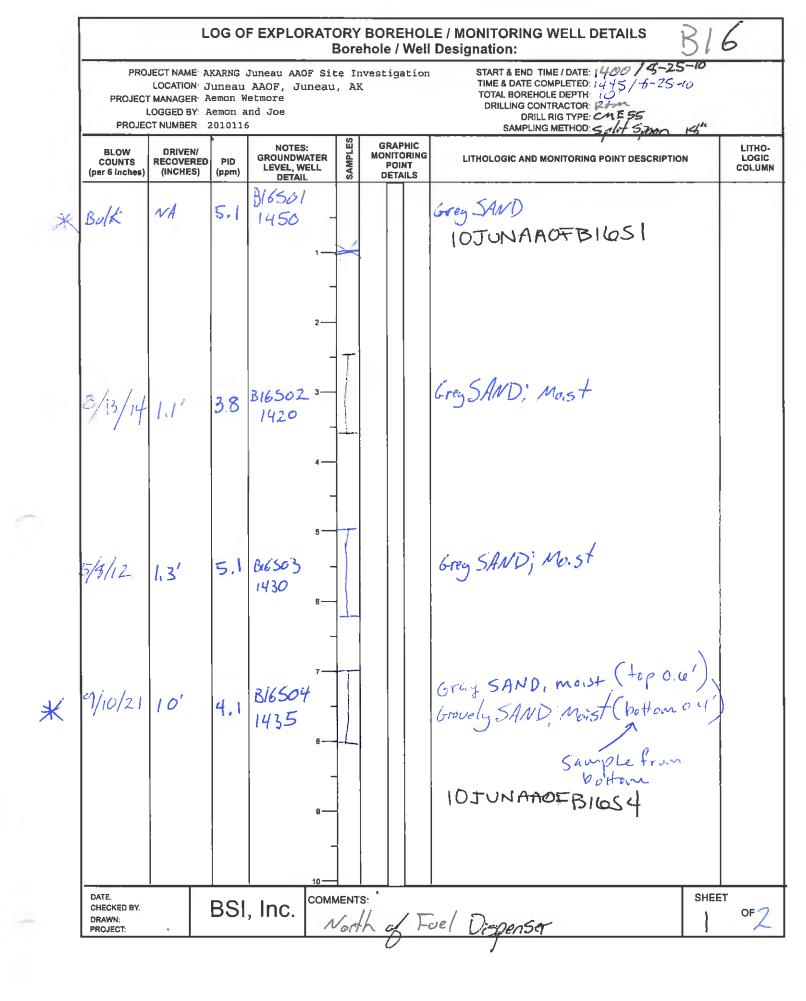
LOG OF EXPLORATORY BOREHOLE / MONITORING WELL DETAILS BIY **Borehole / Well Designation:** 3/24/10 START & END TIME / DATE: 545 PROJECT NAME: AKARNG Juneau AAOF Site Investigation TIME & DATE COMPLETED 1625 LOCATION: Juneau AAOF, Juneau, AK 5/24/10 PROJECT MANAGER Aemon Wetmore DRILLING CONTRACTOR DRILL RIG TYPE CINC 55 Hollow Stars LOGGED BY: Aemon and Joe PROJECT NUMBER: 2010116 SAMPLING METHOD SAMPLES GRAPHIC LITHO-NOTES: DRIVEN/ BLOW MONITORING LOGIC GROUNDWATER LITHOLOGIC AND MONITORING POINT DESCRIPTION COUNTS RECOVERED PID LEVEL, WELL DETAIL POINT (per 6 Inches) (INCHES) (ppm) DETAILS NA NA 2.5 Bi450/ H-19- 1-1545 2-Sand; Grey, Ma.st 5/15/20 1Ft 3.5 B14502, 1550. Grey SAND, Moist * B/W/17 14" 4.1 B14503 Grey SAND, Moist IDJUNAAOF BI453 10JUNAAOFBI458 Duplicate for BEEX, CRO, DEOFFERO Sandy GRAVEL, Moist 2.2 8404 =-1610 11/13/16 1 COMMENTS: ~ 6' Score of fuel dispense Temporary well Twi installed to ~ 14'bgs is Birl, then remained after sampling SHEET DATE: BSI, Inc. of 2 CHECKED BY: DRAWN PROJECT

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BLOW COUNTS (per 6 inches)		PID GROUNDWAT		GRAPHIC MONITORING POINT DETAILS		
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LOG OF EXPLORATORY BOREHOLE / MONITORING WELL DETAILS B15 **Borehole / Well Designation:** START & END TIME / DATE: 1420 24/10 PROJECT NAME: AKARNG Juneau AAOF Site Investigation TIME & DATE COMPLETED: LOCATION Juneau AAOF, Juneau, AK TOTAL BOREHOLE DEPTH: PROJECT MANAGER Aemon Wetmore DRILLING CONTRACTOR: KIM LOGGED BY: Aemon and Joe DRILL RIG TYPE: CM 5 55 PROJECT NUMBER: 2010116 Se SAMPLING METHOD: 5 1154 GRAPHIC SAMPLES LITHO-NOTES: GROUNDWATER DRIVEN/ BLOW LITHOLOGIC AND MONITORING POINT DESCRIPTION LOGIC PID COUNTS RECOVERED POINT LEVEL, WELL COLUMN (per 6 Inches) (INCHES) (ppm) DETAILS DETAIL NA 1.5 BISSOL (MID) Gruy SAND, moist I SAND Mo.st * 7/10/14 1' 43 B15501 1830 IDJUN AADF BISS 2 7/12/20 16" 3.2 B15503 1840 6 Cry SAND; Moist * 11/19/20 1' 3.9 B15504 Sundy GRAVEL 10JUNAAOFBI554 COMMENTS: SO' East of Fuel Dispenser SHEET DATE: BSI, Inc. OF 2 CHECKED BY: DRAWN: PROJECT

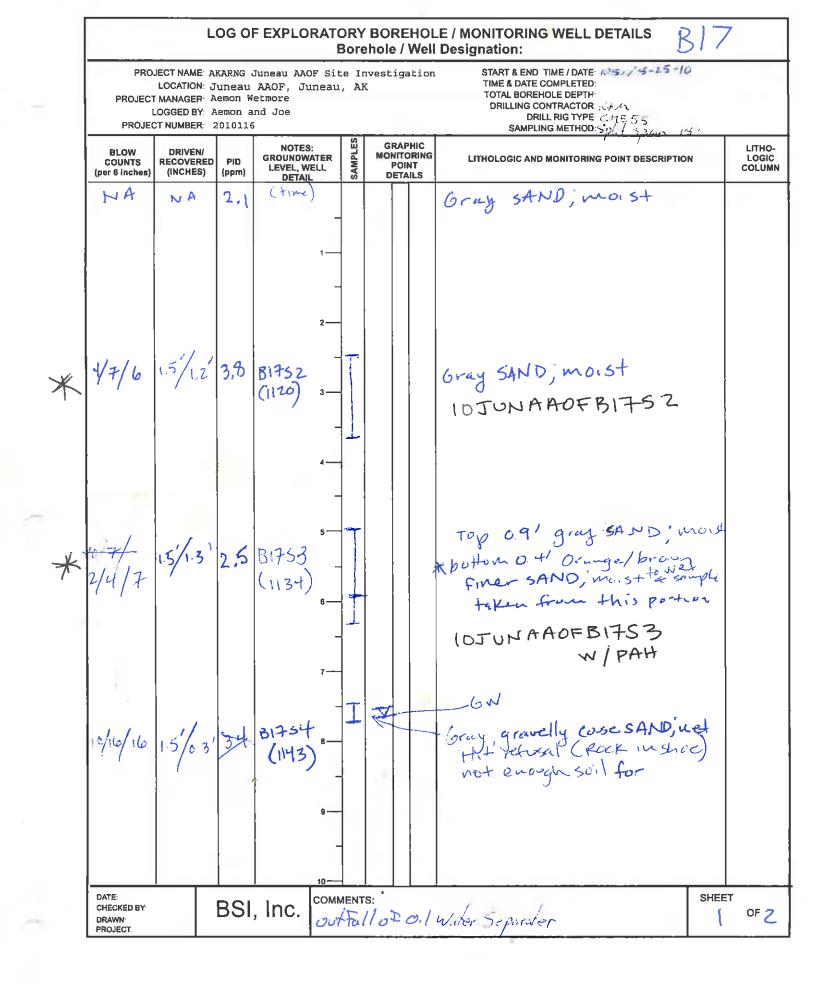
	L	0G 0	FEXPLORAT	ORY Bore	BOREHOI hole / Wel	LE / MONITORING WELL DETAILS B/ S	5	
PROJEC		luneau Lemon W Lemon a	ind Joe			START & END TIME / DATE: / 620 / 5-24- TIME & DATE COMPLETED: 1400 / 5-24- TOTAL BOREHOLE DEPTH: 14.5 + 4 DRILLING CONTRACTOR: 4.5 + 4 DRILL RIG TYPE: 455 SAMPLING METHOD: 50/152000	1-16 10	
BLOW COUNTS (per 6 Inches)	DRIVEN/ RECOVERED (INCHES)	PID (ppm)	NOTES: GROUNDWATER LEVEL, WELL DETAIL	SAMPLES	GRAPHIC MONITORING POINT DETAILS			LITHO- Logic Column
7/13/11	7 "	3.7	Bi 5505 1900 1			Smilg GRAVE I; ust		
DATE: CHECKED BY: DRAWN: PROJECT:		BSI	, Inc. сом	MENT	s:		SHEE	T OFZ

.



PROJECT		Juneau Aemon We Aemon ai	nd Joe	, AK	-	START & END TIME / DATE: 1400 / 4-25-10 TIME & DATE COMPLETED: 1445 - 4-25-10 TOTAL BOREHOLE DEPTH: 10 DRILLING CONTRACTOR: 124 DRILL RIG TYPE: 125 SAMPLING METHOD: 521 - 5300 H	~
BLOW COUNTS (per 6 Inches)	DRIVEN/ RECOVERED (INCHES)	PID (ppm)	NOTES: GROUNDWATER LEVEL, WELL DETAIL	SAMPLES	GRAPHIC MONITORING POINT DETAILS		LIT
5/17/11	1.0'	2,0	B16505			Sundy GRAVEL: Wet	
			2				
			- 3				
			4				
			5	-			
			6				
			7				
-			8				
			B				
DATE: CHECKED BY: DRAWN:		BSL		MENTS	S: '	SI	

~



	L	OG O					E / MONITORING WELL DETAILS Designation:	B	17
PROJECT 1		uneau emon W emon a	nd Joe			on	START & END TIME / DATE: 1050/10-25-1 TIME & DATE COMPLETED: TOTAL BOREHOLE DEPTH: DRILLING CONTRACTOR: 250 DRILL RIG TYPE: CME 55 SAMPLING METHOD: 52(1) 50000		
BLOW COUNTS (per 6 Inches)	DRIVEN/ RECOVERED (INCHES)	PID (ppm)	NOTES: GROUNDWATER LEVEL, WELL DETAIL	SAMPLES	GRAPHIC MONITORI POINT DETAILS	NG	LITHOLOGIC AND MONITORING POINT DESCRIPTIO	N	LITHO- LOGIC COLUMN
4/9/4	15/15	3.†	B1755 10 (1158)				Gray course SAND, We	+	
3" or 19			1/2-						
or 19 fo: 6"			12-	-					
			-] 3—	-					
				-					
			\4						
			5						
			6						
			7 —						
			8— 	-					
			9 <u></u>						
	<u> </u>		10-						
DATE; CHECKED BY DRAWN: PROJECT;		BSI	, Inc. 😋	MENT	s: 11070;	.1	Water Separater		

		Lo	w-Flow G	roundv	vater Sar	mpling	g Data S	heet			
							Well ID:	TI	NI		
Project 2010	0116						Date:	8/29	5/10		
Project Juneau D	ecision Do	cument					Start Time:	1240	2		
Site:	B14(5				End Time:				
Field Team: Ā	ernon		Joe T.								
Sample ID: 12	2 JNUAA	OFBI4DA	Jime:			primary		split	ms/msd		
Sample ID: 105	WUAADEBIS	1402			1320	primary		split	ms/msd		
Sample ID:		-	Time:			primary	dup	split	ms/msd		
Weather Co	n dition of ¹	» //	11 1								
weather Co	natuons:	Tartly	Unudy			D-	TW #5	TOC .		10.68	,
Depth to Top of F	Product (FE	STOC):	NA				o Water (FE		round	9.57	
Depth to Oil/Wate			DC): NA			Total D	epth (FBTO	C):	14.8	7'STOC	p
* Note: Same as	depth to w	ater					Interval (FE			1 +0 1	10.7
		-					Nater Draw	n From (FBTOC)	~q_8-	14.
Criteria for S						12.5				Screan	Ilut
Parameter			g Range		Stability C	riteria	Notes				
Temperature		>0.00 °0	0		± 10%					onductivity	
pH		0-14	01	_	± 10%	_				to within 10	
Conductivity		0-999 m			± 10%					total of 45 r	
Dissolved Oxyger	n	0-19.99	mg/L		± 10% ± 10%		first) collect			(which eve	r occi
Salinity	no micál -				111/0	-	Inist) collect	sample	from we		
Sensory Obs			Desure C	Di Anti	What or	har					
Color: Odor:	Ulear, Alî Nono Lov	noer, la	in, Brown, G	ey Milky	Has E	ner:	homical 2	Inknow			
			um) High, Vei um, High, Vei				Sciencial 4,	UTKNOW	11		
Instrument (in, ngn, ve	iy rurbia,		.5					
	JUSCI VO		Conductivity						T	Water Level	Dra
Round Time	Turbidity	°C	(MS/cm)	Salinity	DO (mg/L)	pH	ORP (mV)	Color	Odor	(ft BTOC)	do
1 1300	20,7	11.89	0.273	0.13	0.44	8.75	2.7	tian	5 light	1 1	01
2 1306	14.4	11.88		011	0.34	851	7.5	10		10.69	0
3 1210	13 0	11.54		0.13	0.30	844		14		10.00	l i
4 1313	8.28	11.69	0.247	0 13	0.28	8.40	11.5	*1	44	44	4
5	• /	1	1	1	1	1		1	1	1	
6 /											\Box
7											
8											
9											
10											
12 /									\square		
13				\downarrow		L			\square	└─)	\vdash
14		\vdash	$ \rightarrow $			\vdash		\vdash	\square	\vdash (L-(
15		1									17
Notes: Drawdown				•	-						
a low rate (appro) may make it diffic				u cominua	my measufif	iy water		Well. IN	ole triat S	ne s nydroge	sology
	# of Bo										
Analyses	Collec		Comments:	Terra	arrived h	11-0	met	lad	an 3	124/10	
-	757	125 m	Comments:	ic op	1 VILLEY	4	Flow Rate	(mL/min)	22/3	
DRO	3×2		1) 1000	7 514	4		Well Casin	g Diame	, ter (in)	2	
DRO GRO/BTEX		112 1941	1ノ				Pump Use	-	• •	Peri	
GRO/BTEX GRO			- /				Well Type			h Mount Si	licke
GRO/BTEX	7	ام ڈی									
GRO/BTEX GRO	3 2×2 12	25 ml	1					undit d		21	
GRO/BTEX GRO DRO/RRO	7	25 ml						WHORE G		/	
GRO/BTEX GRO DRO/RRO	3 2×2 1 2×2	L.	Han				Date: 8-				

APPENDIX C

BORING LOGS

				L		PLORA orehole	ATORY BORING e: B13
PROJE PROJE LOCAT DRILLE LOGGE	ECT #: TON: ED BY:	2010116 JUNEAU	AAOF. JUNEAU NSULTING		E INVESTIGATIO	NC	COMPLETION DATE:8/24/10DRILL METHOD:HOLLOW-STEM AUGERSAMPLING METHOD:2-INCH SPLIT SPOON; 140# HAMMERTOTAL BOREHOLE DEPTH:10.5'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		B13 S01			0.0 feet - 0.2 feet Asphalt 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 9 14	1.5/1.0	4.2	5-	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)
11 17 13	1.5/1.1	0.5	<u> </u>	B13 S05			10.0 feet - 11.5 feet Gray, sandy GRAVEL; wet (Sample 10JUNAAOFB13S5 collected) Total Depth = 11.5 feet
			-				<u>KEY</u> ∑ Groundwater at time of drilling
Bethel S	Services, II		15– MMENTS: 2	2.5' - 1 Boring	0.5' 1.5ft Split-S backfilled with	Spoon Sam cuttings.	pling C - 1

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

PROJE PROJE LOCAT DRILLE LOGGE	ECT #: TION: ED BY:	2010118 JUNEAU	AAOF JUNEAU SIT AAOF. JUNEAU, AL NSULTING	E INVESTIGATI		COMPLETION DATE:8/25/10DRILL METHOD:HOLLOW-STEM AUGERSAMPLING METHOD:2-INCH SPLIT SPOON; 140# HAMMERTOTAL BOREHOLE DEPTH:14'DRILL RIG TYPE:CME-55
BLOW COUNTS (per 0.5 ft)	DRIVEN/ RECOVERED (FEET)	PID (ppm)	DEPTHINFT. INTERVAL / SAMPIES	WELL CONSTRUCTION DETAILS	LITHO- LOGIC COLUMN	LITHOLOGIC DESCRIPTION
Augered	NA	2.5	B14 S07			0.0 feet - 0.4 feet Concrete 0.4 feet - 2.5 feet Augered - Bulk sample Gray SAND; moist
5 15 20	1.5/1.0	3.5	_ B14 S02 _			2.5 feet - 4.0 feet Gray SAND; moist
_ 8 _ 14 _ 17	1.5/1.2	4.1	5 			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 14 12 	1.5/1.0	466				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, II		13.7 fe Well c	et below ground onstruction: 2-ind	surface (be ch, 40-sche	n Sampling. Temporary Well TW1 installed to depth of gs). solule PVC riser (blank from surface to 8.5 feet bgs, to 13.5 feet bgs plus end cap). Native material sand pack.

					B	orehole	
PROJE PROJE LOCAT DRILLE LOGGE	ECT #: TON: ED BY:	2010116 JUNEAU	AAOF. JUNEAL NSULTING		E INVESTIGATIO	COMPLETION DATE:8/24/10DRILL METHOD:HOLLOW-STEM AUGERSAMPLING METHOD:2-INCH SPLIT SPOON; 140# HAMMERTOTAL BOREHOLE DEPTH:10.5'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	- <u>-</u> 10	B15 S05			Gray, sandy GRAVEL; wet
			-				Total Depth = 11.5 feet KEY Y Groundwater at time of drilling
Bethel	Services, In		15— MMENTS: 2 E	2.5' - 1 3oring	0.5' 1.5ft Split-S backfilled with (Spoon Sam cuttings.	pling C - 3

				L		PLORA orehole	ATORY BORING e: B16
PROJE PROJE LOCAT DRILLE LOGGE	ECT #: TON: ED BY:	2010116 JUNEAU	AAOF. JUNEAU NSULTING		E INVESTIGATIO	NC	COMPLETION DATE:8/25/10DRILL METHOD:HOLLOW-STEM AUGERSAMPLING METHOD:2-INCH SPLIT SPOON; 140# HAMMERTOTAL BOREHOLE DEPTH:10.5'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	5.1	-	B16 S01 B16			0.0 feet - 0.2 feet Asphalt 0.2 feet - 2.5 feet Augered - Bulk sample Gray SAND; moist (Sample 10JUNAAOFB16S1 collected) 2.5 feet - 4.0 feet
13 14 5 8 12	1.5/1.1	3.8	5-	B16 S02 B16 S03			Gray SAND; moist 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	<u> </u>	B16 S05			10.0 feet - 11.5 feet Gray, sandy GRAVEL; wet Total Depth = 11.5 feet
			-				<u>KEY</u> <u>∑</u> Groundwater at time of drilling
Bethel S	Services, Ir		15– MMENTS: 2	2.5' - 1 Boring	0.5' 1.5ft Split-S backfilled with (l Spoon Sam cuttings.	l pling C - 4

				L		PLORA orehole	ATORY BORING e: B17
PROJE PROJE LOCAT DRILLE LOGGE	ECT #: TON: ED BY:	2010116 JUNEAU	AAOF. JUNEAU			ON	COMPLETION DATE:8/25/10DRILL METHOD:HOLLOW-STEM AUGERSAMPLING METHOD:2-INCH SPLIT SPOON; 140# HAMMERTOTAL BOREHOLE DEPTH:10.5'DRILL RIG TYPE:CME-55
BLOW COUNTS (per 0.5 ft)	DRIVEN/ RECOVERED (FEET)	PID (ppm)	DEPTHIN 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)
247	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	<u>¥</u>	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	B17 S05			10.0 feet - 11.5 feet Gray SAND; wet
			- - 15				Total Depth = 11.5 feet KEY Y Groundwater at time of drilling NM Not measured
Bethel S	Services, II		MMENTS: 2	2.5' - 1 3oring	0.5' 1.5ft Split-S backfilled with	Spoon Sam cuttings. Bo	pling oring advanced near outfall of oil water separator C - 5

APPENDIX D

ANALYTICAL REPORT FROM TESTAMERICA LABORATORY OF ANCHORAGE, ALASKA



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

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.



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Surrogate Summary	17
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Chronicle	39
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Chain of Custody	47

Qualifiers

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.
Ξ	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).
28	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.
emivolat	iles
Qualifier	Qualifier Description
ZX	Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.
uels	
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.
	Typical pattern for diesel
Q2	

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

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: 10JUNAAC	OFB13S5					La	ab	Sample ID: A	TH0081-0	
No Detections.										
-	OFB14S3					La	ab	Sample ID: A	I H0081-0	
No Detections.								•		
-								Sample ID: A Sample ID: A		
No Detections.	OFB14S5	Qualifier	RL	MDL	Unit		ab	•		
No Detections.	DFB14S5 Result	Qualifier	RL 1.75	MDL	Unit mg/kg dry	La	ab	Sample ID: A	TH0081-04	
No Detections.	DFB14S5 Result			MDL _		La Dil Fac	ab D	Sample ID: A Method AK101-MS/EPA 82	TH0081-04 Prep Type	
No Detections. Client Sample ID: 10JUNAAC Analyte Gasoline Range Organics	DFB14S5 <u>Result</u> 181 0.0278		1.75	MDL	mg/kg dry	La Dil Fac 33.3	ab D \overline	Sample ID: A Method AK101-MS/EPA 82	TH0081-0 Prep Type total	
No Detections. Client Sample ID: 10JUNAAC Analyte Gasoline Range Organics Xylenes (total)	DFB14S5 <u>Result</u> 181 0.0278 346	E	1.75 0.0262		mg/kg dry mg/kg dry	La Dil Fac 33.3	ab D ¤	Sample ID: A Method AK101-MS/EPA 82 AK101-MS/EPA 82 AK102/103	TH0081-0 Prep Type total total	
No Detections. Client Sample ID: 10JUNAAC Analyte Gasoline Range Organics Xylenes (total) Diesel Range Organics	DFB14S5 <u>Result</u> 181 0.0278 346	E	1.75 0.0262 31.6	MDL _	mg/kg dry mg/kg dry mg/kg dry	La Dil Fac 33.3 33.3 1	ab D Ø	Sample ID: A Method AK101-MS/EPA 82 AK101-MS/EPA 82 AK102/103	TH0081-0 Prep Type total total total total	
No Detections. Client Sample ID: 10JUNAAC Analyte Gasoline Range Organics Xylenes (total) Diesel Range Organics Gasoline Range Organics - RE1	DFB14S5 <u>Result</u> 181 0.0278 346 255	E	1.75 0.0262 31.6 15.8	MDL _	mg/kg dry mg/kg dry mg/kg dry mg/kg dry	La Dil Fac 33.3 33.3 1 300 2	D D C C C C C C C C C C C C C C C C C C	Sample ID: A Method AK101-MS/EPA 82 AK101-MS/EPA 82 AK102/103 AK101-MS/EPA 82	Prep Type total total total total total	

Client Sample ID: 10JUNAAOFB14S8

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

No Detections.

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

No Detections.

Client Sample ID: 10JUNAAOFB16S1

No Detections.

Client Sample ID: 10JUNAAOFB16S4

No Detections.

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

No Detections.

....

Lab Sample ID: ATH0081-07

Lab Sample ID: ATH0081-09

Lab Sample ID: ATH0081-10

Lab Sample ID: ATH0081-05

Client Sample ID: 10JUNAAOFB17S3

No Detections.

Client Sample ID: 10JUNAAOFB14GW1

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

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

No Detections.

Client Sample ID: 10JUNAAOFWTB1

Lab Sample ID: ATH0081-16

Lab Sample ID: ATH0081-15

Lab Sample ID: ATH0081-13

Lab Sample ID: ATH0081-14

Lab Sample ID: ATH0081-12

TestAmerica Job ID: ATH0081

SDG: ATH0081

TestAmerica Anchorage 09/28/2010

Matrix: Soil

Lab Sample ID: ATH0081-01

Client Sample ID: 10JUNAAOFB13S3 Date Collected: 08/24/10 13:25

Date	Received:	08/27/10	09:38

Date Conected. 00/24/10 13.2.	5							wat				
Date Received: 08/27/10 09:38	Percent Solids: 97.											
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	₿ Ţ	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			
D " "												

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

Client Sample ID: 10JUNAAOFB13S5 Date Collected: 08/24/10 13:50 Date Received: 08/27/10 09:38

Lab Sample ID: ATH0081-02 Matrix: Soil Percent Solids: 88.2

Method: AK101-MS/EPA 8260B - Gaso	line Range Organics (C	6-C10) by AK	101-MS and	BTEX by EPA	Method 8260E	3
Analyte	Result Qualifier	RL	MDL	Unit D	Prepared	Analyzed

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		
Diesel Range Organics	ND	22.6		mg/kg dry	₽	09/02/10 08:44	09/07/10 19:22		
Residual Range Organics	ND	56.5		mg/kg dry	₽	09/02/10 08:44	09/07/10 19:22		

Residual Range Organics	ND	56.5	mg/kg dry 🌣 09/02/10 08:4	4 09/07/10 19:22	1
Surrogate	% Recovery Qualifier	Limits	Prepar	d Analyzed	Dil Fac
1-Chlorooctadecane	76.0	50 - 150	09/02/10 08:-	4 09/07/10 19:22	1
Triacontane	83.8	50 - 150	09/02/10 08:	4 09/07/10 19:22	1

Dil Fac

Dil Fac

1

Client Sample ID: 10JUNAAOFB14S3 Date Collected: 08/24/10 15:55

Date Received: 08/27/10 09:38

Lab Sample ID: ATH0081-03

Matrix: Soil Percent Solids: 94.3

5

Method: AK101-MS/EPA 8260E	3 - Gasoline Ran	ge Organics	6 (C6-C10) by A	K101-MS a	nd BTEX b	y EF	PA Method 826	0B	
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	ND		1.54		mg/kg dry	₿ Ţ	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
Surrogate 1-Chlorooctadecane	% Recovery 93.0	Qualifier	Limits 50 - 150			Prepared	Analyzed	Dil Fac

Client Sample ID: 10JUNAAOFB14S5 Date Collected: 08/24/10 16:20 Date Received: 08/27/10 09:38

Lab Sample ID: ATH0081-04 Matrix: Soil **Percent Solids: 86**

33.3

33.3

33.3

33.3

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B Result Qualifier Analyte RL MDL Unit D Prepared Analyzed Dil Fac mg/kg dry 🔅 09/05/10 07:00 09/05/10 14:58 1.75 **Gasoline Range Organics** 181 E Benzene ND 0.00700 mg/kg dry 🔅 09/05/10 07:00 09/05/10 14:58 Toluene ND 0.0175 mg/kg dry 🔅 09/05/10 07:00 09/05/10 14:58 Ethylbenzene ND 0.0175 mg/kg dry 🌣 09/05/10 07:00 09/05/10 14:58

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 -

R	F	1	

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 Date Collected: 08/24/10 16:20 Date Received: 08/27/10 09:38

Lab Sample	ID: ATH0081-04
	Matrix: Soil

Percent Solids: 90.9

2

2

5

2

2

Dil Fac

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed
Naphthalene	ND		0.0550		mg/kg dry	₽	09/02/10 12:10	09/08/10 17:38
2-Methylnaphthalene	0.238		0.0550		mg/kg dry	₽	09/02/10 12:10	09/08/10 17:38
1-Methylnapthalene	0.224		0.0550		mg/kg dry	₽	09/02/10 12:10	09/08/10 17:38
Acenaphthylene	ND		0.0220		mg/kg dry	¢	09/02/10 12:10	09/07/10 20:52
Acenaphthene	0.0323		0.0220		mg/kg dry	₽	09/02/10 12:10	09/07/10 20:52
Fluorene	ND		0.0220		mg/kg dry	₽	09/02/10 12:10	09/07/10 20:52
Phenanthrene	ND		0.0220		mg/kg dry	¢	09/02/10 12:10	09/07/10 20:52
Anthracene	ND		0.0220		mg/kg dry	₽	09/02/10 12:10	09/07/10 20:52
Fluoranthene	ND		0.0220		mg/kg dry	₽	09/02/10 12:10	09/07/10 20:52
Pyrene	ND		0.0220		mg/kg dry	¢	09/02/10 12:10	09/07/10 20:52
Benzo (a) anthracene	ND		0.0220		mg/kg dry	₽	09/02/10 12:10	09/07/10 20:52
Chrysene	ND		0.0220		mg/kg dry	₽	09/02/10 12:10	09/07/10 20:52
Benzo (b) fluoranthene	ND		0.0220		mg/kg dry	¢	09/02/10 12:10	09/07/10 20:52
Benzo (k) fluoranthene	ND		0.0220		mg/kg dry	₽	09/02/10 12:10	09/07/10 20:52
Benzo (a) pyrene	ND		0.0220		mg/kg dry	₽	09/02/10 12:10	09/07/10 20:52
Indeno (1,2,3-cd) pyrene	ND		0.0220		mg/kg dry	¢	09/02/10 12:10	09/07/10 20:52
Dibenzo (a,h) anthracene	ND		0.0220		mg/kg dry	₽	09/02/10 12:10	09/07/10 20:52
Benzo (ghi) perylene	ND		0.0220		mg/kg dry	☆	09/02/10 12:10	09/07/10 20:52
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed
Nitrobenzene-d5	105		30 - 140				09/02/10 12:10	09/08/10 17:38
2-FBP	146	ZX	30 - 140				09/02/10 12:10	09/07/10 20:52
p-Terphenyl-d14	94.4		30 - 150				09/02/10 12:10	09/07/10 20:52

Method: AK102/103 - Diesel Rang	e Organics (C10-C25) and Re	sidual Rang	ge Organics	(C25-C36) per	AK102/RRU	
Analyte	Result Qualifier	RL	MDL	Unit D	Prepared	Α

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
Surrogate 1-Chlorooctadecane	% Recovery 83.5	Qualifier	Limits 50 - 150			Prepared	Analyzed	Dil Fac

Client Sample ID: 10JUNAAOFB14S8

Date Collected: 08/24/10 16:00

Lab Sample ID: ATH0081-05 Matrix: Soil

Date Received: 08/27/10 09:38

Percent Solids: 95.2

Method: AK101-MS/EPA 826	0B - Gasoline Rang	ge Organics	s (C6-C10) by A	K101-MS a	nd BTEX b	y EF	PA Method 826	0B	
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

	Sunogale	78 Necovery	Quanner	Linits	riepareu	Analyzeu	Dirrac	
	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	
ľ	—							

lient Sample ID: 10JUNA	AUFB1458						ole ID: ATHO	
ate Collected: 08/24/10 16:00								rix: Soi
ate Received: 08/27/10 09:38							Percent Soli	ds: 95.2
Method: AK102/103 - Diesel R	ange Organics (C	10-C25) an	d Residual Ran	ge Organic	s (C25-C36)	per AK102/RRO		
Analyte		Qualifier	RL	MDL	Unit [Analyzed	Dil Fa
Diesel Range Organics	ND		20.6		mg/kg dry	09/02/10 08:44	09/07/10 20:25	· · · · ·
Residual Range Organics	ND		51.5		mg/kg dry [⊰]		09/07/10 20:25	
Surrogate	% Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Chlorooctadecane	89.5		50 - 150			09/02/10 08:44	09/07/10 20:25	
Triacontane	88.4		50 - 150			09/02/10 08:44	09/07/10 20:25	
lient Sample ID: 10JUNA	AOFB14S9					Lab Sam	ole ID: ATHO	
ate Collected: 08/24/10 16:25 ate Received: 08/27/10 09:38							Percent Soli	rix: Soi ds: 91.8
Method: EPA 8270 mod Poly	unucloar Aromatic	Compour	de by CC/MS w	ith Solocto	d Ion Monito	ring		
Analyte		Qualifier	RL	MDL	Unit [-	Analyzed	Dil Fa
Naphthalene	0.341		0.109		mg/kg dry		09/03/10 13:36	1
2-Methylnaphthalene	3.27		0.109		mg/kg dry ⅔		09/03/10 13:36	1
1-Methylnapthalene	2.61		0.109		mg/kg dry [⊰]		09/03/10 13:36	1
Acenaphthylene	ND		0.109		mg/kg dry		09/03/10 13:36	1
Acenaphthene	0.160		0.109		mg/kg dry [⊰]		09/03/10 13:36	1
Fluorene	0.116		0.109		mg/kg dry [⊰]		09/03/10 13:36	1
Phenanthrene	ND		0.109		mg/kg dry [⊀]	09/02/10 12:10	09/03/10 13:36	1
Anthracene	ND		0.109		mg/kg dry [≭]		09/03/10 13:36	1
Fluoranthene	ND		0.109		mg/kg dry	09/02/10 12:10	09/03/10 13:36	1
Pyrene	ND		0.109		mg/kg dry	09/02/10 12:10	09/03/10 13:36	1
Benzo (a) anthracene	ND		0.109		mg/kg dry 🗄	² 09/02/10 12:10	09/03/10 13:36	1
Chrysene	ND		0.109		mg/kg dry 🗄	09/02/10 12:10	09/03/10 13:36	1
Benzo (b) fluoranthene	ND		0.109		mg/kg dry	09/02/10 12:10	09/03/10 13:36	1
Benzo (k) fluoranthene	ND		0.109		mg/kg dry 🗄	09/02/10 12:10	09/03/10 13:36	1
Benzo (a) pyrene	ND		0.109		mg/kg dry 🗄	09/02/10 12:10	09/03/10 13:36	1
Indeno (1,2,3-cd) pyrene	ND		0.109		mg/kg dry	09/02/10 12:10	09/03/10 13:36	1
Dibenzo (a,h) anthracene	ND		0.109		mg/kg dry 🗄	09/02/10 12:10	09/03/10 13:36	1
Benzo (ghi) perylene	ND		0.109		mg/kg dry 🗄	99/02/10 12:10	09/03/10 13:36	1
Surrogate	% Recovery		Limits			Prepared	Analyzed	Dil Fa
Nitrobenzene-d5	178	ZX	30 - 140			09/02/10 12:10	09/03/10 13:36	1
2-FBP	114		30 - 140			09/02/10 12:10	09/03/10 13:36	1
p-Terphenyl-d14	98.0		30 - 150			09/02/10 12:10	09/03/10 13:36	1

Date Collected: 08/24/10 18:30 Date Received: 08/27/10 09:38

Method: AK101-MS/EPA 826 Analyte	60B - Gasoline Range C Result Qua	• • • •	K101-MS a	and BTEX by Unit		PA Method 826 Prepared	0B Analvzed	Dil Fac
		1.37			¤	09/05/10 07:00	09/05/10 16:01	33.3
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 Qu	ualifier Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	93.5	75 - 125				09/05/10 07:00	09/05/10 16:01	33.3

TestAmerica Anchorage 09/28/2010

Percent Solids: 96.8

lient Sample ID: 10JUN ate Collected: 08/24/10 18:30)					Las Gaily		rix: So
ate Received: 08/27/10 09:38							Percent Solic	ds: 96
Method: AK101-MS/EPA 826 (Continued)	0B - Gasoline Rang	ge Organics	s (C6-C10) by A	K101-MS a	nd BTEX by Ef	PA Method 826	0B	
Surrogate	% Recovery	Qualifier	Limits			Prepared	Analyzed	Dil F
a,a,a-TFT	95.9		50 - 150			09/05/10 07:00	09/05/10 16:01	33
Toluene-d8	93.4		75 - 125			09/05/10 07:00	09/05/10 16:01	33
4-BFB	95.9		75 - 125			09/05/10 07:00	09/05/10 16:01	3
Method: AK102/103 - Diesel Analyte		10-C25) an Qualifier	d Residual Ran _{RL}	ge Organic MDL	:s (C25-C36) pe Unit D	er AK102/RRO Prepared	Analyzed	Dil F
Diesel Range Organics	<u></u>	Quaimer	20.2		mg/kg dry	09/02/10 08:44	09/07/10 15:09	
Residual Range Organics	ND		50.4		mg/kg dry 🌣	09/02/10 08:44	09/07/10 15:09	
Residual Range Organics	ND		50.4			09/02/10 00.44	09/07/10 13:09	
Surrogate	% Recovery	Qualifier	Limits			Prepared	Analyzed	Dil F
1-Chlorooctadecane	84.5		50 - 150			09/02/10 08:44	09/07/10 15:09	
Triacontane	84.7		50 - 150			09/02/10 08:44	09/07/10 15:09	
lient Sample ID: 10JUN	AAOFB15S4					Lab Samp	le ID: ATH0	081-
ate Collected: 08/24/10 18:50							Matr	rix: S
ate Received: 08/27/10 09:38							Percent Solid	ds: 9
Method: AK101-MS/EPA 826								
Analyte		Qualifier	RL	MDL	Unit D	Prepared	Analyzed	Dil
Gasoline Range Organics	ND		0.981		mg/kg dry 🌣	09/05/10 07:00	09/05/10 21:54	3
Benzene	ND		0.00392		mg/kg dry 🌣	09/05/10 07:00	09/05/10 21:54	3
Toluene	ND		0.00981		mg/kg dry 🌣	09/05/10 07:00	09/05/10 21:54	3
Ethylbenzene	ND		0.00981		mg/kg dry 🌣	09/05/10 07:00	09/05/10 21:54	3
Xylenes (total)	ND		0.0147		mg/kg dry 🌣	09/05/10 07:00	09/05/10 21:54	3
Surrogate	% Recovery		Limits			Prepared	Analyzed	Dil I
Dibromofluoromethane	99.3	C4	75 - 125			09/05/10 07:00	09/05/10 21:54	3
a,a,a-TFT	103		50 - 150			09/05/10 07:00	09/05/10 21:54	3
Toluene-d8	92.5		75 - 125			09/05/10 07:00	09/05/10 21:54	3
4-BFB	221	Z2	75 - 125			09/05/10 07:00	09/05/10 21:54	3
Method: AK102/103 - Diesel								
Analyte		Qualifier	RL	MDL	Unit D	Prepared	Analyzed	Dil
Diesel Range Organics	ND		19.1		mg/kg dry	09/02/10 08:44	09/07/10 20:57	
Residual Range Organics	ND		47.8		mg/kg dry 🌣	09/02/10 08:44	09/07/10 20:57	
Surrogate	% Recovery	Qualifier	Limits			Prepared	Analyzed	Dil
1-Chlorooctadecane	82.5		50 - 150			09/02/10 08:44	09/07/10 20:57	
Triacontane	81.5		50 - 150			09/02/10 08:44	09/07/10 20:57	
lient Sample ID: 10JUN	AAOFB16S1					l ab Samr	ole ID: ATH0(081-
ate Collected: 08/25/10 14:50								rix: S
ate Received: 08/27/10 09:38							Percent Solic	
Method: AK101-MS/EPA 826			s (C6-C10) by A		nd BTEX by EF		0B	
Analyte		Qualifier	RL	MDL	Unit D	Prepared	Analyzed	Dil I
-	ND		1.38		mg/kg dry 🌣	09/05/10 07:00	09/05/10 19:16	3
Gasoline Range Organics	ND							
Gasoline Range Organics	ND		0.00552		mg/kg dry 🌣	09/05/10 07:00	09/05/10 19:16	3
						09/05/10 07:00 09/05/10 07:00	09/05/10 19:16 09/05/10 19:16	3: 3:

Client Sample ID: 10JUNAAOFB16S1 Date Collected: 08/25/10 14:50 Date

Lab Sample ID: ATH0081-09 Matrix: Soil

Wethod: AK101-MS/EPA 826 Continued)	60B - Gasoline Rang	ge Organic	s (C6-C10) by A	K101-MS a	nd BTEX by	/ EF	PA Method 826	0B	
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Xylenes (total)	ND		0.0207		mg/kg dry		09/05/10 07:00	09/05/10 19:16	33.
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
Dibromofluoromethane	44.7	Z6, C4	75 - 125				09/05/10 07:00	09/05/10 19:16	33.
a,a,a-TFT	87.0		50 - 150				09/05/10 07:00	09/05/10 19:16	33
Toluene-d8	92.4		75 - 125				09/05/10 07:00	09/05/10 19:16	33
4-BFB	93.5		75 - 125				09/05/10 07:00	09/05/10 19:16	33.
Method: AK102/103 - Diesel	Range Organics (C	:10-C25) an	d Residual Ran	ge Organio	cs (C25-C36	a) ne	AK102/RRO		
Analyte		Qualifier	RL	MDL	Unit		Prepared	Analyzed	Dil Fa
Diesel Range Organics	ND		20.5		mg/kg dry	₽	09/02/10 08:44	09/07/10 20:57	
Residual Range Organics	ND		51.3		mg/kg dry		09/02/10 08:44	09/07/10 20:57	
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctadecane	97.3		50 - 150				09/02/10 08:44	09/07/10 20:57	
Triacontane	94.4		50 - 150				09/02/10 08:44	09/07/10 20:57	
								Die ID: ATHO Mati Percent Solid	rix: So
ate Received: 08/27/10 09:38	8							Mate Percent Solid	rix: So
ate Received: 08/27/10 09:38 Method: AK101-MS/EPA 826	8 60B - Gasoline Ran						PA Method 826	Mati Percent Solid 0B	rix: So ds: 95.
ate Received: 08/27/10 09:38 Method: AK101-MS/EPA 826 Analyte	8 60B - Gasoline Ran	ge Organica Qualifier		K101-MS a	Unit	D	PA Method 826 Prepared	Mate Percent Solid 0B Analyzed	rix: So ds: 95. Dil Fa
ate Received: 08/27/10 09:38 Method: AK101-MS/EPA 826 Analyte Gasoline Range Organics	3 60B - Gasoline Ran Result		RL 1.06		Unit mg/kg dry	D ☆	PA Method 826 Prepared 09/05/10 07:00	Mate Percent Solid 0B <u>Analyzed</u> 09/05/10 19:47	rix: So ds: 95. Dil Fa 33.
ate Received: 08/27/10 09:38 Method: AK101-MS/EPA 826 Analyte Gasoline Range Organics Benzene	8 60B - Gasoline Rang Result ND				Unit mg/kg dry mg/kg dry	D ☆	PA Method 826 Prepared	Mate Percent Solid 0B Analyzed	rix: So ds: 95. Dil Fa 33. 33.
ate Received: 08/27/10 09:38 Method: AK101-MS/EPA 826 Analyte Gasoline Range Organics Benzene Toluene	8 60B - Gasoline Rang Result ND ND		RL 1.06 0.00423		Unit mg/kg dry mg/kg dry mg/kg dry	D ☆ ☆ ☆	PA Method 826 Prepared 09/05/10 07:00 09/05/10 07:00	Mate Percent Solid 0B <u>Analyzed</u> 09/05/10 19:47 09/05/10 19:47	rix: So ds: 95. Dil Fa 33 33 33
ate Received: 08/27/10 09:38 Method: AK101-MS/EPA 826 Analyte Gasoline Range Organics Benzene Toluene Ethylbenzene	3 50B - Gasoline Rang Result ND ND ND		RL 1.06 0.00423 0.0106		Unit mg/kg dry mg/kg dry	D	PA Method 826 Prepared 09/05/10 07:00 09/05/10 07:00 09/05/10 07:00	Mate Percent Solid 0B <u>Analyzed</u> 09/05/10 19:47 09/05/10 19:47 09/05/10 19:47	rix: So ds: 95. Dil Fa 33. 33. 33. 33.
ate Received: 08/27/10 09:38 Method: AK101-MS/EPA 826 Analyte Gasoline Range Organics Benzene Toluene Ethylbenzene Xylenes (total)	B COB - Gasoline Rang Result ND ND ND ND ND ND ND	Qualifier	RL 1.06 0.00423 0.0106 0.0106 0.0159		Unit mg/kg dry mg/kg dry mg/kg dry	D	PA Method 826 Prepared 09/05/10 07:00 09/05/10 07:00 09/05/10 07:00 09/05/10 07:00 09/05/10 07:00	Mate Percent Solid 0B <u>Analyzed</u> 09/05/10 19:47 09/05/10 19:47 09/05/10 19:47 09/05/10 19:47	rix: So ds: 95. Dil Fa 33 33 33 33 33 33 33
ate Received: 08/27/10 09:38 Method: AK101-MS/EPA 826 Analyte Gasoline Range Organics Benzene Toluene Ethylbenzene Xylenes (total) Surrogate	3 50B - Gasoline Rang Result ND ND ND ND ND ND ND ND ND ND	Qualifier Qualifier	RL 1.06 0.00423 0.0106 0.0106 0.0159 Limits		Unit mg/kg dry mg/kg dry mg/kg dry	D	PA Method 826 Prepared 09/05/10 07:00 09/05/10 07:00 09/05/10 07:00 09/05/10 07:00 09/05/10 07:00 Prepared	Mate Percent Solid 0B <u>Analyzed</u> 09/05/10 19:47 09/05/10 19:47 09/05/10 19:47 09/05/10 19:47 09/05/10 19:47 Analyzed	rix: So ds: 95. Dil Fa 33. 33. 33. 33. 33. 33. 33. 33. 33. 33
ate Received: 08/27/10 09:38 Method: AK101-MS/EPA 826 Analyte Gasoline Range Organics Benzene Toluene Ethylbenzene Xylenes (total) Surrogate Dibromofluoromethane	B SOB - Gasoline Rang Result ND ND ND ND ND ND ND ND 105	Qualifier Qualifier	RL 1.06 0.00423 0.0106 0.01059 Limits 75 - 125		Unit mg/kg dry mg/kg dry mg/kg dry	D	PA Method 826 Prepared 09/05/10 07:00 09/05/10 07:00 09/05/10 07:00 09/05/10 07:00 Prepared 09/05/10 07:00	Mate Percent Solid 0B <u>Analyzed</u> 09/05/10 19:47 09/05/10 19:47 09/05/10 19:47 09/05/10 19:47 <u>Analyzed</u> 09/05/10 19:47	rix: So ds: 95. Dil Fa 33 33 33 33 33 33 33 33 33 33 33 33 33
ate Received: 08/27/10 09:38 Method: AK101-MS/EPA 826 Analyte Gasoline Range Organics Benzene Toluene Ethylbenzene Xylenes (total) Surrogate Dibromofluoromethane a,a,a-TFT	3 50B - Gasoline Rang Result ND ND ND ND ND ND ND ND ND ND	Qualifier Qualifier	RL 1.06 0.00423 0.0106 0.0106 0.0159 Limits		Unit mg/kg dry mg/kg dry mg/kg dry	D	PA Method 826 Prepared 09/05/10 07:00 09/05/10 07:00 09/05/10 07:00 09/05/10 07:00 Prepared 09/05/10 07:00 09/05/10 07:00	Mate Percent Solid 0B <u>Analyzed</u> 09/05/10 19:47 09/05/10 19:47 09/05/10 19:47 09/05/10 19:47 <u>Analyzed</u> 09/05/10 19:47	rix: So ds: 95. Dil Fa 33 33 33 33 33 33 33 33 33 33 33 33 33
ate Received: 08/27/10 09:38 Method: AK101-MS/EPA 826 Analyte Gasoline Range Organics Benzene Toluene Ethylbenzene Xylenes (total) Surrogate Dibromofluoromethane a,a,a-TFT Toluene-d8	8 60B - Gasoline Rang Result ND ND ND ND ND ND ND ND ND 00 00 00 00 00 00 00 00 00 0	Qualifier Qualifier	RL 1.06 0.00423 0.0106 0.01059 Limits 75 - 125 50 - 150		Unit mg/kg dry mg/kg dry mg/kg dry	D	PA Method 826 Prepared 09/05/10 07:00 09/05/10 07:00 09/05/10 07:00 09/05/10 07:00 Prepared 09/05/10 07:00	Mate Percent Solid 0B <u>Analyzed</u> 09/05/10 19:47 09/05/10 19:47 09/05/10 19:47 09/05/10 19:47 <u>Analyzed</u> 09/05/10 19:47	rix: So ds: 95. Dil Fa 33 33 33 33 33 33 33 33 33 33 33 33 33
ate Received: 08/27/10 09:38 Method: AK101-MS/EPA 826 Analyte Gasoline Range Organics Benzene Toluene Ethylbenzene Xylenes (total) Surrogate Dibromofluoromethane a,a,a-TFT Toluene-d8 4-BFB	8 60B - Gasoline Rang Result ND ND ND ND ND ND ND ND 200 105 90.3 92.6 101	Qualifier Qualifier C4	RL 1.06 0.00423 0.0106 0.0106 0.0159 Limits 75 - 125 50 - 150 75 - 125 75 - 125 50 - 150 75 - 125	MDL _	Unit mg/kg dry mg/kg dry mg/kg dry mg/kg dry		PA Method 826 Prepared 09/05/10 07:00 09/05/10 07:00 09/05/10 07:00 09/05/10 07:00 Prepared 09/05/10 07:00 09/05/10 07:00 09/05/10 07:00 09/05/10 07:00	Mate Percent Solid 0B <u>Analyzed</u> 09/05/10 19:47 09/05/10 19:47 09/05/10 19:47 09/05/10 19:47 <u>Analyzed</u> 09/05/10 19:47 09/05/10 19:47	rix: So ds: 95. Dil Fa 33. 33. 33. 33. 33. 33. 33. 33. 33. 33
ate Received: 08/27/10 09:38 Method: AK101-MS/EPA 826 Analyte Gasoline Range Organics Benzene Toluene Ethylbenzene Xylenes (total) Surrogate Dibromofluoromethane a,a,a-TFT Toluene-d8 4-BFB Method: AK102/103 - Diesel	3 50B - Gasoline Rang Result ND ND ND ND ND ND ND ND ND ND	Qualifier Qualifier C4	RL 1.06 0.00423 0.0106 0.0106 0.0159 Limits 75 - 125 50 - 150 75 - 125 75 - 125 50 - 150 75 - 125	MDL _	Unit mg/kg dry mg/kg dry mg/kg dry mg/kg dry	D ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	PA Method 826 Prepared 09/05/10 07:00 09/05/10 07:00 09/05/10 07:00 09/05/10 07:00 Prepared 09/05/10 07:00 09/05/10 07:00 09/05/10 07:00 09/05/10 07:00	Mate Percent Solid 0B <u>Analyzed</u> 09/05/10 19:47 09/05/10 19:47 09/05/10 19:47 09/05/10 19:47 09/05/10 19:47 09/05/10 19:47 09/05/10 19:47	rix: So ds: 95. Dil Fa 33. 33. 33. 33. 33. 33. 33. 33. 33. 33
ate Received: 08/27/10 09:38 Method: AK101-MS/EPA 826 Analyte Gasoline Range Organics Benzene Toluene Ethylbenzene Xylenes (total) Surrogate Dibromofluoromethane a,a,a-TFT Toluene-d8 4-BFB Method: AK102/103 - Diesel Analyte	3 50B - Gasoline Rang Result ND ND ND ND ND ND ND ND ND ND	Qualifier Qualifier C4	RL 1.06 0.00423 0.0106 0.0106 0.0159 Limits 75 - 125 50 - 150 75 - 125 75 - 125 0.75 - 125 75 - 125 75 - 125 75 - 125 75 - 125 75 - 125	MDL	Unit mg/kg dry mg/kg dry mg/kg dry mg/kg dry mg/kg dry	D ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	PA Method 826 Prepared 09/05/10 07:00 09/05/10 07:00 09/05/10 07:00 09/05/10 07:00 Prepared 09/05/10 07:00 09/05/10 07:00 09/05/10 07:00 09/05/10 07:00 09/05/10 07:00 Production 100 09/05/10 07:00 Production 100 09/05/10 07:00 09/05/10 07:00 Production 100 Production	Mate Percent Solid 0B <u>Analyzed</u> 09/05/10 19:47 09/05/10 19:47 09/05/10 19:47 09/05/10 19:47 <u>Analyzed</u> 09/05/10 19:47 09/05/10 19:47	rix: Solds: 95. Dil Fa 33. 33. 33. 33. 33. 33. 33. 33
ate Collected: 08/25/10 14:38 ate Received: 08/27/10 09:38 Method: AK101-MS/EPA 826 Analyte Gasoline Range Organics Benzene Toluene Ethylbenzene Xylenes (total) Surrogate Dibromofluoromethane a,a,a-TFT Toluene-d8 4-BFB Method: AK102/103 - Diesel Analyte Diesel Range Organics Residual Range Organics	3 50B - Gasoline Rang Result ND ND ND ND ND ND ND ND 2.6 101 Range Organics (C Result	Qualifier Qualifier C4	RL 1.06 0.00423 0.0106 0.0106 0.0159 Limits 75 - 125 50 - 150 75 - 125 75 - 125 75 - 125 75 - 125 75 - 125 75 - 125 75 - 125 75 - 125 75 - 125	MDL	Unit mg/kg dry mg/kg dry mg/kg dry mg/kg dry cs (C25-C36 Unit	D a a a a a b b b c b c c c c c c c c c c c c c	PA Method 826 Prepared 09/05/10 07:00 09/05/10 07:00 09/05/10 07:00 09/05/10 07:00 Prepared 09/05/10 07:00 09/05/10 07:00 09/05/10 07:00 09/05/10 07:00 Prepared Prepared	Mate Percent Solid 0B Analyzed 09/05/10 19:47 09/05/10 19:47	rix: Soi

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 - 0	Gasoline Rang	ge Organics	(C6-C10) by	/ AK101-MS	and BTEX by	' EP	A Method 826	0B	
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 Date Collected: 08/25/10 11:20

Lab Sample ID: ATH0081-11

Matrix: Soil Percent Solids: 94.9

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Date Received: 08/27/10 09:38

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	ND		0.00571		mg/kg dry	\\\	09/05/10 07:00	09/05/10 20:19	33.
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 (C	10-C25) an	d Residual Ran	ge Organio	s (C25-C36) pe	er 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	

Residual Range Organics	ND		51.6	mg/kg ary ⇒	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 Date Collected: 08/25/10 11:34 Date Received: 08/27/10 09:38

Lab Sample ID: ATH0081-12 Matrix: Soil Percent Solids: 76.3

Dil Fac

Method: AK101-MS/EPA 8260B - Gasoline Range Organics (C6-C10) by AK101-MS and BTEX by EPA Method 8260B Analyte Result Qualifier MDL Unit D Prepared RL Analyzed

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						

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

Analyte	Result C	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 Date Collected: 08/25/10 11:34 Date Received: 08/27/10 09:38

Lab Sample ID: ATH0081-12

Matrix: Soil Percent Solids: 93.8

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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

Date Collected: 08/25/10 13:15 Date Received: 08/27/10 09:38

Lab Sample ID: ATH0081-13

Matrix: Water

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

Matrix: Water

Lab Sample ID: ATH0081-13

Client Sample ID: 10JUNAAOFB14GW1 Date Collected: 08/25/10 13:15 Date Received: 08/27/10 09:38

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
Surrogate 1-Chlorooctadecane	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Client Sample ID: 10JUNAAOFB14GW2

Date Collected: 08/25/10 13:20

Lab Sample ID: ATH0081-14

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

Matrix: Water

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Lab Sample ID: ATH0081-14

Client Sample ID: 10JUNAAOFB14GW2 Date Collected: 08/25/10 13:20 Date Received: 08/27/10 09:38

Analyte	Result	Qualifier	RL	MDL	Unit [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 Rar	nge Organics ((C10-C2	5) and Residual	Range Or	ganics (C25-	-C36) per Ak	(102/RR(0
		_						_	

Analyte	Result	Qualifier	RL	MDL	Unit D	Prepared	Analyzed	Dil Fac
Diesel Range Organi	cs 1.96	Q11	0.400		mg/l	08/30/10 14:08	09/03/10 20:59	1
Residual Range Organ	nics 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	000		50 - 150			08/30/10 14:08	09/03/10 20:59	1
I-CIIIOI OOCIAUECAIIE	96.0	1	50 - 150			06/30/10 14.06	09/03/10 20.59	1

Client Sample ID: 10JUNAAOFSTB

Date Collected: 08/25/10 12:00 Date Received: 08/27/10 09:38 Lab Sample ID: ATH0081-15

Lab Sample ID: ATH0081-16

Matrix: Water

Analyzed Dil Fac

Matrix: Soil Percent Solids: 100

Method: AK101-MS/EPA 8260B - Gasoline Rang	ap Organics (C6-C10) h	v AK101-MS and BTEX by	FPA Method 8260B
Method. Altro - Morel A 02000 - Ousonne Rang	ge organies (ou-orio) b		

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 Date Collected: 08/25/10 12:00 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

-				•		
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

Matrix: Water

Lab Sample ID: ATH0081-16

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

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

Prep Type: total

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

Matrix: Soil

					rrogate Reco
		DBFM	TFT	TOL	4-BFB
Lab Sample ID	Client Sample ID	(75-125)	(50-150)	(75-125)	(75-125)
10I0018-BLK1	1010018-BLK1	97.8	98.2	93.8	99.3
10I0018-BS1	1010018-BS1	99.9	96.1	94.5	101
10I0018-BS2	1010018-BS2	98.5	97.5	94.0	95.0
10I0018-BSD1	10I0018-BSD1	97.7	96.1	95.1	99.5
10I0018-BSD2	1010018-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
1010018-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
1010034-BS2	1010034-BS2	104	106	86.2	92.3
10I0034-BSD1	1010034-BSD1	104	104	87.4	95.9
1010034-BSD2	1010034-BSD2	106	104	85.0	93.8
1010034-DUP1	ATH0082-05	88.8	115	85.5	91.8
10I0034-MS1	ATH0082-05	99.4	111	86.5	89.5
1010034-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

_				Percent Sur
		4-BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(85-115)	(65-125)	(78-115)
1010020-BLK1	1010020-BLK1	93.9	33.0 Z6, C4	90.7
10I0020-BS1	1010020-BS1	94.0	99.7 C4	96.1
10I0020-BS2	1010020-BS2	106	104 C4	98.2
10I0020-BSD1	1010020-BSD1	94.5	100 C4	96.4
1010020-BSD2	1010020-BSD2	94.2	98.3 C4	93.3

13

Prep Type: total

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

Matrix: Water

Prep Type: 1	total
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1010020-DUP1	Client Sample ID ATH0090-01	4-BFB (85-115) 92.8	DBFM (65-125)	TOL (78-115)	
1010020-DUP1	•			(78-115)	
	ATH0090-01	92.8			
10I0020-MS1			1.42 Z6, C4	91.5	
	ATH0090-03	93.9	32.7 Z6, C4	91.0	
1010020-MSD1	ATH0090-03	94.1	13.4 Z6, C4	92.1	
ATH0081-13 1	10JUNAAOFB14GW1	94.4	29.1 Z6, C4	89.3	
ATH0081-14 1	10JUNAAOFB14GW2	94.7	44.1 Z6, C4	90.1	
ATH0081-16 1	10JUNAAOFWTB1	94.0	46.8 Z6, C4	89.6	
Surrogate Legend					
4-BFB = 4-BFB					

TOL = Toluene-d8

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

				Percent Surro	rogate R
		NBZ	2-FBP	ТРН	
Lab Sample ID	Client Sample ID	(30-140)	(30-140)	(30-150)	
10I0015-BLK1	1010015-BLK1	62.0	103	123	
10I0015-BS1	1010015-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					

2-FBP = 2-FBP

TPH = p-Terphenyl-d14

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

				Percent Su
		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

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Prep Type: total

Prep Type: total

Prep Type: total

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

		1COD	тс
_ab Sample ID	Client Sample ID	(50-150)	(50-150)
10I0008-BLK1	1010008-BLK1	87.3	87.3
1010008-DUP1	10JUNAAOFB13S3	93.5	92.6
1010008-MS1	ATH0072-22	97.1	93.6
1010008-MSD1	ATH0072-22	108	91.5
TH0081-01	10JUNAAOFB13S3	94.3	92.3
ATH0081-02	10JUNAAOFB13S5	76.0	83.8
TH0081-03	10JUNAAOFB14S3	93.0	90.8
TH0081-04	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	тс	
ab Sample ID	Client Sample ID	(60-120)	(60-120)	
1010008-BS1	1010008-BS1	92.0	89.7	
1010008-BSD1	1010008-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

		1COD	тс
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

IC = Inacontane

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

Matrix: Water				Prep Type: total
_				Percent Surrogate Recovery (Acceptance Limits)
		1COD	TC	
Lab Sample ID	Client Sample ID	(60-120)	(60-120)	
10H0123-BS1	10H0123-BS1	100	106	·
10H0123-BSD1	10H0123-BSD1	101	105	
Surrogate Legend				
1COD = 1-Chloroocta	adecane			

TC = Triacontane

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

Matrix: Soil												mple ID: 10 Pren		e: tota
Analysis Batch: T000456												Prep Batch		
	в	lank	Blank									Trop Daton		
Analyte			Qualifier		RL	м	DL	Unit	D		Prepared	Analy	zed	Dil Fa
Gasoline Range Organics		ND			3.33		m	g/kg wet		09/05	5/10 07:00	09/05/10 09		33
Benzene		ND		0	.0133			g/kg wet		09/05	5/10 07:00	09/05/10 09):11	33
Toluene		ND			.0333			g/kg wet			5/10 07:00	09/05/10 09		33
Ethylbenzene		ND			.0333			g/kg wet			5/10 07:00	09/05/10 09		33
Xylenes (total)		ND			.0500			g/kg wet			5/10 07:00			33
	В	lank	Blank											
Surrogate			Qualifier	Lim	its						Prepared	Analy	zed	Dil Fa
Dibromofluoromethane		97.8		75 -	125				-	09/05	5/10 07:00	09/05/10 09):11	33.
a,a,a-TFT		98.2		50 -	150					09/05	5/10 07:00	09/05/10 09):11	33.
Toluene-d8		93.8		75 -	125					09/05	5/10 07:00	09/05/10 09):11	33
4-BFB		99.3		75 -	125					09/05	5/10 07:00			33
Lab Sample ID: 1010018-BS1											Client S	Sample ID: 1		
Matrix: Soil														e: tota
Analysis Batch: T000456												Prep Batch	: 1010	018_
				Spike		LCS				_		% Rec.		
Analyte				Added			Qualifier	Unit		D	% Rec	Limits		
Benzene				0.800		0.815		mg/kg			102	70 - 130		
Toluene				0.800		0.820		mg/kg			102	70 - 130		
Ethylbenzene				0.800		0.790		mg/kg			98.7	70 - 130		
Xylenes (total)				2.40		2.38		mg/kg	wet		99.0	70 - 130		
Surrogate	LCS % Recoverv			Limits										
Surrogate	LCS % Recovery 99.9			Limits										
Dibromofluoromethane	% Recovery 99.9													
Dibromofluoromethane a,a,a-TFT	% Recovery			75 - 125										
Dibromofluoromethane a,a,a-TFT Toluene-d8	% Recovery 99.9 96.1			75 - 125 50 - 150										
Dibromofluoromethane a,a,a-TFT Toluene-d8 4-BFB	% Recovery 99.9 96.1 94.5			75 - 125 50 - 150 75 - 125										
Dibromofluoromethane a,a,a-TFT Toluene-d8 4-BFB Lab Sample ID: 1010018-BS2	% Recovery 99.9 96.1 94.5			75 - 125 50 - 150 75 - 125							Client S	Sample ID: 1		
Dibromofluoromethane a,a,a-TFT Toluene-d8 4-BFB Lab Sample ID: 1010018-BS2 Matrix: Soil	% Recovery 99.9 96.1 94.5			75 - 125 50 - 150 75 - 125								Prep	Тур	e: tota
Dibromofluoromethane a,a,a-TFT Toluene-d8 4-BFB Lab Sample ID: 1010018-BS2 Matrix: Soil	% Recovery 99.9 96.1 94.5			75 - 125 50 - 150 75 - 125 75 - 125								Prep Prep Batch	Тур	e: tota
Dibromofluoromethane a,a,a-TFT Toluene-d8 4-BFB Lab Sample ID: 1010018-BS2 Matrix: Soil	% Recovery 99.9 96.1 94.5			75 - 125 50 - 150 75 - 125 75 - 125 Spike		LCS						Prep Prep Batch % Rec.	Тур	e: tota
Dibromofluoromethane a,a,a-TFT Toluene-d8 4-BFB Lab Sample ID: 1010018-BS2 Matrix: Soil Analysis Batch: T000456	% Recovery 99.9 96.1 94.5			75 - 125 50 - 150 75 - 125 75 - 125 Spike Added		Result	LCS Qualifier	Unit		D	% Rec	Prep Prep Batch % Rec. Limits	Тур	e: tota
Dibromofluoromethane a,a,a-TFT Toluene-d8 4-BFB Lab Sample ID: 1010018-BS2 Matrix: Soil Analysis Batch: T000456 Analyte	% Recovery 99.9 96.1 94.5			75 - 125 50 - 150 75 - 125 75 - 125 Spike				- Unit	wet			Prep Prep Batch % Rec.	Тур	e: tota
Dibromofluoromethane a,a,a-TFT Toluene-d8 4-BFB Lab Sample ID: 1010018-BS2 Matrix: Soil Analysis Batch: T000456 Analyte	% Recovery 99.9 96.1 94.5 101	LCS	lifier	75 - 125 50 - 150 75 - 125 75 - 125 Spike Added		Result			wet		% Rec	Prep Prep Batch % Rec. Limits	Тур	e: tota
Dibromofluoromethane a,a,a-TFT Toluene-d8 4-BFB Lab Sample ID: 1010018-BS2 Matrix: Soil Analysis Batch: T000456 Analyte Gasoline Range Organics	% Recovery 99.9 96.1 94.5 101	LCS	lifier	75 - 125 50 - 150 75 - 125 75 - 125 Spike Added		Result			wet		% Rec	Prep Prep Batch % Rec. Limits	Тур	e: tota
Dibromofluoromethane a,a,a-TFT Toluene-d8 4-BFB Lab Sample ID: 1010018-BS2 Matrix: Soil Analysis Batch: T000456 Analyte Gasoline Range Organics Surrogate	% Recovery 99.9 96.1 94.5 101	LCS	lifier	75 - 125 50 - 150 75 - 125 75 - 125 Spike Added 22.0		Result			wet		% Rec	Prep Prep Batch % Rec. Limits	Тур	e: tota
Dibromofluoromethane a,a,a-TFT Toluene-d8 4-BFB Lab Sample ID: 1010018-BS2 Matrix: Soil Analysis Batch: T000456 Analyte Gasoline Range Organics Surrogate Dibromofluoromethane	% Recovery 99.9 96.1 94.5 101 LCS % Recovery	LCS	lifier	75 - 125 50 - 150 75 - 125 75 - 125 Spike Added 22.0 Limits		Result			wet		% Rec	Prep Prep Batch % Rec. Limits	Тур	e: tota
Dibromofluoromethane a,a,a-TFT Toluene-d8 4-BFB Lab Sample ID: 1010018-BS2 Matrix: Soil Analysis Batch: T000456 Analyte Gasoline Range Organics Surrogate Dibromofluoromethane a,a,a-TFT	% Recovery 99.9 96.1 94.5 101 LCS % Recovery 98.5	LCS	lifier	75 - 125 50 - 150 75 - 125 75 - 125 Spike Added 22.0 <i>Limits</i> 75 - 125		Result			wet		% Rec	Prep Prep Batch % Rec. Limits	Тур	e: tota
Dibromofluoromethane a,a,a-TFT Toluene-d8 4-BFB Lab Sample ID: 1010018-BS2 Matrix: Soil Analysis Batch: T000456 Analyte Gasoline Range Organics Surrogate Dibromofluoromethane a,a,a-TFT Toluene-d8	% Recovery 99.9 96.1 94.5 101 LCS % Recovery 98.5 97.5	LCS	lifier	75 - 125 50 - 150 75 - 125 75 - 125 Spike Added 22.0 <i>Limits</i> 75 - 125 50 - 150		Result			wet		% Rec	Prep Prep Batch % Rec. Limits	Тур	e: tota
Dibromofluoromethane a,a,a-TFT Toluene-d8 4-BFB Lab Sample ID: 1010018-BS2 Matrix: Soil Analysis Batch: T000456 Analyte Gasoline Range Organics Surrogate Dibromofluoromethane a,a,a-TFT Toluene-d8 4-BFB	% Recovery 99.9 96.1 94.5 101 LCS % Recovery 98.5 97.5 94.0	LCS	lifier	75 - 125 50 - 150 75 - 125 75 - 125 Spike Added 22.0 <i>Limits</i> 75 - 125 50 - 150 75 - 125		Result			wet	<u>D</u>	% Rec 112	Prep Batch % Rec. Limits 60 - 120	• Typ : 100	e: tota)018_
Dibromofluoromethane a,a,a-TFT Toluene-d8 4-BFB Lab Sample ID: 1010018-BS2 Matrix: Soil Analysis Batch: T000456 Analyte Gasoline Range Organics Surrogate Dibromofluoromethane a,a,a-TFT Toluene-d8 4-BFB Lab Sample ID: 1010018-BSD1	% Recovery 99.9 96.1 94.5 101 LCS % Recovery 98.5 97.5 94.0	LCS	lifier	75 - 125 50 - 150 75 - 125 75 - 125 Spike Added 22.0 <i>Limits</i> 75 - 125 50 - 150 75 - 125		Result			wet	<u>D</u>	% Rec 112	Prep Batch % Rec. Limits 60 - 120	Typ: : 1010	e: tota)018_
Dibromofluoromethane a,a,a-TFT Toluene-d8 4-BFB Lab Sample ID: 1010018-BS2 Matrix: Soil Analysis Batch: T000456 Analyte Gasoline Range Organics Surrogate Dibromofluoromethane a,a,a-TFT Toluene-d8 4-BFB Lab Sample ID: 1010018-BSD1 Matrix: Soil	% Recovery 99.9 96.1 94.5 101 LCS % Recovery 98.5 97.5 94.0	LCS	lifier	75 - 125 50 - 150 75 - 125 75 - 125 Spike Added 22.0 <i>Limits</i> 75 - 125 50 - 150 75 - 125		Result			wet	<u>D</u>	% Rec 112	Prep Batch % Rec. Limits 60 - 120	10018	e: tota)018_
Dibromofluoromethane a,a,a-TFT Toluene-d8 4-BFB Lab Sample ID: 1010018-BS2 Matrix: Soil Analysis Batch: T000456 Analyte Gasoline Range Organics Surrogate Dibromofluoromethane a,a,a-TFT Toluene-d8 4-BFB Lab Sample ID: 1010018-BSD1 Matrix: Soil	% Recovery 99.9 96.1 94.5 101 LCS % Recovery 98.5 97.5 94.0	LCS	lifier	75 - 125 50 - 150 75 - 125 75 - 125 Spike Added 22.0 <i>Limits</i> 75 - 125 50 - 150 75 - 125 75 - 125		Result 24.6	Qualifier		wet	<u>D</u>	% Rec 112	Prep Batch % Rec. Limits 60 - 120	10018	e: tota)018_
Dibromofluoromethane a,a,a-TFT Toluene-d8 4-BFB Lab Sample ID: 1010018-BS2 Matrix: Soil Analysis Batch: T000456 Analyte Gasoline Range Organics Surrogate Dibromofluoromethane a,a,a-TFT Toluene-d8 4-BFB Lab Sample ID: 1010018-BSD1 Matrix: Soil Analysis Batch: T000456	% Recovery 99.9 96.1 94.5 101 LCS % Recovery 98.5 97.5 94.0	LCS	lifier	75 - 125 50 - 150 75 - 125 75 - 125 Spike Added 22.0 <i>Limits</i> 75 - 125 50 - 150 75 - 125 75 - 125		Result 24.6	Qualifier LCS Dup	mg/kg	wet	_ D	% Rec 112	Prep Batch % Rec. Limits 60 - 120	Typ : 1010 	e: tota)018_1 6-BSD e: tota)018_1 RPI
Dibromofluoromethane a,a,a-TFT Toluene-d8 4-BFB	% Recovery 99.9 96.1 94.5 101 LCS % Recovery 98.5 97.5 94.0	LCS	lifier	75 - 125 50 - 150 75 - 125 75 - 125 Spike Added 22.0 <i>Limits</i> 75 - 125 50 - 150 75 - 125 75 - 125		Result 24.6	Qualifier			<u>D</u>	% Rec 112	Prep Batch % Rec. Limits 60 - 120	10018	e: tota)018_I B-BSD e: tota

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

Lab Sample ID: 1010018-BSD1 Matrix: Soil							C	Client Sa	mple ID: 1 Pre	010018- p Type	
Analysis Batch: T000456									Prep Batc		
			Spike	LCS Dup	LCS Dup				% Rec.		RPD
Analyte			Added	Result	Qualifier	Unit	D	% Rec	Limits	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
	LCS Dup	LCS Dup									
Surrogate	% Recovery	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: 1010018-BSD2 Matrix: Soil							C	Client Sa	mple ID: 1 Pre	010018 р Туре	

Analysis Batch: T000456

Analysis Batch: T000456									Prep Batc	h: 1010	018_P
			Spike	LCS Dup	LCS Dup				% Rec.		RPD
Analyte			Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit
Gasoline Range Organics			22.0	23.1		mg/kg wet		105	60 - 120	5.88	20
	LCS Dup	LCS Dup									
Surrogate	% Recovery	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

Matrix: Soil

Analysis Batch: T000456

	Sample	Sample	Spike	Matrix Spike	Matrix Spil	ke			% Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	% 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

	Matrix Spike	Matrix Spike	
Surrogate	% Recovery	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 Matrix: Soil

Prep Type: total Analysis Batch: T000456 Prep Batch: 10I0018 P Sample Sample Spike Matrix Spike Dup Matrix Spike Dup % Rec. RPD Result Qualifier Analyte Result Qualifier Added Unit Limits RPD D % Rec Limit ₽ Benzene ND 0.267 0.306 mg/kg dry 114 60 - 140 3.75 25 ⇔ ND 0.267 Toluene 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 ND ₽ 0.802 0.905 mg/kg dry 113 60 - 140 3.45 25 Xylenes (total)

Client Sample ID: 10JUNAAOFB14S3

Client Sample ID: 10JUNAAOFB14S3

Prep Type: total Prep Batch: 10I0018 P

Toluene-d8

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

Lab Sample ID: 1010018-MSI Matrix: Soil	D1								Client Sample	ID: 10JUNAAO	
										Prep Ty	
Analysis Batch: T000456	Matrix Crike Dur	14-4-	iv Caika D							Prep Batch: 10	10018_P
	Matrix Spike Dup		-	-							
Surrogate	% Recovery	Qua	inier	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: 1010018-DUF	21								Client Sample	ID: 10JUNAAO	FB13S5
Matrix: Soil										Prep Ty	
Analysis Batch: T000456										Prep Batch: 10	
,,	Sample	Sam	ple		C	uplicate	Duplicate				RPD
Analyte	Result	Qual	ifier			Result	Qualifier	Unit	D	RPD) Limit
Gasoline Range Organics	ND					ND		mg/kg dry	, <u> </u>		35
	Duplicate	Dup	licate								
Surrogate	% Recovery	Qua	lifier	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: 1010020-BLK	(1								Client Sa	mple ID: 101002	0-BLK1
Matrix: Water										Prep Ty	be: tota
Analysis Batch: T000456										Prep Batch: 10	10020_P
	В	lank	Blank								
Analyte	Re		Qualifier		RL	М	DL	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
	В	lank	Blank								
Surrogate	% Reco	very	Qualifier	Lin	nits				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: 1010020-BS1									Client S	ample ID: 10100)20-BS1
Matrix: Water										Prep Ty	be: total
Analysis Batch: T000456										Prep Batch: 10	10020_P
				Spike		LCS	LCS			% Rec.	
Analyte				Added		Result	Qualifier	Unit	D % 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	
	LCS	LCS									
Surrogate	% Recovery	Qua	lifier	Limits							
4-BFB	94.0			85 - 115							
Dibromofluoromethane	99.7	C4		65 - 125							

78 - 115

96.1

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

Lab Sample ID: 1010020-BS2								Client S	ample ID: 10	010020-BS2
Matrix: Water									Prep	Type: tota
Analysis Batch: T000456									Prep Batch:	1010020_F
			Spike	LCS	LCS				% Rec.	
Analyte			Added	Result	Qualifier	Unit	D	% Rec	Limits	
Gasoline Range Organics			550	425		ug/l		77.2	60 - 120	
	LCS	LCS								
Surrogate	% Recovery	Qualifier	Limits							
4-BFB	106		85 - 115							
Dibromofluoromethane	104	C4	65 - 125							
Toluene-d8	98.2		78 - 115							

Lab Sample ID: 1010020-BSD1 **Matrix: Water**

Analysis Batch: T000456							Prep Batc	h: 1010	020_P
	Spike	LCS Dup	LCS Dup				% Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	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

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

Lab Sample ID: 1010020-BSD2

Matrix: Water

Analysis Batch: T000456

Analysis Datch. 1000400									ттер Бас	11. 1010	020_1
			Spike	LCS Dup	LCS Dup				% Rec.		RPD
Analyte			Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit
Gasoline Range Organics			550	415		ug/l		75.4	60 - 120	2.39	20
	LCS Dup	LCS Dup									
Surrogate	% Recovery	Qualifier	Limits								
4-BFB	94.2		85 - 115								
Dibromofluoromethane	98.3	C4	65 - 125								
Toluene-d8	93.3		78 - 115								

Lab Sample ID: 1010020-MS1 Matrix: Water Analysis Batch: T000456

Analysis Balch. 1000450									Fiep Balch	. 1010020_P
	Sample	Sample	Spike	Matrix Spike	Matrix Spil	ke			% Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	% 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	

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

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

Client Sample ID: 1010020-BSD2 Prep Type: total Prep Batch: 1010020 P

Client Sample ID: ATH0090-03
Pron Type: total

Prep Type: total Prep Batch: 1010020 P

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6 7 8

13

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

Lab Sample ID: 1010020-MSD1											Client	Sample ID: /		
Matrix: Water														e: total
Analysis Batch: T000456	<u> </u>	~		.				_				Prep Batch	: 1010	
	Sample		•		Matrix	• •	Matrix Spik			_		% Rec.		RPD
Analyte	Result	Qua	lifier	Added			Qualifier	Unit		D	% Rec	Limits	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
	atrix Spike Dup													
Surrogate	% Recovery	Qua	lifier	Limits										
4-BFB	94.1			85 - 115										
Dibromofluoromethane	13.4	Z6, (C4	65 - 125										
Toluene-d8	92.1			78 - 115										
Lab Sample ID: 1010020-DUP1											Client	Sample ID: /	АТНО	090-01
Matrix: Water														e: total
Analysis Batch: T000456												Prep Batch		
	Sample	Sam	ple			Duplicate	Duplicate							RPD
Analyte	Result		•				Qualifier	Unit		D			RPD	Limit
Gasoline Range Organics	354					317		ug/l					10.8	12
	Duplicate	Dup	licate					•						
Surrogate	% Recovery	-		Limits										
4-BFB	92.8			85 - 115										
Dibromofluoromethane	1.42	Z6. (C4	65 - 125										
Toluene-d8	91.5			78 - 115										
-														
Lab Sample ID: 1010034-BLK1										C	client Sa	ample ID: 10		
Matrix: Soil														e: total
Analysis Batch: T000464	_											Prep Batch	: 1010	034_P
			Blank											
Analyte	R	esult	Qualifier		RL	М	DL	Unit	D		Prepared			Dil Fac
Gasoline Range Organics		ND			3.33		-	/kg wet			8/10 11:40			33.3
Benzene		ND			0.0133		-	/kg wet			8/10 11:40			33.3
Toluene		ND			0.0333			/kg wet			8/10 11:40			33.3
Ethylbenzene		ND			0.0333			/kg wet			8/10 11:40			33.3
Xylenes (total)		ND			0.0500		mg	/kg wet		09/08	8/10 11:40	09/08/10 14	1:20	33.3
	E	Blank	Blank											
Surrogate	% Reco	-	Qualifier		nits						Prepared			Dil Fac
		1.0.0		75	105					00/00	3/10 11:40	09/08/10 14	1.20	33.3
Dibromofluoromethane		102		75	- 125					09/00	»10 11.40	09/06/10 14	4.20	00.0

Lab Sample ID: 1010034-BS1 Matrix: Soil

Toluene-d8

4-BFB

Analysis Batch: T000464 Prep Batch: 10I0034_P Spike LCS LCS % Rec. Added Result Qualifier % Rec Analyte Limits Unit D 0.800 Benzene 0.902 mg/kg wet 113 70 - 130 0.800 0.766 70 - 130 Toluene mg/kg wet 95.7 Ethylbenzene 0.800 0.719 70 - 130 mg/kg wet 89.8 2.40 70 - 130 Xylenes (total) 2.15 mg/kg wet 89.8

75 - 125

75 - 125

84.3

95.7

33.3

33.3

09/08/10 11:40

09/08/10 11:40

09/08/10 14:20

09/08/10 14:20

Client Sample ID: 10I0034-BS1

Prep Type: total

4-BFB

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

Lab Sample ID: 1010034-BS1 Matrix: Soil Analysis Batch: T000464								Client		ер Туре	: tota
Analysis Batch: 1000464	105	LCS							Prep Bato	:n: 1010	U34_F
Surrogate	% Recovery		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: 1010034-BS2								Client	Sample ID:	: 101003	4-BS
Matrix: Soil										ер Туре	
Analysis Batch: T000464									Prep Bato		
			Spike	LCS	LCS				% Rec.		
Analyte			Added	Result	Qualifier	Unit	D	% Rec	Limits		
Gasoline Range Organics			22.0	25.0		mg/kg wet		114	60 - 120		
	LCS	LCS									
Surrogate	% Recovery	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								liont S:	ample ID: 1	1010034	-BSD
Matrix: Soil										ep Type	
Analysis Batch: T000464									Prep Bato		
Analysis Batch. 1000404			Spike	LCS Dup	LCS Dup				% Rec.	,	RPI
Analyte			Added	-	Qualifier	Unit	D	% Rec	Limits	RPD	Limi
Benzene			0.800	0.913		mg/kg wet		114	70 - 130	1.28	2
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	2
		LCS Dup	2.10	2.20		ing/itg iter		01.0	10 100	1.00	20
Surrogate	% Recovery	-	Limits								
Dibromofluoromethane	104	Quanner	75 - 125								
a.a.a-TFT	104		50 - 150								
Toluene-d8	87.4		75 - 125								
4-BFB	95.9		75 - 125 75 - 125								
Lab Sample ID: 1010034-BSD2								Client S	ample ID: 1	1010024	Rep
Matrix: Soil								Sherit Ge		ep Type	
Analysis Batch: T000464									Prep Bato		
Analysis Datch. 1000404			Spike	LCS Dup	LCS Dup				% Rec.	,	RPI
Analyte			Added	-	Qualifier	Unit	D	% Rec	Limits	RPD	Limi
Gasoline Range Organics			22.0	24.3		mg/kg wet		111	60 - 120	2.73	2
	LCS Dun	LCS Dup	22.0	21.0						2.70	20
Surrogate	% Recovery	-	Limits								
Dibromofluoromethane	106		75 - 125								
a,a,a-TFT	100		50 - 150								
Toluene-d8	85.0		50 - 150 75 - 125								
	05.0		10-120								

75 - 125

93.8

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

Lab Sample ID: 1010034-MS1 Matrix: Soil								Client	Sample ID:		
									Prep Batc	p Type	
Analysis Batch: T000464	Sample	Sample	Spike	Matrix Spike	Matrix Snik	ē			% Rec.	1. 1010	U34_F
Analyte	-	Qualifier	Added	-	Qualifier	Unit	D	% Rec	Limits		
Benzene	ND		0.574	0.915		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		
		Matrix Spike		2.10		ing/itg ury		120	00 110		
Surrogate	% Recovery	=	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								
	00.0		10 120								
Lab Sample ID: 1010034-MSD	1							Client	Sample ID:	ATHO)82-05
Matrix: Soil	-									р Туре	
Analysis Batch: T000464									Prep Batc		
,, ,	Sample	Sample	Spike	Matrix Spike Dup	Matrix Spik	e Dup			% Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limi
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
Л	Aatrix Spike Dup	Matrix Spike I	Dup								
Surrogate	% Recovery	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: 1010034-DUP	1							Client	Sample ID:	ATH00)82-05
Matrix: Soil									Pre	р Туре	: tota
Analysis Batch: T000464									Prep Batc	h: 1010	034_F
	Sample	Sample		Duplicate	Duplicate						RPD
Analyte	Result	Qualifier		Result	Qualifier	Unit	D			RPD	Limi
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
	Duplicate	Duplicate									
Surrogate	% Recovery	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						Client Sam	ple ID: 10H015 Prep Typ	
Analysis Batch: 10H0157						Р	rep Batch: 10H	
		Blank						
Analyte		Qualifier	RL	MDL	Unit D	·	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

	Blank	Blank				
Surrogate	% Recovery	Qualifier	Limits	Prepare	d Analyzed	Dil Fac
Nitrobenzene-d5	85.9		30 - 150	08/31/10 09:4	3 08/31/10 15:12	1
2-FBP	104		21 - 122	08/31/10 09:4	3 08/31/10 15:12	1
p-Terphenyl-d14	97.1		35 - 150	08/31/10 09:4	3 08/31/10 15:12	1

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

Analysis Baton. Terrerer							Top Batom 1	
	Spike	LCS	LCS				% Rec.	
Analyte	Added	Result	Qualifier	Unit	D	% 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	

	LCS	LCS	
Surrogate	% Recovery	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 Prep Batch: 10H0157_P Spike LCS Dup LCS Dup % Rec. RPD Analyte Added Result Qualifier Unit Limits RPD Limit D % Rec Naphthalene 2.00 1.74 ug/l 86.8 40 - 130 3.12 30 40 - 120 Fluorene 2.00 1.84 ug/l 92.0 4.26 30 2.00 92.8 40 - 120 6.01 Chrysene 1.86 ug/l 30 Indeno (1,2,3-cd) pyrene 2.00 2.02 101 40 - 120 7.18 30 ug/l

Client Sample ID: 10H0157-BS1

Client Sample ID: 10H0157-BSD1

Prep Type: total

Prep Type: total Prep Batch: 10H0157 P

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Method: EPA 8270 mod. - Polynuclear Aromatic Compounds by GC/MS with Selected Ion **Monitoring (Continued)** Lab Sample ID: 10H0157-BSD1 Client Sample ID: 10H0157-BSD1 Matrix: Water Prep Type: total Analysis Batch: 10H0157 Prep Batch: 10H0157_P LCS Dup LCS Dup % Recovery Qualifier Limits Surrogate Nitrobenzene-d5 74.4 30 - 150 2-FBP 97.7 21 - 122 p-Terphenyl-d14 87.8 35 - 150 Lab Sample ID: 10I0015-BLK1 Client Sample ID: 10I0015-BLK1 Matrix: Soil Prep Type: total Prep Batch: 10I0015_P Analysis Batch: 1010015 ac 1 1 1 1 1 1

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

Surrogate	% Recovery	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: 1010015-BS1

Matrix: Soil

Analysis Batch: 1010015

	Spike	LCS	LCS				% Rec.
Analyte	Added	Result	Qualifier	Unit	D	% 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

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

Client Sample ID: 1010015-BS1 Prep Type: total

Prep Batch: 10I0015_P

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p-Terphenyl-d14

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

Lab Sample ID: 1010015-MS1 Matrix: Soil										IAAOFI p Type	
Analysis Batch: 1010015									Prep Batc		
	Sample	Sample	Spike	Matrix Spike	Matrix Spik	e			% Rec.		_
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	% 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		
	Matrix Spike	Matrix Spike									
Surrogate	% Recovery	Qualifier	Limits								
Nitrobenzene-d5	36.0		30 - 140								
			00 440								
2-FBP	72.0		30 - 140								
p-Terphenyl-d14	100		30 - 140 30 - 150								
p-Terphenyl-d14 Lab Sample ID: 10l0015-MSI Matrix: Soil	100					с	lient	Sample		ер Туре	: total
p-Terphenyl-d14 Lab Sample ID: 10I0015-MSI Matrix: Soil	100 D1	Sample	30 - 150	Matrix Spike Dup	Matrix Spik		lient	Sample		ер Туре	: total 015_P
p-Terphenyl-d14 Lab Sample ID: 10I0015-MSI Matrix: Soil Analysis Batch: 10I0015	100 D1 Sample	Sample Qualifier	30 - 150	Matrix Spike Dup Result	Matrix Spik Qualifier		lient	Sample % Rec	Pre Prep Batc	ер Туре	: total 015_P _{RPD}
p-Terphenyl-d14 Lab Sample ID: 10I0015-MSI Matrix: Soil Analysis Batch: 10I0015 Analyte	100 D1 Sample	•	30 - 150 Spike M			e Dup			Prep Prep Batc % Rec.	ep Type h: 1010	total 015_P RPD Limit
p-Terphenyl-d14 Lab Sample ID: 1010015-MSI Matrix: Soil Analysis Batch: 1010015 Analyte Naphthalene	100 D1 Sample Result	•	30 - 150 Spike M Added	Result		e Dup Unit	D	% Rec	Pre Prep Batc % Rec. Limits	ep Type h: 1010 RPD	total 015_P RPD Limit
p-Terphenyl-d14 Lab Sample ID: 1010015-MSI Matrix: Soil Analysis Batch: 1010015 Analyte Naphthalene Fluorene	100 D1 	•	30 - 150 Spike M Added 0.142	Result 0.0995		te Dup Unit mg/kg dry	- D	% Rec 70.0	Prep Batc % Rec. Limits 30 - 120	ep Type h: 1010 RPD 15.4	: total 015_P RPD Limit 35 35
p-Terphenyl-d14 Lab Sample ID: 1010015-MSI Matrix: Soil Analysis Batch: 1010015 Analyte Naphthalene Fluorene Chrysene	D1 Sample Result ND ND	•	30 - 150 Spike M Added 0.142 0.142	Result 0.0995 0.128		e Dup Unit mg/kg dry mg/kg dry	- D	% Rec 70.0 90.0	Prep Batc % Rec. Limits 30 - 120 30 - 140	RPD 15.4 0.00	: total
p-Terphenyl-d14 Lab Sample ID: 1010015-MSI Matrix: Soil Analysis Batch: 1010015 Analyte Naphthalene Fluorene Chrysene Indeno (1,2,3-cd) pyrene	D1 Sample Result ND ND ND	Qualifier	30 - 150 Spike M Added 0.142 0.142 0.142 0.142	Result 0.0995 0.128 0.142		e Dup Unit mg/kg dry mg/kg dry mg/kg dry	- D *	% Rec 70.0 90.0 100	Prep Batc % Rec. Limits 30 - 120 30 - 140 30 - 133	RPD 15.4 0.00 0.00	: total 015_P RPD Limit 35 35 35
Lab Sample ID: 1010015-MSI Matrix: Soil Analysis Batch: 1010015 Analyte Naphthalene Fluorene Chrysene Indeno (1,2,3-cd) pyrene	D1 Sample Result ND ND ND	Qualifier Matrix Spike D	30 - 150 Spike M Added 0.142 0.142 0.142 0.142	Result 0.0995 0.128 0.142		e Dup Unit mg/kg dry mg/kg dry mg/kg dry	- D *	% Rec 70.0 90.0 100	Prep Batc % Rec. Limits 30 - 120 30 - 140 30 - 133	RPD 15.4 0.00 0.00	: total 015_P RPD Limit 35 35 35
p-Terphenyl-d14 Lab Sample ID: 1010015-MSI Matrix: Soil Analysis Batch: 1010015 Analyte Naphthalene Fluorene Chrysene Indeno (1,2,3-cd) pyrene	D1 Sample Result ND ND ND Matrix Spike Dup	Qualifier Matrix Spike D	30 - 150 Spike M Added 0.142 0.142 0.142 0.142 0.142 0.142 0.142	Result 0.0995 0.128 0.142		e Dup Unit mg/kg dry mg/kg dry mg/kg dry	- D *	% Rec 70.0 90.0 100	Prep Batc % Rec. Limits 30 - 120 30 - 140 30 - 133	RPD 15.4 0.00 0.00	: total 015_P RPD Limit 35 35 35

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

30 - 150

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Lab Sample ID: 10H0123-BLK1								C	lient Sar	nple ID: 10H012	
Matrix: Water										Prep Ty	
Analysis Batch: T000446	Blank	Blank								Prep Batch: 10H	10123_P
Analyte		Qualifier	RL	м	DL	Unit	п		Prepared	Analyzed	Dil Fac
Diesel Range Organics			0.500			mg/l		08/30	0/10 14:08		1
Residual Range Organics	ND		0.500			mg/l			0/10 14:08		1
	Blank	Blank									
Surrogate	% Recovery	Qualifier	Limits						Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	90.5		50 - 150				-	08/30	0/10 14:08	08/31/10 11:29	1
Triacontane	100		50 - 150					08/30	0/10 14:08	08/31/10 11:29	1
Lab Sample ID: 10H0123-BS1									Client Sa	ample ID: 10H01	23-BS1
Matrix: Water										Prep Ty	be: total
Analysis Batch: T000446									F	Prep Batch: 10H	10123 P
-			Spike	LCS	LCS					% Rec.	
Analyte			Added	Result	Qualifier	Unit		D	% 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	

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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											ample ID: 1 Pre _l Prep Batch	о Туре	: total
	LCS	LCS											_
Surrogate	% Recovery	Qua	lifier	Limits									
1-Chlorooctadecane	100			60 - 120									
Triacontane	106			60 - 120									
Lab Sample ID: 10H0123-BSD1									C	liont Son	nnia ID: 10	10122	
Matrix: Water										lient San	nple ID: 10		: total
Analysis Batch: T000446											Prep Batch		
Analysis Batch. 1000440				Spike	ιc	S Dun	LCS Dup				% Rec.		RPD
Analyte				Added		-	Qualifier	Unit	D	% Rec	Limits	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
	LCS Dup	105	Dun	10.0		0.01		iiig/i		00.0	00 120	0.7 1	20
Surrogate	% Recovery			Limits									
1-Chlorooctadecane	101	Qua		60 - 120									
Triacontane	101			60 - 120									
	105			00-120									
Lab Sample ID: 10H0123-DUP1										Client S	Sample ID:	ΔΤΗΟ	164-02
Matrix: Water										onente			: total
Analysis Batch: T000445											Prep Batch		
Analysis Datch. 1000440	Sample	Sam	nle		Du	plicate	Duplicate				Tep Daten	. 10110	RPD
Analyte	Result				24	-	Qualifier	Unit	D			RPD	Limit
Diesel Range Organics	0.0735					0.0818		mg/l				10.7	20
Residual Range Organics	ND					ND		mg/l				10.1	50
	Duplicate	Dun	licato			ne.		iiig/i					00
Surrogate	% Recovery	-		Limits									
1-Chlorooctadecane	83.7	Quu		50 - 150									
1 Onioi ocoladobano	00.7			00 100									
Triacontane	94 0			50 - 150									
Triacontane	94.0			50 - 150									
-	94.0			50 - 150					c	Client Sa	mple ID: 10	010008	-BLK1
Triacontane Lab Sample ID: 1010008-BLK1 Matrix: Soil	94.0			50 - 150					C	Client Sa	mple ID: 10 Pre		
Lab Sample ID: 10I0008-BLK1 Matrix: Soil	94.0			50 - 150					C		Pre	р Туре	: total
Lab Sample ID: 1010008-BLK1		lank	Blank	50 - 150					C			р Туре	: total
Lab Sample ID: 10I0008-BLK1 Matrix: Soil	Е		Blank Qualifier	50 - 150	RL	м	DL	Unit D	C		Pre	o Type n: 1010	: total
Lab Sample ID: 10I0008-BLK1 Matrix: Soil Analysis Batch: T000452	Е			50 - 150	RL	м		Unit D			Prep Prep Batcl	o Type n: 1010 yzed	e: total 008_P
Lab Sample ID: 1010008-BLK1 Matrix: Soil Analysis Batch: T000452 Analyte Diesel Range Organics	Е	esult ND		50 - 150	20.0	M	mg	/kg wet	09/02	Prepared 2/10 08:44	Prep Batch Prep Batch Anal 09/02/10 1	7 Type 1010 yzed 9:02	e: total 008_P Dil Fac
Lab Sample ID: 10I0008-BLK1 Matrix: Soil Analysis Batch: T000452 Analyte	E R	ND ND	Qualifier	50 - 150		M	mg		09/02	Prepared	Prep Batch Prep Batch Anal 09/02/10 1	7 Type 1010 yzed 9:02	e: total 008_P Dil Fac
Lab Sample ID: 1010008-BLK1 Matrix: Soil Analysis Batch: T000452 Analyte Diesel Range Organics Residual Range Organics	E R E	ND ND ND	Qualifier Blank		20.0 50.0	M	mg	/kg wet	09/02	Prepared 2/10 08:44 2/10 08:44	Prep Batcl Anal 09/02/10 1 09/02/10 1	yzed 9:02 9:02	bil Fac 1
Lab Sample ID: 1010008-BLK1 Matrix: Soil Analysis Batch: T000452 Analyte Diesel Range Organics Residual Range Organics Surrogate	E R E	ND ND ND Blank	Qualifier		20.0 50.0 its	M	mg	/kg wet	09/02	Prepared 2/10 08:44 2/10 08:44 Prepared	Prep Batcl Anal 09/02/10 1 09/02/10 1 Anal	yzed 9:02 9:02 yzed	e: total 008_P Dil Fac 1 1 Dil Fac
Lab Sample ID: 1010008-BLK1 Matrix: Soil Analysis Batch: T000452 Analyte Diesel Range Organics Residual Range Organics	E R E	ND ND ND Blank overy 87.3	Qualifier Blank	 	20.0 50.0 <i>its</i> 150	M	mg	/kg wet	09/02 09/02 09/02	Prepared 2/10 08:44 2/10 08:44 Prepared 2/10 08:44	Prep Batcl Prep Batcl 09/02/10 1 09/02/10 1 Anal 09/02/10 1	yzed 9:02 yzed 9:02 yzed 9:02	bil Fac 1
Lab Sample ID: 1010008-BLK1 Matrix: Soil Analysis Batch: T000452 Analyte Diesel Range Organics Residual Range Organics Surrogate	E R E	ND ND ND Blank	Qualifier Blank	 	20.0 50.0 its	M	mg	/kg wet	09/02 09/02 09/02	Prepared 2/10 08:44 2/10 08:44 Prepared	Prep Batcl Anal 09/02/10 1 09/02/10 1 <i>Anal</i> 09/02/10 1	yzed 9:02 yzed 9:02 yzed 9:02	e: total 008_P Dil Fac 1 1 Dil Fac
Lab Sample ID: 1010008-BLK1 Matrix: Soil Analysis Batch: T000452 Analyte Diesel Range Organics Residual Range Organics Surrogate 1-Chlorooctadecane Triacontane	E R E	ND ND ND Blank overy 87.3	Qualifier Blank	 	20.0 50.0 <i>its</i> 150	M	mg	/kg wet	09/02 09/02 09/02	Prepared 2/10 08:44 2/10 08:44 Prepared 2/10 08:44 2/10 08:44	Prep Batcl Prep Batcl 09/02/10 1 09/02/10 1 Anal 09/02/10 1 09/02/10 1	yzed 9:02 - 9:02 yzed 9:02 - 9:02 9:02 - 9:02	2: total 008_P Dil Fac 1 1 1 <i>Dil Fac</i> 1 1
Lab Sample ID: 1010008-BLK1 Matrix: Soil Analysis Batch: T000452 Analyte Diesel Range Organics Residual Range Organics Surrogate 1-Chlorooctadecane Triacontane Lab Sample ID: 1010008-BS1	E R E	ND ND ND Blank overy 87.3	Qualifier Blank	 	20.0 50.0 <i>its</i> 150	M	mg	/kg wet	09/02 09/02 09/02	Prepared 2/10 08:44 2/10 08:44 Prepared 2/10 08:44 2/10 08:44	Prep Batcl Prep Batcl 09/02/10 1 09/02/10 1 Anal 09/02/10 1 09/02/10 1 Gample ID:	yzed 9:02 - 9:02 - 9:02 - 9:02 - 9:02 - 9:02 - 9:02 -	:: total 008_P Dil Fac 1 1 1 <i>Dil Fac</i> 1 8-BS1
Lab Sample ID: 1010008-BLK1 Matrix: Soil Analysis Batch: T000452 Analyte Diesel Range Organics Residual Range Organics Surrogate 1-Chlorooctadecane Triacontane Lab Sample ID: 1010008-BS1 Matrix: Soil	E R E	ND ND ND Blank overy 87.3	Qualifier Blank	 	20.0 50.0 <i>its</i> 150	M	mg	/kg wet	09/02 09/02 09/02	Prepared 2/10 08:44 2/10 08:44 2/10 08:44 2/10 08:44 2/10 08:44 Client S	Prep Batch Prep Batch 09/02/10 1 09/02/10 1 Anal 09/02/10 1 09/02/10 1 Sample ID: Pre	yzed 9:02 - 9:02 - 9:02 - 9:02 - 9:02 - 9:02 - 1010000 po Type	:: total 008_P Dil Fac 1 1 1 <i>Dil Fac</i> 1 1 8-BS1 :: total
Lab Sample ID: 1010008-BLK1 Matrix: Soil Analysis Batch: T000452 Analyte Diesel Range Organics Residual Range Organics Surrogate 1-Chlorooctadecane Triacontane Lab Sample ID: 1010008-BS1	E R E	ND ND ND Blank overy 87.3	Qualifier Blank	Lim 50 - 50 -	20.0 50.0 <i>its</i> 150		mg mg	/kg wet	09/02 09/02 09/02	Prepared 2/10 08:44 2/10 08:44 2/10 08:44 2/10 08:44 2/10 08:44 Client S	Prep Batcl Anal 09/02/10 1 09/02/10 1 09/02/10 1 Anal 09/02/10 1 Sample ID: Prep Prep Batcl	yzed 9:02 - 9:02 - 9:02 - 9:02 - 9:02 - 9:02 - 1010000 po Type	:: total 008_P Dil Fac 1 1 1 <i>Dil Fac</i> 1 1 8-BS1 :: total
Lab Sample ID: 1010008-BLK1 Matrix: Soil Analysis Batch: T000452 Analyte Diesel Range Organics Residual Range Organics Surrogate 1-Chlorooctadecane Triacontane Lab Sample ID: 1010008-BS1 Matrix: Soil Analysis Batch: T000452	E R E	ND ND ND Blank overy 87.3	Qualifier Blank	<u>Lim</u> 50 - 50 - 50 -	20.0 50.0 <i>its</i> 150 150	LCS	LCS	J/kg wet	09/02 09/02 09/02	Prepared 2/10 08:44 2/10 08:44 2/10 08:44 2/10 08:44 2/10 08:44 Client S	Prep Batch Prep Batch 09/02/10 1 09/02/10 1 09/02/10 1 09/02/10 1 Sample ID: Prep Batch % Rec.	yzed 9:02 - 9:02 - 9:02 - 9:02 - 9:02 - 9:02 - 1010000 po Type	:: total 008_P Dil Fac 1 1 1 <i>Dil Fac</i> 1 1 8-BS1 :: total
Lab Sample ID: 1010008-BLK1 Matrix: Soil Analysis Batch: T000452 Analyte Diesel Range Organics Residual Range Organics Surrogate 1-Chlorooctadecane Triacontane Lab Sample ID: 1010008-BS1 Matrix: Soil Analysis Batch: T000452 Analyte	E R E	ND ND ND Blank overy 87.3	Qualifier Blank	 	20.0 50.0 <i>its</i> 150 150	LCS Result	mg mg	J/kg wet /kg wet	09/02 09/02 09/02	Prepared 2/10 08:44 2/10 08:44 2/10 08:44 2/10 08:44 2/10 08:44 Client S % Rec	Prep Batch Analy 09/02/10 1 09/02/10 1 09/02/10 1 09/02/10 1 6ample ID: Prep Batch % Rec. Limits	yzed 9:02 - 9:02 - 9:02 - 9:02 - 9:02 - 9:02 - 1010000 po Type	:: total 008_P Dil Fac 1 1 1 <i>Dil Fac</i> 1 1 8-BS1 :: total
Lab Sample ID: 1010008-BLK1 Matrix: Soil Analysis Batch: T000452 Analyte Diesel Range Organics Residual Range Organics Surrogate 1-Chlorooctadecane Triacontane Lab Sample ID: 1010008-BS1 Matrix: Soil Analysis Batch: T000452 Analyte Diesel Range Organics	E R E	ND ND ND Blank overy 87.3	Qualifier Blank		20.0 50.0 <i>its</i> 150 150	LCS Result 149	LCS	/kg wet y/kg wet <u>Unit</u> mg/kg wet	09/02 09/02 09/02	Prepared 2/10 08:44 2/10 08:44 Prepared 2/10 2/10 08:44 2/10 08:44 Client S	Prep Batcl Analy 09/02/10 1 09/02/10 1 09/02/10 1 09/02/10 1 09/02/10 1 Sample ID: Prep Batcl % Rec. Limits 75 - 125	yzed 9:02 - 9:02 - 9:02 - 9:02 - 9:02 - 9:02 - 1010000 po Type	:: total 008_P Dil Fac 1 1 1 <i>Dil Fac</i> 1 1 8-BS1 :: total
Lab Sample ID: 1010008-BLK1 Matrix: Soil Analysis Batch: T000452 Analyte Diesel Range Organics Residual Range Organics Surrogate 1-Chlorooctadecane Triacontane Lab Sample ID: 1010008-BS1 Matrix: Soil Analysis Batch: T000452 Analyte	E E 	esult ND ND Blank vvery 87.3 87.3	Qualifier Blank Qualifier	 	20.0 50.0 <i>its</i> 150 150	LCS Result	LCS	J/kg wet /kg wet	09/02 09/02 09/02	Prepared 2/10 08:44 2/10 08:44 2/10 08:44 2/10 08:44 2/10 08:44 Client S % Rec	Prep Batch Analy 09/02/10 1 09/02/10 1 09/02/10 1 09/02/10 1 6ample ID: Prep Batch % Rec. Limits	yzed 9:02 - 9:02 - 9:02 - 9:02 - 9:02 - 9:02 - 1010000 po Type	:: total 008_P Dil Fac 1 1 1 <i>Dil Fac</i> 1 1 8-BS1 :: total
Lab Sample ID: 1010008-BLK1 Matrix: Soil Analysis Batch: T000452 Analyte Diesel Range Organics Residual Range Organics Surrogate 1-Chlorooctadecane Triacontane Lab Sample ID: 1010008-BS1 Matrix: Soil Analysis Batch: T000452 Analyte Diesel Range Organics	E R E	esult ND ND Blank vvery 87.3 87.3 87.3	Qualifier Blank Qualifier		20.0 50.0 <i>its</i> 150 150	LCS Result 149	LCS	/kg wet y/kg wet <u>Unit</u> mg/kg wet	09/02 09/02 09/02	Prepared 2/10 08:44 2/10 08:44 Prepared 2/10 2/10 08:44 2/10 08:44 Client S	Prep Batcl Analy 09/02/10 1 09/02/10 1 09/02/10 1 09/02/10 1 09/02/10 1 Sample ID: Prep Batcl % Rec. Limits 75 - 125	yzed 9:02 - 9:02 - 9:02 - 9:02 - 9:02 - 9:02 - 1010000 po Type	:: total 008_P Dil Fac 1 1 1 <i>Dil Fac</i> 1 1 8-BS1 :: total

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

Lab Sample ID: 1010008-BS1								Client \$	Sample ID:	101000	8- <mark>BS</mark> 1
Matrix: Soil									Pre	ер Туре	: tota
Analysis Batch: T000452									Prep Batc	h: 1010	008_F
-	LCS	LCS									
Surrogate	% Recovery	Qualifier	Limits								
Triacontane	89.7		60 - 120								
Lab Sample ID: 1010008-BSD1							C	client Sa	ample ID: 1		
Matrix: Soil										ер Туре	
Analysis Batch: T000452			Cuilta						Prep Batc % Rec.	n: 10100	008_P RPD
Analyte			Spike Added	-	LCS Dup Qualifier	Unit	D	% Rec	Limits	RPD	Limit
Diesel Range Organics			139	148		mg/kg wet		106	75 - 125	1.17	20
Residual Range Organics			139	148		mg/kg wet		95.1	60 - 120	1.17	20
Residual Range Organics		LCS Dup	129	122		mg/kg wet		90.1	00 - 120	1.11	20
Surrogata	% Recovery		Limits								
Surrogate 1-Chlorooctadecane	92.8	Quaimer	60 - 120								
	92.0 88.9		60 - 120								
Triacontane	00.9		00 - 120								
Lab Sample ID: 1010008-MS1								Client	Sample ID:	АТНОО	172-22
Matrix: Soil								Client		p Type	
Analysis Batch: T000452									Prep Batc		
Analysis Batch. 1000452	Sample	Sample	Spike	Matrix Spike	Matrix Spik	e			% Rec.	11. 10100	000_F
Analyte	-	Qualifier	Added	-	Qualifier	Unit	D	% Rec	Limits		
Diesel Range Organics	ND		153	174		mg/kg dry	- <u>-</u>	114	75 - 125		
Residual Range Organics	ND		142	147		mg/kg dry	¢	103	60 - 120		
	Matrix Spike	Matrix Spike									
Surrogate	-	Matrix Spike Qualifier	Limits								
Surrogate	Matrix Spike % Recovery 97.1	=	Limits 50 - 150								
	% Recovery	=									
1-Chlorooctadecane	% Recovery 97.1	=	50 - 150								
1-Chlorooctadecane	% Recovery 97.1	=	50 - 150					Client	Sample ID:	ATH00	072-22
1-Chlorooctadecane Triacontane	% Recovery 97.1	=	50 - 150					Client		ATH00 p Type	
1-Chlorooctadecane Triacontane Lab Sample ID: 1010008-MSD1	% Recovery 97.1	=	50 - 150					Client		ер Туре	: total
1-Chlorooctadecane Triacontane Lab Sample ID: 1010008-MSD1 Matrix: Soil	% Recovery 97.1 93.6	=	50 - 150 50 - 150	Matrix Spike Dup	Matrix Spik	e Dup		Client	Pre	ер Туре	: total
1-Chlorooctadecane Triacontane Lab Sample ID: 1010008-MSD1 Matrix: Soil	% Recovery 97.1 93.6 Sample	Qualifier _	50 - 150 50 - 150		Matrix Spik Qualifier	e Dup Unit	D	Client % Rec	Pre Prep Batc	ер Туре	: total 008_P
1-Chlorooctadecane Triacontane Lab Sample ID: 1010008-MSD1 Matrix: Soil Analysis Batch: T000452	% Recovery 97.1 93.6 Sample	Qualifier	50 - 150 50 - 150 Spike		-	-	- D		Prep Batc % Rec.	ep Type h: 10100	: total 008_P RPD
1-Chlorooctadecane Triacontane Lab Sample ID: 1010008-MSD1 Matrix: Soil Analysis Batch: T000452 Analyte	% Recovery 97.1 93.6 Sample Result	Qualifier	50 - 150 50 - 150 Spike Added	Result	-	Unit		% Rec	Pre Prep Batc % Rec. Limits	ep Type h: 10100 	: total 008_P RPD Limit
1-Chlorooctadecane Triacontane Lab Sample ID: 1010008-MSD1 Matrix: Soil Analysis Batch: T000452 Analyte Diesel Range Organics Residual Range Organics	% Recovery 97.1 93.6 Sample Result ND	Qualifier	50 - 150 50 - 150 Spike Added 149 138	Result 162	-	Unit mg/kg dry	- \	% Rec	Pre Prep Batc % Rec. Limits 75 - 125	ep Type h: 10100 RPD 7.22	: total 008_P RPD Limit 25
1-Chlorooctadecane Triacontane Lab Sample ID: 1010008-MSD1 Matrix: Soil Analysis Batch: T000452 Analyte Diesel Range Organics Residual Range Organics	% Recovery 97.1 93.6 Sample Result ND ND	Qualifier Sample Qualifier Matrix Spike I	50 - 150 50 - 150 Spike Added 149 138	Result 162	-	Unit mg/kg dry	- \	% Rec	Pre Prep Batc % Rec. Limits 75 - 125	ep Type h: 10100 RPD 7.22	: total 008_P RPD Limit 25
1-Chlorooctadecane Triacontane Lab Sample ID: 1010008-MSD1 Matrix: Soil Analysis Batch: T000452 Analyte Diesel Range Organics Residual Range Organics Ma	% Recovery 97.1 93.6 Sample Result ND ND trix Spike Dup	Qualifier Sample Qualifier Matrix Spike I	50 - 150 50 - 150 Spike Added 149 138 Dup	Result 162	-	Unit mg/kg dry	- \	% Rec 109	Pre Prep Batc % Rec. Limits 75 - 125	ep Type h: 10100 RPD 7.22	total 008_P RPD Limit 25
1-Chlorooctadecane Triacontane Lab Sample ID: 1010008-MSD1 Matrix: Soil Analysis Batch: T000452 Analyte Diesel Range Organics Residual Range Organics Ma Surrogate	% Recovery 97.1 93.6 Sample Result ND trix Spike Dup % Recovery	Qualifier Sample Qualifier Matrix Spike I	50 - 150 50 - 150 Spike Added 149 138 Dup Limits	Result 162	-	Unit mg/kg dry	- \	% Rec 109	Pre Prep Batc % Rec. Limits 75 - 125	ep Type h: 10100 RPD 7.22	total 008_P RPD Limit 25
1-Chlorooctadecane Triacontane Lab Sample ID: 1010008-MSD1 Matrix: Soil Analysis Batch: T000452 Analyte Diesel Range Organics Residual Range Organics Ma Surrogate 1-Chlorooctadecane Triacontane	% Recovery 97.1 93.6 Sample Result ND trix Spike Dup % Recovery 108	Qualifier Sample Qualifier Matrix Spike I	50 - 150 50 - 150 Spike Added 149 138 Dup Limits 50 - 150	Result 162	-	Unit mg/kg dry mg/kg dry	- x *	% Rec 109 101	Prep Batc % Rec. Limits 75 - 125 60 - 120	RPD 7.22 5.12	: total 008_P RPD Limit 25 25
1-Chlorooctadecane Triacontane Lab Sample ID: 1010008-MSD1 Matrix: Soil Analysis Batch: T000452 Analyte Diesel Range Organics Residual Range Organics <i>Ma</i> Surrogate 1-Chlorooctadecane Triacontane Lab Sample ID: 1010008-DUP1	% Recovery 97.1 93.6 Sample Result ND trix Spike Dup % Recovery 108	Qualifier Sample Qualifier Matrix Spike I	50 - 150 50 - 150 Spike Added 149 138 Dup Limits 50 - 150	Result 162	-	Unit mg/kg dry mg/kg dry	- x *	% Rec 109 101	Prep Batc % Rec. Limits 75 - 125 60 - 120	RPD 7.22 5.12	: total 008_P RPD Limit 25 25
1-Chlorooctadecane Triacontane Lab Sample ID: 1010008-MSD1 Matrix: Soil Analysis Batch: T000452 Analyte Diesel Range Organics Residual Range Organics Ma Surrogate 1-Chlorooctadecane Triacontane Lab Sample ID: 1010008-DUP1 Matrix: Soil	% Recovery 97.1 93.6 Sample Result ND trix Spike Dup % Recovery 108	Qualifier Sample Qualifier Matrix Spike I	50 - 150 50 - 150 Spike Added 149 138 Dup Limits 50 - 150	Result 162	-	Unit mg/kg dry mg/kg dry	- x *	% Rec 109 101	Prep Batc % Rec. Limits 75 - 125 60 - 120	P Type h: 10100 7.22 5.12	: total 008_P RPD Limit 25 25 313S3 : total
1-Chlorooctadecane Triacontane Lab Sample ID: 1010008-MSD1 Matrix: Soil Analysis Batch: T000452 Analyte Diesel Range Organics Residual Range Organics <i>Ma</i> Surrogate 1-Chlorooctadecane Triacontane Lab Sample ID: 1010008-DUP1	% Recovery 97.1 93.6 Sample Result ND trix Spike Dup % Recovery 108 91.5	Qualifier	50 - 150 50 - 150 Spike Added 149 138 Dup Limits 50 - 150	Result 162 139	Qualifier	Unit mg/kg dry mg/kg dry	- x *	% Rec 109 101	Prep Batc % Rec. Limits 75 - 125 60 - 120	P Type h: 10100 7.22 5.12	: total 008_P RPD Limit 25 25 313S3 : total 008_P
1-Chlorooctadecane Triacontane Lab Sample ID: 1010008-MSD1 Matrix: Soil Analysis Batch: T000452 Analyte Diesel Range Organics Residual Range Organics Ma Surrogate 1-Chlorooctadecane Triacontane Lab Sample ID: 1010008-DUP1 Matrix: Soil Analysis Batch: T000452	% Recovery 97.1 93.6 Sample Result ND trix Spike Dup % Recovery 108 91.5	Qualifier	50 - 150 50 - 150 Spike Added 149 138 Dup Limits 50 - 150	Result 162 139 Duplicate	Qualifier	Unit mg/kg dry mg/kg dry	elient	% Rec 109 101	Prep Batc % Rec. Limits 75 - 125 60 - 120	RPD 7.22 5.12	: total 008_P RPD Limit 25 25 313S3 : total 008_P RPD
1-Chlorooctadecane Triacontane Lab Sample ID: 1010008-MSD1 Matrix: Soil Analysis Batch: T000452 Analyte Diesel Range Organics Residual Range Organics Ma Surrogate 1-Chlorooctadecane Triacontane Lab Sample ID: 1010008-DUP1 Matrix: Soil Analysis Batch: T000452 Analyte	% Recovery 97.1 93.6 Sample Result ND trix Spike Dup % Recovery 108 91.5 Sample Result	Qualifier Sample Qualifier Matrix Spike I Qualifier Sample Qualifier	50 - 150 50 - 150 Spike Added 149 138 Dup Limits 50 - 150	Result	Qualifier	Unit mg/kg dry mg/kg dry C	- x *	% Rec 109 101	Prep Batc % Rec. Limits 75 - 125 60 - 120	P Type h: 10100 7.22 5.12 AAOFE p Type h: 10100 RPD	: total 008_P RPD Limit 25 25 313S3 : total 008_P RPD Limit
1-Chlorooctadecane Triacontane Lab Sample ID: 1010008-MSD1 Matrix: Soil Analysis Batch: T000452 Analyte Diesel Range Organics Residual Range Organics <i>Ma</i> Surrogate 1-Chlorooctadecane Triacontane Lab Sample ID: 1010008-DUP1 Matrix: Soil Analysis Batch: T000452 Analyte Diesel Range Organics	% Recovery 97.1 93.6 Sample Result ND trix Spike Dup % Recovery 108 91.5 Sample Result 53.1	Qualifier	50 - 150 50 - 150 Spike Added 149 138 Dup Limits 50 - 150	Result 162 139 Duplicate Result 55.5	Qualifier	Unit mg/kg dry mg/kg dry C Unit mg/kg dry	- x x - D x	% Rec 109 101	Prep Batc % Rec. Limits 75 - 125 60 - 120	RPD 7.22 5.12	: total 008_P RPD Limit 25 25 313S3 : total 008_P RPD Limit 20
1-Chlorooctadecane Triacontane Lab Sample ID: 1010008-MSD1 Matrix: Soil Analysis Batch: T000452 Analyte Diesel Range Organics Residual Range Organics Ma Surrogate 1-Chlorooctadecane Triacontane Lab Sample ID: 1010008-DUP1 Matrix: Soil Analysis Batch: T000452 Analyte	% Recovery 97.1 93.6 Sample Result ND trix Spike Dup % Recovery 108 91.5 Sample Result 53.1 ND	Qualifier Sample Qualifier Matrix Spike I Qualifier Sample Qualifier Qualifier Qualifier Qualifier Q11	50 - 150 50 - 150 Spike Added 149 138 Dup Limits 50 - 150	Result	Qualifier	Unit mg/kg dry mg/kg dry C	- æ	% Rec 109 101	Prep Batc % Rec. Limits 75 - 125 60 - 120	P Type h: 10100 7.22 5.12 AAOFE p Type h: 10100 RPD	: total 008_P RPD Limit 25 25 313S3 : total 008_P RPD Limit 20
1-Chlorooctadecane Triacontane Lab Sample ID: 1010008-MSD1 Matrix: Soil Analysis Batch: T000452 Analyte Diesel Range Organics Residual Range Organics Ma Surrogate 1-Chlorooctadecane Triacontane Lab Sample ID: 1010008-DUP1 Matrix: Soil Analysis Batch: T000452 Analyte Diesel Range Organics Residual Range Organics Residual Range Organics	% Recovery 97.1 93.6 Sample Result ND trix Spike Dup % Recovery 108 91.5 Sample Result 53.1 ND Duplicate	Qualifier Sample Qualifier Matrix Spike I Qualifier Sample Qualifier	50 - 150 50 - 150 50 - 150 Spike Added 149 138 Dup Limits 50 - 150 50 - 150	Result 162 139 Duplicate Result 55.5	Qualifier	Unit mg/kg dry mg/kg dry C Unit mg/kg dry	- x x - D x	% Rec 109 101	Prep Batc % Rec. Limits 75 - 125 60 - 120	P Type h: 10100 7.22 5.12 AAOFE p Type h: 10100 RPD	: total 008_P RPD Limit 25 25 313S3 : total 008_P
1-Chlorooctadecane Triacontane Lab Sample ID: 1010008-MSD1 Matrix: Soil Analysis Batch: T000452 Analyte Diesel Range Organics Residual Range Organics <i>Ma</i> Surrogate 1-Chlorooctadecane Triacontane Lab Sample ID: 1010008-DUP1 Matrix: Soil Analysis Batch: T000452 Analyte Diesel Range Organics	% Recovery 97.1 93.6 Sample Result ND trix Spike Dup % Recovery 108 91.5 Sample Result 53.1 ND	Qualifier Sample Qualifier Matrix Spike I Qualifier Sample Qualifier	50 - 150 50 - 150 Spike Added 149 138 Dup Limits 50 - 150	Result 162 139 Duplicate Result 55.5	Qualifier	Unit mg/kg dry mg/kg dry C Unit mg/kg dry	- x x - D x	% Rec 109 101	Prep Batc % Rec. Limits 75 - 125 60 - 120	P Type h: 10100 7.22 5.12 AAOFE p Type h: 10100 RPD	: total 008_P RPD Limit 25 25 313S3 : total 008_P RPD Limit 20

GCMS Volatiles

Prep Batch: 10I0018_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10I0018-BS1	1010018-BS1	total	Soil	EPA 5030B	
10I0018-BSD1	1010018-BSD1	total	Soil	EPA 5030B	
10I0018-BS2	1010018-BS2	total	Soil	EPA 5030B	
10I0018-BSD2	1010018-BSD2	total	Soil	EPA 5030B	
10I0018-BLK1	1010018-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	1010020-BS1	total	Water	EPA 5030B	
10I0020-BSD1	10I0020-BSD1	total	Water	EPA 5030B	
10I0020-BS2	10I0020-BS2	total	Water	EPA 5030B	
10I0020-BSD2	1010020-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	
1010020-DUP1	ATH0090-01	total	Water	EPA 5030B	
10I0020-MS1	ATH0090-03	total	Water	EPA 5030B	
1010020-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	
1010034-BSD1	10I0034-BSD1	total	Soil	EPA 5030B	
1010034-BS2	10I0034-BS2	total	Soil	EPA 5030B	
1010034-BSD2	1010034-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
1010018-BS1	1010018-BS1	total	Soil	AK101-MS/EPA 8260B	1010018_P
1010018-BSD1	10I0018-BSD1	total	Soil	AK101-MS/EPA 8260B	1010018_P

GCMS Volatiles (Continued)

Analy	/sis	Batch:	T000456	(Continued)	1
7		Batom		(Containa Ca)	

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
1010018-BS2	1010018-BS2	total	Soil	AK101-MS/EPA 8260B	1010018_F
1010018-BSD2	1010018-BSD2	total	Soil	AK101-MS/EPA 8260B	1010018_F
010018-BLK1	1010018-BLK1	total	Soil	AK101-MS/EPA 8260B	1010018_F
TH0081-01	10JUNAAOFB13S3	total	Soil	AK101-MS/EPA 8260B	1010018_F
ATH0081-02	10JUNAAOFB13S5	total	Soil	AK101-MS/EPA 8260B	1010018_F
010018-DUP1	10JUNAAOFB13S5	total	Soil	AK101-MS/EPA 8260B	1010018_F
TH0081-03	10JUNAAOFB14S3	total	Soil	AK101-MS/EPA 8260B	1010018_F
010018-MS1	10JUNAAOFB14S3	total	Soil	AK101-MS/EPA 8260B	1010018_F
010018-MSD1	10JUNAAOFB14S3	total	Soil	AK101-MS/EPA	1010018_F
TH0081-04	10JUNAAOFB14S5	total	Soil	8260B AK101-MS/EPA	1010018_F
ATH0081-05	10JUNAAOFB14S8	total	Soil	8260B AK101-MS/EPA	1010018_F
TH0081-07	10JUNAAOFB15S2	total	Soil	8260B AK101-MS/EPA	1010018_F
TH0081-09	10JUNAAOFB16S1	total	Soil	8260B AK101-MS/EPA	1010018_F
TH0081-10	10JUNAAOFB16S4	total	Soil	8260B AK101-MS/EPA	1010018_6
TH0081-11	10JUNAAOFB17S2	total	Soil	8260B AK101-MS/EPA	1010018_F
TH0081-12	10JUNAAOFB17S3	total	Soil	8260B AK101-MS/EPA	1010018_F
TH0081-15	10JUNAAOFSTB	total	Soil	8260B AK101-MS/EPA	1010018_6
TH0081-08	10JUNAAOFB15S4	total	Soil	8260B AK101-MS/EPA	1010018_6
010020-BS1	1010020-BS1	total	Water	8260B AK101-MS/EPA	1010020_F
010020-BSD1	1010020-BSD1	total	Water	8260B AK101-MS/EPA	
010020-BS2	1010020-BS2	total	Water	8260B AK101-MS/EPA	1010020 F
010020-BSD2	1010020-BSD2	total	Water	8260B AK101-MS/EPA	1010020_F
010020-BLK1	1010020-BLK1	total	Water	8260B AK101-MS/EPA	1010020_1
TH0081-13	10JUNAAOFB14GW1		Water	8260B AK101-MS/EPA	1010020_1
		total		8260B	_
TH0081-14	10JUNAAOFB14GW2	total	Water	AK101-MS/EPA 8260B	1010020_1
TH0081-16	10JUNAAOFWTB1	total	Water	AK101-MS/EPA 8260B	1010020_1
010020-DUP1	ATH0090-01	total	Water	AK101-MS/EPA 8260B	1010020_1
010020-MS1	ATH0090-03	total	Water	AK101-MS/EPA 8260B	10l0020_F
010020-MSD1	ATH0090-03	total	Water	AK101-MS/EPA 8260B	1010020_F

Analysis Batch: T000464

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
1010034-BS1	1010034-BS1	total	Soil	AK101-MS/EPA 8260B	1010034_P
1010034-BSD1	1010034-BSD1	total	Soil	AK101-MS/EPA 8260B	1010034_P
1010034-BS2	10I0034-BS2	total	Soil	AK101-MS/EPA 8260B	10I0034_P

GCMS Volatiles (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
1010034-BSD2	1010034-BSD2	total	Soil	AK101-MS/EPA 8260B	10l0034_P
1010034-BLK1	1010034-BLK1	total	Soil	AK101-MS/EPA 8260B	1010034_P
1010034-DUP1	ATH0082-05	total	Soil	AK101-MS/EPA 8260B	10I0034_P
010034-MS1	ATH0082-05	total	Soil	AK101-MS/EPA 8260B	10I0034_P
010034-MSD1	ATH0082-05	total	Soil	AK101-MS/EPA 8260B	10I0034_P
ATH0081-04 - RE1	10JUNAAOFB14S5	total	Soil	AK101-MS/EPA 8260B	1010034_P

Semivolatiles

Analysis Batch: 10H0157

Lab Sample ID	Client Sample ID	Ргер Туре	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	Ргер Туре	Matrix	Method	Prep Batch
10H0157-BLK1	10H0157-BLK1	total	Water	EPA 3510/600	
10H0157-BS1	10H0157-BS1	total	Water	Series 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: 1010015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10I0015-BLK1	1010015-BLK1	total	Soil	EPA 8270 mod.	1010015_P
10I0015-BS1	1010015-BS1	total	Soil	EPA 8270 mod.	1010015_P
ATH0081-06	10JUNAAOFB14S9	total	Soil	EPA 8270 mod.	1010015_P
10I0015-MS1	10JUNAAOFB17S3	total	Soil	EPA 8270 mod.	1010015_P
10I0015-MSD1	10JUNAAOFB17S3	total	Soil	EPA 8270 mod.	1010015_P
ATH0081-12	10JUNAAOFB17S3	total	Soil	EPA 8270 mod.	1010015_P
ATH0081-04	10JUNAAOFB14S5	total	Soil	EPA 8270 mod.	10I0015_P
ATH0081-04	10JUNAAOFB14S5	total	Soil	EPA 8270 mod.	1010015_P

Prep Batch: 10I0015_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
10I0015-BLK1	1010015-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	10l0034_P
ATH0081-12	10JUNAAOFB17S3	total	Soil	TA SOP	10l0034_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	Ргер Туре	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: 1010007

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
1010007-DUP1	ATH0072-22	total	Soil	TA-SOP	1010007_P
ATH0081-10	10JUNAAOFB16S4	total	Soil	TA-SOP	1010007_P
ATH0081-11	10JUNAAOFB17S2	total	Soil	TA-SOP	1010007_P
ATH0081-12	10JUNAAOFB17S3	total	Soil	TA-SOP	1010007_P
ATH0081-15	10JUNAAOFSTB	total	Soil	TA-SOP	1010007_P

Prep Batch: 10I0007_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
1010007-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	Ргер Туре	Matrix	Method	Prep Batch
10I0008-BSD1	1010008-BSD1	total	Soil	EPA 3545	
10I0008-BS1	1010008-BS1	total	Soil	EPA 3545	
1010008-BLK1	10I0008-BLK1	total	Soil	EPA 3545	
1010008-DUP1	10JUNAAOFB13S3	total	Soil	EPA 3545	
1010008-MS1	ATH0072-22	total	Soil	EPA 3545	
1010008-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	Ргер Туре	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: 1010010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
1010010-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

			Method	Prep Batcl
ATI0007-01	total	Soil	*** DEFAULT	
			PREP ***	
10JUNAAOFB13S3	total	Soil	*** DEFAULT	
10JUNAAOFB13S5	total	Soil		
10JUNAAOFB14S3	total	Soil		
10JUNAAOFB14S5	total	Soil		
10JUNAAOFB14S8	total	Soil		
		0"		
10JUNAAOFB15S2	total	Soli		
	total	Cail		
TUJUNAAUFB 1554	lotal	501		
	total	Soil		
	lotai	001		
			I ILEI	
Client Sample ID	Ргер Туре	Matrix	Method	Prep Batcl
ATH0064-02	total	Water	AK102/103	10H0123_F
	10JUNAAOFB13S3 10JUNAAOFB13S5 10JUNAAOFB14S3 10JUNAAOFB14S5 10JUNAAOFB14S8 10JUNAAOFB15S2 10JUNAAOFB15S4 10JUNAAOFB16S1 Client Sample ID	10JUNAAOFB13S3total10JUNAAOFB13S5total10JUNAAOFB14S3total10JUNAAOFB14S5total10JUNAAOFB14S8total10JUNAAOFB15S2total10JUNAAOFB15S4total10JUNAAOFB16S1total	10JUNAAOFB13S3totalSoil10JUNAAOFB13S5totalSoil10JUNAAOFB14S3totalSoil10JUNAAOFB14S5totalSoil10JUNAAOFB14S8totalSoil10JUNAAOFB15S2totalSoil10JUNAAOFB15S4totalSoil10JUNAAOFB16S1totalSoil10JUNAAOFB16S1Matrix	10JUNAAOFB13S3totalSoilPREP *** *** DEFAULT PREP ***10JUNAAOFB13S5totalSoil*** DEFAULT PREP ***10JUNAAOFB14S3totalSoil*** DEFAULT PREP ***10JUNAAOFB14S5totalSoil*** DEFAULT PREP ***10JUNAAOFB14S8totalSoil*** DEFAULT PREP ***10JUNAAOFB14S8totalSoil*** DEFAULT PREP ***10JUNAAOFB15S2totalSoil*** DEFAULT PREP ***10JUNAAOFB15S4totalSoil*** DEFAULT PREP ***10JUNAAOFB16S1totalSoil*** DEFAULT PREP ***10JUNAAOFB16S1totalSoil*** DEFAULT PREP ***10JUNAAOFB16S1MatrixMethod

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

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
1010008-BSD1	10I0008-BSD1	total	Soil	AK102/103	1010008_P

Fuels (Continued)

Analysi	s Batch:	T000452	(Continued)
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Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
1010008-BS1	1010008-BS1	total	Soil	AK102/103	1010008_P
10I0008-BLK1	1010008-BLK1	total	Soil	AK102/103	1010008_P
1010008-DUP1	10JUNAAOFB13S3	total	Soil	AK102/103	1010008_P
1010008-MS1	ATH0072-22	total	Soil	AK102/103	1010008_P
1010008-MSD1	ATH0072-22	total	Soil	AK102/103	1010008_P
ATH0081-01	10JUNAAOFB13S3	total	Soil	AK102/103	1010008_P
Analysis Batch: T00	0453				
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	ab Sample ID Client Sample ID		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	1010008_P
ATH0081-04	10JUNAAOFB14S5	total	Soil	AK102/103	1010008_P
ATH0081-08	10JUNAAOFB15S4	total	Soil	AK102/103	1010008_P
ATH0081-10	10JUNAAOFB16S4	total	Soil	AK102/103	1010008_P
ATH0081-12	10JUNAAOFB17S3	total	Soil	AK102/103	1010008_P

Analysis Batch: T000460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
ATH0081-03	10JUNAAOFB14S3	total	Soil	AK102/103	1010008_P
ATH0081-05	10JUNAAOFB14S8	total	Soil	AK102/103	1010008_P
ATH0081-09	10JUNAAOFB16S1	total	Soil	AK102/103	1010008_P
ATH0081-11	10JUNAAOFB17S2	total	Soil	AK102/103	1010008_P

Client Sample ID: 10JUNAAOFB13S3 Date Collected: 08/24/10 13:25 Date Received: 08/27/10 09:38

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	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	1010008_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	1010010	09/03/10 08:40	JN	TestAmerica Anchorage

Date Received	: 08/27/10 09:3	38						Per
	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		0.2465	1010018_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	1010008_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	1010010_P	09/02/10 17:24	JPN	TestAmerica Anchorage

1

Client Sample ID: 10JUNAAOFB14S3

Analysis

TA-SOP

Date Collected: 08/24/10 15:55

total

Date Received: 08/27/10 09:38

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		0.3797	1010018_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	1010008_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	1010010_P	09/02/10 17:24	JPN	TestAmerica Anchorage
total	Analysis	TA-SOP		1	1010010	09/03/10 08:40	JN	TestAmerica Anchorage

1010010

09/03/10 08:40 JN

Client Sample ID: 10JUNAAOFB14S5 Date Collected: 08/24/10 16:20 Date Received: 08/27/10 09:38

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		0.3117	1010018_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	10l0034_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	10l0015_P	09/02/10 12:10	MS	TestAmerica Spokane
total	Analysis	EPA 8270 mod.		2	1010015	09/07/10 20:52	ZZZ	TestAmerica Spokane

TestAmerica Anchorage 09/28/2010

Lab Sample ID: ATH0081-01 Matrix: Soil

TestAmerica Job ID: ATH0081

Percent Solids: 97.8

Lab Sample ID: ATH0081-02

Matrix: Soil Percent Solids: 88.2

Lab Sample ID: ATH0081-03 Matrix: Soil

Lab Sample ID: ATH0081-04

Matrix: Soil

Percent Solids: 86

TestAmerica Anchorage

Percent Solids: 94.3

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total

Client Sample ID: 10JUNAAOFB14S5 Date Collected: 08/24/10 16:20 Date Received: 08/27/10 09:38

Date Received	: 08/27/10 09:3	38						Percent Solids: 90.9
	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
total	Analysis	EPA 8270 mod.		5	1010015	09/08/10 17:38	MS	TestAmerica Spokane
total	Prep	Wet Chem		1	1010034_P	09/02/10 16:45	MS	TestAmerica Spokane
total	Analysis	TA SOP		1	1010034	09/03/10 15:15	HB	TestAmerica Spokane
total	Prep	EPA 3545		1.36	1010008_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		1	1010010_P	09/02/10 17:24	JPN	TestAmerica Anchorage

1010010

1

09/03/10 08:40 JN

Analysis

PREP ***

TA-SOP

Date Received: 08/27/10 09:38

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	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	1010008_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	1010010	09/03/10 08:40	JN	TestAmerica Anchorage

Client Sample ID: 10JUNAAOFB14S9

Date Collected: 08/24/10 16:25

Date Received: 08	/27/10 09:38
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—	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	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	1010015	09/03/10 13:36	ZZZ	TestAmerica Spokane
total	Prep	Wet Chem		1	1010034_P	09/02/10 16:45	MS	TestAmerica Spokane
total	Analysis	TA SOP		1	1010034	09/03/10 15:15	HB	TestAmerica Spokane

Client Sample ID: 10JUNAAOFB15S2 Date Collected: 08/24/10 18:30 Date Received: 08/27/10 09:38

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	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	1010008_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	1010010	09/03/10 08:40	JN	TestAmerica Anchorage

Lab Sample ID: ATH0081-06

Matrix: Soil

Percent Solids: 91.8

Matrix: Soil Percent Solids: 96.8

Lab Sample ID: ATH0081-07

Matrix: Soil

Matrix: Soil

Percent Solids: 95.2

Lab Sample ID: ATH0081-04

Lab Sample ID: ATH0081-05

TestAmerica Anchorage

Client Sample ID: 10JUNAAOFB15S4 Date Collected: 08/24/10 18:50

Date Received: 08/27/10 09:38

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		0.2586	1010018_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	1010008_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	1010010_P	09/02/10 17:24	JPN	TestAmerica Anchorage
total	Analysis	TA-SOP		1	1010010	09/03/10 08:40	JN	TestAmerica Anchorage

Client Sample ID: 10JUNAAOFB16S1 Date Collected: 08/25/10 14:50 Date Received: 08/27/10 09:38

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B	_	0.37	1010018_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	1010008_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	1010010_P	09/02/10 17:24	JPN	TestAmerica Anchorage
total	Analysis	TA-SOP		1	1010010	09/03/10 08:40	JN	TestAmerica Anchorage

Client Sample ID: 10JUNAAOFB16S4

Date Collected: 08/25/10 14:35

Date Received: 08/27/10 09:38 Batch Batch Dilution Batch Prepared Prep Type Туре Method Run Factor Number Or Analyzed Analyst Lab total Prep EPA 5030B 0.2635 1010018 P 09/05/10 07:00 JJB TestAmerica Anchorage Analysis AK101-MS/EPA T000456 09/05/10 19:47 JJB total 33.3 TestAmerica Anchorage 8260B EPA 3545 1010008_P 09/02/10 08:44 rt total Prep 0.9794 TestAmerica Anchorage total Analysis AK102/103 1 T000459 09/07/10 21:29 JN TestAmerica Anchorage *** DEFAULT 09/01/10 18:43 sl total Prep 1 10I0007_P TestAmerica Anchorage PREP *** 1010007 09/02/10 08:00 JN Analysis TA-SOP 1 TestAmerica Anchorage total

Client Sample ID: 10JUNAAOFB17S2 Date Collected: 08/25/10 11:20 Date Received: 08/27/10 09:38

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		0.3554	1010018_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	1010008_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	1010007_P	09/01/10 18:43	sl	TestAmerica Anchorage

Lab Sample ID: ATH0081-08 Matrix: Soil

Percent Solids: 97.2

Lab Sample ID: ATH0081-09 Matrix: Soil

Percent Solids: 96.9

Lab Sample ID: ATH0081-10 Matrix: Soil Percent Solids: 95.9

Lab Sample ID: ATH0081-11 Matrix: Soil Percent Solids: 94.9

TestAmerica Anchorage 09/28/2010

Matrix: Soil

Matrix: Soil

Percent Solids: 94.9

Percent Solids: 76.3

Lab Sample ID: ATH0081-11

Lab Sample ID: ATH0081-12

Client Sample ID: 10JUNAAOFB17S2 Date Collected: 08/25/10 11:20 Date Received: 08/27/10 09:38

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
total	Analysis	TA-SOP		1	1010007	09/02/10 08:00	JN	TestAmerica Anchorage

Client Sample ID: 10JUNAAOFB17S3 Date Collected: 08/25/10 11:34 Date Received: 08/27/10 09:38

	Batch	Batch		Dilution	Batch	Prepared		
Prep Туре	Туре	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		0.2969	1010018_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	10l0015_P	09/02/10 12:10	MS	TestAmerica Spokane
total	Analysis	EPA 8270 mod.		1	1010015	09/03/10 21:00	ZZZ	TestAmerica Spokane
total	Prep	Wet Chem		1	1010034_P	09/02/10 16:45	MS	TestAmerica Spokane
otal	Analysis	TA SOP		1	1010034	09/03/10 15:15	HB	TestAmerica Spokane
otal	Prep	EPA 3545		0.9857	1010008_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	1010007_P	09/01/10 18:43	sl	TestAmerica Anchorage
total	Analysis	TA-SOP		1	1010007	09/02/10 08:00	JN	TestAmerica Anchorage

Client Sample ID: 10JUNAAOFB14GW1 Date Collected: 08/25/10 13:15 Date Received: 08/27/10 09:38

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		1	1010020_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 Date Collected: 08/25/10 13:20

Date Received: 08/27/10 09:38

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
total	Prep	EPA 5030B		1	1010020_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

Lab Sample ID: ATH0081-13 Matrix: Water

Lab Sample ID: ATH0081-14

Matrix: Water

TestAmerica Anchorage 09/28/2010

Client Sample ID: 10JUNAAOFSTB Date Collected: 08/25/10 12:00

	Batch	Batch	Dilution	Batch	Prepared
Date Received: 08/2	27/10 09:3	8			
Date Conected. 00/	25/10 12.0	10			

Prep Type	Туре	Method	Run	Factor	Number	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	1010007_P	09/01/10 18:43	sl	TestAmerica Anchorage
total	Analysis	TA-SOP		1	1010007	09/02/10 08:00	JN	TestAmerica Anchorage

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

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	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

Lab Sample ID: ATH0081-16

TestAmerica Job ID: ATH0081

SDG: ATH0081

Matrix: Water

Certification Summary

Client: Bethel Services Incorporated Project/Site: 2010116

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

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
A SOP	Conventional Chemistry Parameters by APHA/EPA Methods		TAL SPK
K102/103	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:

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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

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		11720 North Creek Pkwy N Suite 400, Bothell, WA 98011-8244 11922 E. First Ave, Spokane, WA 99206-5302		425-420-9200 FAX 420-9210
THE LEADER IN ENVIRONMENTAL TESTING		2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119		503-906-9200 FAX 906-9210
	CHAIN OF CUSTODY REPORT	Y REPORT	Work Order # ATH DD81	nn81
CLIENT RSZ	INVOICE TO: BSY / H	(Almentalexanana)	TURNAROUND REOTEST	OUEST
REPORT TO: APANAN WETMAPE ADDRESS: 2605 Denal, 54 54 00			in Business Days * Organic & Inorganic Analyses	yses
Coci +			JX 7 5 4 3	2 1 <1
PROJECT NAME JUN/FRX DPISSION DOC	PRO, NUMBER: 2010 [16]	ATIVE	etroleum Hydroc:	uulyses
PROJECT NUMBER: 2010 11 6				
ç	REQUESTED ANALYSES	UNALYSES	OTHER Consider	•
E9) 180			ר∛ר	nay incur Rush Charges.
CLIENT SAMPLING CLIENT SAMPLING CLIENT SAMPLING DATE/TIME DATE/TIME DATE/TIME DATE/TIME DATE/TIME	Q.7.5.		MATRIX # OF LOCATION/ (W, S, O) CONT. COMMENTS	ON/ TA NTS WOLD
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· 10JUNAADFBI651 4-25-10/1450				50,
.10JUN/ADEBI63/ 8-25-10/1435 V V			>	01-
RELEASED BY HOMAN WEYARE	DATE: 47-26-10 TIME 13-20	RECEIVED BY: Made Clare		DATE: 8/27/10
Juin Maria	DATE: 6/27/1.0	RECEIVED BY NOT PLANTES	FIRM: TA-AK	TIME 0 4 5 DATE 8/2 7/10 TIME 9:32
Plete Digger of Samples with an "X" on the L	ids. Level II	Date Deliveration	TEMP: 4,39	A A
				TAL-1000(0408)
·	·	÷		

09/28/2010

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TestAmerico	Ō	11720 North Creek Pkwy N Suite 400, Bothell, WA 98011-8244 11922 E. First Ave, Spokane, WA 99206-5302	VA 98011-8244 425-420-9200 FAX 420-9210 VA 99206-5302 509-924-9200 FAX 924-9240
THE LEADER IN ENVIRONMENTAL TESTING	ESTING	9405 SW Nimbus Ave.Beaverton, OR 97008-7145 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119	
	CHAIN OF CUSTODY REPORT	(REPORT	Work Ondra #. Art (serce)
CLIENT: KST	INVOICE TO: BSI (ACARD WE MOUTE	an WEImore)	TIRVAROLIND REALEST
REPORT TO: AEMON WEHMORE ADDRESS: 2605 DENAL SK. SK. 200 AND AND AND AND AND AND 2002			in Business Days * Organic & Inoreanic Analyses
PHONE: MY-L'44-1764 FAX			
1/FBX	PRESERVATIVE	IVE	Petroleum Hydrocarthon Analyse
PROJECT NUMBER: 2010 [16	M=0H HCI HC		
SAMPLED BY A 10 / Anna 1 7 Thomas		IALYSES	OTHER Specify:
CLIENT SAMPLE SAMPLE	201/ 15/13 15/15 15/12 15/12 15/12		 Intriaround Requests less than standard may incur Rush Charges.
IDBN'ILFICATION DATE/TIME	9279 41 42 7934 1920 1929 1 42 1924 1924 1924 1924 1924 1924 1924 19		MATRIX # OF LOCATION/ TA (W, S, O) CONT. COMMENTS WO ID
103UNHOFBI752 8-25-10/1120.	1.1		2
20JUNAADFB1753 1 / 1134			
IOSUMMOFBIHGWI			
1320 NAMOFBIYGW2 V / 1320	0		2
* 10TWAA9FSTB 11 / 1200			
18-25-01	M		2 2 201 110 15415-15
7			
5			
RELEASED BY, AVE MAN, WE 'THIN'S' PRUNT NAME. THE PRINT NAME.	351 DATE 7-26-10 TIME 1200	RECEIVED RY LIVE A	DATE: 8/27/10
RELEASED BY SLOVE CALLER FIRM. PRUPT NAME: JPC The West FIRM: ADDITTONAL REMARKS.	BS1 DATE 6/27-10		FIRME TH-AK TIME 07/5
Place Depose of Sumples with an' X" on the Li	an'X" on the tid. Love I	I Date	TEMP. 4, 30/ PAGE 7 OF 2
			TAL-1000(0408)

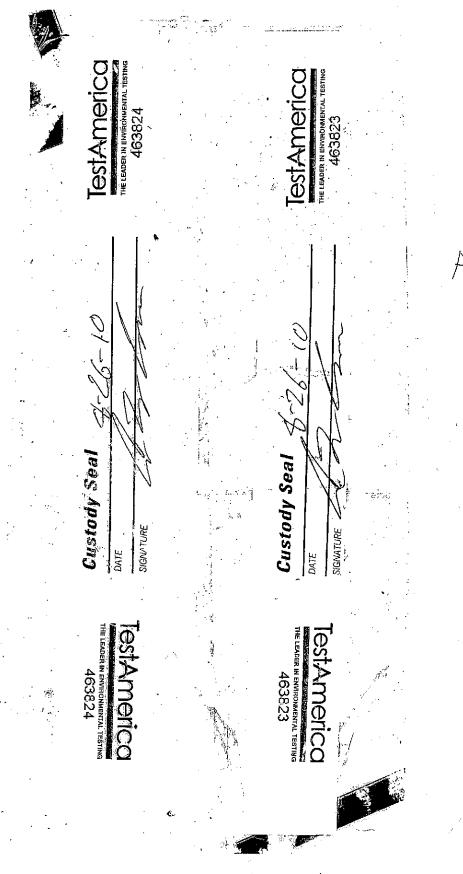
Page 48 of 50

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WORK ORDER # CLIENT: Date /Time Cooler Arrived <u>& 127,10</u> 9:15			X Dorizion Da
Date Time Cooler Arrived (/ / / / / / / /	<u>penc_</u>	PROJECT: <u></u>	VEDIDIO DO
Date / I fine Cooler Antived D / w / / w	_ Cooler sign	(Print name)	_
Preliminary Examination Phase:			• •
Date cooler opened: V same as date received or/ Cooler opened by (print) Robert Tsin	/(sign)	Rolet 2	
1. Delivered by ALASKA AIRLINES Fed-Ex UPS		YNDEN WCLIENT Other:	
Shipment Tracking # if applicable		of shipping papers in file)	
2. Number of Custody Seals 2 Signed by See	<u>baot</u>	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.)?	X 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 ic	dry ice Condition of Ice: Solid	_
Temperature by Digi-Thermo Probe <u> </u>	mometer #	5.	
7. Packing in Cooler: 🔀 bubble wrap 🔲 styrofoam 🗌 cardboard	Other:		-
8. Did samples arrive in plastic bags?) K Yes	No	
9. Did all bottles arrive unbroken, and with labels in good condition	1? 🕅 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 indicat	ed? 🕅 Yes	No	
13. Conoco Phillips, Alyeska, BP H2O samples only: pH < 2?	🗌 Yes	No X N/A	
14. Is there adequate volume for the tests requested?	🔀 Yes	🗌 No	
 Were VOA vials free of bubbles?	es?	□ No	
Log-in Phase: Date of sample log-in 8 127 10 Samples logged in by (print) Robert Tsin	(sign)	Rolat 2	
1. Was project identifiable from custody papers?	X Yes	□ No	
2. Do Turn Around Times and Due Dates agree?	∑ Yes		
3. Was the Project Manager notified of status?	🔀 Yes 🕅 Yes	□ No □ No	
4. Was the Lab notified of status?5. Was the COC scanned and copied?	🗙 Yes 🔀 Yes	No □ No	

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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 InvestigationSite:Juneau, AKLaboratory:TestAmerica, Anchorage, AK and Spokane, WASDG#:ATH0081Receipt date:August 27, 2010Analysis:GRO, BTEX, DRO/RRO, PAH

The following t ables l ist the field s ample num bers, c orresponding l aboratory num bers, a nd r equested 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 an alysis t hat w as p erformed is evaluated in the following subsections. Validation w as conducted in accordance with the USEPA document "Test Methods for Evaluating Solid Wastes, SW-846, r evision 6" (February, 2007 a nd upd ates), U SEPA C ontract L aboratory P rogram National F unctional 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 D ata Validation, the following code l etters and a ssociated de finitions a re 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 ass ociated n umerical value is an estimated q uantity b ecause t he Q uality 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 an alyzed f or, b ut was n ot d etected ab ove t he l evel o f the associated value. The associated value is either the sample quantitation limit or the sample detection limit.
- NR Result was not used from a p articular sample a nalysis. This typically occurs when m ore t han on e r esult f or a n element is r eported due t o di lutions a nd 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 su bmitted to T estAmerica in A nchorage, A K. T hirteen (13) so il and three (3) water samples, including three duplicate samples and two trip blanks, were submitted in one SDG on A ugust 28, 2010. S oil sample 10JUNAAOFB14S8 was collected as a duplicate of sample 10JUNAAOFB14S3. S oil sample 10JUNAAOFB14S9 was collected as a duplicate of sample

10JUNAAOFB14S5. W ater sample 10 JUNAAOFB14GW2 w as c ollected a s a dupl icate o f sample 1 0JUNAAOFB14GW1. A matrix sp ike/matrix sp ike d uplicate (MS/MSD) sam ple w as 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 $(4 \pm 2^{\circ}C)$, 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 S pokane c ool at 3.2° C. These temperatures are within the recommended preservation range of $4 \pm 2^{\circ}$ 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
РАН	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 s urrogate r ecovery (72.9%) is below QC limits (75-125%). T he positive results for GRO and X ylenes 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 r ecovery (145%) is a bove QC L imits (30-140%). Positive 1methylnaphthalene, 2 -methylnaphthalene, and A cenaphthene r esults are q ualified a s 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 su rrogate r ecovery (221%) is a bove Q C l imits (75-125%). A ll results are ND; therefore, no qualifications were made.

ATH0081-09 (10JUNAAOFB16S1):

• GRO/BTEX: D BFM su rrogate r ecovery (44.7%) is below Q C limits (75-125%). A ll results are ND; therefore, the PQLs are qualified as estimated (UJ).

Water:

ATH0081-13 (10JUNAAOFB14GW1):

• GRO/BTEX: DBFM surrogate r ecovery (29.1%) is below QC limits (75-125%). The positive GRO r esults is qualified as estimated (J), and the non-detect BTEX PQLs are qualified as estimated (UJ).

ATH0081-14 (10JUNAAOFB14GW2):

• GRO/BTEX: DBFM surrogate r ecovery (44.1%) is below QC limits (75-125%). The positive GRO r esults is qualified as estimated (J), and the non-detect BTEX PQLs are qualified as estimated (UJ).

ATH0081-16 (10JUNAAOFWTB1):

• GRO/BTEX: D BFM s urrogate r ecovery (46.8%) is b elow QC limits (75-125%). A ll 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 1 0JUNAAOFB14S%. Wat ers ample

10JUNAAOFB14GW2 w as collected as a d uplicate of sam ple 1 0JUNAAOFB14GW1. The results are listed in Table E-1 at the end of this report.

Field QC duplicate sample results were within guidelines (water RPDs \leq 30%, soil RPDs \leq 50%) with the following exceptions:

- The RPDs for 1-Methylnaphthalene, 2-Methylnaphthalene and A cenaphthene in the soil duplicate pair A TH0081-04/-06 (10JUNAAOFB14S5/10JUNAAOFB14S9) a re above R PD g uidelines. The positive r esults i n b oth samples are q ualified 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 R PDs f or DR O, 1-methylnaphthalene and N aphthalene in the water d uplicate pair A TH0081-13/-14 (10JUNAAOFB14GW1/10JUNAAOFB14GW2) a re 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 s oil sample ATH0081-12 (10JUNAAOFB17S3) with acceptable results.

All o ther MS/MSD analyses were p erformed sam ples from a nother p roject; n o qua lifications 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 p ositive r esults f or 1 -methylnaphthalene, 2 -methylnaphthalene a nd A cenaphthene i n s oil sample A TH0081-4 (10JUNAAOFB14S5) ar e q ualified as es timated (J) d ue t o hi gh 2 -FBP surrogate recovery.

The pos itive r eanalysis result f or G RO i n s oil sample A TH0081-4 (10JUNAAOFB14S5) i s 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 an alytical b atch 1 0I0020 is b elow QC l imits. There is no evidence of reanalysis. A ll 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 James

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	

		Sample ATH0081-04	Duplicate ATH0081-06	Reporting			
Analyte	Method	10JUNAAOFB14S5	10JUNAAOFB14S9	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	

		Sample ATH0081-13	Duplicate ATH0081-14	Reporting			
Analyte	Method	10JUNAAOFB14GW1	10JUNAAOFB14GW2	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	

Table E-1: Field Duplicate results, cont.

Laboratory Data Review Checklist

0 1 4 11	x7° / ° x7							
Completed by:	Victoria Yanco	ey						
Title:	Environmenta	l Scientist			Date:	Oct 8, 2010		
CS Report Name:	AKANG June	au AAOF SI			Report Date:	Sep 28, 2010		
Consultant Firm:	Bethel Service	es, Inc. (BSI)						
Laboratory Name:	TestAmerica		Laboratory Rep	port Nu	Number: ATH0081			
ADEC File Number:	ADEC RecKey Nu			y Numb	er:			
1. Laboratory								
	ADEC CS appr	oved laboratory r	eceive and perform	m all of	the submitted	sample analyses?		
		•	Ĩ	<u>111</u> all 01		sample analyses:		
• Yes	⊖ No	○ NA (Plea	ise 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 (Pleas	e explain)		Comments:			
TA-Spokane, W	/A (PAHs)							
2. Chain of Custody	<u>(COC)</u>							
a. COC infor	mation comple	ted, signed, and d	ated (including re	eleased/1	received by)?			
• Yes	⊖ No	○NA (Pleas	e explain)		Comments:			
custody chain is	s unclear betwee	en Wetmore and	Dobson on 7/19					
b. Correct an	alyses requeste	ed?						
• Yes	\bigcirc No	○NA (Plea	ase explain)		Comments:			
3. Laboratory Sampl	e Receipt Docu	imentation						
a. Sample/co	oler temperatur	e documented an	d within range at i	receipt	$(4^\circ \pm 2^\circ \mathrm{C})?$			
• Yes	○ No	○NA (Ple	ase explain)		Comments:			
4.3°C in Anch;	3.2°C in Spoka	ne						

• Yes	⊖ No	○NA (Please explain)	Comments:
c. Sample cor	dition docume	nted - broken, leaking (Methanol),	zero headspace (VOC vials)?
• Yes	⊖ No	○NA (Please explain)	Comments:
	• •	ncies, were they documented? - Fo ature outside of acceptance range, i	insufficient or missing samples, etc
• Yes	⊖ No	ONA (Please explain)	Comments:
0			
e Narrative	understandahl	e)	
e Narrative	understandable	e? ○NA (Please explain)	Comments:
e Narrative a. Present and O Yes	• No		Comments:
○ Yes No CN, only dat	No a flags		Comments:
a. Present and O Yes No CN, only dat	No a flags	○NA (Please explain)	Comments: Comments:
se Narrative a. Present and O Yes No CN, only dat b. Discrepanc O Yes	 No a flags ies, errors or Q ○ No 	○ NA (Please explain) C failures identified by the lab? ○ NA (Please explain)	
se Narrative a. Present and O Yes No CN, only dat b. Discrepanc O Yes	No a flags ies, errors or Q	○ NA (Please explain) C failures identified by the lab? ○ NA (Please explain)	

Comments:

usable as qualified

5. Samples Results

a. Correct	analyses	performed	/reported	as requested	on COC?
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• Yes	\bigcirc No	○NA (Please explain)	Comments:
b. All applica	ble holding ti	mes met?	
• Yes	\bigcirc No	○NA (Please explain)	Comments:
-4 GRO reanalyz	zed at 14.8 da	ys OK up to 28 days with MeOH pr	reservative
c. All soils re	ported on a dr	y weight basis?	
• Yes	⊖ No	○NA (Please explain)	Comments:
d. Are the rep project?	orted PQLs le	ess than the Cleanup Level or the min	imum required detection level for the
• Yes	○ No	○NA (Please explain)	Comments:
DRO/RRO RLs	> DQOs liste	d in WP; well below CL	
Data malit		- 66 - 4 - 10 (D1 1	
e. Data qualit	y or usability	affected? (Please explain)	Comments:
No			
QC Samples			
a. Method Bla	nk		
i. One me	ethod blank re	eported per matrix, analysis and 20 sa	umples?
○ Yes	○ No	○NA (Please explain)	Comments:
Yes			
ii. All met	hod blank res	sults less than PQL?	
• Yes	\bigcirc No	○NA (Please explain)	Comments:
iii. If abov	ve PQL, what	samples are affected?	Comments:
NA			

6.

⊖ Yes	⊖ No	• NA (Please explain)	Comments:
v. Data qı	ality or usabil	ity affected? (Please explain)	Comments:
. Laboratory	Control Samp	ble/Duplicate (LCS/LCSD)	
-		CSD reported per matrix, analysis a equired per SW846)	and 20 samples? (LCS/LCSD required
• Yes	⊖ No	○NA (Please explain)	Comments:
ii. Metals, samples?	/Inorganics - C	One LCS and one sample duplicate re	eported per matrix, analysis and 20
⊖ Yes	⊖ No	• NA (Please explain)	Comments:
project sp	ecified DQOs,	ent recoveries (%R) reported and wit if applicable. (AK Petroleum metho %-120%; all other analyses see the la	
• Yes	⊖ No	○NA (Please explain)	Comments:
	ion - All relativ	1 1	ed and less than method or laboratory
limits? Aı	nd project spec		orted from LCS/LCSD, MS/DMSD, a all other analyses see the laboratory Q
limits? An or sample	nd project spec		
limits? An or sample pages)	nd project spec /sample duplic	cate. (AK Petroleum methods 20%; a	all other analyses see the laboratory Q

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 a		ility affected? (Please explain)	
-			Comments:
No			
c. Surrogates -	· Organics On	ly	
i. Are surro	gate recoveri	es reported for organic analyses - fie	eld, QC and laboratory samples?
• Yes	⊖ No	ONA (Please explain)	Comments:
project spe the laborat	ecified DQOs, tory report pag	, if applicable. (AK Petroleum metho ges)	hin method or laboratory limits? And ods 50-150 %R; all other analyses see
⊖ Yes	• No	○NA (Please explain)	Comments:
GRO/BTEX - D	BFM, BFB ; J	PAH - 2-FBP - see DQA for list	
iii. Do the clearly def	-	s with failed surrogate recoveries ha	ave data flags? If so, are the data flags
• Yes	⊖ No	○NA (Please explain)	Comments:
	-	lity affected? (Use the comment boy	x to explain.). Comments:
Usable as qualifi	ed		
<u>Soil</u> i. One trip		d per matrix, analysis and for each c	Chlorinated Solvents, etc.): <u>Water and</u> cooler containing volatile samples?
• Yes	O No	○ NA (Please explain.)	Comments:
soil, 1 water			
		ransport the trip blank and VOA sar plaining why must be entered below	mples clearly indicated on the COC? v)
○ Yes	○ No	• NA (Please explain.)	Comments:

	iii. All resu	ılts less than F	PQL?	
	• Yes	⊖ No	○ NA (Please explain.)	Comments:
	iv. If abov	e PQL, what	samples are affected?	
				Comments:
NA				
	v. Data qu	ality or usabil	ity affected? (Please explain.)	
NT				Comments:
No				
e.]	Field Duplica	ate		
	i. One field	l duplicate sul	pmitted per matrix, analysis and 10 p	project samples?
	• Yes	🔿 No	○NA (Please explain)	Comments:
2 so	oil, 1 water (-	3/-5, -4/-6, -1	2/-13)	
		ted blind to la		
	• Yes	⊖ No	○ NA (Please explain.)	Comments:
			ve percent differences (RPD) less th	an specified DQOs?
	(Recon	nmended: 30%	water, 50% soil)	
		F	RPD (%) = Absolute Value of: (R_{1-1})	
			$((R_{1+} R_2)$)/2)
		$_1$ = Sample Co		
	ĸ ₂	₂ – Field Dupi	icate Concentration	
	⊖ Yes	• No	○NA (Please explain)	Comments:
See	table E-1 at e	end of DQA		
	iv. Data qı	uality or usabi	lity affected? (Use the comment boy	x to explain why or why not.)
	○ Yes	• No	○NA (Please explain)	Comments:
Usa	ble as qualifi	ed.		

f. Decontamination	or Equipment	Blank (if applicable)
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	⊖ Yes	○ No	○ NA (Please explain)	Comments:
No E	EB submitted	1		
	i. All resul	Its less than PO	QL?	
	○ Yes	⊖ No	• NA (Please explain)	Comments:
	ii. If above	e PQL, what s	amples are affected?	Comments:
NA				
	iii. Data qı	uality or usabi	lity affected? (Please explain.)	Comments:
NA				
Other I	Data Flags/Q	Qualifiers (ACC	OE, AFCEE, Lab Specific, etc.)	
a.	Defined and	l appropriate?		
	• Yes	○ No	○NA (Please explain)	Comments:

Reset Form

APPENDIX F

AIRPORT FIRE STATION DRILLING REPORT

UANY RRU		-	RACTOR		- Carlos Carlos Carlos Carlos			8445)
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	DEG. OFF					i	DALR		
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UN NO.			WEIGHT			RING		SIZE D. P	
AKE	<u> </u>		WTR. LOSS-C.C.			HER	-+	JTS. D. P.	
ERIAL NO.			FILTER CAKE	_		PAIRS		KELLY DOWN	
URS RUN			MTL. ADDED		(5) TA	IP		COLLARS	
	I	<u>k</u>	ADDED		<u>, , , , , , , , , , , , , , , , , , , </u>			TOTAL	
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ø	FT.					, ¹⁸⁷			
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AKE			WTR. LOSS-C.C.		i	HER		JT8. D. P,	
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EPTH IN DURS RUN			······	REMARK	5)			TOTAL	
EPTH IN DURS RUN		To 100'	······	I (REMARK	5)			TOTAL	
EPTH IN DURS RUN EMARKS: (Casin	To 100'	MTL. ADDED	,				TOTAL	
URS RUN			MTL. ADDED	ROTARY	S) WEIGHT ON BIT	PUMP PRES.			
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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

January 1996

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Abbreviations

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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
- C. (7.)	gallons per minute
gpm GRO	gasoline-range organic
IR	infrared
MCL	maximum contaminant level
mg/kg	
PA	milligrams per kilogram
POL	preliminary assessment petroleum, oil, and lubricants
PMP	
	project management plan
QA	quality assurance
QC	quality control
QAPP SAP	quality assurance program plan
SAP	sampling and analysis plan
	site inspection
TPH USGS	total petroleum hydrocarbons
	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.

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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.

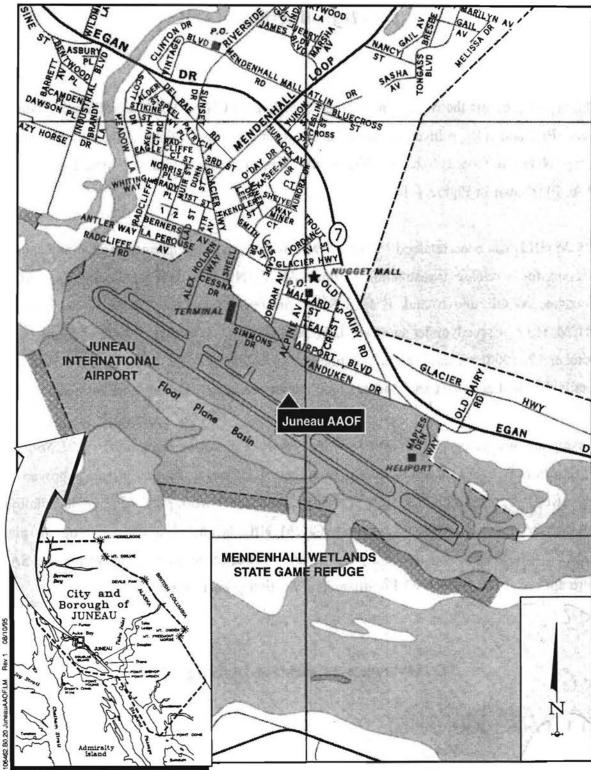
CH2M HILL has been retained by AK ARNG to develop and implement a plan and submit a report for a release investigation of three AK ARNG installations: the Juneau AAOF, Kotzebue AAOF, and Noatak Federal Scout Armory (FSA). The Scope of Services for CH2M HILL (issued under contract DAHA90-94-D-0006, Delivery 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.

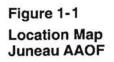
1.1 Overview of Release Investigation

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







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.

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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 check-list. 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.

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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

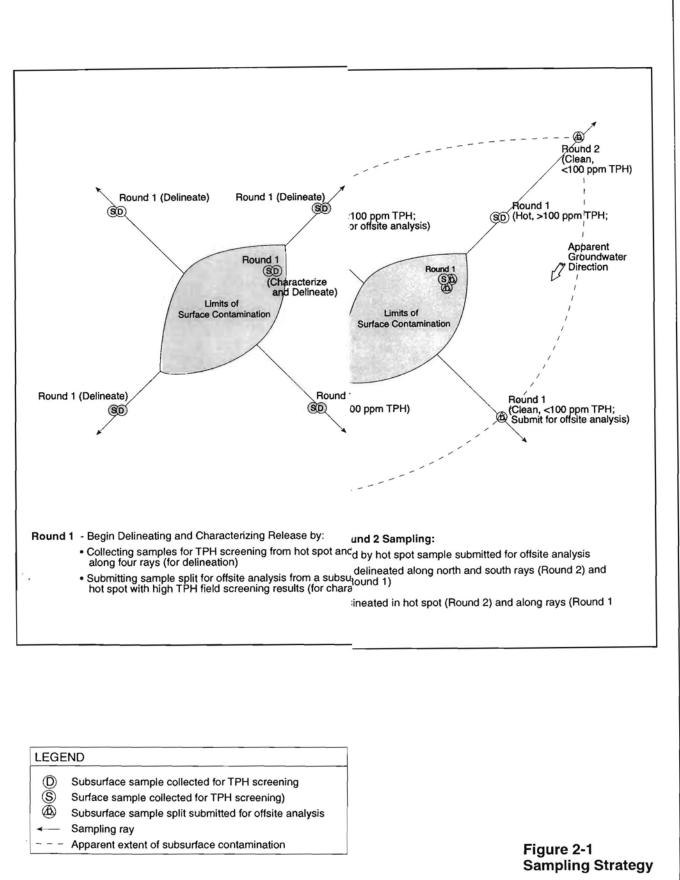
At most sites, however, time permitted CH2M HILL to stake and sample five preliminary (Round 1) locations:

- 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.

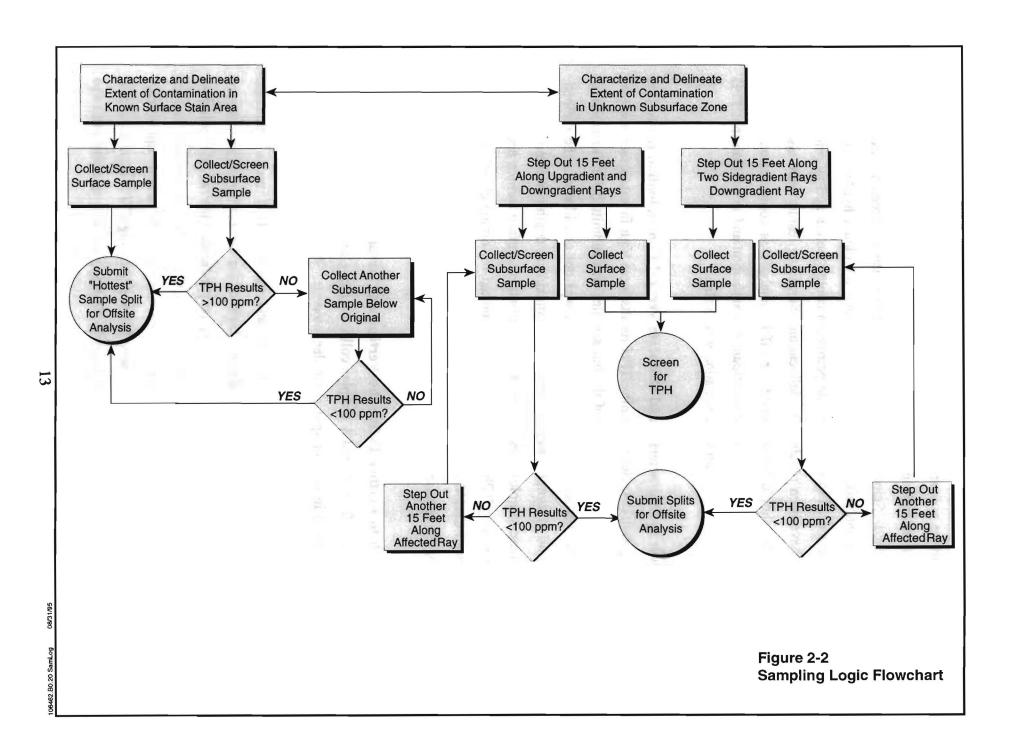
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Surface and subsurface soil samples were collected at each location described above at similar depths and were split into two unequal portions. The smaller portion, or split, was generally field screened. Select larger splits, chosen on the basis of 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 fieldscreening 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.

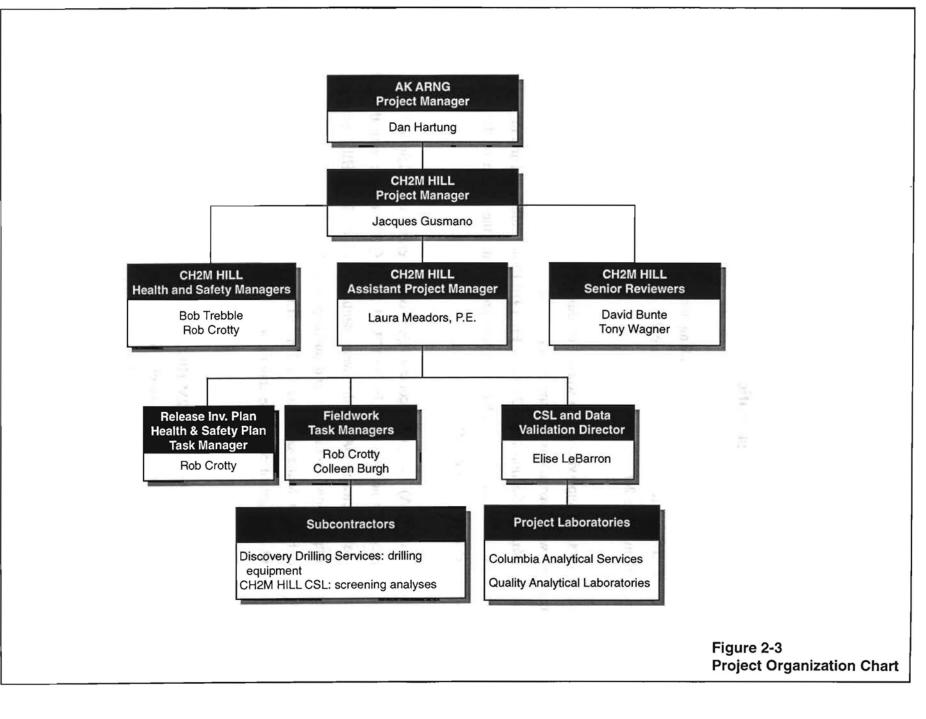


	Table 2-1 Responsibilities of Key Personnel				
Personnel	Responsibilities				
Dan Hartung AK ARNG Project Manager	The AK ARNG project manager has overall responsibility for work performed under this contract. Responsibilities include project coordination between the AK ARNG and consultants, and consultant oversight and direction.				
Jacques Gusmano CH2M HILL Project Manager	The CH2M HILL project manager is responsible for the work specified in the delivery order. Responsi- bilities 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	<i>ject</i> The CH2M HILL assistant project manager oversee 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 deliver- ables 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 coordi- nating 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.

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.

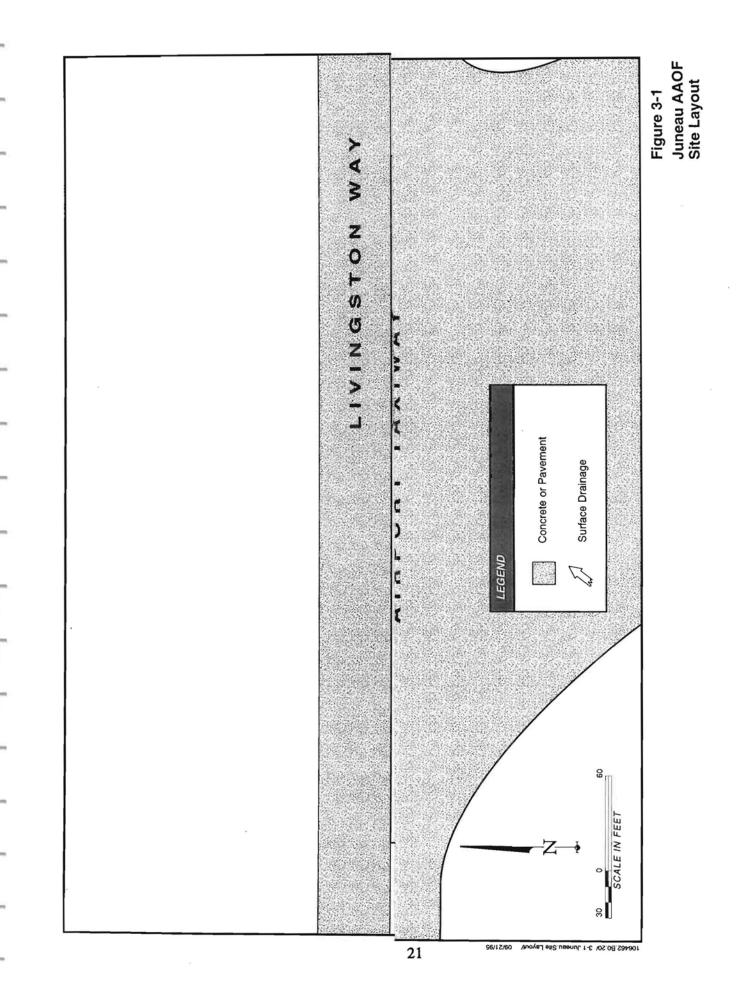
3.1.2 Geographical, Cultural, and Ecological Setting

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.



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 ground-water 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.

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 build-ing 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

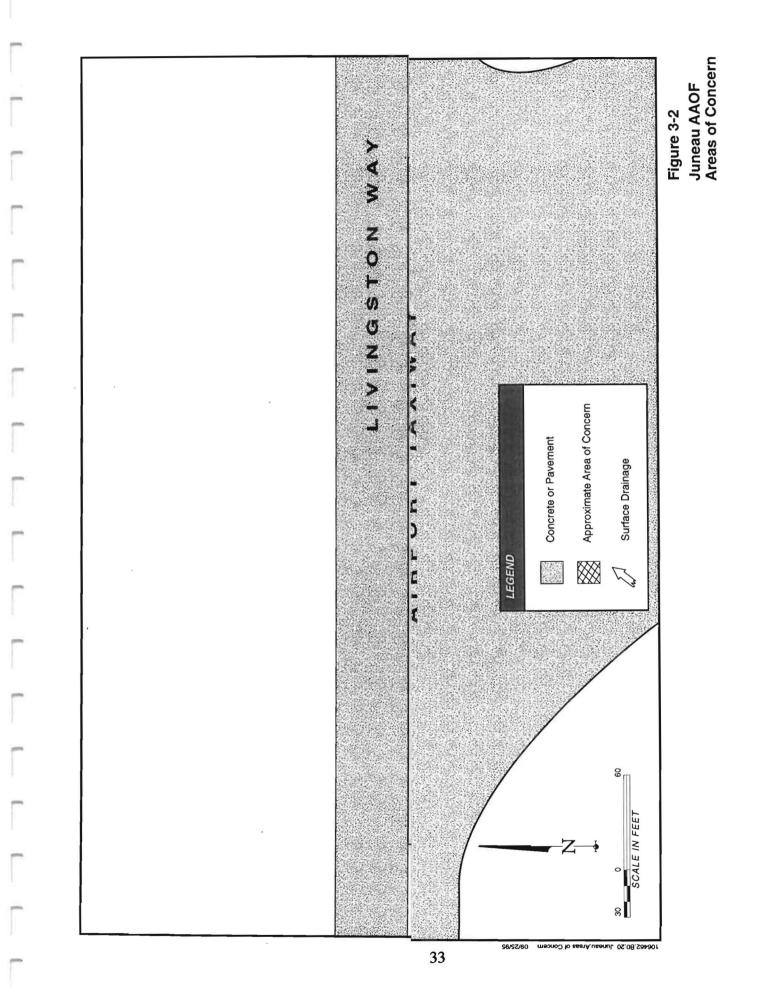
During a record search by CH2M HILL, reports were found describing surface releases of hydrocarbon products that have occurred in the past. Known areas of concern that have been investigated include the following (Figure 3-2):

- 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.





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:

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- 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.

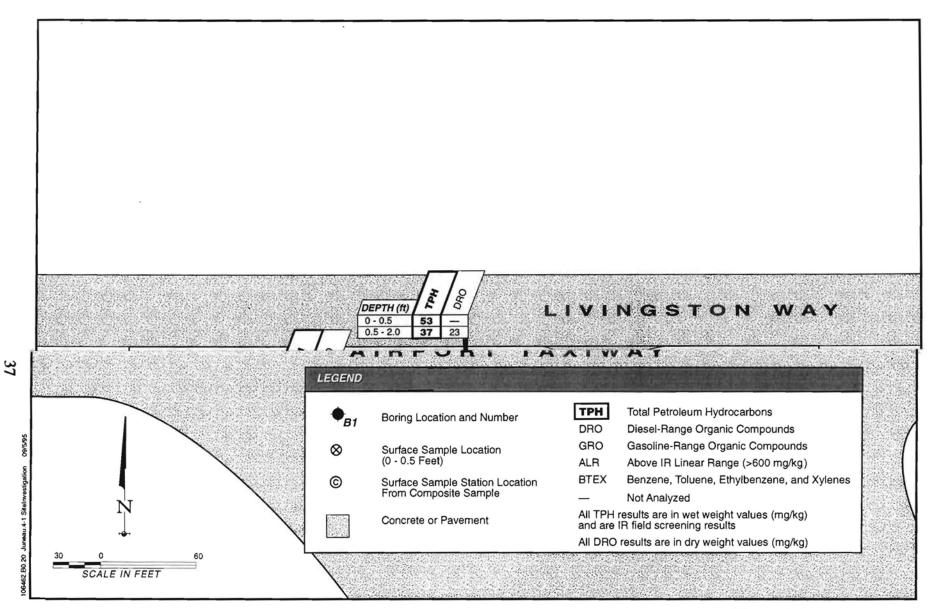
Six water well borings from within the same section as the Juneau AAOF were reviewed by CH2M HILL. All borings consisted of sand and gravel fill to depths ranging from 3 to 10 feet, which was underlain by fine soils consisting of organic material, silts, clays, and sands ranging in thickness from 5 to 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







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 wetweight 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	1 4 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	1	in the		
Area 1	JUNEA-101	B1	0.5-1.5	< 30	< 10	THE STOP	12220 22 323		5.5
Area 1	JUNEA-102	B1	1.5-2.5	< 30			and the second second		
Area 1	JUNEA-301	B1	0.5-1.5	NA	< 10	同て ごねれ	1.01413101		
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	Inlos	Share said	Sector de sea	and the	
Area 1	JUNEA-104	B2	1.5-2.5	> 600	12011 1 (1 Mar 12	and the second			
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	the state of			- A.	
Area 1	JUNEA-113	B4	0.5-3.0	< 30	of course	the set	11-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	CR (C.Y.	
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	NOT THE	112 15/18	and address	1049	
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	1	<5	< 0.05	< 0.20	5
Area 1	JUNEA-302	B12	0-0.5	NA	- C.D	< 5	< 0.05	< 0.20	11.2
Area 1	JUNEA-127	B12	0.5-2.0	< 30	Involution of	PLATE REAL	Alter Contracts	and a	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	DUR SUD	pa (* c.) ad	19.6	6.8
Area 3	JUNEA-13	B7	0-0.5	< 30		· · · · · · · · · · · · · · · · · · ·			
Area 3	JUNEA-14	B8	0-0.5	< 30	a subserve	Same and	A AMART I	840	
Area 4	JUNEA-15	B9	0-0.5	< 30			1913		
Area 4	COMP. A*	B9	0.5-5.0	< 30	200	an and	the month	and the second se	
Area 4	JUNEA-16	B10	0-0.5	< 30	10 12 13	CDC - A LAW	a su su su la	517.10E	
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		the second	COLLED	No. Water	. 8
Area 5	JUNEA-113	B4	0.5-3.0	< 30					
Area 5	JUNEA-114	B4	3.0-4.0	NA					
	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	1 V. 1VS	< 5	< 0.05	< 0.20	11.2
Area 5	JUNEA-127	B12	0.5-2.0	< 30			1		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	the second	ar in the	there because	at he work	Maria
Area 6	JUNEA-09	Discrete	0-0.5	200	A CAR COMP	0.00.00.00.00.00	State of the second		Pre-see 1 million
Area 6	JUNEA-10	Discrete	0-0.5	80		- Commenter	the second	1	
Area 6	JUNEA-11	Discrete	0-0.5	71	ani, 235, 31	an survey	non mai	1122/01/20	1947-1947-1947 1947-1947-1947
DEC Clea	nup Guidelines			NA	100	50	0.1	10	

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.

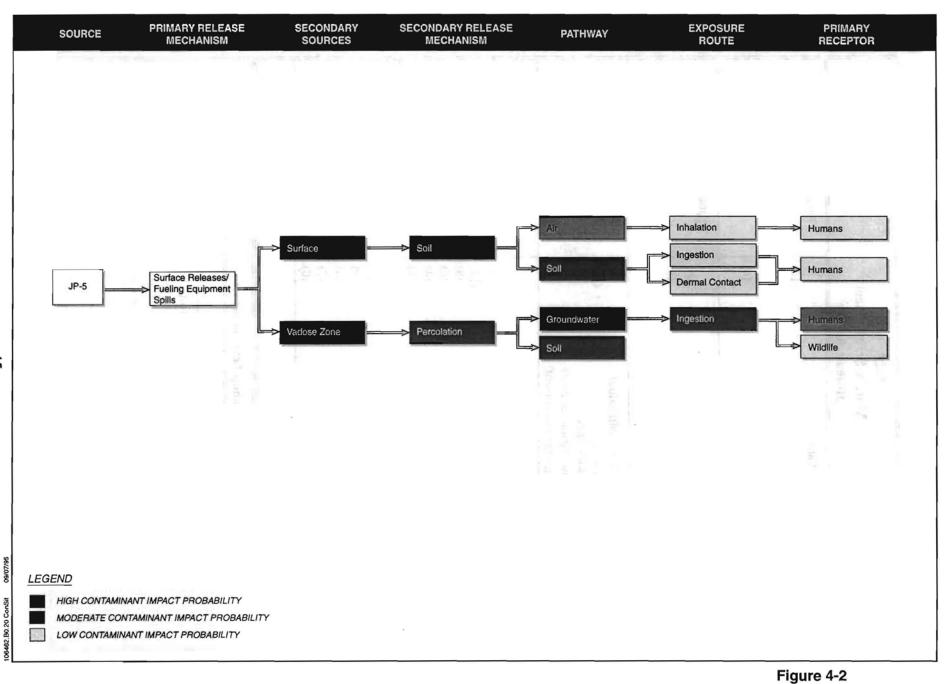
Figure 4-2 shows a conceptual model of the potential fate and transport of JP-5 at the site. Figure 4-2 also shows the relative probability of hazard concerning sources, transport mechanisms, and receptors. Contamination is known to exist to 5 feet and may have reached groundwater. Because most of the 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



Conceptual Site Model

	Table Matrix Sc Juneau	ore Sheet		
<5 feet 5-15 feet 15-25 feet 25-50 feet	<5 feet 5-15 feet 15-25 feet 25-50 feet			1atrix Score
 >50 feet 2. Mean Annual Precipita >40 inches 25-40 inches 15-25 inches <15 inches 	(1) (10) (5) (3) (1)	Parameter Matrix Score		
3. Soil Type (Unified Soi Clean, coarse-grained soils w Fine-grained soils (low Fine-grained soils (hig	(10) (8) (3) (1)	Parameter Matrix Score		
4. Potential Receptors Public well within 1,00 Private well(s) within Municipal/private well Municipal/private well No known well within No known well within Non-potable groundwa	(15) (12) (8) (6) (4) (1)	Parameter Matrix Score		
5. Volume of Contaminat >500 cubic yards 100-500 cubic yards 25-100 cubic yards >De Minimis-25 cubic De Minimis	(10) (8) (5) (2) (0)	Parameter Matrix Score		
Total Matrix Score			4	8
	Cleanup Lev Diesel		asoline/Unknow	
atrix Score	Diesel-Range Petroleum Hydrocarbon	Gasoline- Range Petroleum Hydrocarbon	Benzene	BTEX
Level A >40 Level B 27-40 Level C 21-26 Level D <20	100 200 1,000 2,000	50 100 500 1,000	0.1 0.5 0.5 0.5	10 15 50 100

]

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.

ANC10012C27.WP5

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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 al cleanup actions. A recommended remedial technology to treat soil in Area 1 is presented in a related, follow-up feasibility study.

			Soil Investig	gation		Gro	undwate	r Investigation
Area No. Area 1	Analytes/ Maximum Concentrations		Location of Maximum Concentration	Proposed Cleanup Level (ADEC)	Comments and Recommendations	Analytes/ Maximum Concentrations (ADEC)		Proposed Cleanup Level (ADEC)
	DRO GRO Benzene BTEX TPH	1,020 mg/kg 472 mg/kg <0.25 mg/kg 16.4 mg/kg >650 mg/kg	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 GRO TPH Benzene	NA NA NA NA	No sheen/odor ND 5 μg/L
Area 2	DRO GRO Benzene BTEX TPH	NA NA NA <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 GRO TPH Benzene	NA NA NA NA	NA
Area 3	DRO GRO Benzene BTEX TPH	23 mg/kg NA NA S3 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 GRO TPH Benzene	NA NA NA NA	NA
Area 4	DRO GRO Benzene BTEX TPH	10 mg/kg <5 mg/kg <0.05 mg/kg <0.2 mg/kg 39 mg/kg	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 GRO TPH Benzene	NA NA NA NA	NA
Area 5	DRO GRO Benzene BTEX TPH	46 mg/kg <5 mg/kg <0.05 mg/kg <0.2 mg/kg 57 mg/kg	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 GRO TPH Benzene	NA NA NA NA	NA
Area 6	TPH DRO GRO Benzene BTEX	200 mg/kg NA NA NA NA	Juneau-09 taken from center of Excavation 1 (AK ARNG hydraulic fluid cleanup)	NA	No action.	DRO GRO TPH Benzene	NA NA NA NA	NA

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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.

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ANC10012C27.WP5

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USGS. Water Resources Data. 1995.

Appendix A Photographs

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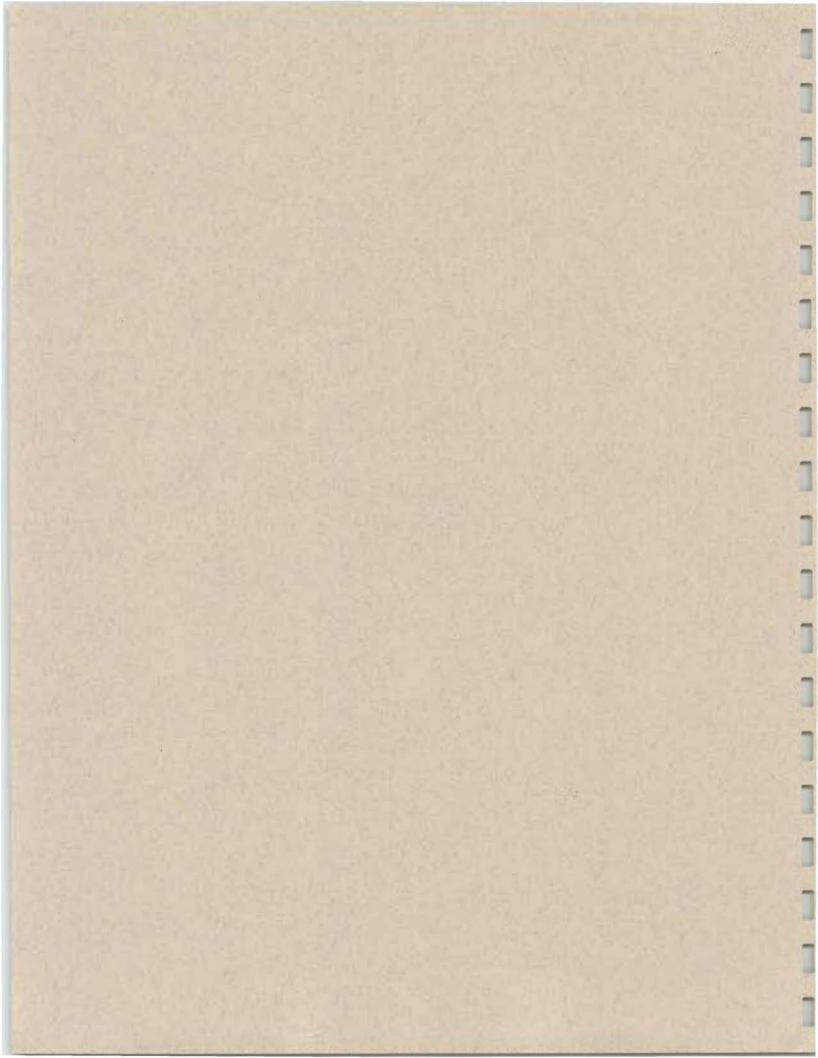
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1. East side of Juneau AAOF, looking west. Area 5 is in photo foreground, Area 1 is in photo center right (behind loader), and Area 2 is photo right.



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Juneau AAOF

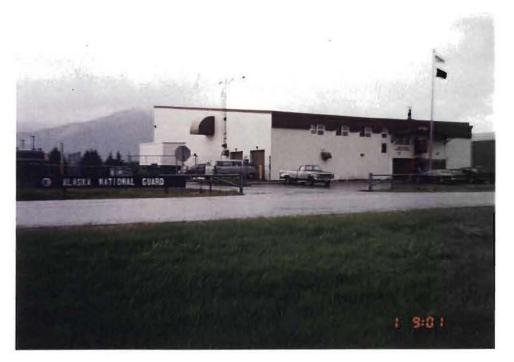
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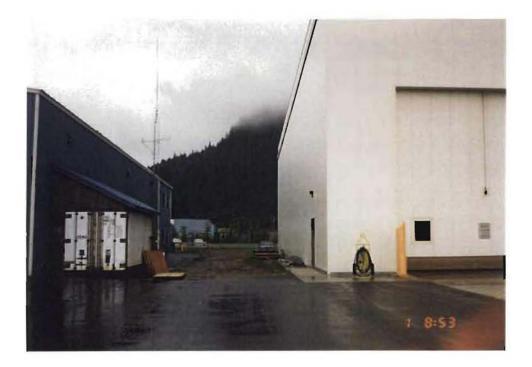
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3. East and north sides of Juneau AAOF, looking southwest.



4. West side of Juneau AAOF, looking north.

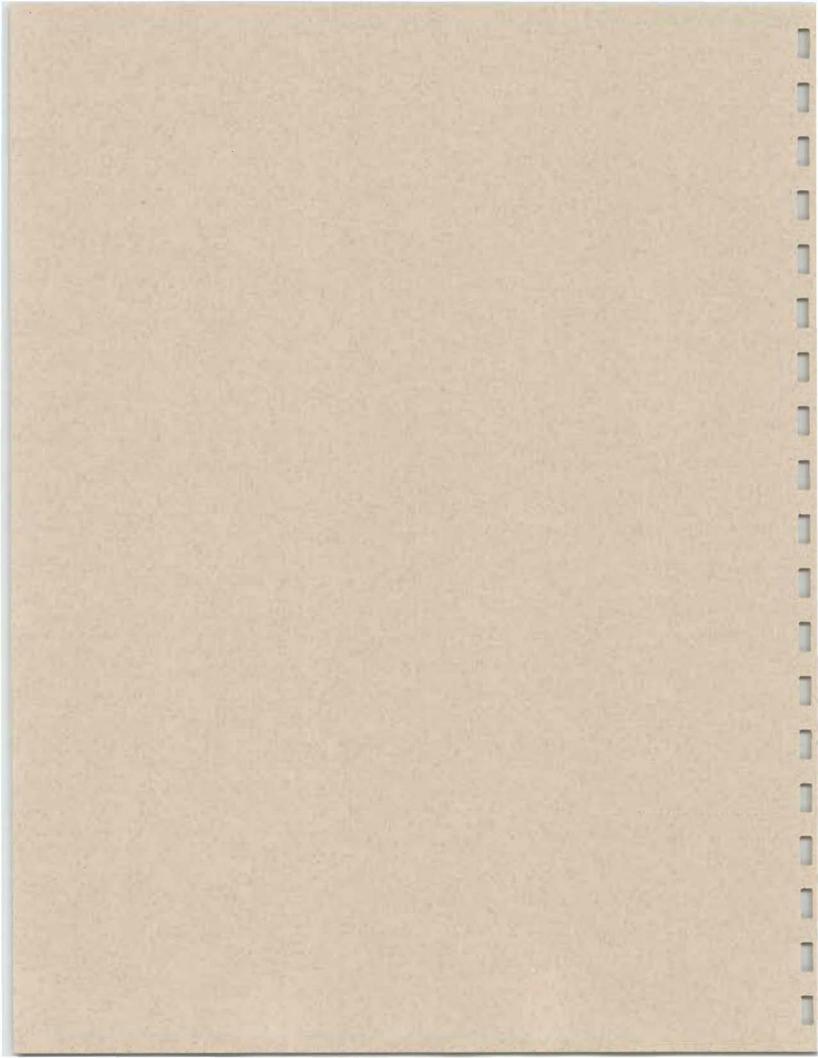
Appendix B Quality Assurance Review Memorandums and Laboratory Analytical Data Reports

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MEMORANDUM

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

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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.

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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 $4^{\circ}C \pm 2^{\circ}C$. 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.

M E M O R A N D U M Page 4 January 16, 1996 106463.B0.10

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								
DROGROBTEXSample ID(mg/kg)(mg/kg)(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

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

ANC10012CA3.WP5

- 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.

M E M O R A N D U M Page 3 October 26, 1995 106462.C0.20, 106463.C0.20

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.

CH2M HILL AK

JUL 03 1995



June 29, 1995

Service Request No: A9500248

Jacques Gusmano CH2M Hill, Inc. 301 W. Northern Lights Blvd. Suite 601 Anchorage, AK 99503

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 7. Whitself

Jane F. Whitsett Laboratory Manager

JFW/eaz

Page 1 of 21

Client:CH2M Hill, Inc.Project:AKARNG/NPE 72222.B0.10Sample Matrix:Soil

Date Received: Work Order No:

6/2/95 A9500248

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 LimitND None Detected at or above the method reporting limit

Approved by <u>IFW</u> June 28, 1995

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Analytical Report

Client: Project: Sample Matrix:	CH2M Hill JUNEAU AAOF/Project No. NPE72 Soil	Service Request: Date Collected: Date Received:	5/30/95	
*		Total Solids (%)		
Prep Method: Analysis Method: Test Notes:	NONE TS AK		Units: Basis:	PERCENT Dry
Sample Name	Lab Code	Date Analyzed	Result	Result Notes
JUNEA-101 JUNEA-301 JUNEA-106 JUNEA-107 JUNEA-115 JUNEA-118 JUNEA-119 JUNEA-129 JUNEA-18	A9500248-1 A9500248-2 A9500248-3 A9500248-4 A9500248-5 A9500248-5 A9500248-6 A9500248-7 A9500248-8 A9500248-8	6/6/95 6/6/95 6/6/95 6/6/95 6/6/95 6/6/95 6/6/95 6/6/95	94.5 95.0 92.2 86.1 96.0 96.1 93.2 90.5 95.0	

6/6/95

A9500248-10

Approved By: Michael L aveltine

Total Solids/042895

00248PHC.SG1 - Total Solids 6/15/95

Date: 15_TUN95

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Page No.: 03

JUNEA-302

Analytical Report

Client: Project: Sample Matrix:	JUNEAU AAOF/Project No. NPE72222.BO.10 Dat						Date Co	Request: ollected: eceived:	
		Aroma	atic Vola	tile Org	anics				
Sample Name: Lab Code: Test Notes:	JUNEA-106 A9500248-3							Units: Basis:	mg/Kg (ppm) Dry
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	А
Toluene Ethylbenzene	5030 5030	8020 8020	0.05 0.05	0.01	5 5	6/5/95 6/5/95	6/8/95 6/8/95	ND 2.1	A A
Xylenes, Total	5030	8020	0.05	0.01	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.

Date: 6.13.95

Approved By:

1522/042895

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00248PHC.KMI - BTEX 6/12/95

Page No.: 04

Analytical Report

Client: CH2M Hill Service Request: A9500248 **Project:** JUNEAU AAOF/Project No. NPE72222.BO.10 Date Collected: 5/31/95 Date Received: 6/2/95 Sample Matrix: Soil

Aromatic Volatile Organics

Sample Name:	JUNEA-107	Units: mg/Kg (ppm)
Lab Code:	A9500248-4	Basis: Dry
Test Notes:		

	Prep	Analysis			Dilution	Date	Date		Result
Analyte	Method	Method	MRL	MDL	Factor	Extracted	Analyzed	Result	Notes
D	6020	8000	0.05	0.01		(15105	(17/05		
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	

1\$22/042895

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Page No.: 05

Date: _____ 13 95

Analytical Report

Client: Project: Sample Matrix:	CH2M Hill JUNEAU AAOF/P Soil	roject No. NPE72222.BO.10			Service Request: Date Collected: Date Received:	5/31/95
		Aromatic Volatile O	ganics			
Sample Name: Lab Code: Test Notes:	JUNEA-115 A9500248-5				Units Basis	: mg/Kg (ppm) : Dry
	Prep	Analysis	Dilution	Date	Date	Result

Analyte	Method	Method	MRL	MDL	Factor	Extracted	Analyzed	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	
Toluene Ethylbenzene	5030 . 5030	8020 8020	0.05	0.01	1 1 1	6/5/95	6/5/95 6/5/95	ND ND	

Approved By: _____

00248PHC.KM1 - BTEX (3) 6/12/95

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Page No.: 06

Analytical Report

Client: Project:	CH2M Hill JUNEAU AAOF/Project No. NPE72222.BO.10	Service Request: Date Collected:	
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	e i	
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	

_____ Date: _____ Date: _____

hs

Analytical Report

Client:	CH2M Hill	Service Request:	5/31/95
Project:	JUNEAU AAOF/Project No. NPE72222.BO.10	Date Collected:	
Sample Matrix:	Soil	Date Received:	

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: _

Date: (1.13.95

00248PHC.KM1 - BTEX (5) 6/12/95

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Page No.: 08

Analytical Report

Client:	CH2M Hill	Service Request:	5/31/95
Project:	JUNEAU AAOF/Project No. NPE72222.BO.10	Date Collected:	
Sample Matrix:	Soil	Date Received:	

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	

hs_____Date: 0.13.95

Analytical Report

Client: Project: Sample Matrix:	CH2M Hill JUNEAU AAOF/Project No. NPE72222.BO.10 Soil	Service Request: Date Collected: Date Received:	6/1/95
	Aromatic Volatile Organics		
Sample Name: Lab Code: Test Notes:	JUNEA-302 A9500248-10	Units: Basis:	mg/Kg (ppm) Dry

	Prep	Analysis			Dilution	Date	Date		Result
Analyte	Method	Method	MRL	MDL	Factor	Extracted	Analyzed	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: _____

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Page No.: 10

Analytical Report

Client:CH2M HillService Request:A9500248Project:JUNEAU AAOF/Project No. NPE72222.BO.10Date Collected:NASample Matrix:SoilDate 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: 1822/042895

_ Date: _______.13.95

Analytical Report

Client: Project: Sample Matrix:	CH2M Hill JUNEAU A Soil	AOF/Project No. NPE	Date C	A9500248 5/31/95 6/2/95					
		Volatil	e Petrole	um Hydr	ocarbons (8015)			
Prep Method: Analysis Method: Test Notes:	5030 8015-VPH							Units: Basis:	mg/Kg (ppm) 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	В
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	А

A B Sample was collected on 6/1/95. The MRL is elevated because the sample required diluting. The actual MRL is 5 times that listed.

Approved By:

hs

1A/042895 00248PHC.KM2 - GRO 6/13/95

_Date: 6 13-95

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Analytical Report

Client:CH2Project:JUNSample Matrix:Soil

CH2M Hill

JUNEAU AAOF/Project No. NPE72222.BO.10

Service Request: A9500248 Date Collected: 5/30/95 Date Received: 6/2/95

Diesel Range Organics

Test Notes:

Units: mg/Kg Basis: Dry

					Dilution	Date	Date		Result
Sample Name	Lab Code	Method	MRL	MDL	Factor	Extracted	Analyzed	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: Mart E. Mul

00248PHC.PW1 - sdro 1 6/28/95

QA/QC Report

Client: Project: Sample Matrix:	CH2M Hill JUNEAU AAOF/P Soil		30.10 gate Recovery Summary natic Volatile Organics	Service Request: Date Collected: Date Received: Date Extracted: Date Analyzed:	5/31/95 6/2/95 6/5/95
Prep Method: AnalysisMethod:	5030 8020			Units: Basis:	PERCENT Dry
Sample Name		Lab Code	Test Notes	Percent Recovery 1,4-Difluorobenzene	
Method Blank JUNEA-106 JUNEA-107 JUNEA-115 JUNEA-118 JUNEA-129		A950605-SB1 A9500248-3 A9500248-4 A9500248-5 A9500248-6 A9500248-8	B C	106 108 95 97 94 89	
JUNEA-18 JUNEA-302 Batch QC Matrix Spi Batch QC Dup Matri		A9500248-9 A9500248-10 A9500247-1 MS A9500247-1DMS	А	95 96 99 99	

CAS Acceptance Limits:

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A Sample was collected on 6/1/95.

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B Result is from an analysis performed on 6/8/95.

C Result is from an analysis performed on 6/7/95.

SUR.1/050495 00248PHC.KM1 - SUR1 6/26/95

Date: $\frac{6/29}{95}$

69 - 120

Page No.: 14

QA/QC Report

-	Client: Project: Sample Matrix:	CH2M Hill JUNEAU AAO Soil)F/Project N	o. NPE	72222.F	30.10					Da Da Dat	ice Request: te Collected: te Received: e Extracted: te Analyzed:	5/30/95 6/2/95 6/5/95	
				Matrix	x Spike	/Duplica	te Matrix	Spike Sı	ummary					
-					Aro	matic V	olatile Org	anics						
	Sample Name: Lab Code:	Batch QC Mat A9500247-1D	-									Units: Basis:	mg/Kg (ppm Dry)
	Test Notes:									Perc	ent	Recovery	/	
1	Analyte	Prep Method	Analysis Method	MRL	Spike MS	Level DMS	Sample Result	Spike MS	Result DMS	MS	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: _____ DMS/042895

JEW

_____ Date: <u>4/29/95</u>

QA/QC Report

Client:	CH2M Hill		Service Request:	A9500248	
Project:	JUNEAU AAOF/	Project No. NPE72222.BO.1	0	Date Collected:	
Sample Matrix:	Soil			Date Received:	6/2/95
				Date Extracted:	6/5/95
				Date Analyzed:	6/5/95
		Surrogate Reco	overy Summary		
		Volatile Petroleum H	lydrocarbons (8015)		
Prep Method:	5030			Units:	PERCENT
AnalysisMethod:	8015-VPH			Basis:	Dry
			Test	Percent Recovery	
Sample Name		Lab Code	Notes	1,4-Difluorobenzene	
Method Blank		A950605-SB1		107	
JUNEA-106		A9500248-3	В	103	
JUNEA-107		A9500248-4	С	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	Α	94	
Batch QC Matrix Spil	ke	A9500247-1MS		100	

A9500247-1DMS

CAS Acceptance Limits:

57 - 137

98

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: _ JEW

Date: 6/29/95

SUR 1/050495 00248PHC KM2 - SUR1 6/26/95

Batch QC Dup Matrix SPike

Page No.:

1

QA/QC Report

Client: Project: Sample Matrix:	CH2M Hill JUNEAU AA Soil	AOF/Project N	Io. NPE	72222	.BO.10					Da Da	ice Request: te Collected: te Received: e Extracted:	5/30/95 6/2/95	
,											te Analyzed:		
		N	fatrix S	pike/T	Duplicat	e Matrix S	Spike Su	mmary					
						Hydroca							
Sample Name: Lab Code: Test Notes:	Batch QC Dr A9500247-1	up Matrix Spi DMS	ke								Units: Basis:	mg/Kg (ppm Dry)
		1							Pere	ent	Recover		
Analyte	Prep Method	Analysis Method	MRL			Sample Result		Result DMS	MS	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	
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Approved By:F	√					I	Date:	6/29	193	2			

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

		Test	Percent Recovery
Sample Name	Lab Code	Notes	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 Month E. Am

SUR1/012095

00248PHC.PW1 - sdrosurr 6/28/95

Date: 6. 18.95

Page No.: 18

QA/QC Report

Client: Project: Sample Matrix:	CH2M Hill JUNEAU AAOF/Project No. NPE72222.BO.10 Soil								ce Request: e Collected: e Received: Extracted: e Analyzed:	5/30/95 6/2/95 6/6/95	
	1		-	uplicate N le Petrolei		-					
Sample Name: Lab Code: Test Notes:	JUNEA-101 A9500248-1DM								Units: Basis:	mg/Kg Dry	
			Spike	Sample	Spike		Perc	ent]	Recover CAS Acceptance	Relative	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

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.

В

MS/DMS were not in control, the LCS/DLCS were in agreement with CAS acceptance criteria.

Approved By: Ment E. Mul Date: 6.28.95 DMS/012095

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PROJECT NAME JUNEAU	DOF # NPET	12222. BO.10							4			SIS F	REQ	UES	TE	>	`			
PROJECT MGR	USMAND				7	7 /	tiles	7.	10	7	7	01	8	7	7	8 /	7	7		
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SAMPLERS SIGNATURE	the	77 9736	NUMBER OF	erveux.	Volatile 05582709anics GCMS 029anics Halc 6248250	601/8010 Or Aromatic Vi Pesticides of 802802 Vi	1 Petrol	TPH18.1 000 Hydrocarbons	TPH BTEX 503080158020 Hydrocart Modifie	DRO/81001 Scar	TCLP Wetal	Metals (total	Cond. CI dissolved)			/		/		
SAMPLE I.D. DATE	TIME I.D.	SAMPLE MATRIX	NUN	Bas CC	No.	601/10		Gas Gas	L'ENT	GRO	TCL Meta	Mel	HON TO	NES S		L		/	REM	ARKS
JUNEA-101 05/30	1517 M500240	SOIL	1							X										
Junea - 301 05/30	15/8 -2	5017	1							X										
Sunen-106. 05/31	0950 -3	Soil	2					Х		X										
Junea-107 0531	1002 - 4	Soil	2					Х		Х										
Suma-115 5/31	14:17 -5	Soil	2					X		x										
Junea - 118 5/31	15:50 -6	Soil	2					X		R										
Junea-119 5/31	17:05 -7	Soil	1							X										
Junea-129 5/31	19:14 -8	Soil	2					X	_	2										
Junea-118 5/31	18:58 -9	Soil	1					X	_										*Bottle	marked
JUNIA-302 6/1	15:25 -10	Soil	1					X												-
BELINGUISHED BY:	RECEIVED BY:				JIREMENTS			T REQU ine Repor	IREMEN t	NTS	P.O.#	INVOI	CE INF	ORMA	TION:		Temp:	S	SAMPLE RECEIP	^{T:0} C
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CH2m Hill FB/1/95 17:10	Firm 295 9.0			AX prelim	inary Results		(inc	ludes All I	Raw Data) ble Report		_						Condit	-		
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Project/Client_CHM+hil	150	ine	w	A ASFWork	Order A95 <u>C</u>	0248	•													
Cooler received on $6/2$ and of	1	chig	-	Trala	Toly	910														
Cooler received on $6/22$ and of	bened on	01211	1	<u>y 100000</u>																
1. Were custody seals on outs	side of co	ouler?	1	614	° Lo	YES N	10													
	1. Were custody sears on outside of cooler? If yes, how many and where? <u>3</u> , Front back, left ende 2. Were signature & date correct? YES NO																			
 Were signature & date cont Were custody papers properties 		l out (ink	, si	gned, etc)?		YES	10													
4. Did all bottles arrive in go	od condi	tion (unb	rok	en)?		YES	10													
 5. Were all bottle labels complete (<i>i.e.</i> analysis, preservation, etc)? 6. Did all bottle labels and tags agree with custody papers? X- 7. Were correct bottles used for the tests indicated? 8. Were VOA vials checked for absence of air bubbles, and noted if so? YES NO YES NO 																				
													9. Did the bottles originate fro	om CAS	/Kelso or	al	ranch laboratory	y?	(YES N	10
													10. Temperature of cooler(s) upon r	eceipt: C),E	<u> </u>			
Identification number of	f thermor	neter:	24	±																
Is the temperature within	$n 4 \pm 2$		les [es 🗆 🛛 Yes	_													
Explain any discrepancies June	zan 1	18 má	vo li	ed as 1	8 on CO	o □ No	u													
Junear 302	Ma	rked		15:20 0	n bottle	for Time	L													
·			=1																	
	YES	NO		Sample I.D	. Reagent	Vol. Addee	d													
pH Reagent																				
12 NaOH																				
2 HNO ₃																				
2 H ₂ SO ₄																				
YES = All samples OK			=1																	
NO = Samples were preserved at	lab as li	sted	า																	
VOC Vial pH Verific							-													
(Tested after Analy □ All Samples pH																				
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Appendix C Preliminary Assessment

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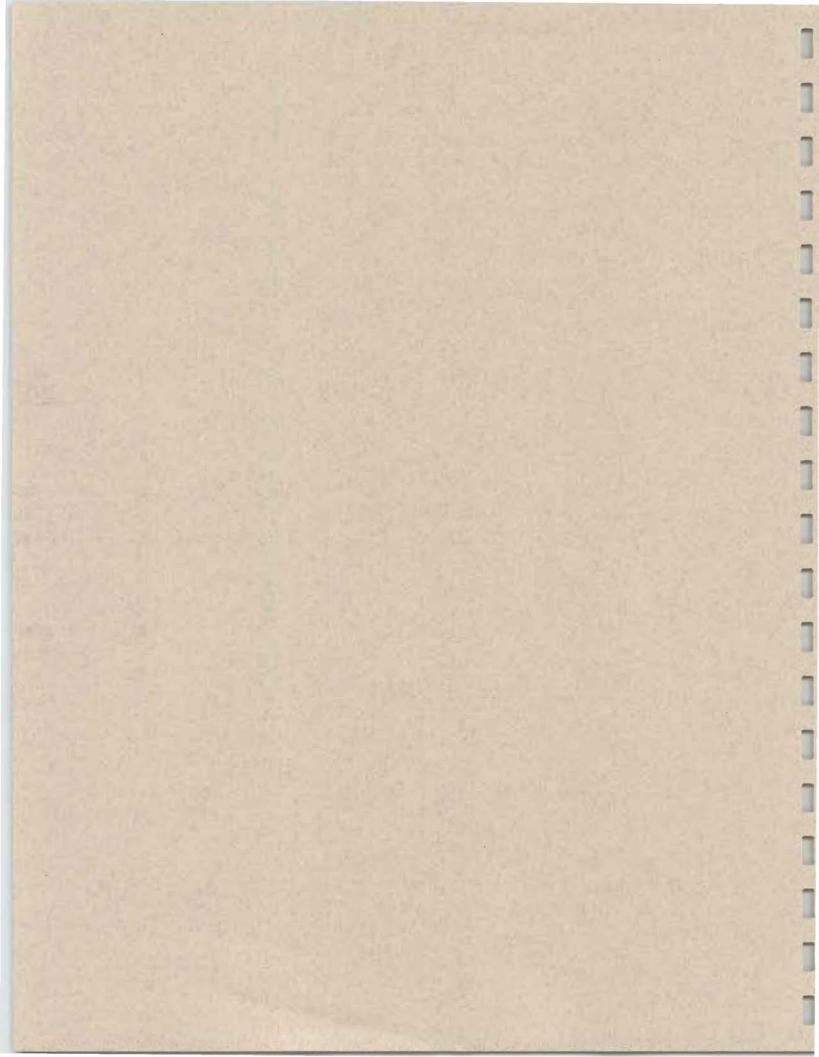
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AK ARNG Site Assessment Summary Form Juneau Army Aviation Operating Facility

Date: **Preparer Name:** Title: **Employer:** Address:

January 19, 1996 **Rob** Crotty Geologist CH2M HILL 301 West Northern Lights Boulevard Suite 601 Anchorage, Alaska 99503

Phone number: Signature:

(907) 278-2551 **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

х		Was soil contamination observed or identified?
	x	Was groundwater contamination observed or identified?
х		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?
Х		Do previous site assessments indicate any contamination has occurred? Contamination has been noted in ECAS reports.
х		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.
	х	Was an AK ARNG Site Assessment Summary Form completed for pre-

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

and the state

Weather (clear, raini	ing, etc.): Sunny	y 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

Х

X	were any	areas of	obvious	contamination	identified	or observed?

- 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 <u>Product</u>	Analytical <u>Method</u>	Number of Samples	Range of Result(s) <u>(ppm)</u>	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
 - 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 <u>Method</u> Number of Samples Range of Result(s) <u>(ppm)</u> 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

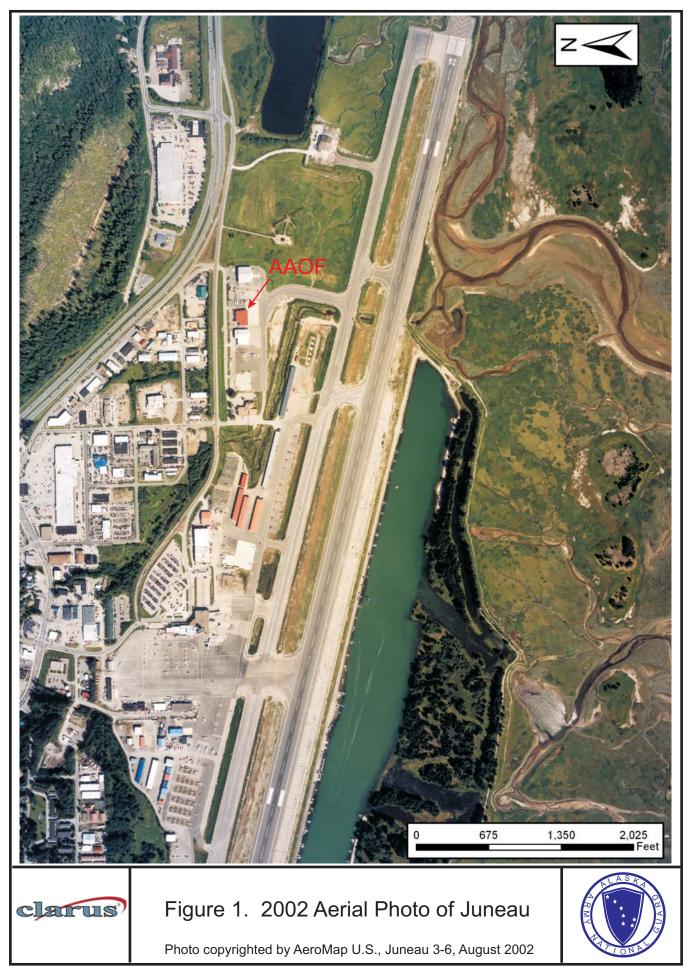
The following certification is to be signed by the assessment firm's principal investigator.

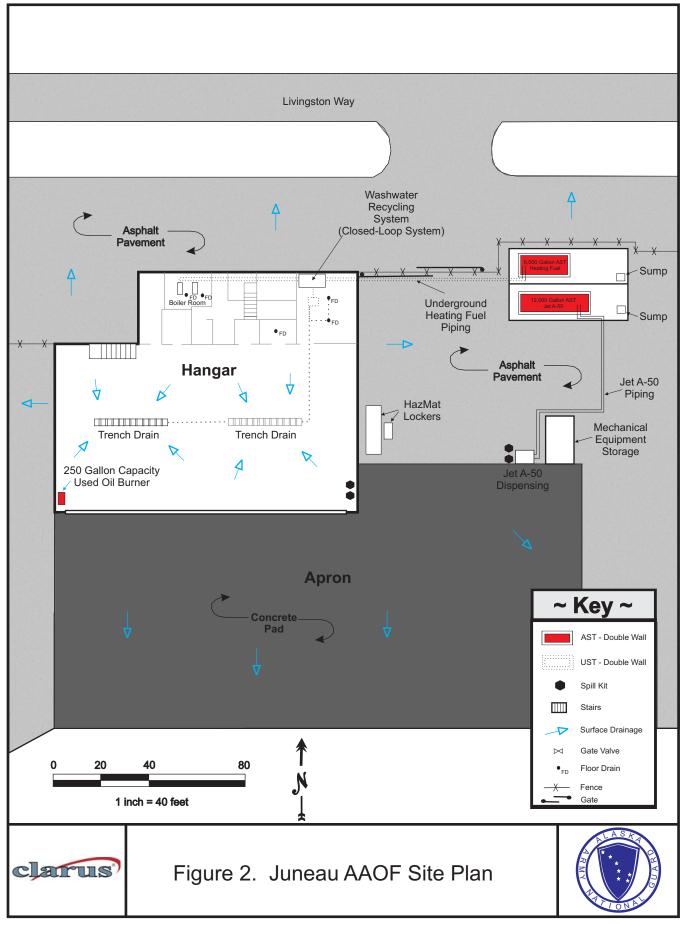
I certify that all statements and data appearing in this summary are valid and accurate.

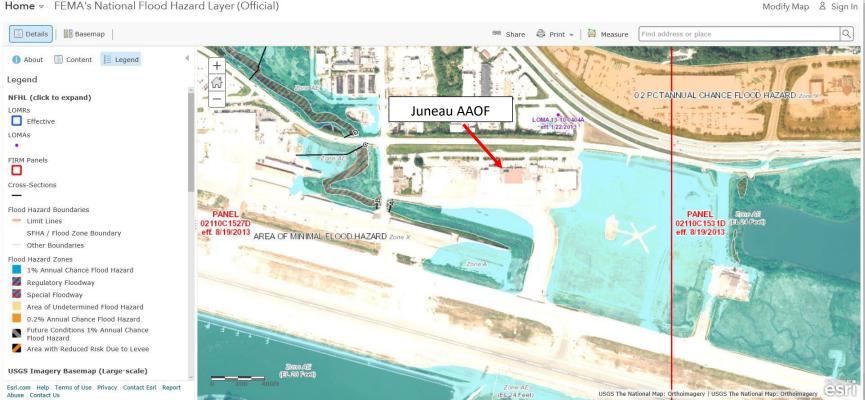
(Print name)

Signature)

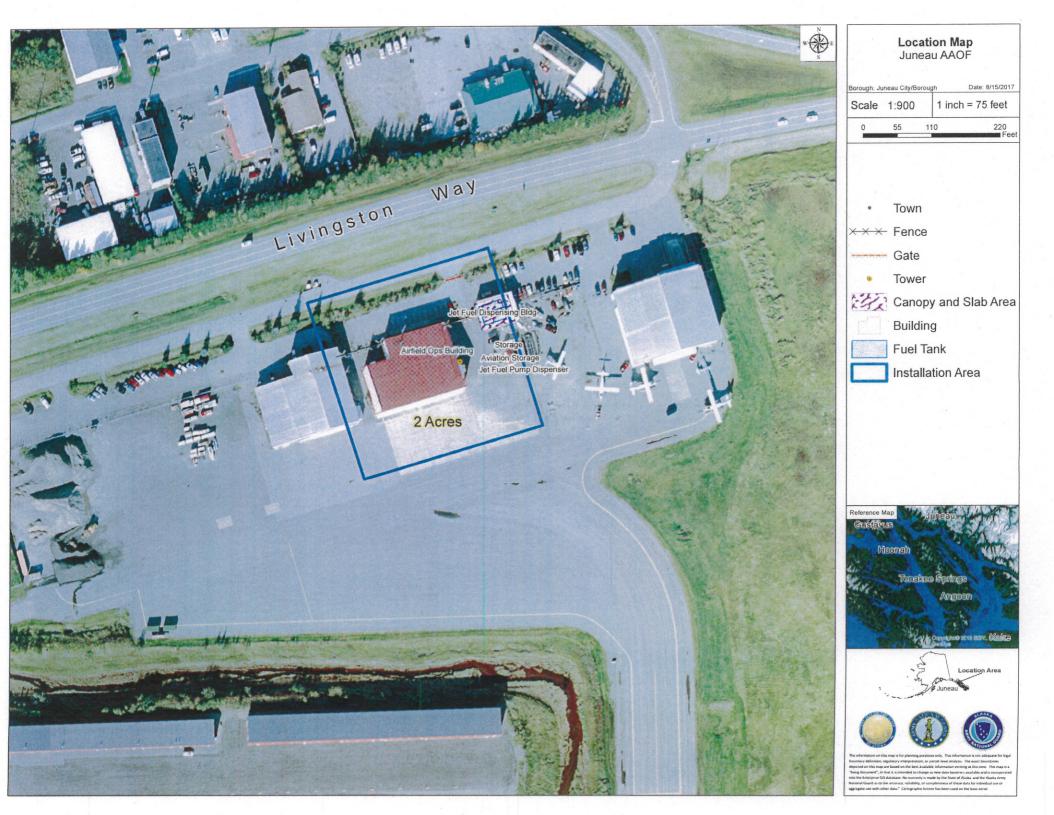
<u>Ceolograt</u> (Title) 01/19/96



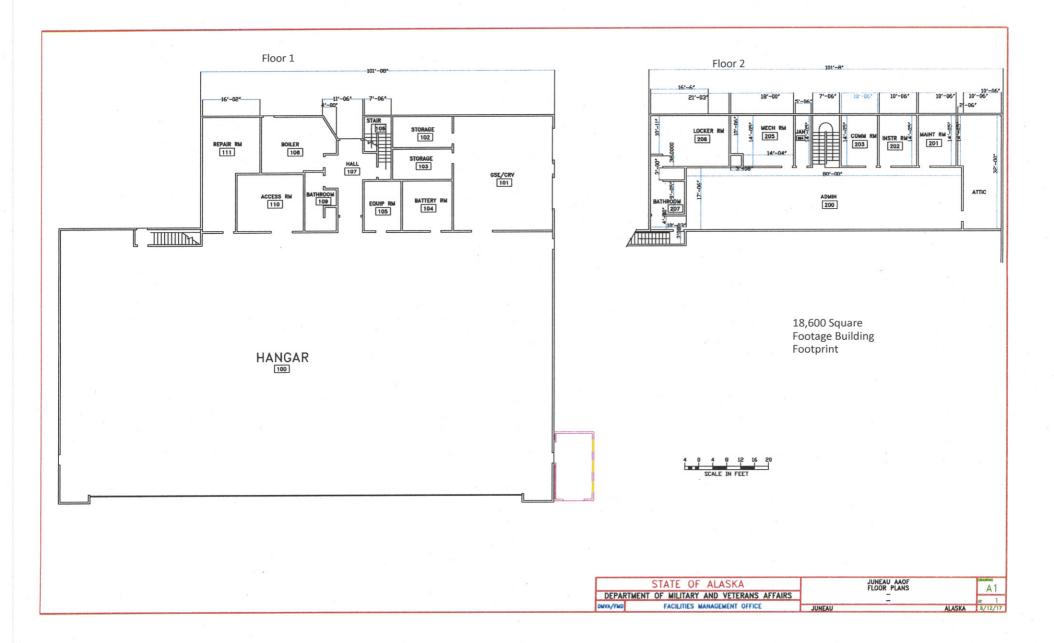


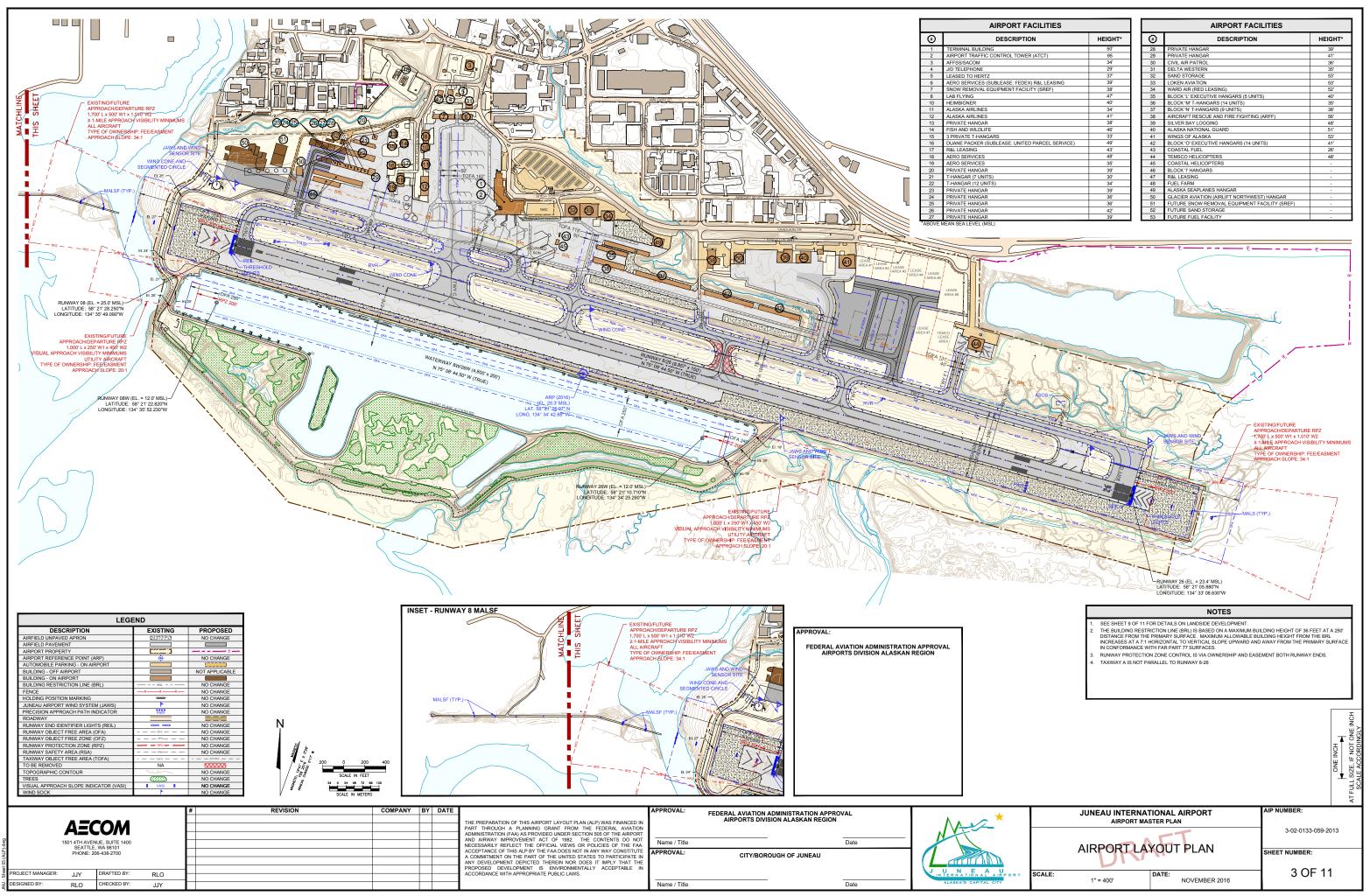


Home - FEMA's National Flood Hazard Layer (Official)









PORT FACILITIES			AIRPORT FACILITIES			
SCRIPTION	HEIGHT*	۲	DESCRIPTION	HEIGHT*		
	50'	28	PRIVATE HANGAR	39'		
ROL TOWER (ATCT)	95	29	PRIVATE HANGAR	41'		
	34'	30	CIVIL AIR PATROL	36'		
	29'	31	DELTA WESTERN	35'		
	37'	32	SAND STORAGE	53'		
SE: FEDEX) R&L LEASING	39'	33	LOKEN AVIATION	53'		
ENT FACILITY (SREF)	38'	34	WARD AIR (RED LEASING)	52'		
	47'	35	BLOCK 'L' EXECUTIVE HANGARS (5 UNITS)	40'		
	40'	36	BLOCK 'M' T-HANGARS (14 UNITS)	35'		
	34'	37	BLOCK 'N' T-HANGARS (9 UNITS)	38'		
	41'	38	AIRCRAFT RESCUE AND FIRE FIGHTING (ARFF)	56'		
	38'	39	SILVER BAY LOGGING	48'		
	46'	40	ALASKA NATIONAL GUARD	51'		
	33'	41	WINGS OF ALASKA	53'		
SE: UNITED PARCEL SERVICE)	49'	42	BLOCK 'O' EXECUTIVE HANGARS (14 UNITS)	41'		
	43'	43	COASTAL FUEL	26'		
	48'	44	TEMSCO HELICOPTERS	48'		
	35'	45	COASTAL HELICOPTERS	-		
	39'	46	BLOCK 'I' HANGARS	-		
	30'	47	R&L LEASING			
	34'	48	FUEL FARM			
	39'	49	ALASKA SEAPLANES HANGAR	-		
	36'	50	GLACIER AVIATION (AIRLIFT NORTHWEST) HANGAR	-		
	36'	51	FUTURE SNOW REMOVAL EQUIPMENT FACILITY (SREF)	-		
	42'	52	FUTURE SAND STORAGE	-		
	39'	53	FUTURE FUEL FACILITY	-		

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 Ma	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 Photograp	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:	overage exists for JUNEAU County				
Current:	arget 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, ĀK 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:

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- ____ EDR Sanborn Map[®] Search/Print
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- ____ USGS Aerial 3 Package
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- Environmental Lien Search
- Chain of Title Search
- _ NJ MacRaes Industrial Directory Report
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Thank you

Juneau 8425 Livingston Way Juneau, AK 99801

Inquiry Number: 5509586.3 December 12, 2018

Certified Sanborn® Map Report



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12/12/18Site Name:Client Name:JuneauAECOM8425 Livingston Way12120 Shamrock PlazaJuneau, AK 99801Omaha, NE 68154EDR Inquiry # 5509586.3Contact: Brittany Kirchmann

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Certified Sanborn Results: Certification # 4928-4C72-9AE0 PO # NA Project Juneau

UNMAPPED PROPERTY

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Library of Congress	
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Juneau

8425 Livingston Way Juneau, AK 99801

Inquiry Number: 5509586.5 December 14, 2018

The EDR Aerial Photo Decade Package



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EDR Aerial Photo Decade Package

Site Name:

Client Name:

Juneau 8425 Livingston Way Juneau, AK 99801 EDR Inquiry # 5509586.5

. . .

AECOM 12120 Shamrock Plaza Omaha, NE 68154 Contact: Brittany Kirchmann



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Searc	h Results:			
<u>Year</u>	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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Juneau 8425 Livingston Way Juneau, AK 99801

Inquiry Number: 5509586.2s December 12, 2018

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FORM-LBD-SPM

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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: Source:

N/A U.S. Geological Survey

Target Property Address: 8425 LIVINGSTON WAY JUNEAU, AK 99801

Click on Map ID to see full detail.

MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
ID A1	JUNEAU AAOF 300-GAL	8425 LIVINGSTON DR	AK RGA LUST	LLEVATION	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		ТР
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.
118	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.
133	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.
135	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.

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

Target Property Address: 8425 LIVINGSTON WAY JUNEAU, AK 99801

Click on Map ID to see full detail.

MAP	SITE NAME	ADDRESS		ELATIVE EVATION	DIST (ft. & mi.) DIRECTION
ID 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, ECH	O 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

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

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
	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

State and tribal registered storage tank lists

FEMA UST	Underground Storage Tank Listing
AK AST	
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

	. Section 7 Tracking Systems
ROD	
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 Registration Database
	Radiation Information Database
	- FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
	_ Superfund (CERCLA) Consent Decrees
INDIAN RESERV	
	Formerly Utilized Sites Remedial Action Program
UMTRA	
LEAD SMELTERS	
	Aerometric Information Retrieval System Facility Subsystem
DOCKET HWC	- Hazardous Waste Compliance Docket Listing
	. Unexploded Ordnance Sites
FUELS PROGRAM	EPA Fuels Program Registered Listing
AK AIRS	
AK COAL ASH	Coal Ash Disposal Sites
AK DRYCLEANERS	
AK UIC	

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.

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.)	135	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 - Instit	1850 CREST STREET, N utional Controls	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 - Institu 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.)	057	90
CHEVRON - AIRPORT (P Facility Status: Cleanup Complete - Institu Hazard ID: 24532	9151 GLACIER HWY; Itional Controls	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 - Institu Hazard ID: 24743	9225 CESSNA DRIVE Itional Controls	W 0 - 1/8 (0.065 mi.)	Q72	114
UNOCAL - #5785- AIRP Facility Status: Cleanup Complete - Institu Hazard ID: 2984 Hazard ID: 23568	9190 GLACIER HIGHWAY Itional Controls	WNW 0 - 1/8 (0.076 mi.)	S76	119
JUNEAU AIRPORT TRAVE Facility Status: Cleanup Complete - Institu Hazard ID: 4517	9200 GLACIER HIGHWAY utional Controls	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.)	778	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 187 9351 GLACIER HIGHWAY WNW 1/4 - 1/2 (0.348 mi.) 93 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 103 216 NW 1/2 - 1 (0.711 mi.) 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 -1650 MAPLESDEN WAY E 0 - 1/8 (0.033 mi.) R69 110 Facility Status: Cleanup Complete - Institutional Controls Hazard ID: 24511 2009 RADCLIFFE ROAD, MENDENHALL WW TREATM W 1/4 - 1/2 (0.380 mi.) 94 189 Facility Status: Active Hazard ID: 3863 **RESIDENCE - MISTY LA** 10648 MISTY LANE, DO SSW 1/2 - 1 (0.779 mi.) 104 219 Facility Status: Cleanup Complete - Institutional Controls Hazard ID: 4063

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 - Ins	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 - Instit	9151 GLACIER HWY	WNW 0 - 1/8 (0.022 mi.)	P58	91
DELTA WESTERN JUNEAU	9203 CESSNA DRIVE; J	W 0 - 1/8 (0.027 mi.)	Q63	103
eventid: 23308 Facility Status: Cleanup Complete				
AERO SERVICES, JUNEA eventid: 23170	"F"GATE 9203 SHELL S	W 0 - 1/8 (0.036 mi.)	N70	113
Facility Status: Cleanup Complete			_	
PTI- JUNEAU CESSNA D eventid: 24743 Facility Status: Cleanup Complete - Instit	9225 CESSNA DRIVE	W 0 - 1/8 (0.065 mi.)	Q73	117
UNOCAL - #5785- AIRP	9190 GLACIER HIGHWAY	WNW 0 - 1/8 (0.076 mi.)	S76	119
eventid: 23568	9190 GLACIER HIGHWAT	WINW 0 - 1/8 (0.070 IIII.)	370	119
Facility Status: Cleanup Complete - Instit	utional Controls			
ALASKA AIRLINES - JU eventid: 22996 Facility Status: Open	1915 ALEX HOLDEN WAY	W 0 - 1/8 (0.120 mi.)	T78	137
ALASKA AIRLINES - JU	1915 ALEX HOLDEN WAY	W 0 - 1/8 (0.120 mi.)	T79	148
eventid: 24525 Facility Status: Cleanup Complete	1915 ALEX HOLDEN WAT	W 0 - 1/8 (0.120 mil.)	179	140
FAA JUNEAU SFOP	9341 GLACIER HIGHWAY	WNW 1/4 - 1/2 (0.276 mi.)	W91	180
eventid: 24941		, ,		
Facility Status: Open				
BRUCE D. MORLEY, INC eventid: 24560	9128 N. DOUGLAS HIGH	SE 1/4 - 1/2 (0.469 mi.)	X97	206
Facility Status: Cleanup Complete				
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 -	1650 MAPLESDEN WAY	E 0 - 1/8 (0.033 mi.)	R68	110
eventid: 24511 Facility Status: Cleanup Complete - Instit		2 0 - 1/0 (0.000 mil.)	100	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.)	133	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: 270 Tank Status: Permanently Out of Use Tank Status: Currently in Use				
TEMSCO HELICOPTERS,	1650 MAPLESDEN WAY	E 0 - 1/8 (0.033 mi.)	R66	108
Lower Elevation	Address	Direction / Distance	Map ID	Page
AERO SERVICES, INC. Facility Id: 1375 Tank Status: Permanently Out of Use	1890 RENSHAW WAY	W 1/8 - 1/4 (0.137 mi.)	Т83	161
<i>MIKE'S AIRPORT EXPRE</i> 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
JUNEAU & DOUGLAS TEL Facility Id: 143 Tank Status: Permanently Out of Use	9229 CESSNA DR	W 0 - 1/8 (0.036 mi.)	Q71	114
FAA JUNEAU Facility Id: 1020 Tank Status: Permanently Out of Use	9230 CESSNA DR	WNW 0 - 1/8 (0.023 mi.)	Q62	101
Facility Id: 928 Tank Status: Permanently Out of Use				

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	9151 GLACIER HWY;	WNW 0 - 1/8 (0.022 mi.)	P60	93
Facility Status: Cleanup Complete - Hazard ID: 24532	Institutional Controls			

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 - In Hazard ID: 1755	1850 CREST STREET, N stitutional Controls	0 - 1/8 (0.000 mi.)	E41	68
CBJ JUNEAU AIRPORT M Facility Status: Cleanup Complete - In Hazard ID: 25156	SHELL SIMMONS DRIVE stitutional Controls	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 - Institu Hazard ID: 24532	tional Controls			
PTI- JUNEAU CESSNA D Facility Status: Cleanup Complete - Institu Hazard ID: 24743	9225 CESSNA DRIVE utional Controls	W 0 - 1/8 (0.065 mi.)	Q72	114
UNOCAL - #5785- AIRP Facility Status: Cleanup Complete - Institu Hazard ID: 2984 Hazard ID: 23568	9190 GLACIER HIGHWAY utional Controls	WNW 0 - 1/8 (0.076 mi.)	S76	119
JUNEAU AIRPORT TRAVE Facility Status: Cleanup Complete - Institu Hazard ID: 4517	9200 GLACIER HIGHWAY utional Controls	WNW 0 - 1/8 (0.112 mi.)	S77	129
COMMERCIAL PROPERTY Facility Status: Cleanup Complete Hazard ID: 25608	9351 GLACIER HIGHWAY	WNW 1/4 - 1/2 (0.348 mi.)	93	187
SKATEBOARD PARK Facility Status: Cleanup Complete - Institu Hazard ID: 2697	MENDENHALL LOOP ROAD	WNW 1/4 - 1/2 (0.392 mi.)	95	200
Lower Elevation	Address	Direction / Distance	Map ID	Page
TEMSCO HELICOPTERS - Facility Status: Cleanup Complete - Institu Hazard ID: 24511	1650 MAPLESDEN WAY utional Controls	E 0 - 1/8 (0.033 mi.)	R69	110

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 DEC File Number: 1513.26.056 Facility Status: Cleanup Complete - Inst	9225 CESSNA DRIVE	W 0 - 1/8 (0.065 mi.)	Q72	114
Hazard Id: 24743				
SKATEBOARD PARK DEC File Number: 1513.38.038 Facility Status: Cleanup Complete Hazard Id: 2696	MENDENHALL LOOP ROAD	WNW 1/4 - 1/2 (0.392 mi.)	95	200
Lower Elevation	Address	Direction / Distance	Map ID	Page
TEMSCO HELICOPTERS - DEC File Number: 1513.26.053 Facility Status: Cleanup Complete - Insti Hazard Id: 24511	1650 MAPLESDEN WAY	E 0 - 1/8 (0.033 mi.)	R64	107

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.)	l18	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
<i>T W HALL</i> 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 Gov Mine ID:: 5001723	vernment Version: 08/01/2018	NW 1/8 - 1/4 (0.175 mi.)	U87	165
CHANNEL CONSTRUCTION Database: US MINES, Date of Gov	vernment Version: 08/01/2018	NW 1/8 - 1/4 (0.194 mi.)	V89	168

Mine ID:: 5001722

MILLER CONSTRUCTION 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

V90 174

NW 1/8 - 1/4 (0.194 mi.)

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

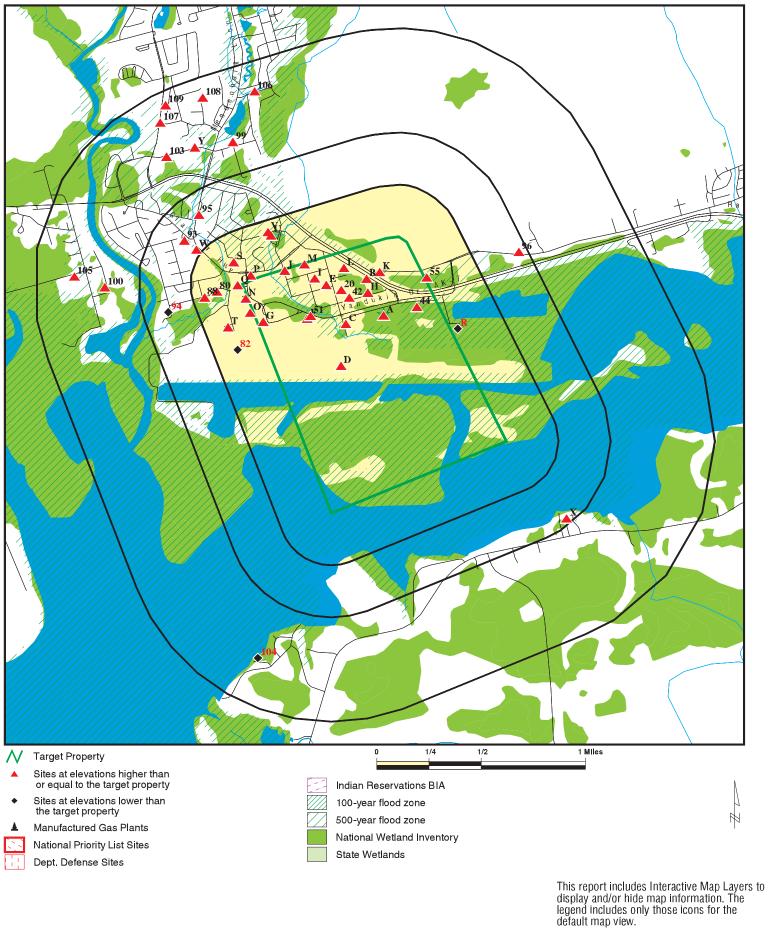
Due to poor or inadequate address information, the following sites were not mapped. Count: 24 records.

Site Name

JUNEAU LDFL AT&T - JUNEAU TOLL CENTER JUNEAU AIRPORT JUNEAU -JIA- TAXIWAY REHABILITATIO JUNEAU EGAN DRIVE-10TH STREET INTE JUNEAU - OLD DAIRY ROAD SHOULDER W DELTA WESTERN JUNEAU AIRPORT FUEL DELTA WESTERN JUNEAU AIRPORT FUEL AERO SERVICES, JUNEAU AIRPORT AERO SERVICES, JUNEAU AIRPORT JUNEAU READY MIX INCORPORATED JUNEAU READY MIX INCORPORATED JUNEAU READY MIX INCORPORATED ALASKA LAUNDRY AND CLEANERS - JUNE ALASKA LAUNDRY AND CLEANERS - JUNE DELTA WESTERN JUNEAU AIRPORT FUEL AUKE BAY HARBOR - JUNEAU AUKE BAY HARBOR - JUNEAU FAA - JUNEAU JUNEAU AIRPORT CBJ JUNEAU AIRPORT MAINTENANCE FAC CBJ JUNEAU AIRPORT MAINTENANCE FAC CBJ JUNEAU AIRPORT MAINTENANCE FAC CBJ JUNEAU AIRPORT MAINTENANCE FAC

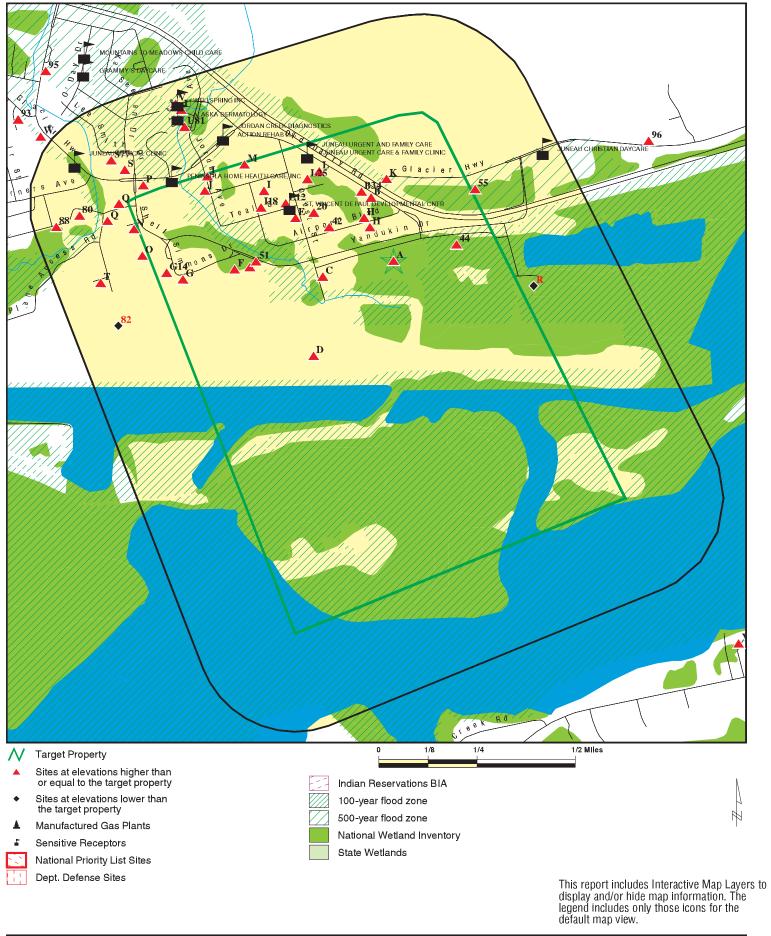
Database(s) SEMS-ARCHIVE AK UST HMIRS AK NPDES AK NPDES AK NPDES AK RGA LUST AK RGA LUST

OVERVIEW MAP - 5509586.2S



SITE NAME: Juneau	CLIENT: AECOM
ADDRESS: 8425 Livingston Way	CONTACT: Brittany Kirchmann
Juneau AK 99801	INQUIRY #: 5509586.2s
LAT/LONG: 58,35764 / 134,568524	DATE: December 12. 2018 9:59 am

DETAIL MAP - 5509586.2S



SITE NAME:	CLIENT: CONTACT	AECOM Brittany Kirchmann
		5509586.2s December 12, 2018 9:59 am
Brinzonia.	BATE.	2000mber 12, 2010 0.00 am

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 Proposed NPL NPL LIENS	1.000 1.000 1.000		0 0 0	0 0 0	0 0 0	0 0 0	NR NR NR	0 0 0	
Federal Delisted NPL site list									
Delisted NPL	1.000		0	0	0	0	NR	0	
Federal CERCLIS list									
FEDERAL FACILITY SEMS	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0	
Federal CERCLIS NFRA	P site list								
SEMS-ARCHIVE	0.500		1	0	1	NR	NR	2	
Federal RCRA CORRAC	TS facilities li	ist							
CORRACTS	1.000		0	0	0	0	NR	0	
Federal RCRA non-COR		acilities list							
RCRA-TSDF	0.500		0	0	0	NR	NR	0	
Federal RCRA generato	rs list								
RCRA-LQG RCRA-SQG RCRA-CESQG	0.250 0.250 0.250	1	0 0 9	0 0 1	NR NR NR	NR NR NR	NR NR NR	0 0 11	
Federal institutional controls / engineering controls registries									
LUCIS US ENG CONTROLS US INST CONTROL	0.500 0.500 0.500		0 0 0	0 0 0	0 0 0	NR NR NR	NR NR NR	0 0 0	
Federal ERNS list									
ERNS	TP		NR	NR	NR	NR	NR	0	
State- and tribal - equivalent CERCLIS									
AK SHWS	1.000	1	22	1	6	11	NR	41	
State and tribal landfill a solid waste disposal sit									
AK SWF/LF	0.500		0	0	0	NR	NR	0	
State and tribal leaking storage tank lists									
AK LUST INDIAN LUST	0.500 0.500	1	18 0	0 0	2 0	NR NR	NR NR	21 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 AK AST INDIAN UST	0.250 0.250 0.250	1	21 0 0	1 0 0	NR NR NR	NR NR NR	NR NR NR	23 0 0
State and tribal institutional control / engineering control registries								
AK ENG CONTROLS AK INST CONTROL	0.500 0.500		1 7	0 0	0 2	NR NR	NR NR	1 9
State and tribal voluntar	y cleanup sit	es						
AK VCP INDIAN VCP	0.500 0.500		2 0	0 0	1 0	NR NR	NR NR	3 0
State and tribal Brownfie	elds sites							
AK BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMEN	NTAL RECORD	s						
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / S Waste Disposal Sites			-	-	-			-
AK SWRCY INDIAN ODI ODI DEBRIS REGION 9 IHS OPEN DUMPS	0.500 0.500 0.500 0.500 0.500		0 0 0 0	0 0 0 0	0 0 0 0	NR NR NR NR NR	NR NR NR NR NR	0 0 0 0
Local Lists of Hazardous Contaminated Sites	s waste /							
US HIST CDL AK CDL US CDL	TP TP TP		NR NR NR	NR NR NR	NR NR NR	NR NR NR	NR NR NR	0 0 0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency I	Release Repo	orts						
HMIRS AK SPILLS AK SPILLS 90	TP TP TP		NR NR NR	NR NR NR	NR NR NR	NR NR NR	NR NR NR	0 0 0
Other Ascertainable Rec	cords							
RCRA NonGen / NLR FUDS DOD SCRD DRYCLEANERS US FIN ASSUR EPA WATCH LIST	0.250 1.000 1.000 0.500 TP TP		7 0 0 NR NR	3 0 0 NR NR	NR 0 0 NR NR	NR 0 NR NR NR	NR NR NR NR NR	10 0 0 0 0 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	NŘ	NR	NR	NR	ŏ
TRIS	TP		NR	NR	NR	NR	NR	Õ
SSTS	TP		NR	NR	NR	NR	NR	Õ
ROD	1.000		0	0	0	0	NR	ŏ
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 CONSENT	TP 1.000		NR 0	NR	NR 0	NR 0	NR NR	0 0
INDIAN RESERV	1.000		0	0 0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		Ő	õ	Ő	NR	NR	õ
LEAD SMELTERS	TP		NR	NR	NŘ	NR	NR	õ
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
AKAIRS	TP		NR	NR	NR	NR	NR	0
AK COAL ASH	0.500		0	0	0	NR	NR	0
AK DRYCLEANERS AK Financial Assurance	0.250 TP		0 NR	0 NR	NR NR	NR NR	NR NR	0 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 HISTORICA	L RECORDS							
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		2	NŘ	NŘ	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

Map ID Direction		[MAP FINDINGS		
Distance Elevation	Site			Database(s)	EDR ID Number EPA ID Number
A1 Target Property	JUNEAU AAOF 300-G 8425 LIVINGSTON DR JUNEAU, AK		ED OIL TANK	AK RGA LUST	S116469408 N/A
	Site 1 of 7 in cluster A	4			
Actual: 11 ft.	RGA LUST:	2003 2002 2001	JUNEAU AAOF 300-GAL USED OIL TANK JUNEAU AAOF 300-GAL USED OIL TANK JUNEAU AAOF 300-GAL USED OIL TANK	8425 LIVINGSTON DR 8425 LIVINGSTON DR 8425 LIVINGSTON DR	
A2 Target Property	JUNEAU AAOF 300-G 8425 LIVINGSTON DR JUNEAU, AK		ED OIL TANK	AK RGA LUST	S116469407 N/A
	Site 2 of 7 in cluster A	\			
Actual: 11 ft.	RGA LUST:	2008 2007 2006 2005 2004	JUNEAU AAOF 300-GAL USED OIL TANK JUNEAU AAOF 300-GAL USED OIL TANK	8425 LIVINGSTON DR. 8425 LIVINGSTON DR. 8425 LIVINGSTON DR. 8425 LIVINGSTON DR. 8425 LIVINGSTON DR.	
A3 Target Property	ALASKA AIR NATION 8425 LIVINGSTON WA JUNEAU, AK 99801		ARD AAOF JUNEAU	RCRA-CESQG FINDS ECHO	1000586263 AKD983073321
	Site 3 of 7 in cluster A	4			
Actual: 11 ft.	RCRA-CESQG: Date form receive Facility name: Facility address: EPA ID: Mailing address: Contact: Contact address: Contact country: Contact country: Contact telephone Contact email: EPA Region: Land type: Classification: Description:		gency: 12/19/1997 AKARNG AAOF JUNEAU 8425 LIVINGSTON WAY JUNEAU, AK 99801 AKD983073321 LIVINGSTON WAY JUNEAU, AK 99801 GRETCHEN A BRAND 8425 LIVINGSTON WAY JUNEAU, AK 99801 US 907-789-3366 Not reported 10 Municipal Conditionally Exempt Small Quantity Get Handler: generates 100 kg or less of haz month, and accumulates 1000 kg or less or generates 1 kg or less of acutely haza month, and accumulates at any time: 1 k waste; or 100 kg or less of any residue o other debris resulting from the cleanup o land or water, of acutely hazardous wast of any residue or contaminated soil, wass from the cleanup of a spill, into or on any hazardous waste during any calendar mu time: 1 kg or less of acutely hazardous w any residue or contaminated soil, waste the cleanup of a spill, into or on any land	cardous waste per calendar of hazardous waste at any time; ardous waste per calendar og or less of acutely hazardous or contaminated soil, waste or of a spill, into or on any re; or generates 100 kg or less te or other debris resulting r land or water, of acutely onth, and accumulates at any vaste; or 100 kg or less of or other debris resulting from	

Database(s)

EDR ID Number EPA ID Number

ALASKA AIR NATIONAL GUARD AAOF JUNEAU (Continued)

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:	and a Na
U.S. importer of hazardous w	
Mixed waste (haz. and radioa	
Recycler of hazardous waste	
Transporter of hazardous was	
Treater, storer or disposer of	
Underground injection activity	
On-site burner exemption:	No No
Furnace exemption: Used oil fuel burner:	No
	No
Used oil processor: User oil refiner:	No
Used oil fuel marketer to burr	
Used oil Specification market	
Used oil transfer facility:	No
	No
Used oil transporter:	NO
. Waste code:	NONE
. Waste code.	None
. Waste name.	None
Facility Has Received Notices of	f 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:	06/22/4004

legulation violated.	Not reported
rea of violation:	Generators - Ge
Date violation determined:	05/02/1994
Date achieved compliance:	06/19/1994
iolation lead agency:	State
Enforcement action:	WRITTEN INFO
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: Evaluation: Area of violation:

05/02/1994 COMPLIANCE EVALUATION INSPECTION ON-SITE Generators - General

1000586263

Database(s)

EDR ID Number EPA ID Number

		AAOF JUNEAU (Continued)	1000586263
	Date achieved compliance: Evaluation lead agency:	06/19/1994 State	
	FINDS:		
	Registry ID:	110003039809	
	Conservati events and and treat, s program st	nation System is a national information system that supports the Resource on and Recovery Act (RCRA) program through the tracking of activities related to facilities that generate, transport, store, or dispose of hazardous waste. RCRAInfo allows RCRA aff to track the notification, permit, compliance, and action activities required under RCRA.	
		<u>yperlink</u> while viewing on your computer to access FINDS: detail in the EDR Site Report.	
	ECHO: Envid: Registry ID: DFR URL:	1000586263 110003039809 http://echo.epa.gov/detailed-facility-report?fid=110003039809	
A4 Target Property	JUNEAU AAOF 300-GAL USED 0 8425 LIVINGSTON DR. JUNEAU, AK 99801	DIL TANK AK SHWS	S109255556 N/A
Actual: 11 ft.	Site 4 of 7 in cluster A SHWS: File Number: Staff: Facility Status: Latitude: Longitude: Hazard ID: Problem:	1513.38.060 Not reported Cleanup Complete 58.357540 -134.568192 2534 Petroleum contaminated soil. Site Investigation Report date 1996 prepared by CH2MHill. Matrix score sheet indicated L cleanup level for site. DRO detected at 1,020 and GRO at 4 soil at 0.8 to 1.4 foot depth. Last staff assigned was Pexton.	evel A 72 mg/kg in
	Actions: Action Date: Action: DEC Staff: Action Description: Action Date: Action:	9/27/2013 Cleanup Complete Determination Issued Debra Caillouet Final well decommissioning and ROD approved. 9/24/1997 Site Added to Database	
	DEC Staff: Action Description: Action Date: Action: DEC Staff:	Scott Pexton Petroleum contamination. 9/24/1997 Site Ranked Using the AHRM Scott Pexton	

EDR ID Number Database(s) EPA ID Number

	Environment/Recreation Value from 0 to 2. Former score was 18.
Action Date: Action: DEC Staff:	9/21/2012 Site Characterization Workplan Approved Debra Caillouet Work Plan, Alaska Army National Guard, Monitoring Natural Attenuatior
Action Description:	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: Action Description:	Debra Caillouet Final Work Plan Site Investigation, Alaska Army National Guard Juneau
Cuon Description.	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: DEC Staff:	Report or Workplan Review - Other 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: Action Description:	Debra Caillouet 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 proper
	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 conclusion
	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

EDR ID Number Database(s) EPA ID Number

S109255556

JUNEAU AAOF 300-GAL USED OIL TANK (Continued)

EAU AAOF 300-GAL USED OIL TANK (Continued)			
DEC Staff: Action Description:	Bill Wright (Old R:Base Action Code = SA1A - Phase I Site Assessment Approval). Reviewed and approved a Phase I site Assessment.		
Action Date: Action: DEC Staff: Action Description:	3/18/2004 Update or Other Action Sarah Cunningham File number assigned: 1513.38.060.		
Action Date: Action: DEC Staff: Action Description:	3/17/2008 Exposure Tracking Model Ranking Debra Caillouet Initial ranking with ETM completed.		
Action Date: Action: DEC Staff: Action Description:	3/1/1996 Site Ranked Using the AHRM Bill Wright Site ranked by staff.		
Action Date: Action: DEC Staff: Action Description:	2/3/2010 Meeting or Teleconference Held Debra Caillouet Staff participated in the Installation Action Plan meeting.		
Action Date: Action: DEC Staff: Action Description:	12/28/2012 Report or Workplan Review - Other Debra Caillouet 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: Action: DEC Staff: Action Description:	12/28/2010 CERCLA SI Debra Caillouet 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: Action: DEC Staff: Action Description:	12/17/2012 Report or Workplan Review - Other Debra Caillouet Comment was sent on Draft Alaska Army National Guard, Monitoring Natural Attenuation Report for Juneau Alaska Army Aviation Operation Facility, December 2012		

EDR ID Number Database(s) EPA ID Number

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 Description	1: < Method 2 Most Stringent
Contaminate Media1:	Soil
Control Type:	No ICs Required
Control Details Description1:	Not reported
Control Details Description 1.	
Contaminant CTD:	Not reported
•	Not reported Not reported Not reported

Database(s)

EDR ID Number EPA ID Number

S109255556

File Number: Staff: Facility Status: Latitude: Longitude: Hazard ID: Problem:	1513.26.072 Not reported Cleanup Complete 58.357891 -134.568703 23037 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

Letter sent to RP

A5 JUNEAU ARMY AVIATION OPERATING FACILTY 8425 LIVINGSTON WAY Target JUNEAU, AK 99801 Property

Action Description:

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

JUNEAU AAOF 300-GAL USED OIL TANK (Continued)

300 Tank Product: Used Oil Installed Date: 07/01/1988 **Regulated Tank:** Yes

TC5509586.2s Page 14

AK UST U004116156

N/A

Map ID			
Direction Distance			
Elevation	Site	Database(EDR ID Number s) EPA ID Number
A6 Target Property	JUNEAU AAOF 300-(8425 LIVINGSTON DI JUNEAU, AK	GAL USED OIL TANK AK RGA LUS R.,	ST S116469406 N/A
	Site 6 of 7 in cluster	A.	
Actual: 11 ft.	RGA LUST:	 2012 JUNEAU AAOF 300-GAL USED OIL TANK 2011 JUNEAU AAOF 300-GAL USED OIL TANK 2010 JUNEAU AAOF 300-GAL USED OIL TANK 2009 JUNEAU AAOF 300-GAL USED OIL TANK 2010 AAOF 300-GAL USED OIL TANK <li< th=""><th></th></li<>	
A7 Target Property	JUNEAU AAOF 300-0 8425 LIVINGSTON DI JUNEAU, AK 99801	GAL USED OIL TANK AK LUS R.	ST S105096403 N/A
	Site 7 of 7 in cluster	A	
Actual: 11 ft.	LUST: Facility Name: Facility Status: Record Key: File ID: Oname: Lat/Lon: Lust Event ID: CS or Lust: Borough: Staff: Site Type: Horizontal Datum	JUNEAU AAOF 300-GAL USED OIL TANK Cleanup Complete 1999110023901 1513.26.072 Alaska Army National Guard Attn AKNG ARE 58.35789 -134.5687 2777 LUST Juneau No Longer Assigned Unknown WGS84	
B8 < 1/8 1 ft.	MENDENHALL CHR) 8345 OLD DAIRY RD JUNEAU, AK 99801	'SLER (OLD SITE) AK US	8T U003951987 N/A
	Site 1 of 3 in cluster	3	
Relative: Higher	UST: Facility ID:	2711	
Actual:	Facility Type:	Auto Dealership	
45 ft.	Owner ID: Owner Name:	1821 Vern Hardin	
	Owner Address:	9621 Glacier HWY	
	Owner City,St,Zi	b: Juneau, AK 99801	
	Tank ID: Tank Status: Tack Capacity: Tank Product: Installed Date: Regulated Tank: Tank ID: Tank Status: Tack Capacity:	2 Permanently Out of Use 1000	
	Tank Product: Installed Date:	Gasoline 01/01/1981	5500586 2c Page 15

Map ID Direction		MAP FINDINGS	
Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
	MENDENHALL CHRYSLER (OLD Regulated Tank: Yes	SITE) (Continued)	U003951987
C9 < 1/8 1 ft.	CBJ GLACIER VALLEY FIRE STA 1700 CREST DRIVE JUNEAU, AK 99801	TION AK LUST	S105096375 N/A
111.	Site 1 of 3 in cluster C		
Relative: Higher Actual: 29 ft.	LUST: Facility Name: Facility Status: Record Key: File ID: Oname: Lat/Lon: Lust Event ID: CS or Lust: Borough: Staff: Site Type: Horizontal Datum:	CBJ GLACIER VALLEY FIRE STATION Cleanup Complete 1999110029501 1513.26.065 City & Borough of Juneau 58.35777 -134.5733 2735 LUST Juneau No Longer Assigned Other WGS84	
D10 < 1/8 1 ft.	L A B FLYING SVC JUNEAU INTL ARPRT BLK D LO JUNEAU, AK 99801	RCRA-CESQG	1000904397 AK0000385609
1	Site 1 of 3 in cluster D		
Relative: Higher	RCRA-CESQG: Date form received by agency	::05/12/1994	
Actual: 13 ft.	Facility name: Facility address:	L A B FLYING SVC JUNEAU INTL ARPRT BLK D LOT 1 &2	
	EPA ID: Mailing address:	JUNEAU, AK 99801 AK0000385609 NO MAILING ADDRESS NO MAILING CITY, OR	
	Contact: Contact address:	Not reported Not reported Not reported	
	Contact country: Contact telephone: Contact email: EPA Region: Land type: Classification: Description:	US Not reported Not reported 10 Facility is not located on Indian land. Additional information is not known. Conditionally Exempt Small Quantity Generator 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	

EDR ID Number Database(s) **EPA ID Number**

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

04/28/1994
COMPLIANCE EVALUATION INSPECTION ON-SITE
Generators - General
06/29/1994
State

B11 LOVE BROS

8345 OLD DAIRY RD JUNEAU, AK 99801

< 1/8 1 ft.

Site 2 of 3 in cluster B

Relative: RCRA NonGen / NLR: Higher Date form received by agency: 08/24/1990 Facility name: LOVE BROS Actual: Facility address: 8345 OLD DAIRY RD 45 ft. **JUNEAU, AK 99801** EPA ID: AKD983068669 Mailing address: JAMES BLVD

RCRA NonGen / NLR 1000456197 AKD983068669 FINDS ECHO

LOVE BROS (Continued)

MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

1000456197

JUNEAU, AK 99801 Contact: ALAN LOVE Contact address: 9174 JAMES BLVD JUNEAU, AK 99801 Contact country: US 907-789-7151 Contact telephone: Contact email: Not reported EPA Region: 10 Classification: Non-Generator Description: Handler: Non-Generators do not presently generate hazardous waste Owner/Operator Summary: LOVE BROTHERS Owner/operator name: 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 Private Legal status: 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 THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: Waste name: 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

EDR ID Number Database(s) EPA ID Number

	LOVE BROS (Continued			1000456197
	RC Cc ev an pro	st/Information System CRAInfo is a national information system that supports the Resource inservation and Recovery Act (RCRA) program through the tracking ents and activities related to facilities that generate, transport, d treat, store, or dispose of hazardous waste. RCRAInfo allows RCI ogram staff to track the notification, permit, compliance, and rrective action activities required under RCRA.	g of	
		ck this hyperlink while viewing on your computer to access ditional FINDS: detail in the EDR Site Report.		
	ECHO: Envid: Registry ID: DFR URL:	1000456197 110003041075 http://echo.epa.gov/detailed-facility-report?fid=1	10003041075	
E12 < 1/8	JAKE'S INC. (HONDA HU 8602 TEAL ST JUNEAU, AK 99801	Т)	AK UST	U003765215 N/A
l ft.	,			
Relative: Higher Actual: 45 ft.	Site 1 of 3 in cluster E UST: Facility ID: Facility Type: Owner ID: Owner Name: Owner Address: Owner City,St,Zip:	1533 Unknown 592 Jake's Inc. 8602 Teal ST Juneau, AK 99801		
	Tank ID: Tank Status: Tack Capacity: Tank Product: Installed Date: Regulated Tank:	1 Permanently Out of Use 150 Heating Oil 06/24/1982 No		
=13 < 1/8	CHANNEL FLYING 8995 YANDUKIN DR JUNEAU, AK 99801		RCRA-CESQG FINDS ECHO	1000904395 AK000038558
l ft.	Site 1 of 4 in cluster F			
Relative: Higher Actual: 23 ft.	RCRA-CESQG: Date form received b Facility name: Facility address: EPA ID: Mailing address: Contact:	y agency: 05/13/1994 CHANNEL FLYING 8995 YANDUKIN DR JUNEAU, AK 99801-8086 AK0000385583 NO MAILING ADDRESS NO MAILING CITY, OR Not reported		

Database(s)

EDR ID Number EPA ID Number

CI

000904395

CHANNEL FLYING (Continued)			100
Contact telephone: Contact email: EPA Region: Land type: Classification: Description:	Inditionally Exempt Small andler: generates 100 kg onth, and accumulates 10 generates 1 kg or less of onth, and accumulates at laste; or 100 kg or less of her debris resulting from and or water, of acutely ha any residue or contamina m the cleanup of a spill, zardous waste during an ite: 1 kg or less of acutely y residue or contaminate	dian land. Additional information is not known I Quantity Generator or less of hazardous waste per calendar 200 kg or less of hazardous waste per calendar any time: 1 kg or less of acutely hazardous any residue or contaminated soil, waste or the cleanup of a spill, into or on any zardous waste; or generates 100 kg or less ated soil, waste or other debris resulting into or on any land or water, of acutely y calendar month, and accumulates at any hazardous waste; or 100 kg or less of d soil, waste or other debris resulting from or on any land or water, of acutely	
Handler Activities Summary: U.S. importer of hazardous wa Mixed waste (haz. and radioad Recycler of hazardous waste:			
Transporter of hazardous was Treater, storer or disposer of H	No No		
Underground injection activity: On-site burner exemption: Furnace exemption:	No No No		
Used oil fuel burner: Used oil processor:	No No		
User oil refiner: Used oil fuel marketer to burn Used oil Specification markete	No No No		
Used oil transfer facility: Used oil transporter:	No No		
Facility Has Received Notices of Regulation violated:	lations: t reported		
Area of violation:	enerators - General		
Date violation determined: Date achieved compliance:	/29/1994 /29/1994		
Violation lead agency:	ate		
Enforcement action: Enforcement action date:			
Enforcement action date: Enf. disposition status:	/23/1994 it reported		
Enf. disp. status date:	t reported		
Enforcement lead agency:	ate		
Proposed penalty amount:	t reported		
Final penalty amount: Paid penalty amount:	t reported t reported		
Evaluation Action Summary: Evaluation date:	/29/1994		
Evaluation date.		ON INSPECTION ON-SITE	
Area of violation:	enerators - General		

Database(s)

EDR ID Number EPA ID Number

	CHANNEL FLYING (Continued)	1000904395		
	Date achieved compliance: Evaluation lead agency:	07/29/1994 State		
	FINDS:			
	Registry ID:	110003044900		
	Conserva events an and treat, program s	mation System b is a national information system that supports the Resource tion and Recovery Act (RCRA) program through the tracking of d activities related to facilities that generate, transport, store, or dispose of hazardous waste. RCRAInfo allows RCRA staff to track the notification, permit, compliance, and action activities required under RCRA.		
	<u>Click this hyperlink</u> while viewing on your computer to access additional FINDS: detail in the EDR Site Report.			
	ECHO: Envid: Registry ID: DFR URL:	1000904395 110003044900 http://echo.epa.gov/detailed-facility-report?fid=110003044900		
G14 < 1/8 1 ft.	FAA JUNEAU STATION JUNEAU AIRPORT JUNEAU, AK 99801 Site 1 of 4 in cluster G	AK SHWS S107504829 N/A		
Relative: Higher Actual: 18 ft.	SHWS: File Number: Staff: Facility Status: Latitude: Longitude: Hazard ID: Problem:	1513.38.048 Not reported Cleanup Complete 58.360436 -134.587534 2975 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: Action: DEC Staff: Action Description: Action Date: Action: DEC Staff: Action Description:	8/30/2002 Site Closure Approved Bruce Wanstall Closure letter issued to RP. Saved at G: SPAR/SparCSites/SE FIELD OPS/Southeast Sites/Wings Air Cargo/Wings Air Cargo Bldg Closure. 7/5/2000 Update or Other Action Bruce Wanstall Department request by letter for additional SI due to condition of		

EDR ID Number Database(s) EPA ID Number

FAA JUNEAU STATION (Continued)

	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: Action: DEC Staff: Action Description:	7/27/2001 Site Characterization Workplan Approved Bruce Wanstall Supplemental Release Investigation workplan approved. SRI to address department concerns of petroleum soil and groundwater impacts.
Action Date: Action: DEC Staff: Action Description:	7/10/2002 Update or Other Action Bruce Wanstall 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: Action: DEC Staff: Action Description:	2/27/2002 Site Added to Database Bruce Wanstall Heating oil release to soils. Non-regulated UST transferred from Storage Tank Program.
Action Date: Action: DEC Staff: Action Description:	2/27/2002 Site Ranked Using the AHRM Bruce Wanstall Preliminary ranking.
Contaminants: Staff:	Not reported
Contaminate Name1: Contaminate Level Descriptic Contaminate Media1:	Wings Aircargo Building n1: Not reported Not reported
Control Type: Control Details Description1: Contaminant CTD: Contaminant CDR: Comments:	No ICs Required Advance approval required to transport soil or groundwater off-site. Not reported Not reported For more information about this site, contact DEC at (907) 465-5390.
File Number: Staff: Facility Status: Latitude: Longitude: Hazard ID: Problem:	1513.38.051 Danielle Duncan, 9074655207 danielle.duncan@alaska.gov Active 58.359401 -134.583990 1450 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

EDR ID Number Database(s) EPA ID Number

FAA JUNEAU STATION	(Continued)		S10750482
		at the SFO Maintenance Shop and severed the fuel lines of an aboveground storage tank, spilling 275 gallons of fuel. Investiga and remediation activities were performed in 2010 and 2014.Contamination associated with the regulated UST at Shop 300 is also tracked under the FAA Juneau SFOP site, hazard II	ation p Building
Actions: Action Date: Action: DEC Staff: Action Description:	Melody Del Received T sampling fr GRO, DRO	cterization Report Approved benham [•] echnical Memorandum summarizing July 2010 groundwater om 3 wells on site. Groundwater samples were analyzed for b, RRO, and BTEX. Benzene is the only compound reported abov b level, at 11.1 ug/L in MW-A18.	ve
Action Date: Action: DEC Staff: Action Description:	Melody Del Received a activities to 2006 heatir sample res release is li	cterization Report Approved benham I Technical Memorandum describing characterization delineate the horizontal and vertical extent of the ng oil release. Based on field screening and analytical ults, petroleum contamination related to the heating oil imited to the immediate vicinity of the AST and along the of the maintenance shop, with a maximum depth of 3 feet.	
Action Date: Action: DEC Staff: Action Description:	Anne Marie Site Charao Building 30 Emergency action was attached to	cterization Report Approved e Palmieri cterization report approved this date. Letter addressed 0 Shop Tank 39-A-4, Building 602 Drum Storage Area, SFO v Generator Pad and FSS Satellite Dish 1 Pad. Additional requested at the Building 300 Shop Tank only. Letter is the database, but a summary of the determination at each a is included on the database as a series of updates.	
Action Date: Action: DEC Staff: Action Description:	Anne Marie Building 30 was used fo Sector Field documente 1997. Eight removed ar confirmatio at depths u highest cor mg/kg, and analytes we 1997, eight completed were docur 1998. Grou detected w and toluene was installed	Other Action a Palmieri 0 Tank 39-E-1: This 500 gallon underground storage tank or providing diesel heating oil to Building 300 at the d Office (SFO). The tank was removed in May 1997, as d in the Decommissioning Assessment Report dated November ty (80) cubic yards of petroleum contaminated soil was nd sent to a disposal facility in Washington State. Six (6) n samples were collected from the limits of the excavation p to 12 feet bgs and analyzed for DRO, GRO, and BTEX. The ncentrations detected were DRO: 29,000 mg/kg, GRO: 500 benzene: 0.2 mg/kg. Sampling results for all other ere found below the approved cleanup levels. In October (8) soil borings were advanced and four (4) were as monitoring wells. Installation and sampling of the wells nented in the Remedial Investigation Report, dated March indwater sample results found the highest concentrations ere DRO: 2.8 milligrams per liter (mg/L), GRO: 1.2 mg/L, a: 0.33 mg/L. In 2006, one (1) additional monitoring well ed. This well, along with three (3) of the previously ells were sampled during two (2) separate sampling events. ent occurred in August 2006, with the only exceedence	

EDR ID Number Database(s) EPA ID Number

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 Update or Other Action 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 Update or Other Action 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 Update or Other Action Action: DEC Staff: Anne Marie Palmieri FSS Former Emergency Generator: A concrete pad is present at the FSS Action Description:

EDR ID Number Database(s) EPA ID Number

FAA JUNEAU STATION (Continued)

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.
8/27/2007
Update or Other Action Anne Marie Palmieri 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.
0/4/2/4000
8/16/1993 Preliminary Assessment Approved
No Longer Assigned
NFRAP planned, once placed on federal docket.
7/19/1994 Update or Other Action No Longer Assigned (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.
7/12/2010 Site Characterization Workplan Approved
Melody Debenham 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

EDR ID Number Database(s) EPA ID Number

FAA JUNEAU STATION (Continued)

petroleum contamination is present beneath the engine generator building at this site, associated with a formoving the remaining contamination at the engine generator building, and sampling and decommissioning the 3 existing groundwater monitoring wells.Action Date:7/12/2006 Site Characterization Workplan Approved DEC Staff:Action Description:Site Characterization Workplan Approved DEC Staff: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 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 Split no. 06119934102; PERP Staff Scot Tiernan. Split date = 127/06; split no. 06119934102; PERP file no. 1613.02; 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 struck by falling ice and/or snow and the fuel line from the tank was struck by falling ice and/or snow and the fuel line from the tank was struck by falling in a describing petroleum contaminated soil removal and groundwater sampling at the Juneau Sector Field Office yard.Action Date:6/23/2015 Action:Action Date:5/14/1998 Station:Action Date:5/14/1988 Action:Action Date:6/21/2011 Action:Action Date:6/12/2018 Action:Action Date:4/12/	A JUNEAU STATION (Continu	ea)	З
Action:Site Characterization Workplan Approved Mike JaynesDEC Staff:Mike JaynesAction 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 Spill Transferred from Prevention Preparedness and Response Program DEC Staff:Action Description:Site transferred by PERP staff Scot Tieman. Spill date = 12/7/06; spill no.06119934102; PERP file no.1513.02.312; substance = diesel; quarity = ~250 gallons. Description: A 276 gallon heating oil tank was struck by falling ice and/or snow and the fuel line from the tank was servered. 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:Action Date:6/14/1998 Staff:Action Date:5/14/1998 Staff:Action Date:6/14/1998 Staff:Action Date:6/14/1998 Action:Action Date:6/14/1998 Daniele Uncan Action Date:Action Date:6/14/12018 AugurdAction Date:6/14/12018 Daniele Duncan Daniele DuncanAction Date:6/14/12018 Action:Action Date:6/14/12018 Daniele Duncan Action Description:Action Date:6/14/12011 Paniele Duncan Action Description:Action Date:4/27/2018 		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	
Action: DEC Staff:Spill Transferred from Prevention Preparedness and Response Program Mitzi ReadAction 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 servered. 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, 	Action: DEC Staff:	Site Characterization Workplan Approved Mike Jaynes 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:Report or Workplan Review - OtherDEC Staff:Melody DebenhamAction Description:Received draft work plan describing petroleum contaminated soil removal and groundwater sampling at the Juneau Sector Field Office yard.Action Date:5/14/1998Action:Site Ranked Using the AHRMDEC Staff:Eileen OlsonAction Description:Initial ranking.Action Date:4/27/2018Action Date:4/27/2018Action Date:4/27/2018Action Description:Update or Other Action Danielle DuncanAction Description:Sent an update on the site needs this date.Action Date:4/1/2011Action Date:4/1/2011Action Description:Final Cleanup Report Reviewed DEC Staff:Dec Staff:Melody DebenhamAction Date:4/1/2011Action Description:Final Cleanup Report Reviewed DEC Staff:Dec Staff:Melody Debenham Action Description:Action Date:4/1/2011Action Date: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	Action: DEC Staff:	Spill Transferred from Prevention Preparedness and Response Program Mitzi Read 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,	
Action:Site Ranked Using the AHRMDEC Staff:Eileen OlsonAction Description:Initial ranking.Action Date:4/27/2018Action:Update or Other ActionDEC Staff:Danielle DuncanAction Description:Sent an update on the site needs this date.Action Date:4/1/2011Action:Final Cleanup Report ReviewedDEC Staff:Melody DebenhamAction 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	Action: DEC Staff:	Report or Workplan Review - Other Melody Debenham Received draft work plan describing petroleum contaminated soil removal and groundwater sampling at the Juneau Sector Field Office	
Action:Update or Other ActionDEC Staff:Danielle DuncanAction Description:Sent an update on the site needs this date.Action Date:4/1/2011Action:Final Cleanup Report ReviewedDEC Staff:Melody DebenhamAction 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	Action: DEC Staff:	Site Ranked Using the AHRM Eileen Olson	
Action:Final Cleanup Report ReviewedDEC Staff:Melody DebenhamAction 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 	Action: DEC Staff:	Update or Other Action Danielle Duncan	
	Action: DEC Staff:	Final Cleanup Report Reviewed Melody Debenham Approved the Final Site Remediation Report for FAA Remote Communications Outlet/Ratio Transmit Receive. The FAA decommissione 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	əd

EDR ID Number Database(s) EPA ID Number

FAA JUNEAU STATION (Continued)

	sample results were below applicable cleanup levels.
Action Date: Action: DEC Staff: Action Description:	4/1/2011 Conceptual Site Model Submitted Melody Debenham 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: Action: DEC Staff: Action Description:	3/28/2007 Update or Other Action Anne Marie Palmieri 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: Action: DEC Staff: Action Description:	3/28/2007 Cleanup Level(s) Approved Anne Marie Palmieri 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: Action: DEC Staff: Action Description:	3/28/2007 Update or Other Action Anne Marie Palmieri 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: Action: DEC Staff: Action Description:	3/28/2007 Update or Other Action Anne Marie Palmieri 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

EDR ID Number Database(s) EPA ID Number

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. 3/24/2007 Exposure Tracking Model Ranking Anne Marie Palmieri Not reported 12/7/2007 Update or Other Action

Anne Marie Palmieri Fuel spill occurred at the Juneau Sector Field Office when ice came off the roof of the building. 250 gallons of fuel was released.

Changed workplan to reflect non-regulated UST site; site also

Action Date: Action: DEC Staff: Action Description:

Action Date:

DEC Staff:

Action Date: Action:

DEC Staff:

Action Description:

Action Description:

Action:

Action Date: Action: DEC Staff: Action Description:

Action Date: Action: DEC Staff: Action Description:

Action Date: Action: DEC Staff: Action Description:

Action Date: Action: DEC Staff: Action Description: Federal UST, not regulated by DEC. 12/13/2016 Report or Workplan Review - Other Melody Debenham Received final Contaminated Soil Removal and Groundwater Sampling Report for the Juneau Sector Field Office Yard.

1/6/2012

12/30/1994

12/29/1994

No Longer Assigned

Site Added to Database

No Longer Assigned

Site Number Identifier Changed

encompasses multiple contamination issues.

Report or Workplan Review - Other Melody Debenham Approved the technical memorandum describing the hydrologic study at the Juneau Sector Field Office from November 2010 to November 2011.

1/25/2010 Report or Workplan Review - Other Melody Debenham 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.

Database(s)

EDR ID Number EPA ID Number

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FAA JUNEAU STATION (Continued)

Contaminants: Staff:

> Contaminate Name1: Contaminate Level Description1: Contaminate Media1:

Control Type: Control Details Description1: Contaminant CTD: Contaminant CDR: Comments: Danielle Duncan, 9074655207 danielle.duncan@alaska.gov

FAA Juneau Station Not reported Not reported

Not reported Not reported Not reported Not reported Not reported

H15	DOUGLAS TRUCKING INC. 8400 AIRPORT BLVD		AK LUST AK UST	U003330829 N/A
< 1/8 1 ft.	JUNEAU, AK 99801			
	Site 1 of 7 in cluster H			
Relative: Higher Actual: 38 ft.	LUST: Facility Name: Facility Status: Record Key: File ID: Oname: Lat/Lon: Lust Event ID: CS or Lust: Borough: Staff: Site Type: Horizontal Datum:	DOUGLAS TRUCKING Cleanup Complete 1992110010801 1513.26.037 Douglas Trucking Inc. 58.35950 -134.5697 1983 LUST Juneau No Longer Assigned Unknown WGS84		
	Facility ID:	1266		
	Facility Type: Owner ID: Owner Name: Owner Address: Owner City,St,Zip:	Truck/Transporter 370 Douglas Trucking Inc. P.O. Box 32238 Juneau, AK 99803		
	Tank ID:	1		
	Tank Status: Tack Capacity: Tank Product: Installed Date: Regulated Tank:	Permanently Out of Use 1000 Gasoline 03/24/1982 Yes		
	Tank ID: Tank Status: Tack Capacity: Tank Product: Installed Date: Regulated Tank:	2 Permanently Out of Use 1000 Diesel 03/24/1982 Yes		

Database(s)

EDR ID Number EPA ID Number

F16	CHANNEL FLYING JUNEAU AIRPO 8995 YANDUKIN DRIVE, JUNEAU A	
< 1/8 1 ft.	JUNEAU, AK 99801	
	Site 2 of 4 in cluster F	
Relative: Higher Actual: 23 ft.	SHWS: File Number: Staff: Facility Status: Latitude: Longitude: Hazard ID: Problem:	1513.38.095 Amy Rodman, 9074655368 amy.rodman@alaska.gov Active 58.358614 -134.579898 26362 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 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:	
		/21/2015 xposure Tracking Model Ranking
		itzi Read
	•	itial ranking with ETM completed for source area id: 79807 name: etroleum Contamination ~140 Ft E of Used Oil Burner
	Action Date: 7	/30/2015
	Action: F	otentially Responsible Party/State Interest Letter
		itzi Read
	•	otentially Responsible Party / State Interest Letter for spill no. 5119913201 sent to Channel Flying, Inc. by PERP staff Kayley Moen.
	Action Date: 7	/30/2015
		pill Transferred from Prevention Preparedness and Response Program
		itzi Read
		pill transferred by PERP staff Kayley Moen. Spill no. 15119913201; bill date = 5/12/15; substance = unknown petroleum; quantity =
		nknown; suspected source used oil tank and burner in connex ~140
	f	et from location where contamination was discovered; possibly lated to spill no. 14119920601.
	Action Date: 7	28/2014
		otentially Responsible Party/State Interest Letter
	DEC Staff:	itzi Read

EDR ID Number Database(s) EPA ID Number

CHANNEL FLYING JUNEAU AIRPORT (Continued)

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: Action: DEC Staff: Action Description:	7/28/2014 Potentially Responsible Party/State Interest Letter Mitzi Read Potentially Responsible Party / State Interest Letter for spill no.
·	14119920601 sent to Channel Flying, Inc. by PERP staff Bob Mattson.
Action Date: Action:	6/28/2017 Exposure Tracking Model Ranking
DEC Staff:	Amy Rodman
Action Description:	Updated ETM for source area id: 79745 name: Waste Oil Burner
Action Date: Action:	6/28/2017 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: DEC Staff:	Potentially Responsible Party/State Interest Letter 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: DEC Staff:	Site Added to Database Mitzi Read
Action Description:	A new site has been added to the database
Action Date:	3/17/2015
Action: DEC Staff:	Exposure Tracking Model Ranking Mitzi Read
Action Description:	Initial ranking with ETM completed for source area id: 79745 name: Waste Oil Burner
Action Date:	2/23/2015
Action: DEC Staff:	Spill Transferred from Prevention Preparedness and Response Program 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: DEC Staff:	Update or Other Action 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

Map ID	
Direction	
Distance	
Elevation	Site

MAP FINDINGS

EDR ID Number Database(s) **EPA ID Number**

S117849292

CHANNEL FLYING JUNEAU AIRPORT (Continued)

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:

> Contaminate Name1: Contaminate Level Description1: Contaminate Media1:

Control Type: Control Details Description1: Contaminant CTD: Contaminant CDR: Comments:

Amy Rodman, 9074655368 amy.rodman@alaska.gov

Channel Flying Juneau Airport Not reported Not reported

Not reported Not reported Not reported Not reported Not reported

C17 < 1/8 1 ft.	CBJ GLACIER VALLEY FIRE STA 1700 CREST DRIVE JUNEAU, AK 99801 Site 2 of 3 in cluster C	TION	AK SHWS	S109255392 N/A
Relative: Higher Actual: 29 ft.	SHWS: File Number: Staff: Facility Status: Latitude: Longitude: Hazard ID: Problem:	1513.26.065 Not reported Cleanup Complete 58.357773 -134.573368 25160 Concentrations of 3,670 parts per million (ppm) (DRO) and 112 ppm gasoline range organics (C feet below ground surface along the west prope to buried utilities. Subsurface soil was not tested aromatic hydrocarbons (PAHs); but for benzene and xylenes (BTEX) compound indicators instea BTEX compounds indicate that the exposure po is not unacceptable.	GRO) remain i erty boundary d for polycycli e, toluene, eth ad. Minimal de	n soil 11 adjacent c ylbenzene, etections of
	Actions: Action Date: Action: DEC Staff: Action Description: Action Date: Action: DEC Staff: Action Description:	 9/3/2003 Update or Other Action Bruce Wanstall Letter requesting Release Investigation and Corrective Actions sent to Responsible Party. 9/15/2004 Release Investigation Bruce Wanstall Site Assessment Report of additional subsurface soil removations former UST site; contamination screening began six feet bell surface (BGS) and continued down to groundwater at about 345 tons of contaminated material were excavated, transport offsite, and remediated. 	al from the ow ground 12 feet BGS.	
	Action Date:	8/20/2007		

EDR ID Number EPA ID Number Database(s)

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 Leaking Underground Storage Tank Corrective Action Underway Action: 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

EDR ID Number Database(s) EPA ID Number

CBJ GLACIER VALLEY FIRE STATION (Continued)

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: Action: DEC Staff: Action Description:	10/31/2014 Exposure Tracking Model Ranking Bruce Wanstall A new updated ranking with ETM has been completed for source area 77878 Underground Storage Tanks.
Action Date: Action: DEC Staff: Action Description:	10/22/1999 Site Added to Database * Not Assigned Not reported
Action Date: Action: DEC Staff: Action Description:	10/2/2001 Update or Other Action Cynthia Pring-Ham Changed Project Manager from Paul Horwath to Bill Janes
Action Date: Action: DEC Staff: Action Description:	10/11/2007 Exposure Tracking Model Ranking Bruce Wanstall 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: Action: DEC Staff: Action Description:	1/29/2009 Record of Decision Bruce Wanstall 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: Action: DEC Staff: Action Description:	1/29/2009 Cleanup Complete Determination Issued Bruce Wanstall 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: Action: DEC Staff: Action Description:	1/28/2009 Site Characterization Report Approved Bruce Wanstall The concentrations of hydrocarbon fractions (GRO & DRO) and volatile

EDR ID Number Database(s) EPA ID Number

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: Action: DEC Staff: Action Description:

1/27/2009

Exposure Tracking Model Ranking **Bruce Wanstall** 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.

l18 < 1/8 1 ft.	HALS BODY SHOP 1990 ALPINE AVE JUNEAU, AK 99801 Site 1 of 3 in cluster I		RCRA NonGen / NLR FINDS ECHO	1001085225 AKR000000919
Relative:	RCRA NonGen / NLR:			
Higher	Date form received by ager	icy:03/14/1996		
Actual:	Facility name:	HALS BODY SHOP		
35 ft.	Facility address:	1990 ALPINE AVE		
		JUNEAU, AK 99803		
	EPA ID:	AKR000000919		
	Mailing address:	PO BOX 32177		
	Ũ	JUNEAU, AK 99803-2177		
	Contact:	STEVE SEWILL		
	Contact address:	PO BOX 32177		
		JUNEAU, AK 99803-2177		
	Contact country:	US		
	Contact telephone:	907-789-0268		
	e entact telephone.			

Database(s)

EDR ID Number EPA ID Number

1001085225

HALS BODY SHOP (Continued)

ALS BODY SHOP (Continued)	
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 w	aste: No
Mixed waste (haz. and radioa	
Recycler of hazardous waste	
Transporter of hazardous was	
Treater, storer or disposer of	
Underground injection activity	
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 burn	ner: No
Used oil Specification market	er: No
Used oil transfer facility:	No
Used oil transporter:	No
. Waste code:	NONE
. Waste name:	None
. Waste hame.	
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.

<u>Click this hyperlink</u> while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

Tank ID:

1

MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

	HALS BODY SHOP (Conti	nued)		1001085225
	ECHO:			
	Envid:	1001085225		
	Registry ID:	110003038533		
	DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=11000	3038533	
C19	GLACIER FIRE STATION 1700 CREST DR		AK UST	U003140262 N/A
< 1/8 1 ft.	JUNEAU, AK 99801			
	Site 3 of 3 in cluster C			
Relative:	UST:			
Higher	Facility ID:	2167		
Actual: 29 ft.	Facility Type: Owner ID:	Unknown 228		
2911.	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: Installed Date:	Gasoline 01/01/1980		
	Regulated Tank:	Yes		
	Tank ID:	2		
	Tank Status:	Permanently Out of Use		
	Tack Capacity:	1000		
	Tank Product: Installed Date:	Diesel 01/01/1980		
	Regulated Tank:	Yes		
	rtogulatod Fallik.			
	Tank ID:	3		
	Tank Status:	Permanently Out of Use		
	Tack Capacity:	1500		
	Tank Product: Installed Date:	Diesel 01/01/1980		
	Regulated Tank:	Yes		
	0			
20			AK UST	U003141425 N/A
< 1/8	P. O. BOX 2177, 1990 ALP JUNEAU, AK 99803			IN/A
1 ft.				
	UST:			
Relative:	Facility ID:	944		
Higher	Facility Type:	Unknown		
Actual:	Owner ID: Owner Name:	1066 Steve R. Sewill		
44 ft.	Owner Address:	P.O. Box 2177		
	Owner City,St,Zip:	Juneau, AK 99803		

Database(s)

EDR ID Number EPA ID Number

	HALS BODY SHOP (Con	tinued) U003141425
	Tank Status: Tack Capacity: Tank Product: Installed Date: Regulated Tank:	Permanently Out of Use 500 Gasoline Not reported Yes
J21 < 1/8 1 ft.	FORMER CAPITAL CITY 2092 JORDAN AVE. SUIT JUNEAU, AK 99801	CLEANERS NUGGET MALL AK SHWS S118659598 E 595 NUGGET MALL N/A
11.	Site 1 of 4 in cluster J	
Relative: Higher Actual: 41 ft.	SHWS: File Number: Staff: Facility Status: Latitude: Longitude: Hazard ID: Problem:	1513.38.099 Danielle Duncan, 9074655207 danielle.duncan@alaska.gov Active 58.362145 -134.578967 26537 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: Action: DEC Staff: Action Description:	9/29/2016 Site Characterization Workplan Approved Danielle Duncan 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: Action: DEC Staff: Action Description:	9/16/2016 Update or Other Action Danielle Duncan 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

EDR ID Number Database(s) EPA ID Number

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: Update or Other Action DEC Staff: Danielle Duncan Action: Update or Other Action DEC Staff: Danielle Duncan Action: Update or Other Action DEC Staff: Danielle Duncan Action: Report or Workplan Review - Other Dec Staff: Danielle Duncan Action: Report or Workplan Review - Other DEC Staff: Danielle Duncan Action Description: Reort or Workplan Review - Other Dec Staff: Danielle Duncan Action Description: Rec'd the completed Site Assessment Report this date. Action Descript	MER CAPITAL CITY CLE	EANERS NUGGET MALL (Continued)
Action: Update or Other Action DEC Staff: Danielle Duncan Action Description: The property transfer to Columbia Pacific Advisors should be final if 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/secon weeks of September at the Nugget Mall:??? Indoor air sampling in 1 four suites as before.??? Grab GW sampling as outlined in the word plan submitted in March 2017.??? The 11 soil vapor wells will be sampled.??? GW monitoring of the 3 monitoring wells.??? Soil gas be collected from sub-sabes SS1 through SS8 and SS13. In addition will submit a comprehensive report that will include the SVE system installation and startup, 0&M history, analytical results, and status history. Action Date: 6/9/2016 Action: Report or Workplan Review - Other DEC Staff: Danielle Duncan Action Date: 6/23/2016 Action Date: 6/23/2016 Action Date: 6/23/2016 Action Description: Sent report approval letter this date for Site Assessment Report 203 Jordan Ave Building Suite 595 Nugget Mall. Indoor air was sampled no PCE or TCE was detected in the air. Soil boring and groundwate samples indicated both were contaminated with dry cleaning solver soil sample collected from outside the building the near the former location of	DEC Staff:	Sent PRP letter today to Columbia Pacific Advisors as they have
ActionUpdate or Other ActionDEC Staff:Danielle DuncanAction Description:The following tasks are proposed to be completed in the first/secon weeks of September at the Nugget Mall:??? Indoor air sampling in 1 four suites as before.??? Grab GW sampling as outlined in the worl plan submitted in March 2017.??? The 11 soil vapor wells will be sampled.??? GW monitoring of the 3 monitoring wells.??? Soil gas be collected from sub-slabs SS1 through SS8 and SS13. In addition 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:Action Date:6/9/2016 Cation:Action Date:6/23/2016 Site Characterization Report Approved DEC Staff:Danielle Duncan Action Description:Site Characterization Report Approved Jordan Ave Building Suite 595 Nugget Mall. Indoor air was sample soil sample collected from outside the building the near the former location of the dry cleaning machine had a PCE concentration of 0. mgrkg which is above the ADEC cleanup level for migration to groundwater of 0.024 mg/kg. This value (0.106), although it is being a significant source of PCE in the soil. The groundwater miloting a significant source of PCE in the soil. The groundwater miloting 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 m which is greater than the cleanup level for migration to groundwater miloting a significant source of PCE in the soil. The groundwater miloting 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 m which is greater than the cleanup level for migration to groun	Action: DEC Staff:	Update or Other Action Danielle Duncan The property transfer to Columbia Pacific Advisors should be final ir
Action:Report or Workplan Review - OtherDEC Staff:Danielle DuncanAction Description:Rec'd the completed Site Assessment Report this date.Action Date:6/23/2016Action:Site Characterization Report ApprovedDEC Staff:Danielle DuncanAction Description:Sent report approval letter this date for Site Assessment Report 200Jordan Ave Building Suite 595 Nugget Mall. Indoor air was sampled on PCE or TCE was detected in the air. Soil boring and groundwate samples indicated both were contaminated with dry cleaning solven soil sample collected from outside the building the near the former location of the dry cleaning machine had a PCE concentration of 0. 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 PCE of 10.07 mg/L. 1,2-DCE is a breakdown product of both PCE and TCE. This same well also had 	Action: DEC Staff:	Update or Other Action Danielle Duncan The following tasks are proposed to be completed in the first/second weeks of September at the Nugget Mall:??? Indoor air sampling in 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 be collected from sub-slabs SS1 through SS8 and SS13. In addition will submit a comprehensive report that will include the SVE system installation and startup, O&M history, analytical results, and status
Action:Site Characterization Report ApprovedDEC Staff:Danielle DuncanAction Description:Sent report approval letter this date for Site Assessment Report 203Jordan Ave Building Suite 595 Nugget Mall. Indoor air was sampled on PCE or TCE was detected in the air. Soil boring and groundwate samples indicated both were contaminated with dry cleaning solven soil sample collected from outside the building the near the former location of the dry cleaning machine had a PCE concentration of 0. 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 m 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 belo ADEC cleanup levels. The contamination appears to be located on east side of the building where the dry cleaning machine was located ADEC cleanup levels. The contamination appears to be located on east side of the building where the dry cleaning machine was located ADEC staff:Action Date:5/19/2016 Report or Workplan Review - Other Danielle DuncanAction 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: DEC Staff:	Report or Workplan Review - Other Danielle Duncan
Action:Report or Workplan Review - OtherDEC Staff:Danielle DuncanAction 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: DEC Staff:	Site Characterization Report Approved Danielle Duncan Sent report approval letter this date for Site Assessment Report 205 Jordan Ave Building Suite 595 Nugget Mall. Indoor air was sampled no PCE or TCE was detected in the air. Soil boring and groundwate samples indicated both were contaminated with dry cleaning solven soil sample collected from outside the building the near the former location of the dry cleaning machine had a PCE concentration of 0. 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
Action Date: 4/8/2016	Action: DEC Staff:	Report or Workplan Review - Other Danielle Duncan Rec'd the Indoor Air Quality Testing report this date, preliminary,
	Action Date:	4/8/2016

EDR ID Number Database(s) EPA ID Number

Action:	Potentially Responsible Party/State Interest Letter
DEC Staff: Action Description:	Danielle Duncan Sent certified 7014 2120 0001 4209 6670
Action Date:	4/8/2016
Action: DEC Staff:	Report or Workplan Review - Other 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 ADE vapor intrusion guidance documents be followed to allow the ADEC HHS to determine the level of potential risk due to PCE and TCE va 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: Action Description:	Mitzi Read 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 Pro
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: Action Description:	Danielle Duncan Consultant performed the structural analysis and IAQ sampling usi
	summa canisters . We???re expecting to see results later this weel and expecting monitoring wells to be installed May 3/4.
Action Date:	3/28/2017
Action:	Site Characterization Workplan Approved
DEC Staff: Action Description:	Danielle Duncan Approved a work plan to collect 5 grab water samples and potentia
Action Description.	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: Action Description:	Danielle Duncan Rec'd new soil vapor data and the SVE system appears to be havir
	positive effect and will remain running.

EDR ID Number Database(s) EPA ID Number

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	
EC 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.	
ction Date:	10/21/2016	
action:	Report or Workplan Review - Other	
EC Staff:	Danielle Duncan	
ction Description:	Approved a work plan to install a soil vapor extraction system on	
	site to remediate solvent contaminated soils on site.	
ction Date:	1/26/2018	
Action:	Report or Workplan Review - Other	
EC Staff:	Danielle Duncan	
ction 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.	
ction Date:	1/17/2017	
ction:	Site Characterization Report Approved	
EC 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	
	present at this time within the west side of ragget man (os time	
	Fabrics) and Suite 595 in the annex building. 2.Groundwater contamination is following a water pipeline moving southwest instead	

EDR ID Number Database(s) EPA ID Number

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:

> Contaminate Name1: Contaminate Level Description1: Contaminate Media1:

Control Type: Control Details Description1: Contaminant CTD: Contaminant CDR: Comments: Danielle Duncan, 9074655207 danielle.duncan@alaska.gov

EDR Hist Cleaner

1019948324

N/A

Former Capital City Cleaners Nugget Mall Not reported Not reported

Not reported Not reported Not reported Not reported Not reported

J22 CAPITAL CITY CLEANERS 2092 JORDAN AVE STE 595

< 1/8

1 ft.

Site 2 of 4 in cluster J

JUNEAU, AK 99801

Relative: EDR Hist Cleaner

Higher			
Actual:	Year:	Name:	Туре:
41 ft.	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

	ADJ. TO TIA INSURANCE BLDG. & THE BIKE PATH ALONG EGAN HIGHW
< 1/8	JUNEAU, AK 99801

< 1/c 1 ft.

Site 1 of 2 in cluster K

Relative:	LUST:	
Higher	Facility Name:	CBJ - LEMON CREEK LIFT STATION
Actual:	Facility Status:	Cleanup Complete
47 ft.	Record Key:	1997110026901
	File ID:	1513.26.028

TC5509586.2s	Page 42

AK LUST S105246771

N/A

Map ID		MAP FINDINGS		
Direction Distance Elevation	Site	Ч	Database(s)	EDR ID Number EPA ID Number
	CBJ - LEMON CREEK LIFT	STATION (Continued)		S105246771
	Oname: Lat/Lon: Lust Event ID: CS or Lust: Borough: Staff: Site Type: Horizontal Datum:	City & Borough of Juneau 58.36059 -134.5675 1367 LUST Juneau No Longer Assigned Water/Wastewater Facility WGS84		
K24 < 1/8 1 ft.	CBJ - LEMON CREEK LIFT ADJ. TO TIA INSURANCE B JUNEAU, AK 99801	STATION BLDG. & THE BIKE PATH ALONG EGAN HIGHW	AK SHWS	S109255309 N/A
	Site 2 of 2 in cluster K			
Relative: Higher Actual: 47 ft.	SHWS: File Number: Staff: Facility Status: Latitude: Longitude: Hazard ID: Problem:	1513.26.028 Not reported Cleanup Complete 58.360593 -134.567564 24631 A 300-gallon underground storage tank (US 2,800 parts per million (ppm) diesel range of detected in oily soil collected from beneath material from the subsurface was returned	organics (DRO) wa the tank. Contami	as nated
	Actions:			
	Action Date: Action: DEC Staff: Action Description:	9/26/1997 Site Added to Database * Not Assigned Not reported		
	Action Date: Action: DEC Staff: Action Description:	9/18/2013 Cleanup Complete Determination Issued Denise Elston Based on the information available, DEC has determine assessment or cleanup action is required. Although mod DRO were documented in soil during 1997 environment sampling in 2012 show that no contamination remains a regulatory criteria. This is further verified by groundwate monitoring data which reported no evidence of contamir no longer a risk to human health or the environment, an will be designated as closed on the Department's databa	derate levels of al work, follow-up bove DEC er nation. There is d this site	
	Action Date: Action: DEC Staff: Action Description:	8/8/2006 Update or Other Action Bruce Wanstall File reviewed for conditional closure and discussed with responsible party CBJ. ADEC site inspection found no ir residual contamination reaching nearby surface water th intermittently during storm events.	ndications of	
	Action Date: Action: DEC Staff: Action Description:	8/20/2007 Update or Other Action Bruce Wanstall Develop a priority site list for CBJ Engineering and requ water investigation at each of six leaking underground s	-	

MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

CBJ - LEMON CREEK LIFT STATION (Continued)

S109255309

	sites
Action Date: Action: DEC Staff: Action Description:	6/7/2012 Update or Other Action Kristin Thompson Address updated, per Bruce Wanstall.
Action Date: Action: DEC Staff: Action Description:	6/14/2002 Update or Other Action Pam Mickelson Received check for CBJ from Department of Law (DOL) on 6/14/02 for \$1,706.89
Action Date: Action: DEC Staff: Action Description:	5/8/2002 Update or Other Action Bruce Wanstall Notice of Intent to Cost Recover sent to CBJ.
Action Date: Action: DEC Staff: Action Description:	5/5/2008 Site Visit Bruce Wanstall ADEC site inspection found no indications of residual contamination reaching nearby surface water that appear intermittently during storm events.
Action Date: Action: DEC Staff: Action Description:	5/3/2013 Report or Workplan Review - Other Denise Elston 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: Action: DEC Staff: Action Description:	4/25/2007 Update or Other Action Bruce Wanstall 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: Action: DEC Staff: Action Description:	4/24/2007 Exposure Tracking Model Ranking Bruce Wanstall Initial ranking using the Exposure Tracking Model (ETM) based on Storage Tank Program Report Forms.
Action Date: Action: DEC Staff: Action Description:	4/18/2002 Update or Other Action Bruce Wanstall Request for Release Investigation Report for Approved Corrective Action sent by letter to City & Borough of Juneau (CBJ) Engineering.
Action Date: Action: DEC Staff: Action Description:	3/11/2002 Update or Other Action Bruce Wanstall Letter drafted to accompany letters to responsible party (RP) for

EDR ID Number Database(s) EPA ID Number

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: Action: DEC Staff: Action Description:	11/9/2001 Leaking Underground Storage Tank Corrective Action Underway Bruce Wanstall 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: Action: DEC Staff: Action Description:	 1/23/2009 Exposure Tracking Model Ranking Bruce Wanstall 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 < 1/8 1 ft.	VALLEY LUMBER 8525 OLD DAIRY RD JUNEAU, AK 99801 Site 1 of 3 in cluster L		RCRA-CESQG FINDS ECHO	1004670276 AKR000002238
Relative: Higher Actual: 55 ft.	RCRA-CESQG: Date form received by age Facility name: Facility address: EPA ID: Mailing address: Contact: Contact: Contact address:	ency: 10/24/1996 VALLEY LUMBER 8525 OLD DAIRY RD JUNEAU, AK 99801 AKR000002238 OLD DAIRY RD JUNEAU, AK 99801 DAN GRAVES 8525 OLD DAIRY RD JUNEAU, AK 99801		

Database(s)

EDR ID Number EPA ID Number

1004670276

VALLEY LUMBER (Continued)	
Contact country: Contact telephone: Contact email: EPA Region: Classification: Description:	US 907-789-7500 Not reported 10 Conditionally Exempt Small Quantity Generator 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 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: Owner/operator address: Owner/operator country: Owner/operator telephone: Owner/operator email: Owner/operator fax: Owner/operator extension:	DAN GRAVES 8525 OLD DAIRY RD JUNEAU, AK 99801 Not reported 907-789-7500 Not reported Not reported Not reported
Legal status: Owner/Operator Type: Owner/Op start date: Owner/Op end date:	Private Owner Not reported Not reported
Handler Activities Summary: U.S. importer of hazardous wa Mixed waste (haz. and radioad Recycler of hazardous waste: Transporter of hazardous wass Treater, storer or disposer of H Underground injection activity: On-site burner exemption: Furnace exemption: Used oil fuel burner: Used oil fuel burner: Used oil processor: User oil refiner: Used oil fuel marketer to burner Used oil Specification marketer Used oil transfer facility: Used oil transporter:	ctive): No No HW: No : No No No No No No No
. Waste code: . Waste name:	NONE None

Violation Status:

No violations found

Database(s)

	VALLEY LUMBER (Continued)			
	FINDS:			
	Registry ID:	110003038203		
	Conservat events and and treat, program s	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.		
		nyperlink while viewing on your computer to access FINDS: detail in the EDR Site Report.		
	ECHO: Envid: Registry ID: DFR URL:	1004670276 110003038203 http://echo.epa.gov/detailed-facility-report?fid=110003038203		
M26 < 1/8 1 ft.	CAPITAL CITY CLEANERS 8745 GLACIER HWY STE 595 JUNEAU, AK 99801 Site 1 of 3 in cluster M	RCRA NonGen / NLR FINDS ECHO	1000264307 AKD983071887	
Relative: Higher	RCRA NonGen / NLR: Date form received by agence	sv: 05/01/2000		
Actual: 46 ft.	Facility name: Facility address:	CAPITAL CITY CLEANERS 8745 GLACIER HWY STE 595		
	EPA ID: Mailing address: Contact: Contact address:	JUNEAU, AK 99801 AKD983071887 P O BOX 33375 JUNEAU, AK 99803 WM KENNEDY P O BOX 33375		
	Contact country: Contact telephone: Contact email: EPA Region: Land type: Classification:	JUNEAU, AK 99803 US 907-789-3604 Not reported 10 Private Non-Generator		
	Description: Owner/Operator Summary: Owner/operator name: Owner/operator address: Owner/operator country: Owner/operator telephone: Owner/operator email: Owner/operator fax: Owner/operator extension: Legal status:	Handler: Non-Generators do not presently generate hazardous waste E. NEIL MACKINNON 1114 GLACIER AVE JUNEAU, AK 99801 Not reported 907-586-1133 Not reported Not reported Not reported Private		

Database(s)

EDR ID Number EPA ID Number

CAPITAL CITY CLEANERS (Continued)

ATTAL OTT CLEATERO (CON	linacaj
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 wa	aste: No
Mixed waste (haz. and radioa	
Recycler of hazardous waste:	
Transporter of hazardous was	
Treater, storer or disposer of	
Underground injection activity	
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 burn	
Used oil Specification markete	
Used oil transfer facility:	No
Used oil transporter:	No
Historical Generators:	22/12/1222
Date form received by agency	
Site name:	
Classification:	Conditionally Exempt Small Quantity Generator
Data form received by errors	" OF /10/1000
Date form received by agency	CAPITAL CITY CLEANERS
Site name: Classification:	Small Quantity Generator
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

Database(s)

	CAPITAL CITY CLEANERS (Cor	ntinued)	1000264307
	Paid penalty amount:	Not reported	
	Evaluation Action Summary: Evaluation date: Evaluation: Area of violation: Date achieved compliance: Evaluation lead agency:	04/05/1990 COMPLIANCE EVALUATION INSPECTION ON-SITE Generators - General 05/22/1990 State	
	FINDS:		
	Registry ID:	110003040236	
	Conservat events and and treat, s program si corrective	is a national information system that supports the Resource ion and Recovery Act (RCRA) program through the tracking of d activities related to facilities that generate, transport, store, or dispose of hazardous waste. RCRAInfo allows RCRA taff to track the notification, permit, compliance, and action activities required under RCRA.	
		nyperlink while viewing on your computer to access FINDS: detail in the EDR Site Report.	
	ECHO: Envid: Registry ID: DFR URL:	1000264307 110003040236 http://echo.epa.gov/detailed-facility-report?fid=110003040236	
M27 < 1/8 1 ft.	RITZ CAMERA CENTERS #40 8745 GLACIER HWY #432 JUNEAU, AK 99803	RCRA NonGen / NLR FINDS ECHO	1004670295 AKR000003186
1 10	Site 2 of 3 in cluster M		
Relative:	RCRA NonGen / NLR:		
Higher	Date form received by agence	•	
Actual: 46 ft.	Facility name: Facility address: EPA ID: Mailing address: Contact: Contact address: Contact country: Contact telephone:	RITZ CAMERA CENTERS #40 8745 GLACIER HWY #432 NUGGET MALL JUNEAU, AK 99803 AKR000003186 RITZ WY BELTSVILLE, MD 20705 TOM KELLY 6711 RITZ WY BELTSVILLE, MD 20705 US 301-419-0000	
	Contact email: EPA Region: Classification: Description:	Not reported 10 Non-Generator Handler: Non-Generators do not presently generate hazardous waste	
	Owner/Operator Summary: Owner/operator name:	RITZ CAMERA CENTERS INC	

Database(s)

EDR ID Number EPA ID Number

RITZ CAMERA CENTERS #40 (Continued)

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:

FINDS:

Registry ID:

110006852405

No violations found

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

<u>Click this hyperlink</u> while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

Map ID Direction Distance		MAP FINDINGS	EDR ID Number
Elevation	Site	Database(s)	EPA ID Number
	RITZ CAMERA CENTERS #40 (Continu Envid: Registry ID: DFR URL:	ed) 1004670295 110006852405 http://echo.epa.gov/detailed-facility-report?fid=110006852405	1004670295
M28 < 1/8	STARHILL ENTERPRISES 8745 GLACIER HWY STE 295 JUNEAU, AK 99801	EDR Hist Cleaner	1018602095 N/A
1 ft.	Site 3 of 3 in cluster M		
Relative: Higher	EDR Hist Cleaner		
Actual: 46 ft.	Year: Name: 1987 CAPITAL CITY CLEANERS 1988 STARHILL ENTERPRISES 1989 STARHILL ENTERPRISES 1990 STARHILL ENTERPRISES 1991 STARHILL ENTERPRISES 1992 STARHILL ENTERPRISES 1993 STARHILL ENTERPRISES 1994 STARHILL ENTERPRISES 1995 STARHILL ENTERPRISES 1996 STARHILL ENTERPRISES 1997 STARHILL ENTERPRISES 1998 STARHILL ENTERPRISES 1999 STARHILL ENTERPRISES 1999 STARHILL ENTERPRISES 2000 STARHILL ENTERPRISES 2001 STARHILL ENTERPRISES	Type: Drycleaning Plants, Except Rugs Drycleaning Plants, Except Rugs Drycleaning Plants, Except Rugs, NEC Drycleaning Plants, Except Rugs, NEC	
L29	USDA FS OLD DAIRY RD 8465 OLD DAIRY RD	RCRA-CESQG FINDS	1004433687 AK4122300151
< 1/8 1 ft.	JUNEAU, AK 99801	ECHO CA HAZNET	
	Site 2 of 3 in cluster L		
Relative: Higher	RCRA-CESQG: Date form received by agency: 07/03		
Actual: 58 ft.	Facility address:8465JUNEEPA ID:AK41Mailing address:OLDJUNEContact:DEANContact address:8465JUNEContact country:USContact telephone:907-7Contact email:Not reEPA Region:10Classification:CondDescription:Handmonthor genmonth	A FS OLD DAIRY RD OLD DAIRY RD AU, AK 99801 22300151 DAIRY RD AU, AK 99801 I BRINKMAN OLD DAIRY RD AU, AK 99801 89-3331 eported tionally Exempt Small Quantity Generator er: generates 100 kg or less of hazardous waste per calendar h, and accumulates 1000 kg or less of hazardous waste per calendar h, and accumulates 1000 kg or less of hazardous waste per calendar h, and accumulates at any time: 1 kg or less of acutely hazardous ; or 100 kg or less of any residue or contaminated soil, waste or	

EDR ID Number Database(s) EPA ID Number

USDA FS OLD DAIRY RD (Continued)

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
Owner/operator address.	JUNEAU, AK 99802
Owner/energies	Not reported
Owner/operator country:	907-586-8723
Owner/operator telephone:	
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported Federal
Legal status:	
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 w	aste: No
Mixed waste (haz. and radioa	
Recycler of hazardous waste	
Transporter of hazardous was	
Treater, storer or disposer of	
Underground injection activity	
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 burn	
Used oil Specification market	
Used oil transfer facility:	No
Used oil transporter:	No
cocc on transporter.	110
. Waste code:	NONE

Waste name:	None

Database(s)

Violation Status:	No violations found	
FINDS:		
Registry ID:	110003044287	
	erest/Information System RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.	
	<u>Click this hyperlink</u> while viewing on your computer to access additional FINDS: detail in the EDR Site Report.	
ECHO:		
Envid:	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 Gen County:		
TSD EPA ID:	Not reported 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 Gen County:		
TSD EPA ID:	Not reported CAD059494310	
TSD County:	Not reported	
Waste Category:	Not reported	
Disposal Method:	Disposal, Other	
Tons:	3.66	

Map ID	Γ	MAP FINDINGS		
Direction Distance	Ц_			EDR ID Number
Elevation	Site	Dat	tabase(s)	EPA ID Number
	USDA FS OLD DAIRY RD (Co Method Decode: Not r Facility County: 99	reported		1004433687
L30	USFS JUNEAU RANGER DIST	RICT WAREHOUSE A	AK SHWS	S108540255
< 1/8	8465 OLD DAIRY ROAD JUNEAU, AK 99801			N/A
1 ft.				
	Site 3 of 3 in cluster L			
Relative: Higher	SHWS: File Number:	1513.38.072		
Actual:	Staff:	Not reported		
58 ft.	Facility Status:	Cleanup Complete		
	Latitude:	58.361585		
	Longitude:	-134.571790		
	Hazard ID: Problem:	4391 Detroloum and metals contamination are present in	n tha flaar d	roine of
	FTODIEIII.	Petroleum and metals contamination are present in a warehouse building originally constructed in 196 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 comments submitted on site characterization report and remov.	al plan	
	Action Description:		ai piari	
	Action Date:	4/18/2007		
	Action:	Site Added to Database		
	DEC Staff: Action Description:	Mitzi Read Site added to the database.		
	Action Date:	3/9/2009		
	Action: DEC Staff:	Final Cleanup Report Reviewed Anne Marie Palmieri		
	Action Description:	Cleanup report approved. Cleanup conducted at the former AS	T and	
	· · · · · · · · · · · · · · · · · · ·	former UST areas. The former AST area is located along the re		
		line of the warehouse. Characterization activities showed petro		
		contaminated soil to be present on both Forest Service and Cit		
		Borough of Juneau (CBJ) property. In April 2008, the Forest Se excavated a total of approximately 89 tons of soil from both For		
		Service and CBJ property. Eleven confirmation samples were of		
		One sample, located below the concrete pad adjacent to the cu		
		fuel storage shed, contained elevated diesel range organics (D	,	
		4550 milligrams per kilogram (mg/kg); the cleanup level set for was 230 mg/kg. Other sample results demonstrated that this is		
		relatively thin layer of contaminated soil in an area which is	u	
		inaccessible due to the existing structure. Confirmation sample	S	
		collected on CBJ property slightly exceeded the cleanup level f		
		benzene; however, additional samples collected after the remo		
		the same general areas showed that no benzene contamination present. The department determines that the contaminated soil		
		the fuel shed does not pose an unacceptable risk to human her		
		the environment. The extent of contamination is fairly limited ar		

EDR ID Number Database(s) **EPA ID Number**

USFS JUNEAU RANGER DISTRICT WAREHOUSE (Continued)

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: Action: DEC Staff: Action Description:	3/9/2009 Cleanup Comple Anne Marie Palm Letter issued this	
Action Date: Action: DEC Staff: Action Description:	Anne Marie Palm	ng Model Ranking nieri anking with ETM has been completed for source area
Action Date: Action: DEC Staff: Action Description:	Anne Marie Palm	ation Workplan Approved nieri red this date; fieldwork is scheduled for 12/19 - 12/21.
Contaminants: Staff:		Not reported
Contaminate Name1: Contaminate Level Desc	ription1:	USFS Juneau Ranger District Warehouse Between Method 2 Migration to Groundwater and Hur

Contaminate Media1:

Control Type: Control Details Description1: Contaminant CTD: Contaminant CDR: Comments:

uman Health/Ingestion/Inhalation Soil

No ICs Required Advance approval required to transport soil or groundwater off-site. Not reported Not reported Contamination is below existing fuel tank shed and AST.

S108540255

Database(s)

J31	YUKON OFFICE SUPPLY 2075 JORDAN AVE	RCRA Non	Gen / NLR FINDS	1000817139 AKD983075037
< 1/8 1 ft.	JUNEAU, AK 99801		ECHO	
	Site 3 of 4 in cluster J			
Relative: Higher Actual: 39 ft.	Site 3 of 4 in cluster J RCRA NonGen / NLR: Date form received by agency: Facility name: Facility address: EPA ID: Mailing address: Contact: Contact address: Contact country: Contact telephone: Contact telephone: Contact email: EPA Region: Land type: Classification:	07/17/1992 YUKON OFFICE SUPPLY 2075 JORDAN AVE JUNEAU, AK 99801 AKD983075037 PO BOX 21788 JUNEAU, AK 99802 BRYAN WILSON 2075 JORDAN AVE JUNEAU, AK 99801 US 907-790-2900 Not reported 10 Facility is not located on Indian land. Additional information is Non-Generator	not known.	
		Handler: Non-Generators do not presently generate hazardou	s waste	
	Owner/Operator Summary: Owner/operator name: Owner/operator address: Owner/operator country: Owner/operator telephone: Owner/operator telephone: Owner/operator telephone: Owner/operator telephone: Owner/operator telephone: Owner/operator telephone: Owner/Operator telephone: Owner/Operator Type: Owner/Op start date: Owner/Op end date:	SE OFFICE SUPPLY INC PO BOX 21788 JUNEAU, AK 99802 Not reported Not reported Not reported Not reported Private Owner Not reported Not reported Not reported		
	Handler Activities Summary: U.S. importer of hazardous wa Mixed waste (haz. and radioac Recycler of hazardous waste: Transporter of hazardous waste Treater, storer or disposer of H Underground injection activity: On-site burner exemption: Furnace exemption: Used oil fuel burner: Used oil fuel burner: Used oil fuel burner: Used oil fuel marketer to burne Used oil fuel marketer to burne Used oil Specification markete Used oil transfer facility: Used oil transporter: . Waste code:	tive): No No e: No W: No No No No No No No No No		
	. Waste name:	None		

Database(s)

		((Continued)	1000817139
	Violation Status:	No violations found	
	Evaluation Action Sumr Evaluation date: Evaluation: Area of violation: Date achieved comp Evaluation lead ager	06/04/1999 NON-FINANCIAL RECORD REVIEW Not reported liance: Not reported	
	FINDS:		
	Registry ID:	110003039550	
	R(Co ev ar pr	est/Information System CRAInfo is a national information system that supports the Resource onservation and Recovery Act (RCRA) program through the tracking of vents and activities related to facilities that generate, transport, nd treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA ogram staff to track the notification, permit, compliance, and orrective action activities required under RCRA.	
	Registry ID:	110013319113	
	Ní Fé To re	est/Information System CDB (National Compliance Data Base) supports implementation of the ederal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the poxic Substances Control Act (TSCA). The system tracks inspections in gions and states with cooperative agreements, enforcement actions, and settlements.	
		ick this hyperlink while viewing on your computer to access Iditional FINDS: detail in the EDR Site Report.	
	ECHO: Envid: Registry ID: DFR URL:	1000817139 110003039550 http://echo.epa.gov/detailed-facility-report?fid=110003039550	1
D32 < 1/8 1 ft.	CIVIL AIR PATROL HAN JUNEAU AIRPORT, W R JUNEAU, AK 99801	GAR AK US	T U003331115 N/A
110.	Site 2 of 3 in cluster D		
Relative: Higher Actual: 13 ft.	UST: Facility ID: Facility Type: Owner ID: Owner Name: Owner Address: Owner City,St,Zip: Tank ID: Tank ID: Tank Status: Tack Capacity: Tank Product:	2891 Unknown 2005 Civil Air Patrol P.O. Box 730 Juneau, AK 99802 1 Permanently Out of Use 1000 Gasoline	

Database(s)

EDR ID Number **EPA ID Number**

U003331115

Installed Date:	
Regulated Tank:	

2 Permanently Out of Use

Yes

01/01/1975

Tank Status: Tack Capacity: 1000 Tank Product: Gasoline Installed Date: 01/01/1975 Regulated Tank: Yes

133 MENDENHALL AUTO CENTER

Tank ID:

8725 MALLARD ST JUNEAU, AK 99801 < 1/8

1 ft.

Site 2 of 3 in cluster I

Relative: Higher Actual: 40 ft.	UST: Facility ID: Facility Type: Owner ID: Owner Name: Owner Address: Owner City,St,Zip:	2146 Auto Dealership 1416 Steven Allwine/karla Tollefson 8725 Mallard St Juneau, AK 99801
	Tank ID: Tank Status: Tack Capacity: Tank Product: Installed Date: Regulated Tank:	1 Permanently Out of Use 1000 Diesel 01/01/1975 Yes

Tank ID: Tank Status: Tack Capacity: Tank Product: Installed Date: Regulated Tank:

2 Permanently Out of Use 1000 Diesel 01/01/1975 Yes

Tank ID: Tank Status:

Permanently Out of Use Tack Capacity: 300 Tank Product: Used Oil Installed Date: 01/01/1975 **Regulated Tank:** Yes

3

AK UST U001960041 N/A

TC5509586.2s Page 58

Database(s)

EDR ID Number EPA ID Number

B34 < 1/8 1 ft.	T & S WELDING INC. 8355 OLD DAIRY RD JUNEAU, AK 99801 Site 3 of 3 in cluster B	AK UST	U003139523 N/A
Relative: Higher Actual: 51 ft.	UST: Facility ID: Facility Type: Owner ID: Owner Name: Owner Address: Owner City,St,Zip: Tank ID: Tank Status: Tack Capacity: Tank Product: Installed Date: Regulated Tank:	1192 Unknown 9104 Russell Shivers PO Box 32156 Juneau, AK 99803 1 Permanently Out of Use 500 Diesel 05/08/1977 Yes	
I35 < 1/8 1 ft.	MENDENHALL AUTO CTR 8725 MALLARD ST JUNEAU, AK 99801	RCRA-CESQG FINDS ECHO	1004670123 AK0000001115
Relative: Higher Actual: 40 ft.	Site 3 of 3 in cluster I RCRA-CESQG: Date form received by a Facility name: Facility address: EPA ID: Mailing address: Contact: Contact address: Contact country: Contact telephone: Contact telephone: Contact email: EPA Region: Classification: Description:	agency: 09/16/1993 MENDENHALL AUTO CTR 8725 MALLARD ST JUNEAU, AK 99801-8052 AK000001115 MALLARD ST JUNEAU, AK 99801-8052 STEVEN ALLWINE 8725 MALLARD ST JUNEAU, AK 99801-8052 US 907-789-1386 Not reported 10 Conditionally Exempt Small Quantity Generator Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste per calendar month, and accumulates 1000 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 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:

Map ID Direction Distance Elevation Site MAP FINDINGS

Database(s)

EDR ID Number **EPA ID Number**

MENDENHALL AUTO CTR (Continued)

Owner/operator name: Owner/operator address:	STEVEN ALLWINE & KARLA TOLLEFSON 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
andler Activities Summary:	

Har

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:

Waste name:

D001

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: Waste name: D002 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:

Waste name:

F002

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

Distance		MAP FINDINGS	EDR ID Number
Elevation	Site	Databas	
	MENDENHALL AUTO CTI	R (Continued)	1004670123
		SPENT SOLVENT MIXTURES.	
	. Waste code: . Waste name:	F003 THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYI ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTY ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SO MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE AE NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT M CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NO SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VC MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENT MIXTURES.	'L KETONE, N-BUTYL OLVENT 30VE SPENT 11XTURES/BLENDS ON-HALOGENATED DLUME) OF ONE OR F005, AND STILL
	Violation Status:	No violations found	
	FINDS:		
	Registry ID:	110003371440	
	pro	I treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA gram staff to track the notification, permit, compliance, and rective action activities required under RCRA.	
		this hyperlink while viewing on your computer to access ditional FINDS: detail in the EDR Site Report.	
	ado		
			440
3 36 : 1/8	ado ECHO: Envid: Registry ID: DFR URL: 	ditional FINDS: detail in the EDR Site Report. 1004670123 110003371440 http://echo.epa.gov/detailed-facility-report?fid=1100033714	440 UST U004115643 N/A
1/8	ado ECHO: Envid: Registry ID: DFR URL: ALASKA AIRLINES - JUN 1873 SHELL SIMMONS D	ditional FINDS: detail in the EDR Site Report. 1004670123 110003371440 http://echo.epa.gov/detailed-facility-report?fid=1100033714 EAU CARGO BUILDI	UST U004115643
1/8 ft. elative:	ECHO: Envid: Registry ID: DFR URL: ALASKA AIRLINES - JUN 1873 SHELL SIMMONS DI JUNEAU, AK 99801 Site 2 of 4 in cluster G UST:	ditional FINDS: detail in the EDR Site Report. 1004670123 110003371440 http://echo.epa.gov/detailed-facility-report?fid=1100033714 EAU CARGO BUILDI R JUNEAU CARGO BUILDING	UST U004115643
1/8 ft. celative: ligher	add ECHO: Envid: Registry ID: DFR URL: ALASKA AIRLINES - JUN 1873 SHELL SIMMONS DI JUNEAU, AK 99801 Site 2 of 4 in cluster G	ditional FINDS: detail in the EDR Site Report. 1004670123 110003371440 http://echo.epa.gov/detailed-facility-report?fid=1100033714 EAU CARGO BUILDI	UST U004115643
1/8 ft. elative: ligher .ctual:	ECHO: Envid: Registry ID: DFR URL: ALASKA AIRLINES - JUN 1873 SHELL SIMMONS DI JUNEAU, AK 99801 Site 2 of 4 in cluster G UST: Facility ID: Facility ID: Facility Type: Owner ID:	<pre>ititional FINDS: detail in the EDR Site Report.</pre>	UST U004115643
	ECHO: Envid: Registry ID: DFR URL: ALASKA AIRLINES - JUN 1873 SHELL SIMMONS DI JUNEAU, AK 99801 Site 2 of 4 in cluster G UST: Facility ID: Facility Type:	titional FINDS: detail in the EDR Site Report. 1004670123 110003371440 http://echo.epa.gov/detailed-facility-report?fid=1100033714 EAU CARGO BUILDI R JUNEAU CARGO BUILDING 1570 Air Taxi (Airline)	UST U004115643
: 1/8 ft. Relative: ligher Actual:	ECHO: Envid: Registry ID: DFR URL: ALASKA AIRLINES - JUN 1873 SHELL SIMMONS DI JUNEAU, AK 99801 Site 2 of 4 in cluster G UST: Facility ID: Facility ID: Facility Type: Owner ID: Owner Name: Owner Address:	1004670123 1004670123 110003371440 http://echo.epa.gov/detailed-facility-report?fid=1100033714 EAU CARGO BUILDI R JUNEAU CARGO BUILDING 1570 Air Taxi (Airline) 35 Alaska Airlines PO Box 68900, SEAZA	UST U004115643

Database(s)

SEMS-ARCHIVE 1001814646

AKSFN1002180

EDR ID Number EPA ID Number

U004115643

ALASKA AIRLINES - JUNEAU CARGO BUILDI (Continued)

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

1873 SHELL-SIMMONS DRIVE< 1/8 JUNEAU, AK 99801

1	ft.	

Site 3 of 4 in cluster G

Relative: Higher Actual: 20 ft.	SEMS Archive: Site ID: EPA ID: Cong District: FIPS Code: FF: NPL: Non NPL Status: Latitude: Longitude:	1002180 AKSFN1002180 0 2110 N Not on the NPL NFRAP-Site does not qualify for the NPL based on existing information 58.366667 -134.5833330000001
	SEMS Archive Detail: Region: Site ID: EPA ID: Site Name: NPL: FF: OU: Action Code: Action Code: Action Name: SEQ: Start Date: Finish Date: Qual: Current Action Lead:	10 1002180 AKSFN1002180 JUNEAU AIRFIELD AND GARRISON N N 0 VS ARCH SITE 1 Not reported 2005-10-25 00:00:00 Not reported EPA Perf In-Hse
	Region: Site ID: EPA ID: Site Name: NPL: FF: OU: Action Code: Action Name: SEQ:	10 1002180 AKSFN1002180 JUNEAU AIRFIELD AND GARRISON N N 0 PA PA 1

Database(s)

EDR ID Number EPA ID Number

JUNEAU AIRFIELD AND GARRISON (Continued)

Start Date:	1999-11-30 00:00:00
Finish Date:	2005-10-25 00:00:00
Qual:	N
Current Action Lead:	EPA Perf
Region: Site ID: EPA ID: Site Name: NPL: FF: OU: Action Code: Action Name: SEQ: Start Date: Finish Date: Qual: Current Action Lead:	10 1002180 AKSFN1002180 JUNEAU AIRFIELD AND GARRISON N 0 DS DISCVRY 1 1999-11-17 00:00:00 1999-11-17 00:00:00 Not reported EPA Perf

G38 < 1/8 1 ft.	JUNEAU INTL ARPRT MAINT SVCS BLDG RCRA-CESQ 1873 SHELL SIMMONS DR #200 JUNEAU, AK 99801			1000856046 AK0000084020
1	Site 4 of 4 in cluster G			
Relative: Higher Actual: 20 ft.	Site 4 of 4 in cluster G RCRA-CESQG: Date form received by agence Facility name: Facility address: EPA ID: Mailing address: Contact: Contact country: Contact country: Contact telephone: Contact telephone: Contact email: EPA Region: Land type: Classification: Description:	y: 12/03/2001 JUNEAU INTL ARPRT MAINT SVCS BLDG 1873 SHELL SIMMONS DR #200 JUNEAU, AK 99801-9375 AK0000084020 SHELL SIMMONS DRIVE, #200 JUNEAU, AK 99801 JERRY MAHLE 9243 BONNETT WY JUNEAU, AK 99801-9375 US 907-789-4001 Not reported 10 Municipal Conditionally Exempt Small Quantity Generator Handler: generates 100 kg or less of hazardous waste p month, and accumulates 1000 kg or less of hazardous waste p	vaste at any time;	
		month, and accumulates at any time: 1 kg or less of acu waste; or 100 kg or less of any residue or contaminated other debris resulting from the cleanup of a spill, into or land or water, of acutely hazardous waste; or generates of any residue or contaminated soil, waste or other debr	tely hazardous soil, waste or on any 100 kg or less	
		from the cleanup of a spill, into or on any land or water, hazardous waste during any calendar month, and accur time: 1 kg or less of acutely hazardous waste; or 100 kg any residue or contaminated soil, waste or other debris	nulates at any or less of	

the cleanup of a spill, into or on any land or water, of acutely

hazardous waste

TC5509586.2s Page 63

Database(s)

EDR ID Number EPA ID Number

JUNEAU INTL ARPRT MAINT SVCS BLDG (Continued)

Owner/Operator Summary: Owner/operator name: Owner/operator address: Owner/operator country: Owner/operator telephone: Owner/operator email: Owner/operator fax: Owner/operator fax: Owner/operator Type: Owner/Operator Type: Owner/Op start date: Owner/Op end date:	CBJ 1873 SHELL SIMMONS DR #200 JUNEAU, AK 99801 Not reported Not reported Not reported Not reported Not reported Municipal Operator Not reported Not reported Not reported Not reported
Owner/operator name: Owner/operator address:	CITY & BOROUGH OF JUNEAU 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 Not reported
Owner/operator extension: 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 w Mixed waste (haz. and radioa Recycler of hazardous waste Transporter of hazardous was Treater, storer or disposer of Underground injection activity On-site burner exemption: Furnace exemption: Used oil fuel burner: Used oil fuel burner: Used oil fuel burner: Used oil processor: User oil refiner: Used oil fuel marketer to burr Used oil fuel marketer to burr Used oil fuel marketer to burr Used oil transfer facility: Used oil transporter:	active): No : No ste: No HW: No /: No No No
. Waste code: . Waste name:	D001 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.

	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

Database(s)

EDR ID Number EPA ID Number

. Waste code: . Waste name:	D008 LEAD
Historical Generators:	
Date form received by agency	r: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-SI
Area of violation:	Not reported
Date achieved compliance:	Not reported
Evaluation lead agency:	EPA
Evaluation date:	04/28/1994
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SI
Area of violation:	Generators - General
Date achieved compliance:	07/19/1994
Evaluation lead agency:	State

Database(s)

D39	DELTA AIR LINES JUNEAU JUNEAU INTL ARPRT	RCRA NonGen / NLR	1000394869 AKD152465670
< 1/8	JUNEAU, AK 99801		/112102100010
1 ft.	Site 3 of 3 in cluster D		
Relative:	RCRA NonGen / NLR:		
Higher	Date form received by agency		
Actual:	Facility name:	DELTA AIR LINES JUNEAU	
13 ft.	Facility address:		
	EPA ID:	JUNEAU, AK 99801 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: EPA Region:	Not reported 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	
	Ourper/energies	Not reported	
	Owner/operator country: Owner/operator telephone:	Not reported 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: Owner/operator telephone:	Not reported	
	Owner/operator email:	Not reported 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 wa	aste: No	
	Mixed waste (haz. and radioa	,	
	Recycler of hazardous waste:		
	Transporter of hazardous was		
	Treater, storer or disposer of Underground injection activity		
	Chargeound injection activity		

Database(s)

	DELTA AIR LINES JUNEA	(Continued)			1000394869
	On-site burner exempt Furnace exemption: Used oil fuel burner: Used oil processor: User oil refiner: Used oil fuel marketer Used oil Specification Used oil transfer facilit Used oil transporter:	No No No o burner: No narketer: No			
	Historical Generators: Date form received by Site name: Classification:	DELTA AIR I	LINES, INC JNU v Exempt Small Quantity Generator		
	Date form received by	agency:07/06/1987			
	Site name: Classification:	DELTA AIR I Not a genera	LINES JUNEAU ator, verified		
. Waste name: IG LE CL FL WI MA		LESS THAN CLOSED CU FLASH POIN WHICH CAN MATERIAL.	HAZARDOUS WASTES ARE THOSE WASTES WHI 140 DEGREES FAHRENHEIT AS DETERMINED BY IP FLASH POINT TESTER. ANOTHER METHOD OI IT OF A WASTE IS TO REVIEW THE MATERIAL SA I BE OBTAINED FROM THE MANUFACTURER OR LACQUER THINNER IS AN EXAMPLE OF A COMM JLD BE CONSIDERED AS IGNITABLE HAZARDOUS	Y A PEN F DETEI AFETY D DISTRIE MONLY L	SKY-MARTENS RMINING THE DATA SHEET, BUTOR OF THE JSED SOLVENT
	Violation Status:	No violations	found		
J40 < 1/8 1 ft.	PACIFIC TELECOM, INC 2075 JORDAN AVE JUNEAU, AK 99801		A	K UST	U004115942 N/A
Relative: Higher Actual: 39 ft.	Site 4 of 4 in cluster J UST: Facility ID: Facility Type: Owner ID: Owner Name: Owner Address: Owner City,St,Zip: Tank ID: Tank ID: Tank Status: Tack Capacity: Tank Product: Installed Date: Regulated Tank:	2687 Utilities 879 PTI Communication 3940 Arctic BLVD Anchorage, AK 995 1 Permanently Out o 300 Diesel 01/01/1982 Yes	503		

Database(s)

E41	CAMERON PLUMBING AND F 1850 CREST STREET, NEAR	YANDUKIN DRIVE AK LUST N/A
< 1/8 1 ft.	JUNEAU, AK 99801	AK INST CONTROL
	Site 2 of 3 in cluster E	
Relative: Higher Actual: 40 ft.	SHWS: File Number: Staff: Facility Status: Latitude: Longitude: Hazard ID: Problem:	 1513.38.001 IC Unit, 9074655229 dec.icunit@alaska.gov Cleanup Complete - Institutional Controls 58.360393 -134.574322 1755 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: Action: DEC Staff: Action Description:	5/8/2003 Conditional Closure Approved Bruce Wanstall 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: Action: DEC Staff: Action Description:	5/7/2003 Long Term Monitoring Established Bruce Wanstall 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: Action: DEC Staff: Action Description:	5/7/2003 Institutional Control Record Established Bruce Wanstall 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,

EDR ID Number Database(s) EPA ID Number

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: Action: DEC Staff: Action Description:	5/16/2013 Long Term Monitoring (Kristin Thompson Administrative action ad	Complete dded during a quality control check.
Action Date: Action: DEC Staff: Action Description:	3/9/1994 Update or Other Action Bruce Wanstall Site Assessment, Relea submitted.	ase Investigation, and Corrective Action Plan
Action Date: Action: DEC Staff: Action Description:	12/4/2013 Institutional Control Col Evonne Reese IC review conducted.	mpliance Review
Action Date: Action: DEC Staff: Action Description:	12/23/2013 Institutional Control Up Kristin Thompson An IC reminder letter w date.	date ras issued to the responsible party on this
Action Date: Action: DEC Staff: Action Description:	12/20/2001 Site Added to Database Bruce Wanstall Heating oil spill from US	
Action Date: Action: DEC Staff: Action Description:	12/20/2001 Site Ranked Using the Bruce Wanstall Preliminary ranking.	AHRM
Action Date: Action: DEC Staff: Action Description:	Bruce Wanstall Corrective action includ Bioremediation of soils yards. Perforated PVC installed. Contaminated	Storage Tank Corrective Action Underway des addition of fertilizer to promote In-Situ left in-place, volume estimated at 30 cubic pipe with vertical aeration chimney was d soil stockpile was transported to the y for thermal remediation.
Contaminants: Staff:		IC Unit, 9074655229 dec.icunit@alaska.gov
Contaminate Name1: Contaminate Level Descripti	on1:	Cameron Plumbing and Heating Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation
Contaminate Media1:		Soil
Control Type:		CS Database Notation And Letter To Landowner/RP

Database(s)

EDR ID Number EPA ID Number

S105273790

CAMERON PLUMBING AND HEATING (Continued)

Control Details Description1: Contaminant CTD: Contaminant CDR: Comments:

Staff:

Contaminate Name1: Contaminate Level Description1:

Contaminate Media1:

Control Type: Control Details Description1: Contaminant CTD: Contaminant CDR: Groundwater Use Restrictions Not reported No wells shall be installed on the property Not reported

IC Unit, 9074655229 dec.icunit@alaska.gov

Cameron Plumbing and Heating Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation Soil

CS Database Notation And Letter To Landowner/RP When Contaminated Soil is Accessible, Remediation Should Occur Not reported 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. Not reported

Comments:

File Number: Staff: Facility Status: Latitude: Longitude: Hazard ID: Problem: 1513.26.012 Not reported Cleanup Complete 58.360400 -134.574300 24385 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: 8/1/1993 Action Date: Site Added to Database Action: 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

EDR ID Number Database(s) EPA ID Number

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 Update or Other Action Action: DEC Staff: **Bill Janes** Project Manager changed from Horwath to Bruce Wanstall Action Description: Action Date: 12/1/1997 Update or Other Action 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 Leaking Underground Storage Tank Cleanup Initiated - Petroleum Action: 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 Underground Storage Tank Site Characterization or Assessment Action: DEC Staff: * Not Assigned Action Description: SA1: 1/17/1994 Action Date: Update or Other Action 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 Cleanup Complete Facility Status: 1993110021301 Record Key: File ID: 1513.26.012 Oname: Cameron Plumbing & Heating, Inc. Lat/Lon: 58.3604 -134.5743 Lust Event ID: 1196 LUST CS or Lust: Borough: Juneau Staff: No Longer Assigned Site Type: Unknown

Database(s)

EDR ID Number **EPA ID Number**

S105273790

CAMERON PLUMBING AND HEATING (Continued)

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

N C MACHINERY CO JUNEAU 42

8850 AIRPORT BLVD < 1/8 JUNEAU, AK 99803

1 ft.

RCRA-CESQG 1000123250 AK LUST AKD035418979 AK UST FINDS ECHO

Relative:	RCRA-CESQG:	
Higher	Date form received by ag	gency: 02/02/1998
Actual:	Facility name:	N C MACHINERY CO JUNEAU
40 ft.	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

Database(s)

EDR ID Number EPA ID Number

N C MACHINERY CO JUNEAU (Continued)

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: Legal status:	Not reported Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported
	Notroponou
Handler Activities Summary:	
U.S. importer of hazardous wa	aste: No
Mixed waste (haz. and radioa	
Recycler of hazardous waste:	No
Transporter of hazardous was	ste: No
Treater, storer or disposer of	
Underground injection activity	r: 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 burn	
Used oil Specification markete Used oil transfer facility:	er: No No
Used oil transporter:	No
Used on 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	1-02/22/1000
Site name:	N C MACHINERY CO.
Classification:	Not a generator, verified
oncontration.	
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 load agapav:	Stata

Violation lead agency:

Enforcement action: Enforcement action date: State

01/17/1989

WRITTEN INFORMAL

Database(s)

EDR ID Number EPA ID Number

N C MACHINERY CO JUNEAU (Continued)

C MACHINERY CO JUNEA	U (Continued)
Enf. disposition status: Enf. disp. status date: Enforcement lead age Proposed penalty amount: Final penalty amount: Paid penalty amount:	Not reported ncy: State
Evaluation Action Summary Evaluation date: Evaluation: Area of violation: Date achieved compliand Evaluation lead agency:	08/09/2005 COMPLIANCE EVALUATION INSPECTION ON-SITE Not reported
Evaluation date: Evaluation: Area of violation: Date achieved complianc Evaluation lead agency:	12/13/1988 COMPLIANCE EVALUATION INSPECTION ON-SITE Generators - General e: 02/14/1989 State
LUST: Facility Name: Facility Status: Record Key: File ID: Oname: Lat/Lon: Lust Event ID: CS or Lust: Borough: Staff: Site Type: Horizontal Datum:	NC MACHINERY COMPANY Cleanup Complete 1992110024401 1513.26.009 N. C. Machinery Co. 58.30194 -134.4196 1187 LUST Juneau No Longer Assigned Unknown NAD27
Facility Type: Owner ID: Owner Name: Owner Address: Owner City,St,Zip: Tank ID: Tank Status: Tack Capacity:	828 Unknown 818 N. C. Machinery Co. 8550 Airport BLVD Juneau, AK 99803 1 Permanently Out of Use 750
Installed Date: Regulated Tank: Tank ID:	Used Oil 05/05/1984 Yes 2 Permanently Out of Use
Tack Capacity: Tank Product: Installed Date:	1000 Diesel 01/01/1984 Yes

Database(s)

	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. <u>Click this hyperlink</u> while viewing on your computer to access		
		I FINDS: detail in the EDR Site Report.	
	ECHO: Envid: Registry ID: DFR URL:	1000123250 110003043448 http://echo.epa.gov/detailed-facility-report?fid=110003043448	
H43 < 1/8 1 ft.	PETROLEUM SVCS INC 8401 AIRPORT BLVD JUNEAU, AK 99803 Site 2 of 7 in cluster H	RCRA NonGen / NLR FINDS ECHO	1000473430 AKD983069121
Relative:	RCRA NonGen / NLR:		
Higher	Date form received by agen		
Actual: 33 ft.	Facility name: Facility address:	PETROLEUM SVCS INC 8401 AIRPORT BLVD	
	EPA ID: Mailing address: Contact: Contact address: Contact country:	JUNEAU, AK 99803 AKD983069121 NO MAILING ADDRESS NO MAILING CITY, OR Not reported Not reported Not reported US	
	Contact telephone: Contact email:	Not reported Not reported	
	EPA Region: Classification: Description:	10 Non-Generator Handler: Non-Generators do not presently generate hazardous waste	
	Owner/Operator Summary: Owner/operator name: Owner/operator address: Owner/operator country: Owner/operator telephone: Owner/operator email: Owner/operator fax: Owner/operator extension: Legal status: Owner/Operator Type:	PETROLEUM SVCS INC Not reported Not reported Not reported Not reported Not reported Not reported Private Owner	

PETROLEUM SVCS INC (Continued)

Owner/Op start date:

Owner/Op end date:

MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

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: 110003040780 Registry ID: 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: 1000473430 Envid: Registry ID: 110003040780 DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110003040780

Not reported

Not reported

44 JUNEAU AIRPORT SHELL SIMMONS DR AT N APRON < 1/8 JUNEAU, AK 99801

1 ft.

	LUST:	
Relative:	Facility Name:	CBJ JUNEAU AIRPORT MAINTENANCE FACILITY
Higher	Facility Status:	Cleanup Complete - Institutional Controls
Actual:	Record Key:	1999110028101
22 ft.	File ID:	1513.26.061
	Oname:	City & Borough of Juneau
	Lat/Lon:	58.36125 -134.5853
	Lust Event ID:	2731
	CS or Lust:	LUST

U003140252

N/A

AK LUST

AK UST

Database(s)

EDR ID Number EPA ID Number

JUNEAU AIRPORT (Continued) U003140252 Borough: Juneau IC Unit Staff: Site Type: Airport/Airfield Horizontal Datum: NAD83 UST: Facility ID: 2157 Facility Type: Unknown Owner ID: 228 Owner Name: City & Borough of Juneau Attn: Accounts Payable Owner Address: Owner City,St,Zip: Juneau, AK 99801 Tank ID: 1 Tank Status: Permanently Out of Use Tack Capacity: 5000 Tank Product: Gasoline 01/01/1962 Installed Date: **Regulated Tank:** Yes Tank ID: 2 Tank Status: Permanently Out of Use Tack Capacity: 5000 Tank Product: Diesel 01/01/1962 Installed Date: **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
	8550 AIRPORT BLVD;

< 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

AK SHWS S109256445 N/A

tabase(s) EPA ID

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 Site Added to Database Action: 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 **JUNEAU, AK 99801** < 1/8 1 ft. Site 4 of 7 in cluster H SHWS: **Relative:** Higher File Number: 1513.26.004 Staff: Not reported Actual: Facility Status: **Cleanup Complete** 32 ft. Latitude: 58.359046 Longitude: -134.569494 Hazard ID: 24490 Problem: Farnell was last staff assigned. Actions: Action Date: 8/12/1991 Update or Other Action 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

Database(s) E

Map ID Direction	[MAP FINDINGS	
Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
	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 < 1/8 1 ft.	CAMERON PLUMBING & 1850 CREST ST JUNEAU, AK 99801	HEATING, INC.	AK UST	U000730012 N/A
	Site 3 of 3 in cluster E			
Relative: Higher Actual: 40 ft.	UST: Facility ID: Facility Type: Owner ID: Owner Name: Owner Address: Owner City,St,Zip: Tank ID: Tank Status: Tack Capacity: Tank Product: Installed Date: Regulated Tank: Tank ID: Tank Status: Tack Capacity: Tank Product: Installed Date: Regulated Tank:	2726 Unknown 1833 Cameron Plumbing & Heating, Inc. 1850 Crest ST Juneau, AK 99801 1 Permanently Out of Use 1000 Gasoline Not reported Yes 2 Permanently Out of Use 1000 Heating Oil Not reported No		

TC5509586.2s Page 79

Database(s)

EDR ID Number EPA ID Number

H48	DOUGLAS TRUCKING 8400 AIRPORT BLVD	AK SHWS S109256725 N/A
< 1/8 1 ft.	JUNEAU, AK 99801	
	Site 5 of 7 in cluster H	
Relative: Higher Actual: 38 ft.	SHWS: File Number: Staff: Facility Status: Latitude: Longitude: Hazard ID: Problem:	1513.26.037 Not reported Cleanup Complete 58.359506 -134.569708 24917 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
	Actions: Action Date: Action: DEC Staff: Action Description:	interference on first round. 4/17/1992 Leaking Underground Storage Tank Cleanup Initiated - Petroleum * Not Assigned Not reported
	Action Date: Action: DEC Staff: Action Description:	4/17/1992 Site Closure Approved * Not Assigned Not reported
	Action Date: Action: DEC Staff: Action Description:	4/17/1992 Site Added to Database * Not Assigned Not reported
	Action Date: Action: DEC Staff: Action Description:	11/23/2016 Update or Other Action Kristin Thompson Administrative update: the closure documentation for this site could not be located.
F49 < 1/8 1 ft.	WARD AIR WARD AIR JUNEAU, AK 99801	AK SHWS S109256577 N/A
	Site 3 of 4 in cluster F	
Relative: Higher Actual: 23 ft.	SHWS: File Number: Staff: Facility Status:	1513.26.030 Not reported Cleanup Complete 58.358800

Problem: Actions: Action Date: Action: DEC Staff: Action Description:

Latitude:

Longitude:

Hazard ID:

Not reported Cleanup Complete 58.358800 -134.578300 24697 Farnell was last staff assigned.

3/19/1998 Site Closure Approved * Not Assigned Not reported

Database(s)

EDR ID Number EPA ID Number

S109256577

WARD AIR (Continued)

Action Date: Action: DEC Staff: Action Description:

Action Date: Action: DEC Staff: Action Description:

1/1/1994 Leaking Underground Storage Tank Cleanup Initiated - Petroleum * Not Assigned Not reported

1/1/1994 Site Added to Database * Not Assigned Not reported

F50	WARD AIR INC 8991 YANDUKIN DR	RCRA-CESQC AK LUS	AK0000385625
< 1/8 1 ft.	JUNEAU, AK 99801	AK US FIND	
	Site 4 of 4 in cluster F	ECHO	
Relative: Higher Actual: 23 ft.	Site 4 of 4 in cluster F RCRA-CESQG: Date form received by agend Facility name: Facility address: EPA ID: Mailing address: Contact: Contact address: Contact country: Contact telephone: Contact telephone: Contact email: EPA Region: Land type: Classification: Description:		н.
		the cleanup of a spill, into or on any land or water, of acutely hazardous waste	
	Handler Activities Summary:		

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

Database(s)

EDR ID Number EPA ID Number

1000904399

WARD AIR INC (Continued)

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 Regulation violated: Area of violation: Date violation determined: Date achieved compliance: Violation lead agency: Enforcement action: Enforcement action date: Enf. disposition status: Enf. disp. status date: Enforcement lead agency: Proposed penalty amount: Final penalty amount: Paid penalty amount:	Violations: Not reported Used Oil - Fuel Marketers 12/06/2005 12/31/2005 EPA WRITTEN INFORMAL 12/06/2005 Not reported Not reported EPA Not reported Not reported Not reported Not reported Not reported Not reported Not reported
Regulation violated: Area of violation: Date violation determined: Date achieved compliance: Violation lead agency: Enforcement action: Enforcement action date: Enf. disposition status: Enf. disp. status date: Enforcement lead agency: Proposed penalty amount: Final penalty amount: Paid penalty amount:	Not reported Generators - General 04/29/1994 07/08/1994 State WRITTEN INFORMAL 06/23/1994 Not reported Not reported State Not reported Not reported Not reported Not reported Not reported

Evaluation Action Summary:

Evaluation date:

Evaluation:

Evaluation date:
Evaluation:
Area of violation:
Date achieved compliance:
Evaluation lead agency:

08/08/2005 COMPLIANCE EVALUATION INSPECTION ON-SITE Used Oil - Fuel Marketers 12/31/2005 EPA 04/29/1994 COMPLIANCE EVALUATION INSPECTION ON-SITE Generators - General 07/08/1994

Area of violation: Date achieved compliance: Evaluation lead agency:

LUST: Fac

Facility Name:	WARD AIR
Facility Status:	Cleanup Complete
Record Key:	1994110012201
File ID:	1513.26.030
Oname:	Ward Air

State

Database(s)

EDR ID Number EPA ID Number

1000904399

WARD AIR INC (Continued)

34.5783 Assigned

UST:

Facility ID: Facility Type: Owner ID: Owner Name: Owner Address:	2725 Air Taxi (Airline) 1832 Ward Air 8991 Yandukin Dr
Owner City,St,Zip:	Juneau, AK 99801
Tank ID:	1

Tank Status:Permanently Out of UseTack Capacity:3000Tank Product:GasolineInstalled Date:08/01/1985Regulated Tank:Yes

Tank ID:2Tank Status:Permanently Out of UseTack Capacity:3000Tank Product:GasolineInstalled Date:08/01/1985Regulated 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.

<u>Click this hyperlink</u> while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: Registry ID: DFR URL: 1000904399 110003044777 http://echo.epa.gov/detailed-facility-report?fid=110003044777

Database(s)

51	SILVER BAY AVIATION 8892 YANDUKIN DR		RCF	RA-CESQG FINDS	1000904398 AK0000385617
< 1/8 1 ft.	JUNEAU, AK 99801			ECHO	
	RCRA-CESQG:				
Relative:	Date form received by agency:	05/13/	/1994		
Higher			ER BAY AVIATION		
Actual:		8892	YANDUKIN DR		
24 ft.	-	JUNE	AU, AK 99801-8086		
	EPA ID:	AK000	00385617		
	Mailing address:	NO M	AILING ADDRESS		
		NO M	IAILING CITY, OR		
	Contact:	Not re	eported		
	Contact address:	Not re	eported		
		Not re	eported		
	Contact country:	US			
			eported		
		Not re	eported		
	5	10			
			ty is not located on Indian land. Additional information is	s not known.	
			tionally Exempt Small Quantity Generator		
	•		ler: generates 100 kg or less of hazardous waste per ca		
			n, and accumulates 1000 kg or less of hazardous waste	•	
		-	nerates 1 kg or less of acutely hazardous waste per cale		
			n, and accumulates at any time: 1 kg or less of acutely h		
			e; or 100 kg or less of any residue or contaminated soil,		
			debris resulting from the cleanup of a spill, into or on ar		
			or water, of acutely hazardous waste; or generates 100	-	
			residue or contaminated soil, waste or other debris res	-	
			he cleanup of a spill, into or on any land or water, of ac dous waste during any calendar month, and accumulate	•	
			1 kg or less of acutely hazardous waste; or 100 kg or le	•	
			esidue or contaminated soil, waste or other debris result		
		•	eanup of a spill, into or on any land or water, of acutely		
			dous waste		
	Handler Activities Summary:				
	U.S. importer of hazardous was	cto.	No		
	Mixed waste (haz. and radioact				
	Recycler of hazardous waste:	,	No		
	Transporter of hazardous waste		No		
	Treater, storer or disposer of H		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 burne		No		
	Used oil Specification marketer		No		
	Used oil transfer facility:		No		
	Used oil transporter:		No		
	Facility Has Received Notices of \	Violatio	ons:		
			eported		
	5		rators - General		
	Date violation determined:	05/02/	/1994		

Site Type:

Unknown

MAP FINDINGS

Database(s)

	SILVER BAY AVIATION (Continued)			1000904398
	Date achieved compliance: Violation lead agency: Enforcement action: Enforcement action date: Enf. disposition status: Enf. disp. status date: Enforcement lead agency Proposed penalty amount Final penalty amount: Paid penalty amount:			
	Evaluation Action Summary: Evaluation date: Evaluation: Area of violation: Date achieved compliance: Evaluation lead agency: FINDS:	05/02/1994 COMPLIANCE EVALUATION INSPECTION ON-SITE Generators - General 06/30/1994 State		
	Registry ID:	110003044768		
Conservati events and and treat, s program st corrective a <u>Click this h</u>		b is a national information system that supports the Resource tion and Recovery Act (RCRA) program through the tracking of d activities related to facilities that generate, transport, store, or dispose of hazardous waste. RCRAInfo allows RCRA staff to track the notification, permit, compliance, and action activities required under RCRA.		
	ECHO: Envid: Registry ID: DFR URL:	1000904398 110003044768 http://echo.epa.gov/detailed-facility-report?fid=11000)3044768 -	
H52 < 1/8 1 ft.	JUNEAU DAIRIES DISTRICT, IN 8403 AIRPORT BLVD. JUNEAU, AK 99801 Site 6 of 7 in cluster H	CORPORATED	AK LUST	S109261083 N/A
Relative: Higher Actual: 33 ft.	Site 6 of 7 in cluster H LUST: Facility Name: Facility Status: Record Key: File ID: Oname: Lat/Lon: Lust Event ID: CS or Lust: Borough: Staff: Site Type:	JUNEAU DAIRIES DISTRICT, INCORPORATED Cleanup Complete 1991110020501 1513.26.004 Juneau Dairies District Inc. 58.35904 - 134.5694 1173 LUST Juneau No Longer Assigned Ukknown		

	MAP FINDINGS		
Site		Database(s)	EDR ID Number EPA ID Number
JUNEAU DAIRIES DIS Horizontal Datum	TRICT, INCORPORATED (Continued) WGS84		S109261083
JUNEAU DAIRIES DIS 8403 AIRPORT BLVD JUNEAU, AK 99801	TRICT, INC.	AK UST	U000001067 N/A
Site 7 of 7 in cluster H			
UST: Facility ID: Facility Type: Owner ID: Owner Name: Owner Address: Owner City,St,Zip	51 Unknown 640 Juneau Dairies District Inc. P.O. Box 249 8403 Airport BLVD		
Tank ID: Tank Status: Tack Capacity: Tank Product: Installed Date: Regulated Tank:	1 Permanently Out of Use 670 Gasoline 05/23/1973 Yes		
GHELL SIMMONS DRI JUNEAU, AK 99801	T MAINTENANCE FACILITY VE AT NORTH APRON	AK SHWS AK INST CONTROL	S109254538 N/A
Site 1 of 2 in cluster N			
SHWS: File Number: Staff: Facility Status: Latitude: Longitude: Hazard ID: Problem:	1513.26.061 IC Unit, 9074655229 dec.icunit@ala Cleanup Complete - Institutional Co 58.361259 -134.585385 25156 DRO @ 8300ppm remains in soil be maintenance building and utility line Contamination release is from corro UST excavated along with 70 tons c	ntrols meath west side of airpor s under the north apron. sion holes in 1,000gallon	
Actions: Action Date: Action: DEC Staff: Action Description	9/22/2003 Conditional Closure Approved Bruce Wanstall No Further Remedial Action Plan discussed with supervisor. Institutional control notation made in for remedial action when residual soil contaminar accessible. Groundwater not a drinking water so	the LUST database tion becomes	
Action Date: Action:	9/22/2003 Institutional Control Record Established Bruce Wanstall		

EDR ID Number Database(s) EPA ID Number

	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	
Action Description.	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	
Action Description.	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	
	Update or Other Action	

Owner Address:

MAP FINDINGS

EDR ID Number EPA ID Number Database(s)

	CBJ JUNEAU AIRPO	RT MAINTENANCE FACILITY (Continued)	S109254538
	DEC Staff: Action Descriptio	* Not Assigned n: ADEC sends Notification of Intent to Cost Recover Letter to Current Owner: CITY & BOROUGH OF JUNEAU. For same site - duplicate event of 2731 that has been deleted.	li
	Action Date: Action: DEC Staff: Action Descriptio	 10/8/1999 Leaking Underground Storage Tank Cleanup Initiated - Petroleum Bruce Wanstall n: 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: Action: DEC Staff: Action Descriptio	10/7/2003 Update or Other Action Cynthia Pring-Ham n: Administrator deleted record for EventId 1210 which is a duplicate record for this site.	
	Action Date: Action: DEC Staff: Action Descriptio	10/2/2001 Update or Other Action Cynthia Pring-Ham n: Changed Project Manager from Paul Horwath to Bill Janes	
	Inst Control: Hazard ID: Facility Status: Action: Action Date: File Number: Hazard ID: Facility Status: Action: Action Date: File Number: Hazard ID: Facility Status: Action: Action Date: File Number:	 25156 Cleanup Complete - Institutional Controls Institutional Control Record Established 9/22/2003 1513.26.061 25156 Cleanup Complete - Institutional Controls Institutional Control Compliance Review 12/5/2013 1513.26.061 25156 Cleanup Complete - Institutional Controls Institutional Control Update 12/23/2013 1513.26.061 	
55 NE < 1/8 0.010 mi. 55 ft.	FRED MEYER #158 F 8181 GLACIER HWY JUNEAU, AK 99801	UEL STOP AK UST AK Financial Assurance AK NPDES	U004116415 N/A
Relative: Higher Actual: 54 ft.	UST: Facility ID: Facility Type: Owner ID: Owner Name:	716 Gas Station 457 Fred Meyer Stores, Inc. Env Dept 235 Eval Stores	

Env Dept 23E, Fuel Stops

Database(s)

EDR ID Number EPA ID Number

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 Commentation line
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
Facility Type: Owner ID: Owner Name: Owner Addr: Owner City: Owner City: Owner Zip: Owner City,St,Zip: Policy Begin Date: Policy End Date:	Gas Station 457 Fred Meyer Stores, Inc. Env Dept 23E, Fuel Stops Portland OR 97242 Portland, OR 97242 05/01/2018 05/01/2019
PDES:	
Facility Type:	Con-SWPP or SW Eng. Plan
Permit Number:	06-3P-072-068 Not reported
Issued Date: Responsible Party:	Not reported
Responsible Party: Lat/Long:	Not reported Not reported
Latitude Direction:	N
Lat/Lon Type Code:	N LAT
Langitude Direction:	W
C	V V
ermit:	
D	06-3P-072-068
Permit No:	
Permit Type:	Stormwater
Permit Type: Permit Status:	Not migrated yet
Permit Type:	

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Database(s)

	FRED MEYER #158 FUEL STOP	(Continued)		U004116415
	Dec Date Type: Dec Issue Date: Dec Expiration Date:	DEC Dates 3/13/2006 7/1/2008		
	Outfall: Receiving Water: Stormwater Receiving Water:	Not reported undetermined - migration		
O56 West < 1/8 0.014 mi.	DELTA AIR CARGO JUNEAU INTERNATIONAL AIRPO JUNEAU, AK 99801	DRT	AK LUST	U003140141 N/A
75 ft.	Site 1 of 2 in cluster O			
Relative: Higher Actual: 18 ft.	LUST: Facility Name: Facility Status: Record Key: File ID: Oname: Lat/Lon: Lust Event ID: CS or Lust: Borough: Staff: Site Type: Horizontal Datum:	DELTA AIR CARGO Cleanup Complete 1991110009201 1513.26.034 Delta Airlines Inc. Anc 58.36024 -134.5853 1974 LUST Juneau No Longer Assigned Unknown Not reported		
O57 West < 1/8 0.016 mi. 82 ft.	DELTA AIR CARGO JUNEAU INTERNATIONAL AIRPO JUNEAU, AK 99801 Site 2 of 2 in cluster O	DRT	AK SHWS	S109256693 N/A
Relative:	SHWS:			
Higher Actual: 18 ft.	File Number: Staff: Facility Status: Latitude: Longitude: Hazard ID: Problem:	1513.26.034 Not reported Cleanup Complete 58.360240 -134.585340 24902 Below matrix levels. No gasoline range detecte Tank was removed. File says No Contamination concentration. Missing: EventID, Reckey, FacIE was last staff assigned.	n. Contaminar	nts low
	Actions: Action Date: Action: DEC Staff: Action Description:	4/2/1991 Site Added to Database * Not Assigned Not reported		
	Action Date: Action: DEC Staff:	3/5/2002 Site Closure Approved Bill Janes		

DELTA AIR CARGO (Continued) 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. 2/8/2002 Action Date: Update or Other Action 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 Update or Other Action 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)** WNW 9151 GLACIER HWY < 1/8 **JUNEAU, AK 99801** 0.022 mi. Site 1 of 4 in cluster P 116 ft. **Relative:** LUST: Higher Facility Name: CHEVRON - AIRPORT (PAUL'S CHEVRON) Facility Status: **Cleanup Complete - Institutional Controls** Actual: 1994110036401 Record Key: 34 ft. File ID: 1513.26.017 Oname: **Pilcher Properties LLC** Lat/Lon: 58.3627 -134.5839 Lust Event ID: 1213 LUST CS or Lust: Borough: Juneau Staff: IC Unit

Site Type: Horizontal Datum: Gas Station

NAD83

S109256693

AK LUST S104891675 N/A

Database(s)

P59 WNW < 1/8 0.022 mi. 116 ft.	PAUL'S CHEVRON 9151 GLACIER HWY JUNEAU, AK 99801 Site 2 of 4 in cluster P		AK UST	U003141408 N/A
Relative: Higher Actual: 34 ft.	UST: Facility ID: Facility Type: Owner ID: Owner Name: Owner Address: Owner City,St,Zip: Tank ID: Tank ID: Tank Status: Tack Capacity: Tank Product: Installed Date: Regulated Tank:	928 Gas Station 895 Erwin Enterprises C/O Key Book Keeping 9105 Mendenhall RD Juneau, AK 99801 1 Permanently Out of Use 10000 Gasoline 05/25/1985 Yes		
	Tank ID: Tank Status: Tack Capacity: Tank Product: Installed Date: Regulated Tank:	2 Permanently Out of Use 10000 Gasoline 05/25/1985 Yes		
	Tank ID: Tank Status: Tack Capacity: Tank Product: Installed Date: Regulated Tank:	3 Permanently Out of Use 10000 Gasoline 05/25/1985 Yes		
	Tank ID: Tank Status: Tack Capacity: Tank Product: Installed Date: Regulated Tank:	4 Permanently Out of Use 1000 Used Oil Not reported Yes		
	Tank ID: Tank Status: Tack Capacity: Tank Product: Installed Date: Regulated Tank:	5 Permanently Out of Use 5000 Gasoline 05/25/1966 Yes		
	Tank ID: Tank Status: Tack Capacity: Tank Product: Installed Date:	6 Permanently Out of Use 5000 Gasoline 05/25/1966		

Database(s)

EDR ID Number EPA ID Number

U003141408

	TAGE CONEVICON (CON		0003141400
	Regulated Tank:	Yes	
	Tank ID:	7	
	Tank Status:	Permanently Out of Use	
		1000	
	Tack Capacity:		
	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 (P	AUL'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:	SHWS:		
Higher	File Number:	1513.26.017	
Actual:	Staff:	IC Unit, 9074655229 dec.icunit@alaska.gov	
34 ft.	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 concontrations above ADEC cleanup levels. GPO levels in	

contaminant concentrations above ADEC cleanup levels. GRO levels in MW-3 had a concentration of 4.3mg/l which is above ADEC cleanup

PAUL'S CHEVRON (Continued)

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EDR ID Number Database(s) EPA ID Number

HEVRON - AIRPORT (PAUL'S	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: Action: DEC Staff: Action Description:	9/20/2004 Report or Workplan Review - Other Bill Janes 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: Action: DEC Staff: Action Description:	9/14/2012 Report or Workplan Review - Other Evonne Reese 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: Action: DEC Staff: Action Description:	9/11/2013 Site Visit Evonne Reese 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: Action: DEC Staff: Action Description:	8/30/2010 Offsite Soil or Groundwater Disposal Approved Evonne Reese 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: Action: DEC Staff: Action Description:	7/29/2015 Institutional Control Update Evonne Reese Informed by the site consultant that they will be onsite to do the summer groundwater monitoring on August 6th and 7th.	
Action Date: Action: DEC Staff: Action Description:	6/17/1999 Conditional Closure Approved * Not Assigned ADEC approved No Further Remedial Action Planned (NFRAP) status.	

CH

EDR ID Number Database(s) EPA ID Number

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: Action: DEC Staff: Action Description:	5/29/1996 Leaking Underground Storage Tank Cleanup Initiated - Petroleum * Not Assigned 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: Action: DEC Staff: Action Description:	4/7/2006 Update or Other Action Bill Janes 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: Action: DEC Staff: Action Description:	4/14/2015 Report or Workplan Review - Other Kristin Thompson 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

EDR ID Number Database(s) EPA ID Number

Action Date: Action: DEC Staff:	next sampling event is scheduled for August 2015. If the 2015 results remain generally stable, future sampling events will occur on a biennial basis. 3/22/2017 Institutional Control Compliance Review
Action:	Institutional Control Compliance Review
DEC Staff:	
Action Description:	Kristin Thompson 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: Action:	2/7/2014 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???II 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: Action Description:	Kristin Thompson 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: Action Description:	Evonne Reese 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: DEC Staff: Action Description:	Update or Other Action Evonne Reese 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: Action: DEC Staff:	2/26/2013 Report or Workplan Review - Other Evonne Reese
Action Description:	Reviewed the Second Semi-Annual Groundwater Monitoring Report 2012

Action Date:

MAP FINDINGS

EDR ID Number Database(s) EPA ID Number

CHEVRON - AIRPORT (PAUL'S CHEVRON) (Continued)			
	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: Action Description:	Evonne Reese 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: Action Description:	* Not Assigned 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		

11/30/2015

EDR ID Number Database(s) EPA ID Number

Action:	Report or Workplan Review - Other
DEC Staff: Action Description:	Kristin Thompson Reviewed the 2015 Annual Groundwater Monitoring Report submitte ARCADIS and dated November 6, 2015. Groundwater samples were collected on August 6, 2015 from monitoring wells MW-1, MW-2, MW and MW-4. Samples were analyzed for DRO, GRO, and BTEX. DRO concentrations were below cleanup levels in all wells except for MW- 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 reduce from annually to biennially. The next sampling event is scheduled for August 2017.
Action Date: Action: DEC Staff: Action Description:	11/30/2015 Institutional Control Compliance Review Kristin Thompson The IC compliance review was conducted at the same time as the 20
· · · · · · · · · · · · · · · · · · ·	Annual Groundwater Monitoring report was reviewed.
Action Date:	11/20/1997
Action: DEC Staff:	Update or Other Action * 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: DEC Staff:	Report or Workplan Review - Other 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 contin 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 specul

Action Date: Action: DEC Staff: Action Description:

11/18/2010

Report or Workplan Review - Other Evonne Reese

conditions will be re-evaluated at that time.

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.

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

S109254667

EDR ID Number Database(s) EPA ID Number

Action Data	11/1/2011	
Action Date: Action:	11/1/2011 Offsite Soil or Groundwater Disposal Approved	
DEC Staff:	Bill Janes	
Action Description:	Approval provided to Conestoga-Rovers for transport and disposal of	
Action Description.	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	h
	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.	

Database(s) EPA ID N

EDR ID Number EPA ID Number

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 **Cleanup Complete - Institutional Controls** Facility Status: Institutional Control Record Established Action: 6/17/1999 Action Date: File Number: 1513.26.017 Hazard ID: 24532 Facility Status: **Cleanup Complete - Institutional Controls** Institutional Control Compliance Review Action: 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 Cleanup Complete - Institutional Controls Facility Status: Institutional Control Update Action: Action Date: 7/29/2015 1513.26.017 File Number:

Map ID Direction		MAP FINDINGS		
Distance				EDR ID Number
Elevation	Site		Database(s)	EPA ID Number
	CHEVRON - AIRPOR	T (PAUL'S CHEVRON) (Continued)		S109254667
	Hazard ID:	24532		
	Facility Status:	Cleanup Complete - Institutional Controls		

Institutional Control Compliance Review

Cleanup Complete - Institutional Controls

Institutional Control Compliance Review

11/30/2015

1513.26.017

24532

3/22/2017

1513.26.017

EDR Hist Auto	1021462288
	N/A

WNW < 1/8 0.022 mi.	9151 GLAC JUNEAU, A				N/A
116 ft.	Site 4 of 4 i	n cluster P			
Relative: Higher	EDR Hist	t Auto			
Actual: 34 ft.	Year: 1980 1982 1983 1985 1986 1992 1993	Name: EMIGS CHEVRON EMIGS CHEVRON EMIGS CHEVRON EMIGS CHEVRON EMIGS CHEVRON ROBITAILLES INC ROBITAILLES INC	Type: Gasoline Service Stations Gasoline Service Stations Gasoline Service Stations Gasoline Service Stations Gasoline Service Stations Tour Operators, NEC Tour Operators, NEC		
Q62 WNW < 1/8 0.023 mi. 119 ft.	FAA JUNEA 9230 CESS JUNEAU, A Site 1 of 5 i	NA DR		AK UST	U004115416 N/A

P61

Relative:	UST:
Higher	Facility ID:
Actual:	Facility Type:
29 ft.	Owner ID:
	Owner Name:
	Owner Address:

Action: Action Date:

File Number:

Hazard ID:

Facility Status: Action:

Action Date:

File Number:

EMIGS CHEVRON

1020 Unknown 432 Federal Aviation Administration 3868 University Ave S Fairbanks, AK 99709

Tank ID: **Tank Status:** Tack Capacity: Tank Product: Installed Date: **Regulated Tank:**

Owner City,St,Zip:

1 Permanently Out of Use 1000 Gasoline 05/07/1963 Yes

Tank ID: Tank Status: Tack Capacity: Tank Product: Installed Date:

2 Permanently Out of Use 100 Gasoline 05/06/1982

Database(s)

EDR ID Number EPA ID Number

FAA

A JUNEAU (Continued)		U004115416
Regulated Tank:	No	
Tank ID: Tank Status: Tack Capacity: Tank Product: Installed Date: Regulated Tank:	3 Permanently Out of Use 500 Diesel 05/06/1985 Yes	
Tank ID: Tank Status: Tack Capacity: Tank Product: Installed Date: Regulated Tank:	4 Permanently Out of Use 2500 Heating Oil 01/01/1989 No	
Tank ID: Tank Status: Tack Capacity: Tank Product: Installed Date: Regulated Tank:	5 Permanently Out of Use 500 Gasoline 05/07/1963 Yes	
Tank ID: Tank Status: Tack Capacity: Tank Product: Installed Date: Regulated Tank:	6 Permanently Out of Use 300 Diesel 05/06/1986 Yes	
Tank ID: Tank Status: Tack Capacity: Tank Product: Installed Date: Regulated Tank:	7 Permanently Out of Use 1000 Other 01/01/1963 No	
Tank ID: Tank Status: Tack Capacity: Tank Product: Installed Date: Regulated Tank:	8 Permanently Out of Use 100 Diesel 01/01/1986 No	
Tank ID: Tank Status: Tack Capacity: Tank Product: Installed Date: Regulated Tank:	9 Permanently Out of Use 500 Other 01/01/1963 No	

Database(s)

	FAA JUNEAU (Continue	d)		U004115416			
	Tank ID: Tank Status: Tack Capacity: Tank Product: Installed Date: Regulated Tank:	10 Permanently Out of Use 2500 Diesel 01/01/1989 Yes					
Q63 West < 1/8 0.027 mi. 141 ft.			SHWS K LUST	S109255032 N/A			
Relative: Higher Actual: 28 ft.	SHWS: File Number: Staff: Facility Status: Latitude: Longitude: Hazard ID: Problem:	1513.26.046 Not reported Cleanup Complete 58.362327 -134.588998 23308 A 25,000-gallon underground storage tank (UST) for closed by removal. Soil analysis detected 97,612 par (ppm) benzene, toluene, ethylbenzene, and xylenes 3,400 ppm gasoline range hydrocarbons (GRO) in so UST. Petroleum impacted soil was evident at the sur the tank. Contamination to the groundwater is greate range hydrocarbons (DRO); speculation that petroleu the UST resulted in no additional soil analysis for gas A fuel additives such as lead.	oil analysis detected 97,612 parts per million ne, ethylbenzene, and xylenes (Total BTEX) and ange hydrocarbons (GRO) in soil surrounding the loted soil was evident at the surface and beneath on to the groundwater is greatest in the diesel DRO); speculation that petroleum did not escape o additional soil analysis for gasoline and Jet				
	Actions: Action Date: Action: DEC Staff: Action Description:	9/6/2007 Leaking Underground Storage Tank Corrective Action Underway Bruce Wanstall ADEC approved the installation of a solar powered ozone injectio device to remediate residual diesel contamination of soil and grou water at the Juneau Airport Fueling Facility. Visit the Site Summa published soon on the Contaminated Sites Program webpage to photos and to obtain additional information.	on und ary				
	Action Date: Action: DEC Staff: Action Description:	9/26/1999 Underground Storage Tank Site Characterization or Assessment Bruce Wanstall RRM Assessment for Chevron advanced 14 borings to collect sul soil and water samples then sampled the contaminated material stockpile. Gasoline range hydrocarbons were detected at concen of 2,120ppm in boring B-6-; 112ppm in B-7; 140ppm in B-8. GRO ground water reached 500ppm in B-6, 13.8 GRO in B-7, 9.8 GRC and 3.54 GRO in B-2. All DRO and RRO samples were treated by gel before analysis; not the GRO samples. Most stringent cleanup levels for contaminated media are recommended for a residential exposure scenario.	bsurface htration) in D in B-1 by silica p				
	Action Date: Action: DEC Staff: Action Description:	8/21/2006 Long Term Monitoring Established Bruce Wanstall Review and approve Cambria Site Characterization Report and G Water monitoring Workplan	Ground				

Database(s)

EDR ID Number EPA ID Number

DELTA WESTERN JUNEAU AIRPORT FUEL STORAGE (Continued)

S109255032

Action Date: Action: DEC Staff:	8/21/2002 Update or Other Action Cynthia Pring-Ham
Action Description:	RECKEY has automatically been generated.
Action Date: Action: DEC Staff: Action Description:	7/24/2009 Report or Workplan Review - Other Bruce Wanstall 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: Action: DEC Staff:	7/23/2007 Release Investigation 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: Action: DEC Staff: Action Description:	7/20/2006 Release Investigation Bruce Wanstall 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: Action: DEC Staff: Action Description:	6/2/2006 Site Visit Bruce Wanstall 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: Action: DEC Staff: Action Description:	6/13/2008 Update or Other Action Bruce Wanstall ADEC approves reduction of the sample analyte list for future ground water monitoring of MW-4.
Action Date: Action: DEC Staff: Action Description:	5/21/1999 Site Visit * Not Assigned 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

EDR ID Number Database(s) EPA ID Number

A WESTERN JUNEAU	AIRPORT FUEL STORAGE (Continued) S1092550
	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: Action:	4/4/2007 Release Investigation
DEC Staff: Action Description:	Bruce Wanstall 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: DEC Staff:	Leaking Underground Storage Tank Corrective Action Underway 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: Action:	3/27/2008 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: Action:	3/25/2008 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: Action:	3/21/2008 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: Action:	12/31/2012 Cleanup Complete Determination Issued
DEC Staff: Action Description:	Bruce Wanstall 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

Database(s)

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:		
Action Description:	ADMINISTRATIVE SITE CLOSURE based on informtion in 5/21/99 ema 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.	ı
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 Syster Maintenance Report by CRA documenting groundwater monitoring at th 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.	e
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 Oz System Maintenance Report by Conestoga Rovers & Associates. Diese contamination of ground water is in stable in concentrations still exceeding regulatory cleanup levels. Active treatment and monitoring	

Map ID		MAP FINDINGS		
Direction Distance	0.14	4		EDR ID Number
Elevation	Site		atabase(s)	EPA ID Number
	DELTA WESTERN JUNEAU	J AIRPORT FUEL STORAGE (Continued)		S109255032
	Action Date: Action:	10/13/2010 Report or Workplan Review - Other		
	DEC Staff:	Bruce Wanstall		
	Action Description:	ADEC approved field and laboratory data in Annual 2009 Gro Monitoring Report and Ozone System Maintenance Report by Rovers & Associates. Diesel contamination of ground water is stable in concentrations still exceeding regulatory cleanup lev Active treatment and monitoring will continue in 2010.	/ Conestoga s in	
	LUST: Facility Name:	DELTA WESTERN JUNEAU AIRPORT FUEL STORAGE		
	Facility Status:	Cleanup Complete		
	Record Key: File ID:	1998110030801 1513.26.046		
	Oname:	Not reported		
	Lat/Lon: Lust Event ID:	58.36232 -134.5889 2319		
	CS or Lust:	LUST		
	Borough:	Juneau		
	Staff: Site Type:	No Longer Assigned Airport/Airfield		
	Horizontal Datum:	WGS84		
			_	
R64 East < 1/8 0.033 mi.	TEMSCO HELICOPTERS - 、 1650 MAPLESDEN WAY JUNEAU, AK	JNU HELIPORT	AK VCP	S109254664 N/A
175 ft.	Site 1 of 6 in cluster R			
Relative: Lower	VCP: DEC File Number:	1512 26 052		
Actual:	Facility Status:	1513.26.053 Cleanup Complete - Institutional Controls		
1 ft.	Staff: Hazard Id:	IC Unit, 24511		
		24311		
R65 East < 1/8	TEMSCO HELICOPTERS 1650 MAPLEADEN WAY JUNEAU, AK 99801		AK LUST	S122315768 N/A
0.033 mi. 175 ft.	Site 2 of 6 in cluster R			
Relative:	LUST:			
Lower	Facility Name: Facility Status:	TEMSCO HELICOPTERS Cleanup Complete		
Actual: 1 ft.	Record Key:	1992110029701		
	File ID: Oname:	1513.26.010		
	Lat/Lon:	Temsco Helicopters, Inc. 58.35701 -134.5605		
	Lust Event ID:	1189		
	CS or Lust: Borough:	LUST Juneau		
	Borough: Staff:	Juneau No Longer Assigned		
	Site Type:	Unknown		
	Horizontal Datum:	NAD83		

Database(s)

R66 East < 1/8 0.033 mi. 175 ft.	TEMSCO HELICOPTERS, IN 1650 MAPLESDEN WAY JUNEAU, AK 99801 Site 3 of 6 in cluster R	IC.	AK UST AK Financial Assurance	U004115945 N/A
Relative: Lower Actual: 1 ft.	UST: Facility ID: Facility Type: Owner ID: Owner Name: Owner Address: Owner City,St,Zip:	270 Air Taxi (Airline) 1091 Temsco Helicopters, Inc. P.O. Box 5057 Ketchikan, AK 99901		
	Tank ID: Tank Status: Tack Capacity: Tank Product: Installed Date: Regulated Tank:	1 Permanently Out of Use 6000 Gasoline 04/09/1983 Yes		
	Tank ID: Tank Status: Tack Capacity: Tank Product: Installed Date: Regulated Tank:	2 Permanently Out of Use 1000 Gasoline 04/09/1983 Yes		
	Tank ID: Tank Status: Tack Capacity: Tank Product: Installed Date: Regulated Tank:	3 Permanently Out of Use 300 Used Oil 04/09/1983 Yes		
	Tank ID: Tank Status: Tack Capacity: Tank Product: Installed Date: Regulated Tank:	4 Currently in Use 8000 Kerosene 01/01/1990 Yes		
	AK Financial Assurance 1: Region: Financial Responsibility Facility ID: Facility Type: Owner ID: Owner Name: Owner Addr: Owner City: Owner City: Owner State: Owner Zip: Owner City,St,Zip: Policy Begin Date: Policy End Date:	1	SIBILITY	

Database(s)

R67 East < 1/8 0.033 mi.	TEMSCO HELICOPTERS 1650 MAPLEADEN WAY; JUNEAU, AK 99801	AK SHWS S109256446 N/A
175 ft.	Site 4 of 6 in cluster R	
Relative: Lower Actual: 1 ft.	wer File Number: 1513.26.010 stual: Staff: Not reported	
	Actions:	
Action Date:8/24/1993Action:Leaking Underground Storage Tank Corrective Action UnderDEC Staff:* Not Assigned		Leaking Underground Storage Tank Corrective Action Underway * Not Assigned CAPR; Proposal to thermally treat oily soil using a Pioneer Agregate
	Action Date:	12/18/1992
	Action:	Underground Storage Tank Site Characterization or Assessment
	DEC Staff: Action Description:	* Not Assigned 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: Action: DEC Staff: Action Description:	10/24/1992 Leaking Underground Storage Tank Cleanup Initiated - Petroleum * Not Assigned 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: Action:	10/23/1992 Update or Other Action
	DEC Staff: Action Description:	* Not Assigned 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 East < 1/8 0.033 mi. 175 ft.	TEMSCO HELICOPTERS - JUNEA 1650 MAPLESDEN WAY JUNEAU, AK 99801 Site 5 of 6 in cluster R	U HELIPORT		AK LUST	S122315769 N/A
Relative: Lower Actual: 1 ft.	LUST: Facility Name: Facility Status: Record Key: File ID: Oname: Lat/Lon: Lust Event ID: CS or Lust: Borough: Staff: Site Type: Horizontal Datum:	TEMSCO HELICOPTERS - JUNEAU HELIPORT Cleanup Complete - Institutional Controls 1999110012601 1513.26.053 Temsco Helicopters, Inc. 58.35546 -134.5601 2618 LUST Juneau IC Unit Airport/Airfield WGS84		_	
R69 East < 1/8 0.033 mi. 175 ft.	TEMSCO HELICOPTERS - JUNEA 1650 MAPLESDEN WAY JUNEAU, AK 99801 Site 6 of 6 in cluster R		AK INST	AK SHWS CONTROL	U003331078 N/A
Relative: Lower Actual: 1 ft.	SHWS: File Number: Staff: Facility Status: Latitude: Longitude: Hazard ID: Problem:	1513.26.053 IC Unit, 9074655229 dec.icunit@alaska Cleanup Complete - Institutional Contro 58.355465 -134.560122 24511 Soil contamination reached 20,000 milig diesel range hydrocarbons, benzene 2. range hydrocarbons. 75 cubic yards of from the piping run was remediated off- with clean soil leaving unknown quantity contamination left in place where piping continued to and beneath the hanger at ground surface.	grams pe .2 mg/Kg contamin -site. DEC y of resid g run from	and 7,100 mg ated soil exca c approved ba ual soil u Jet A fuel U	g/Kg gasoline avated ackfill ST
	Actions: Action Date: Action: DEC Staff: Action Description:	9/9/2004 Streamlined Cleanup Program Bruce Wanstall Site reranked based on site visit and personal know Property is located in Mendenhall Wetlands Wildlife primary contaminant of concern is gasoline range hy benzene, both remain in soil on the property. Groun considered a drinking water source; eligible for Streat Program and accepted under current review.	Refuge, f ydrocarbo idwater no	the ons and ot	
	Action Date: Action: DEC Staff: Action Description:	9/16/2004 Update or Other Action Bruce Wanstall Notice of ADEC Cost Recovery policy sent to respon conjunction with NFRAP Decision with institutional of	•	rty in	
	Action Date:	9/15/2004			

EDR ID Number Database(s) EPA ID Number

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.
Astian Data	4/4 4/2024
Action Date:	4/14/2004
Action: DEC Staff:	Leaking Underground Storage Tank Corrective Action Underway Bruce Wanstall
Action Description:	File located and reviewed; corrective action plan to excavate soil
Action Description.	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 wa
	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.
A stice Date:	2/17/4000
Action Date:	3/17/1999
Action:	Underground Storage Tank Site Characterization or Assessment
DEC Staff:	Colin Basye

EDR ID Number Database(s) EPA ID Number

U003331078

TEMSCO HELICOPTERS - JUNEAU HELIPORT (Continued) 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. 3/10/2017 Action Date: 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 Institutional Control Compliance Review Action: DEC Staff: Evonne Reese Action Description: IC review conducted. Scheduled to send the RP an IC reminder letter. 12/29/2002 Action Date: Update or Other Action Action: DEC Staff: Bruce Wanstall Hard file not available for review at this time. Action Description: 12/23/2013 Action Date: Institutional Control Update Action: 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 **Cleanup Complete - Institutional Controls** Facility Status: Action: Institutional Control Record Established 9/13/2004 Action Date: File Number: 1513.26.053 Hazard ID: 24511 Facility Status: **Cleanup Complete - Institutional Controls** Action: Institutional Control Compliance Review Action Date: 12/4/2013

Database(s)

	TEMSCO HELICOPTERS - JUNEAU HELIPORT (Continued)			U003331078		
	File Number:	1513.26.053				
	Hazard ID:24511Facility Status:Cleanup Complete - Institutional ControlsAction:Institutional Control UpdateAction Date:12/23/2013File Number:1513.26.053					
	Hazard ID: Facility Status: Action: Action Date: File Number:	24511 Cleanup Complete - Institutional Controls Institutional Control Compliance Review 3/10/2017 1513.26.053				
N70 West < 1/8 0.036 mi. 189 ft.	AERO SERVICES, JU "F"GATE 9203 SHELI JUNEAU, AK 99801 Site 2 of 2 in cluster I	L SIMMONS DRIVE	AK SHWS AK LUST	S109349499 N/A		
189 ft. Relative: Higher Actual: 23 ft.	SHWS: File Number: Staff: Facility Status: Latitude: Longitude: Hazard ID: Problem: Action Date: Action Date: Action Descriptio Action Date: Action Date: Action Descriptio Action Date: Action Descriptio	writtern 7/31/00 from Dept.asking for additional assessment. 7/14/1999 Site Added to Database * Not Assigned n: Not reported 3/27/2002 Underground Storage Tank Site Characterization or Assess Bruce Wanstall	ment no this was out of	UST) was		
	Action Date: Action: DEC Staff: Action Descriptio Action Date: Action:	3/27/2002 Site Closure Approved Bruce Wanstall				

Database(s)

EDR ID Number EPA ID Number

S109349499

AERO SERVICES, JUNEAU AIRPORT (Continued)

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 West < 1/8 0.036 mi. 191 ft.	JUNEAU & DOUGLAS TEL 9229 CESSNA DR JUNEAU, AK 99803 Site 3 of 5 in cluster Q	.CO.	AK UST	U004115583 N/A
Relative: Higher Actual: 26 ft.	UST: Facility ID: Facility Type: Owner ID: Owner Name: Owner Address: Owner City,St,Zip: Tank ID: Tank Status: Tack Capacity: Tank Product: Installed Date: Regulated Tank:	143 Utilities 879 PTI Communications 3940 Arctic BLVD Anchorage, AK 99503 1 Permanently Out of Use 600 Diesel 04/29/1979 Yes		
Q72 West < 1/8 0.065 mi. 342 ft.	PTI- JUNEAU CESSNA DR 9225 CESSNA DRIVE JUNEAU, AK 99803 Site 4 of 5 in cluster Q		AK SHWS CONTROL AK VCP	S109254684 N/A
Relative: Higher Actual: 24 ft.	SHWS: File Number: Staff: Facility Status: Latitude: Longitude:	1513.26.056 IC Unit, 9074655229 dec.icunit@alaska.gov Cleanup Complete - Institutional Controls 58.361846 -134.586520		

PTI- JUNEAU CESSNA DRIV	E (Continued) S109254684
Hazard ID: Problem:	24743 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: DEC Staff:	Leaking Underground Storage Tank Corrective Action Underway 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 Bruce Wanstall
DEC Staff: Action Description:	File review for site status and database ranking. No corrective
Action Description.	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

Database(s)

EDR ID Number EPA ID Number

S109254684

PTI- JUNEAU CESSNA DRIVE (Continued)

did not encounter groundwater.

		did hot encounter groundwater.
Action Date: Action: DEC Staff: Action Descriptio	on:	3/18/2002 Update or Other Action Bruce Wanstall Project manager changed from Janes to Wanstall.
Action Date: Action: DEC Staff: Action Descriptio	n:	2/18/2004 Update or Other Action Bruce Wanstall Streamlined Cleanup Program invitation letter sent to owner/RP
Action Date: Action: DEC Staff: Action Descriptio	on:	12/23/2013 Institutional Control Update Kristin Thompson An IC reminder letter was issued to the responsible party on this date.
Action Date: Action: DEC Staff: Action Descriptic	on:	12/13/2013 Institutional Control Compliance Review Evonne Reese IC review conducted. Scheduled for an IC reminder letter to be issued. Not reported
Action Date: Action: DEC Staff: Action Description	on:	10/7/1997 Site Added to Database * Not Assigned Not reported
Action Date: Action: DEC Staff: Action Descriptio	on:	10/2/2001 Update or Other Action Cynthia Pring-Ham Changed Project Manager from Paul Horwath to Bill Janes
Action Date: Action: DEC Staff: Action Descriptic	on:	 1/3/2017 Institutional Control Compliance Review Kristin Thompson 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: Facility Status: Action: Action Date: File Number:		omplete - Institutional Controls I Control Record Established 6
Hazard ID: Facility Status: Action: Action Date: File Number:		
Hazard ID: Facility Status:	24743 Cleanup Co	omplete - Institutional Controls

MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

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:

1513.26.056
Cleanup Complete - Institutional Controls
IC Unit,
24743

Q73 West < 1/8 0.065 mi. 342 ft.	PTI- JUNEAU CESSNA DRIVE 9225 CESSNA DRIVE JUNEAU, AK 99803 Site 5 of 5 in cluster Q	
Relative: Higher Actual: 24 ft.	LUST: Facility Name: Facility Status: Record Key: File ID: Oname: Lat/Lon: Lust Event ID: CS or Lust: Borough: Staff:	PTI- JUNEAU CESSNA DRIVE Cleanup Complete - Institutional Controls 1997110028001 1513.26.056 City and Borough of Juneau & Airport 58.36184 -134.5865 2706 LUST Juneau IC Unit
	Site Type:	Telecommunications

	Horizontal Datum:	WGS84	
S74 WNW < 1/8 0.076 mi. 399 ft.	MIKE'S AIRPORT EXPRE 9190 GLACIER HWY JUNEAU, AK 99801 Site 1 of 4 in cluster S	SS	AK UST AK Financial Assurance
Relative: Higher Actual: 33 ft.	UST: Facility ID: Facility Type: Owner ID: Owner Name: Owner Address: Owner City,St,Zip:	816 Gas Station 9513 Mike Holloway 9190 Glacier Hwy Juneau, AK 99801	
	Tank ID: Tank Status: Tack Capacity: Tank Product:	1 Permanently Out of Use 550 Used Oil	

06/10/1986

Yes

Installed Date: Regulated Tank:

AK LUST S105096354 N/A

U003141313

N/A

MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

	MIKE'S AIRPORT EXPRESS (Continued)			U003141313	
	Tank ID: Tank Status: Tack Capacity: Tank Product: Installed Date: Regulated Tank:	2 Currently in Use 12000 Gasoline 06/10/1986 Yes			
	Tank ID: Tank Status: Tack Capacity: Tank Product: Installed Date: Regulated Tank:	3 Currently in Use 12000 Gasoline 06/10/1986 Yes			
	AK Financial Assurance Region: Financial Responsibilit Facility ID: Facility Type: Owner ID: Owner Name: Owner Addr: Owner City: Owner City: Owner State: Owner Zip: Owner City,St,Zip: Policy Begin Date: Policy End Date:	1			
S75 WNW < 1/8 0.076 mi. 399 ft.	MIKES AIRPORT UNION 9190 GLACIER HWY JUNEAU, AK 99801 Site 2 of 4 in cluster S			EDR Hist Auto	1022106396 N/A
Relative:	EDR Hist Auto				
Higher Actual: 33 ft.	Year: Name: 1986 MIKES AIRPO 1987 MIKES AIRPO 1988 MIKES AIRPO 1989 MIKES AIRPO 1990 MIKES AIRPO 1990 MIKES AIRPO 1991 MIKES AIRPO 1993 MIKES AIRPO 1994 MIKES AIRPO 1995 MIKES AIRPO 1996 MIKES AIRPO 1997 MIKES AIRPO 1998 MIKES AIRPO 1998 MIKES AIRPO 1999 MIKES AIRPO 2000 MIKES AIRPO 2001 HOLLOWAY M 2002 HOLLOWAY M	ORT UNION ORT UNION	Type: Gasoline Service Stations Gasoline Service Stations Gasoline Service Stations Gasoline Service Stations Gasoline Service Stations, NEC Gasoline Service Stations, NEC		

TC5509586.2s Page 118

	 2004 HOLLOWAY MIKE 2005 HOLLOWAY MIKE 2006 HOLLOWAY MIKE 2007 HOLLOWAY MIKE 2008 HOLLOWAY MIKE 2009 HOLLOWAY MIKE 2010 HOLLOWAY MIKE 2011 HOLLOWAY MIKE 2012 HOLLOWAY MIKE 2013 HOLLOWAY MIKE 2014 HOLLOWAY MIKE 	Gasoline Service Stations, NEC Gasoline Service Stations, NEC
S76 WNW < 1/8 0.076 mi.	UNOCAL - #5785- AIRPORT UNI 9190 GLACIER HIGHWAY JUNEAU, AK 99801	ON AK SHWS S104893243 AK LUST N/A AK INST CONTROL
399 ft.	Site 3 of 4 in cluster S	
Relative: Higher Actual:	SHWS: File Number: Staff: Facility Status:	1513.38.005 IC Unit, 9074655229 dec.icunit@alaska.gov
33 ft.	Latitude:	Cleanup Complete - Institutional Controls 58.363300
	Longitude:	-134.584800
	Hazard ID: Problem:	2984 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:	7/05/00.00
	Action Date: Action:	7/25/2009 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: DEC Staff:	Update or Other Action 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: Action:	4/4/2001 Update or Other Action

Map ID Direction

Distance

Elevation

Site

MIKES AIRPORT UNION (Continued)

Database(s)

EDR ID Number EPA ID Number

1022106396

TC5509586.2s Page 119

EDR ID Number **EPA ID Number** Database(s)

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** IC compliance review conducted. The scheduled IC reminder letters Action Description: 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 Conditional Closure Approved Action: DEC Staff: **Bill Janes** Action Description: Not reported Action Date: 1/13/2000 Action: Site Added to Database

Meilani Clark Action Description: Gasoline contamination.

DEC Staff:

Action Date:

Action:

1/10/2000 Site Ranked Using the AHRM

Database(s)

EDR ID Number EPA ID Number

S104893243

UNOCAL - #5785- AIRPORT UNION (Continued)

DEC Staff: Action Description: Meilani Clark Initial ranking.

Contaminants: Staff:

> Contaminate Name1: Contaminate Level Description1:

Contaminate Media1:

Control Type: Control Details Description1: Contaminant CTD: Contaminant CDR: Comments:

Staff:

Contaminate Name1: Contaminate Level Description1:

Contaminate Media1:

Control Type: Control Details Description1: Contaminant CTD: Contaminant CDR: Comments:

Staff:

Contaminate Name1: Contaminate Level Description1:

Contaminate Media1:

Control Type: Control Details Description1: Contaminant CTD: Contaminant CDR: Comments:

Staff:

Contaminate Name1: Contaminate Level Description1:

Contaminate Media1:

Control Type: Control Details Description1: Contaminant CTD: Contaminant CDR: Comments: IC Unit, 9074655229 dec.icunit@alaska.gov

Mike's Airport Express Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation Soil

Notice of Environmental Contamination (Deed Notice) When Contaminated Soil is Accessible, Remediation Should Occur Juneau Recording District, Book 0560, Page 423 Contamination remains beneath the building foundation. None Not reported

IC Unit, 9074655229 dec.icunit@alaska.gov

Mike's Airport Express Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation Soil

Notice of Environmental Contamination (Deed Notice) Groundwater Use Restrictions Juneau Recording District, Book 0560, Page 423 No drinking water wells None Not reported

IC Unit, 9074655229 dec.icunit@alaska.gov

Mike's Airport Express Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation Soil

Notice of Environmental Contamination (Deed Notice) When Contaminated Soil is Accessible, Remediation Should Occur Juneau Recording District, Book 0560, Page 423 Contamination remains beneath the building foundation. None Not reported

IC Unit, 9074655229 dec.icunit@alaska.gov

Mike's Airport Express Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation Soil

Notice of Environmental Contamination (Deed Notice) Groundwater Use Restrictions Juneau Recording District, Book 0560, Page 423 No drinking water wells None Not reported

EDR ID Number Database(s) EPA ID Number

UNOCAL - #5785- AIRPORT UNION (Continued) S104893243 File Number: 1513.26.049 IC Unit, 9074655229 dec.icunit@alaska.gov Staff: 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 Update or Other Action 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 Waste oil UST removal of 8/25/97 SA rept reviewed. 2 cu yds contam Action Description: soil (temporary) stockpiled on-site. Need to determine final fate. Action Date: 9/15/2004 Update or Other Action 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. 9/15/1999 Action Date: Update or Other Action 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. 8/9/1999 Action Date: Action: **Release Investigation** DEC Staff: * Not Assigned DEC writes Itr in concurrence with RPCON's conclusion for RI & Action Description: hydraulic fluid release to be handled by CS/Jnu. Action Date: 8/25/1997 Underground Storage Tank Site Characterization or Assessment Action: DEC Staff: * Not Assigned Action Description: Waste oil UST removal (by Geo Engineers)

EDR ID Number Database(s) EPA ID Number

Action Date: Action: DEC Staff:	8/23/2007 Update or Other Action 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: Action:	8/22/2003 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: DEC Staff:	Update or Other Action * 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 contac with CS/Jnu.	t
Action Date:	8/18/1999	
Action: DEC Staff:	Release Investigation * 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: DEC Staff:	Update or Other Action 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: DEC Staff:	Institutional Control Update Kristin Thompson	
Action Description:	An IC reminder letter was issued to the responsible party on this date.	
Action Date: Action:	7/23/2009	
DEC Staff:	Update or Other Action Evonne Reese	
Action Description:	Received Monitoring Well/Remediation System Decommissiong Report MWH.	ir
Action Date: Action:	7/23/1999 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: fou 22 intact batteries and many automotive parts. Pit cleanup has been accomplished. Contact by e-mail w/Schlichting re-CS portion of report. 	n

EDR ID Number Database(s) EPA ID Number

UNOCAL - #5785- AIRPORT UNION (Continued)

Action Date: Action: DEC Staff: Action Description:	7/10/2006 Site Visit Daniel Fremgen 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: Action: DEC Staff: Action Description:	6/20/2002 Update or Other Action Bill Janes 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: Action: DEC Staff: Action Description:	5/21/1999 Update or Other Action * Not Assigned SA rept received by DEC on removal/upgrade of piping conducted 11/30/98
Action Date: Action: DEC Staff: Action Description:	5/20/2009 Site Visit Evonne Reese 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: Action: DEC Staff: Action Description:	4/6/2004 Update or Other Action Bill Janes 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: Action: DEC Staff: Action Description:	3/9/2005 Update or Other Action Bill Janes 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: Action: DEC Staff: Action Description:	3/25/2009 Cleanup Complete Determination Issued Evonne Reese Not reported
Action Date: Action: DEC Staff: Action Description:	3/25/2009 Institutional Control Record Established Bill Janes Institutional Controls established and entered into the database.
Action Date:	2/7/2007

EDR ID Number Database(s) EPA ID Number

UNOCAL - #5785- AIRPORT UNION (Continued)

CAL - #5785- AIRPORT	UNION (Continued) S	104
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	
Adden Besonption.	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	

EDR ID Number Database(s) EPA ID Number

UNOCAL - #5785- AIRPORT UNION (Continued)

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: Action: DEC Staff: Action Description:	12/19/2001 Update or Other Action Bill Janes GW monitoring. Met on site with Gilfilian Engineering and Robert
	Reges, attorney for Holloway, to discuss site issues.
Action Date: Action:	11/30/1998 Underground Storage Tank Site Characterization or Assessment
DEC Staff: Action Description:	* Not Assigned Gasoline USTs piping removal & upgrade (by Gilfilian Engineering)
Action Date:	11/3/2008
Action: DEC Staff:	Exposure Tracking Model Ranking Evonne Reese
Action Description:	A new updated ETM ranking has been completed for source area UST.
Action Date: Action:	11/27/2002 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: Action:	11/22/2006 Update or Other Action
DEC Staff:	Bill Janes
Action Description:	CR check received by Law - \$200.27
Action Date: Action:	11/2/2008 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 0.0095 mg/kg and in
	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: Action:	11/19/2004 Update or Other Action
DEC Staff: Action Description:	Bill Janes 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: Action:	11/16/2001 Update or Other Action

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 u 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.	p
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	
•		to

Database(s)

EDR ID Number EPA ID Number

UNOCAL - #5785- AIRPORT	UNION (Continued)	S104893243
	9/23/99 RI work plan via e-mail to RPCON	
Action Date: Action:	10/27/2004 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: File ID:	1997110023701	
File ID: Oname:	1513.26.049 Mike Hellewey	
Uname.	Mike Holloway	

Database(s)

EDR ID Number EPA ID Number

Facility Status:Cleanup Complete - Institutional ControlsAction:Institutional Control Record EstablishedAction Date:11/22/2002File Number:1513.38.005Hazard ID:2984Facility Status:Cleanup Complete - Institutional ControlsAction:Institutional Control UpdateAction Date:7/25/2009File Number:1513.38.005Hazard ID:2984Facility Status:Cleanup Complete - Institutional ControlsAction Date:7/25/2009File Number:1513.38.005Hazard ID:2984Facility Status:Cleanup Complete - Institutional ControlsAction:Institutional Control Compliance ReviewAction Date:12/13/2013File Number:1513.38.005Hazard ID:23568Facility Status:Cleanup Complete - Institutional ControlsAction:Institutional Control Record EstablishedAction:3/25/2009File Number:1513.26.049Hazard ID:23568Facility Status:Cleanup Complete - Institutional ControlsAction Date:3/25/2009File Number:1513.26.049Hazard ID:23568Facility Status:Cleanup Complete - Institutional ControlsAction:Institutional Control Compliance ReviewAction:Institutional Control Compliance ReviewAction:Institutional Control Compliance ReviewAction:Institutional Control Compliance ReviewAction:Institutional Con	File Number:	1513.26.049	
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Action: Institutional Control Record Established			
Facility Status: Cleanup Complete - Institutional Controls	Action:	Institutional Control Record Established	
nst Control: Hazard ID: 2984	Hazard ID:		
Site Type: Gas Station	Borough:	Juneau	
Borough:JuneauStaff:IC UnitSite Type:Gas Station	Lust Event ID: CS or Lust:	2352 LUST	

UNOCAL - #5785- AIRPORT UNION (Continued)

S104893243

AK SHWS S108940957 AK INST CONTROL N/A

ft.	Sito	1 of	1 in	cluster	c

JUNEAU, AK 99803

S77 WNW

< 1/8 0.112 mi. 594 ft.

Relative:	SHWS:	
Higher	File Number:	1513.38.076
Actual:	Staff:	IC Unit, 9074655229 dec.icunit@alaska.gov
33 ft.	Facility Status:	Cleanup Complete - Institutional Controls
	Latitude:	58.363897
	Longitude:	-134.585642

Lineard ID.	4547	
Hazard ID: Problem:	4517 After removal of the 600-gallon underground storage abatement of free phase petroleum from off-site fres groundwater in the excavation, all stockpiled contam transported off-site and remediated. Soil contaminat trapped under building structures. In samples of craw collected in 2000, the greatest diesel range organics reached was 6,900 milligrams per kilogram (mg/kg). samples of crawlspace soil reached DRO levels of 7 total xylenes of 0.725 mg/kg. Piping was installed in the excavation at the foundation to allow the addition release nitrogen fertilizer and ammonium hydroxide to treat the soil. The effort does not appear to have f measurable effect on reducing the levels of petroleu subsurface soil possibly due to the frequent influx of groundwater. After the 1,000-gallon UST and the ass contaminated soil were excavated and disposed off- volume of contaminated material remained at a dept the surface under the structural supports for the awn	h water and inated soil was ion remained wlspace soil (DRO) level In 2010, the ,190 mg/kg and the floor of n of quick to the subsurface had a m in the shallow sociated site, a small h of 10 feet below ing. The
	greatest level of DRO in the remaining subsurface so at 680 mg/kg. Samples were not analyzed for volatile	
Actions:	0/14/2012	
Action Date: Action:	9/14/2012 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 remain from an underground storage tank release at the referenced site.	ning
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 crawls	pace
	at the Juneau Airport Travel Lodge. A sampling event in August 2	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. Sam	
	collected in the crawlspace must be submitted to a DEC approve	d
	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 contamin	otod
	soil remains under the building's foundation and in the crawlspac	
	Although assessment sampling in August 2010 by Nortech Enviro	
	Inc. indicated the periodic addition of soil amendments to the	
	crawlspace was having the positive effect of bringing down the le	vels
	of petroleum, DEC has determined that petroleum contamination	
	remaining at the site may still present a risk of exposure to huma	n
	receptors. DEC letter requests additional sampling and	
	characterization to ensure that conditions at the site are protectiv	
	of human health and the environment. The results may indicate t the cleanup remedy has reduced the historical petroleum contam	

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 Data:	12/6/2007
Action Date:	12/6/2007 Site Added to Detebage
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

EDR ID Number Database(s) EPA ID Number

JUNEAU AIRPORT TRAVELODGE HOTEL (Continued)

	5
work begins.	
12/31/2012 Exposure Tracking Model Ranking Bruce Wanstall A new updated ranking with ETM has been completed for source area 78299 600-gal Diesel UHOT.	
12/3/2007 Spill Transferred from Prevention Preparedness and Response Program Mitzi Read 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.	
12/27/2012 Report or Workplan Review - Other Bruce Wanstall 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.	
12/11/2007 Update or Other Action Bruce Wanstall 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.	
12/10/2007 Exposure Tracking Model Ranking Mitzi Read Initial ranking with ETM completed.	
11/22/2010 Report or Workplan Review - Other Bruce Wanstall 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.	
	 12/31/2012 Exposure Tracking Model Ranking Bruce Wanstall A new updated ranking with ETM has been completed for source area 78299 600-gal Diesel UHOT. 12/3/2007 Spill Transferred from Prevention Preparedness and Response Program Mitzi Read 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. 12/27/2012 Report or Workplan Review - Other Bruce Wanstall 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 delaenup remedy may have reduced the residual DRO soil contamination to levels acceptable for regulatory site closure. 12/11/2007 Update or Other Action Bruce Wanstall 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. Ground-water 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. 12/10/2007 Exposure Tracking Model Ranking Mitzi Read initial ranking with ETM completed. 11/22/2010 Report or Workplan Review - Other Bruce Wanstall 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

EDR ID Number **EPA ID Number** Database(s)

JUNEAU AIRPORT TRAVELODGE HOTEL (Continued) S108940957 Action Date: 1/8/2016 Institutional Control Compliance Review Action: 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** ADEC discussed the site cleanup with the RP consultant pertaining to Action Description: 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 IC Compliance Review conducted. Reminder system set-up to follow-up Action Description: with the responsible party in 2016. Staff changed from Bruce Wanstall to IC Unit. 1/14/2013 Action Date: **Enforcement Action Closed** Action: 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 Institutional Control Update Action: DEC Staff: **Evonne Reese** Deed notice filed by DEC staff at the Recorder's Office on this date. Action Description: Action Date: 1/10/2013 Enforcement Agreement or Order Action: DEC Staff: Bruce Wanstall Travelodge will report to DEC that property ownership and land use is Action Description: 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 Cleanup Complete Determination Issued Action: DEC Staff: Bruce Wanstall

EDR ID Number Database(s) EPA ID Number

S108940957

JUNEAU AIRPORT TRAVELODGE HOTEL (Continued)

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:

> Contaminate Name1: Contaminate Level Description1:

Contaminate Media1:

Control Type: Control Details Description1: Contaminant CTD:

Contaminant CDR: Comments:

Staff:

Contaminate Name1: Contaminate Level Description1:

Contaminate Media1:

Control Type: Control Details Description1: Contaminant CTD: IC Unit, 9074655229 dec.icunit@alaska.gov

Juneau Airport Travelodge Hotel Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation Soil

Notice of Environmental Contamination (Deed Notice) Movement or use of contaminated material (including on site) in a manner that rest 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. Standard condition. 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.

IC Unit, 9074655229 dec.icunit@alaska.gov

Juneau Airport Travelodge Hotel Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation Soil

Notice of Environmental Contamination (Deed Notice) Excavation / Soil Movement Restrictions Soil contamination remains in a layer at the water table in the

JUNEAU AIRPORT TRAVELODGE HOTEL (Continued)	S108940957
Contaminant CDR:	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. 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
Comments:	provide oversight before any work begins. 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: Contaminate Level Description1:	Juneau Airport Travelodge Hotel Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation
Contaminate Media1:	Soil
Control Type: Control Details Description1: Contaminant CTD:	Notice of Environmental Contamination (Deed Notice) Periodic Review 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
Contaminant CDR:	provide oversight before any work begins. 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: Contaminate Level Description1: Contaminate Media1:	Juneau Airport Travelodge Hotel Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation Soil
Control Type: Control Details Description1: Contaminant CTD:	Notice of Environmental Contamination (Deed Notice) Groundwater Use Restrictions 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

EDR ID Number Database(s) EPA ID Number

JUNEAU AIRPORT TRAVELODGE HOTEL (Continued)	S108940957
Contaminant CDR: Comments:	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. Installation of groundwater wells will require prior approval from ADEC. 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: Contaminate Level Description1:	Juneau Airport Travelodge Hotel Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation
Contaminate Media1:	Soil
Control Type: Control Details Description1: Contaminant CTD:	Notice of Environmental Contamination (Deed Notice) Advance approval required to transport soil or groundwater off-site. 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: Comments:	Standard condition. 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 Cor Action: Institutional Control Record Establish Action Date: 12/31/2012 File Number: 1513.38.076	

Hazard ID:4517Facility Status:Cleanup OAction:InstitutionAction Date:1/11/2013File Number:1513.38.0

4517 Cleanup Complete - Institutional Controls Institutional Control Update 1/11/2013 1513.38.076

Hazard ID:4517Facility Status:Cleanup Complete - Institutional ControlsAction:Institutional Control Compliance ReviewAction Date:1/21/2013File Number:1513.38.076

Hazard ID:4517Facility Status:Cleanup Complete - Institutional Controls

Map ID Direction		MAP FINDINGS		
Distance Elevation	Site		Database(s)	EDR ID Number EPA ID Number
	JUNEAU AIRPORT TR Action: Action Date: File Number:	AVELODGE HOTEL (Continued) Institutional Control Compliance Review 1/8/2016 1513.38.076		S108940957
	Hazard ID: Facility Status: Action: Action Date: File Number:	4517 Cleanup Complete - Institutional Controls Institutional Control Compliance Review 3/28/2017 1513.38.076		
T78 West < 1/8 0.120 mi. 636 ft.		JUNEAU CARGO FACILITY VAY JUNEAU INTERNATIONAL AIRPORT, SOURCE AR	AK SHWS AK LUST	S109254969 N/A
Relative: Higher	SHWS: File Number: Staff:	1513.26.054 Amy Rodman, 9074655368 amy.rodman@a	ilaska dov	
Actual: 12 ft.	Facility Status: Latitude: Longitude: Hazard ID: Problem:	Active 58.359031 -134.587689 22996 Groundwater monitoring well and soil boring contamination consists of primarily gasoline at 8-12 feet below ground surface in the pro- underground storage tanks (USTs).	samples indicate and some diesel	in soils
	Actions: Action Date: Action: DEC Staff: Action Descriptior	9/30/2004 Update or Other Action Bruce Wanstall		
	Action Date: Action: DEC Staff: Action Descriptior	9/20/2002 Update or Other Action Bruce Wanstall Stormwater Pollution Prevention Plan for Juneau Interna dated 11/01 from maintenance dept. found to have accur locations in areas of the residual plume at the site. Met w staff on-site for well sampling, measuring water levels, ar recording drain locations with GPS. Copies of Plan made to RP/consultant.	rate stormdrain /ith E&E nd	
	Action Date: Action: DEC Staff: Action Descriptior	9/16/2002 Update or Other Action Bruce Wanstall Approval letter issued for 2002-03 Quarterly Groundwate Workplan submitted 9/13/02. Continuation of the supplen investigation, the sampling plan is designed to delineate dissolved phase of the GRO/BTEX contaminant plume a the period of the monitoring events.	nental release the	
	Action Date: Action: DEC Staff: Action Descriptior	9/15/2014 Report or Workplan Review - Other Bruce Wanstall DEC evaluated and approved, by letter sent by electronic	c and regular	

EDR ID Number Database(s) EPA ID Number

ALASKA AIRLINES - JUNEAU CARGO FACILITY (Continued)

	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: DEC Staff: Action Description:	Leaking Underground Storage Tank Cleanup Initiated - Petroleum Bruce Wanstall 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: Action Description:	* Not Assigned Not reported
Action Date:	8/21/2003
Action: DEC Staff:	Leaking Underground Storage Tank Corrective Action Underway 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: DEC Staff:	Report or Workplan Review - Other 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: DEC Staff:	Update or Other Action Bruce Wanstall
Action Description:	Bruce wanstall Cost recovery memo sent to DOL approving current site log package.
Action Date:	8/15/2003
Action: DEC Staff:	Report or Workplan Review - Other Bruce Wanstall

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.	

EDR ID Number Database(s) EPA ID Number

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ASKA AIRLINES - JUNEAU CARGO FACILITY (Continued)			
Action Date: Action: DEC Staff: Action Description:	5/30/2002 Report or Workplan Review - Other Bruce Wanstall Review 2001 SRI Report for comment on pending 2002 SRI workplan for the Ak Aircargo blg USTs.		
Action Date: Action: DEC Staff: Action Description:	5/27/2003 Update or Other Action Bruce Wanstall 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: Action: DEC Staff: Action Description:	5/20/2014 Update or Other Action Bruce Wanstall 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: Action: DEC Staff: Action Description:	5/19/2004 Leaking Underground Storage Tank Corrective Action Underway Bruce Wanstall Approval to transport IDW petroleum contaminated soil off-site for remediation sent by fax and mail.		
Action Date: Action: DEC Staff: Action Description:	5/18/2004 Long Term Monitoring Established Bruce Wanstall Groundwater Monitoring Plan approved.		
Action Date: Action: DEC Staff: Action Description:	5/14/2008 Update or Other Action Bruce Wanstall ADEC reviewed and approved data from the 2007 Groundwater Monitorin 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.	g	
Action Date: Action: DEC Staff: Action Description:	5/1/2007 Update or Other Action Bruce Wanstall \$399.82 Check received for project management costs from Alaska Airlines.		
Action Date: Action: DEC Staff: Action Description:	4/8/1999 Release Investigation Bruce Wanstall 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		

	U CARGO FACILITY (Continued) S10925
	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: Action: DEC Staff: Action Description:	4/6/1999 Release Investigation Bruce Wanstall 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: Action Description:	Bruce Wanstall DEC evaluated and by email approved a URS plan to complete
Action Description.	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: DEC Staff:	Report or Workplan Review - Other Bruce Wanstall
Action Description:	DEC approves the corrective action Remediation System Installation
rector Description.	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 applied reporting of the
	well purging and sample collection and annual reporting of the sampling results.
Action Date:	4/25/2004
Action: DEC Staff:	Leaking Underground Storage Tank Corrective Action Underway Bruce Wanstall
Action Description:	Ozone sparging unit is installed in the subsurface at the site and
	operating.
Action Date: Action:	4/2/2014
DEC Staff:	Update or Other Action 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: DEC Staff:	Report or Workplan Review - Other 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

Action: DEC Staff:	Update or Other Action Bruce Wanstall
Action Description:	Project management FY 05 cost recovery check for \$302.15 receive 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 samp 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 treatme system installation and well sampling.
Action Date:	3/3/2003
Action:	Update or Other Action
DEC Staff: Action Description:	Bruce Wanstall January 2003 Quarterly Groundwater Sampling Report received. Wa
Action Description.	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 semi-annual to annual sampling during the summer seasonal period sent by letter to Alaska Airlines; copied to consultant URS.
Action Date:	2/9/2007
Action:	Exposure Tracking Model Ranking
DEC Staff: Action Description:	Bruce Wanstall Baseline ranking for the former UST sources has been completed a
Action Description.	locked in.
Action Date:	2/9/2004
Action: DEC Staff:	Update or Other Action 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 delivere 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 schedule Spring 2004. Approval letter sent with recommendations to analyze

	for bioremedial tracking parameters.	
Action Date: Action: DEC Staff: Action Description:	12/27/2017 Report or Workplan Review - Other Amy Rodman 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.	I
Action Date: Action: DEC Staff: Action Description:	12/2/2009 Report or Workplan Review - Other Bruce Wanstall 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: Action: DEC Staff: Action Description:	12/18/2002 Report or Workplan Review - Other Bruce Wanstall 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: Action: DEC Staff: Action Description:	12/14/2011 Report or Workplan Review - Other Bruce Wanstall 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.	
ction Date: ction: IEC Staff: ction Description:	12/12/2002 Report or Workplan Review - Other Bruce Wanstall 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: Action: DEC Staff:	12/12/2001 Update or Other Action Bill Janes	

Action Description:	Changed Project Manager from Janes to Bruce Wanstall.	
Astian Data	44/0/0040	
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 201	

EDR ID Number Database(s) EPA ID Number

SKA AIRLINES - JUNEA	U 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: Action: DEC Staff: Action Description:	10/29/2013 Update or Other Action Bruce Wanstall 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: Action: DEC Staff: Action Description:	10/29/2013 Update or Other Action Bruce Wanstall 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: Action: DEC Staff: Action Description:	10/2/2001 Update or Other Action Cynthia Pring-Ham Changed Project Manager from Paul Horwath to Bill Janes	
Action Date: Action: DEC Staff: Action Description:	1/9/2015 Report or Workplan Review - Other Bruce Wanstall 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: Action: DEC Staff: Action Description:	1/7/2011 Exposure Tracking Model Ranking Bruce Wanstall 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 cleanup levels near maintenance shop on the south side of the building.	С
File Number: Staff:	1513.26.014 Not reported	

Staff: Facility Status: 1513.26.014 Not reported Cleanup Complete

Database(s)

EDR ID Number EPA ID Number

La Chada	50.050004	
Latitude:	58.359031	
Longitude: Hazard ID:	-134.587689 24525	
Problem:	In September 1993, certified underground storage tank worker J	lohn
	Bertholl with Petroleum Services Inc. (PSI) removed a 500-gallo used-oil, underground storage tank (UST) from the Alaska Airlin	on
	Cargo Building at the Juneau International Airport. Concurrent w the UST removal, Smith Bayliss LeResche Inc (SBL) conducted	vith
	assessment of the site. Once petroleum contamination was iden in the excavated soil to remove the UST, SBL began a release	
	investigation and identified a volume of fifteen cubic yards by fie screening. DEC authorized PSI to transport the soil to Channel	
	Sanitation where it was thermally remediated. In January 1994, submitted the Release Investigation Report to the DEC which cited the Release Investigation Report to the DEC which cited the Release Investigation Report to the DEC which cited the Release Investigation Report to the DEC which cited the Release Investigation Report to the DEC which cited the Release Investigation Report to the DEC which cited the Release Investigation Report to the DEC which cited the Release Investigation Report to the DEC which cited the Release Investigation Report to the DEC which cited the Release Investigation Report to the DEC which cited the Release Investigation Report to the DEC which cited the Release Investigation Report to the Release Investigation R	ited
	piping connectors as the source of the release. The tank had no of faulty material and was cleaned and then scrapped off-site in	•
	accordance with UST regulations. Two existing, active USTs use store diesel and gasoline were situated on either side of the was oil tank, prohibiting the complete removal of contaminated soil.	ste
	to sloughing walls and the close proximity of other UST systems excavation was lined and then backfilled with clean material before	s, the
	the limits of subsurface contamination were found. Field screeni and observation of the contaminated material indicated that soil	ing
	contaminated with waste oil was fully removed and that the remain	aining
	contaminated soil was impacted by a release from one of the oth systems. No groundwater was encountered in the excavation ar therefore was not investigated for contamination.	
	increme was not investigated for contamination.	
ctions:	7/5/0000	
Action Date: Action:	7/5/2002 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: DEC Staff:	Update or Other Action 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: DEC Staff:	Leaking Underground Storage Tank Cleanup Initiated - Petroleum * 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 Experience Tracking Model Banking	
Action: DEC Staff:	Exposure Tracking Model Ranking Bruce Wanstall	
Action Description:	A new updated ranking with ETM has been completed for source area	
	77880 underground waste oil tank.	

Action Date: Action: DEC Staff: Action Description:	12/2/2009 Report or Workplan Review - Other Bruce Wanstall 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: Action: DEC Staff: Action Description:	12/13/2011 Cleanup Complete Determination Issued Bruce Wanstall 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: Action:	12/12/2001
DEC Staff:	Update or Other Action Bill Janes
Action Description:	Project manager changed from Janes to Wanstall.
Action Date:	11/25/2011
Action: DEC Staff:	Exposure Tracking Model Ranking 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: DEC Staff:	Exposure Tracking Model Ranking 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: Action Description:	Cynthia Pring-Ham Changed Project Manager from Paul Horwath to Bill Janes.
·	
Action Date:	10/12/2007 Exposure Tracking Model Panking
Action: DEC Staff:	Exposure Tracking Model Ranking 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.

Action Date:

MAP FINDINGS

ALASKA AIRLINES - JUNEAU CARGO FACILITY (Continued)

10/1/1992

EDR ID Number Database(s) EPA ID Number

Relative: Higher Actual: 12 ft.	LUST: Facility Name: Facility Status: Record Key: File ID: Oname:	ALASKA AIRLINES - JUNEAU CARGO BUILDING Cleanup Complete 1994110002701 1513.26.014 Alaska Airlines		
T79 West < 1/8 0.120 mi. 636 ft.	ALASKA AIRLINES - JUNEAU 1915 ALEX HOLDEN WAY JUNEAU, AK 99801 Site 2 of 4 in cluster T	CARGO BUILDING	AK LUST	S105453951 N/A
	LUST: Facility Name: Facility Status: Record Key: File ID: Oname: Lat/Lon: Lust Event ID: CS or Lust: Borough: Staff: Site Type: Horizontal Datum:	ALASKA AIRLINES - JUNEAU CARGO FACILITY Open 1998110022201 1513.26.054 Not reported 58.35903 - 134.5876 2677 LUST Juneau Amy Rodman Airport/Airfield WGS84		
	Action Date: Action: DEC Staff: Action Description:	1/14/2002 Underground Storage Tank Site Characterization or Assess Bruce Wanstall SuppleImental Release Investigation recieved investigating releases at the site. Groundwater moving downgradient to t southwest past the UST footprints: MW 02 had 73ppm GR0 benzene, MW04 had GRO of 49ppm and benzene at 0.071 GRO and 2.3ppm benzene, MW07 had 22ppm GRO and 1 had 17ppm GRO and 1.7ppm benzene.	UST the D and 4.4ppm , MW08 had 33	
	Action Date: Action: DEC Staff: Action Description:	1/27/1994 Site Added to Database * Not Assigned Not reported		
	Action Date: Action: DEC Staff: Action Description:	 1/27/1994 Release Investigation * Not Assigned RELR; 500gallon used oil UST removed. Leaky pipe conne discovered upon decommissioning. Other source of contarr approximately 3 overfills in 15 years. 15cy oily soil were exe and incinerated per DEC approval. Currently the UST pit is pending a cleanup plan for the underground contamination. 	nination: cavated sealed	
	Action Date: Action: DEC Staff: Action Description:	10/1/1992 Update or Other Action * Not Assigned NOR; Leaking underground pipe connection and infrequent over a 15-year period.	overfills	

Direction		MAP FINDINGS		
Distance				EDR ID Number
Elevation	Site		Database(s)	EPA ID Number
	ALASKA AIRLINES - JUNEAU		S105453951	
	Lat/Lon:	58.35903 -134.5876		
	Lust Event ID:	1206		
	CS or Lust:	LUST		
	Borough: Staff:	Juneau No Longer Assigned		
	Site Type:	Commercial/Retail/Office		
	Horizontal Datum:	WGS84		
80	JUNEAU AIRPORT FUELING F	FACILITY	AK SHWS	S104893281
West	2085 ALEX HOLDEN WAY			N/A
1/8-1/4	JUNEAU, AK 99801			
0.127 mi. 670 ft.				
Relative: Higher	SHWS: File Number:	1513.38.008		
Actual:	Staff:	Danielle Duncan, 9074655207 danielle.d	luncan@alaska.gov	
23 ft.	Facility Status:	Active		
	Latitude:	58.362254		
	Longitude:	-134.588824		
	Hazard ID:	2987	tion by Dolto Montor	n tha
	Problem:	In 1998, following a brief period of opera former Chevron bulk fuel above ground s		
		dismantled and removed from a 0.25 acr	- ,	
		commercial fuel storage facility located o		
		Juneau International Airport (JIA). Delta		
		facility is located 100 feet to the southeas		
		Delta Western facility, Aero Services ope		
		inactive ASTs are also present and most facility is bare soil with little or no fuel spi		;
		capacity. Subsurface soil and groundwat		by
		historical release of gasoline and diesel f		,
		operations dating back to land use as a l		
		process has seen numerous site investig		n
		removals of contaminated soils, and an i remediation system operated by Chevror		omontlad
		The final phase of the cleanup process n		
		of weathered petroleum constituents is a	-	
	Actions:			
	Action Date:	9/7/2000		
	Action:	Update or Other Action		
	DEC Staff:	Bill Janes		
	Action Description:	Reviewed draft site characterizaton repor dated Augu problems; contacted Reinsma and Cochran.	ist 7, 2000; a few	
		r sector, contactor nomenia and ocentari		
	Action Date:	9/6/2007		
	Action:	Update or Other Action		
	DEC Staff: Action Description:	Bruce Wanstall	zono inication	
	Action Description:	ADEC approved the installation of a solar powered oz device to remediate residual diesel contamination of s		
		water at the Juneau Airport Fueling Facility. Visit the	-	
		published soon on the Contaminated Sites Program v		
		photos and to obtain additional information.		
	Action Data:	0/14/1000		
	Action Date:	9/14/1999 Site Ranked Using the AHRM		

Map ID

9/14/1999 Site Ranked Using the AHRM Bill Janes

Action: DEC Staff:

Database(s)

EDR ID Number EPA ID Number

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.	

EDR ID Number Database(s) EPA ID Number

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

S104893281

EDR ID Number Database(s) EPA ID Number

JUNEAU AIRPORT FUELING FACILITY (Continued)

S104893281

inspection. Samples were collected for laboratory analysis.

Action Date: Action: DEC Staff: Action Description:	6/18/2001 Update or Other Action Bill Janes Cost recovery check received by Law in the amount of \$210.80.
Action Date: Action: DEC Staff: Action Description:	5/5/2000 Cleanup Plan Approved Bill Janes 3/16/00 letter work plan to further address location of debris; perform soil excavations; conduct well installations.
Action Date: Action: DEC Staff: Action Description:	5/30/2000 Update or Other Action Bill Janes 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: Action: DEC Staff: Action Description:	5/27/2005 Update or Other Action Bill Janes Annual gw sampling this date.
Action Date: Action: DEC Staff: Action Description:	5/24/2006 Site Characterization Workplan Approved Bruce Wanstall 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: Action: DEC Staff: Action Description:	5/23/2000 Update or Other Action Bill Janes Cost recovery check received from Chevron may 18.
Action Date: Action: DEC Staff: Action Description:	5/23/2000 Interim Removal Action Approved Bill Janes 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: Action: DEC Staff: Action Description:	5/20/2014 Update or Other Action Bruce Wanstall 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

EDR ID Number Database(s) EPA ID Number

JUN	EAU AIRPORT FUELING FAC	CILITY (Continued)	S104893281
	Action: DEC Staff: Action Description:	Update or Other Action Bruce Wanstall 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: Action: DEC Staff: Action Description:	5/12/2014 Report or Workplan Review - Other Bruce Wanstall 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: Action: DEC Staff: Action Description:	5/12/2014 Exposure Tracking Model Ranking Bruce Wanstall A new updated ranking with ETM has been completed for source area 73962 Above and Underground tanks, piping & dispensers.	
	Action Date: Action: DEC Staff: Action Description:	5/10/2001 Update or Other Action Bill Janes 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: Action: DEC Staff: Action Description:	4/7/2006 Update or Other Action Bill Janes 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: Action: DEC Staff:	4/4/2007 Meeting or Teleconference Held Bruce Wanstall	

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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: Action: DEC Staff: Action Description:	4/4/2000 Update or Other Action Bill Janes Teleconference with Reinsma regarding modifying the placement of two of the proposed wells
Action Date: Action: DEC Staff: Action Description:	4/3/2002 Update or Other Action Bill Janes Site tickler update - no action at this time. Reply back from RRM stating monitoring to occur 2nd quarter.
Action Date: Action: DEC Staff: Action Description:	4/24/2008 Long Term Monitoring Established Bruce Wanstall ADEC approved changing the long term monitoring schedule from annual to semi-annual for MW-4.
Action Date: Action: DEC Staff: Action Description:	4/23/2014 Update or Other Action Bruce Wanstall 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: Action: DEC Staff: Action Description:	4/21/2000 Update or Other Action Bill Janes Cost Rrecovery Memorandum sent to Kay Rawlings for \$1,086 for the period July 1999 thru March 2000.
Action Date: Action: DEC Staff: Action Description:	4/18/2006 Update or Other Action Bruce Wanstall 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: Action: DEC Staff: Action Description:	3/4/2005 Update or Other Action Bill Janes 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.

EDR ID Number **EPA ID Number** Database(s)

JUNEAU AIRPORT FUELING FACILITY (Continued) S104893281 Action Date: 3/30/2000 Update or Other Action 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. 3/27/2008 Action Date: Action: Update or Other Action DEC Staff: Bruce Wanstall ADEC reviewed the CRA Conceptual Site Model. Action Description: 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 Update or Other Action 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

Action Date: 3/21/2001 Long Term Monitoring Established Action:

accepted.

EDR ID Number **EPA ID Number** Database(s)

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. 3/18/2005 Action Date: 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 Update or Other Action 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** RRM, Chevron, DEC, Del West and CBJ met to discuss next phase of site Action Description: 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 Update or Other Action 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 Update or Other Action 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 Update or Other Action Action:

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S104893281

JUNEAU AIRPORT FUELING FACILITY (Continued)

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 Update or Other Action 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 Site Number Identifier Changed Action: 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 Site Characterization Report Approved Action: 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 guarterly 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.

EDR ID Number Database(s) EPA ID Number

JUNEAU AIRPORT FUELING	FACILITY (Continued)	S104893281
Action Date: Action: DEC Staff: Action Description:	10/19/2000 Meeting or Teleconference Held Bill Janes 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: Action: DEC Staff: Action Description:	10/15/2012 Report or Workplan Review - Other Bruce Wanstall 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: Action: DEC Staff: Action Description:	10/15/2010 Report or Workplan Review - Other Bruce Wanstall 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: Action: DEC Staff: Action Description:	10/13/2010 Report or Workplan Review - Other Bruce Wanstall 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: Action: DEC Staff: Action Description:	1/7/2005 Update or Other Action Bill Janes 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: Action: DEC Staff: Action Description:	1/30/2002 Update or Other Action Bill Janes Site tickler update - Sent email to RRM to determine schedule for 1st quarter monitoring.	
Action Date: Action: DEC Staff: Action Description:	1/3/2013 Report or Workplan Review - Other Bruce Wanstall 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	

Jl

Mine Status Date:

Controller ID:

Coal (C) or Metal (M) Mine:

MAP FINDINGS

EDR ID Number Database(s) EPA ID Number

	JUNEAU AIRPORT FUELING FACII	LITY (Continued) S104893	281
	a i r	or regulatory site closure with institutional controls controlling any off-site transport of soil and/or groundwater and the nstallation of wells to access and use groundwater. If the land nanager (City and Borough of Juneau) finds the controls are consistent with the Airport Management Plan then an agreement can be eached.	
	Action: DEC Staff: Action Description:	I/12/2015 Report or Workplan Review - Other Bruce Wanstall DEC reviewed the letter/report: Annual 2014 Groundwater Monitoring Report (Report), dated November 5, 2014 and provided approval by etter 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 he 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 aboratory 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 mplementation of the Institutional Controls denoted in the DEC's May 12, 2014 correspondence.	
	Contaminants: Staff:	Danielle Duncan, 9074655207 danielle.duncan@alaska.go	v
	Contaminate Name1: Contaminate Level Description1 Contaminate Media1: Control Type: Control Details Description1: Contaminant CTD: Contaminant CDR: Comments:	Juneau Airport Fueling Facility Not reported Not reported Not reported Not reported Not reported Not reported Not reported Not reported Not reported	
U81 WNW 1/8-1/4 0.131 mi.	MILLER CONSTRUCTION CO LTD 2207 NORTH JORDAN AVE. JUNEAU, AK 99801	ABANDONED MINES 10242480 N/A	009
691 ft.	Site 1 of 4 in cluster U		
Relative: Higher Actual: 50 ft.	ABANDONED MINES: Mine ID: Mine Type: Mine Status Description: Mine Status Date:	5001746 Surface Abandoned 2017-10-01 00:00:00	

2017-10-01 00:00:00

M/NM

0040959

TC5509586.2s Page 159

Database(s)

EDR ID Number **EPA ID Number**

1024248009

MILLER CONSTRUCTION CO LTD (Continued)

ALASKA COASTAL AIRLINES

JUNEAU, AK 99801

JUNEAU INTL ARPRT BLK H LOT 7

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.

Lower

10 ft.

RCRA-CESQG 1000904403 AK0000444174

Relative: RCRA-CESQG: Date form received by agency: 04/29/1994 ALASKA COASTAL AIRLINES Facility name: Actual: Facility address: JUNEAU INTL ARPRT BLK H LOT 7 JUNEAU, AK 99801 AK0000444174 EPA ID: NO MAILING ADDRESS 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

Database(s)

EDR ID Number EPA ID Number

Handler Activities Summary:

U.S. importer of hazardous wa	aste:	No
Mixed waste (haz. and radioa	ctive):	No
Recycler of hazardous waste:		No
Transporter of hazardous was	te:	No
Treater, storer or disposer of I	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 burn	er:	No
Used oil Specification markete	er:	No
Used oil transfer facility:		No
Used oil transporter:		No
Facility Has Received Notices of	Violati	ons:
Regulation violated:	Not re	eported
Area of violation:	Gene	rators - C
Date violation determined:	04/29	/1994
Date achieved compliance:	07/28	/1994
Violation lead agency:	State	
Enforcement action:	WRIT	TEN INF
Enforcement action date:	06/23	/1994

Paid penalty amount:

rea of violation:	Generators - General
ate violation determined:	04/29/1994
ate achieved compliance:	07/28/1994
iolation 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

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

Not reported

T83 West 1/8-1/4 0.137 mi. 721 ft.	AERO SERVICES, INC. 1890 RENSHAW WAY JUNEAU, AK 99801 Site 3 of 4 in cluster T		AK UST	U003998651 N/A
Relative: Higher Actual: 12 ft.	UST: Facility ID: Facility Type: Owner ID: Owner Name: Owner Address: Owner City,St,Zip: Tank ID: Tank Status: Tack Capacity: Tank Product:	1375 Gas Station 1476 Atlantic Aviation dba Trajen Flight Support, LP alternate name: Aero Services, Inc.P.O. Box Portland, OR 97208 1 Permanently Out of Use 3000 Gasoline		

Database(s)

EDR ID Number EPA ID Number

	AERO SERVICES, INC. (Co	ntinued)	U003998651
	Installed Date: Regulated Tank:	08/01/1988 Yes	
	Tank ID: Tank Status: Tack Capacity: Tank Product: Installed Date: Regulated Tank:	2 Permanently Out of Use 3000 Diesel 08/01/1988 Yes	
T84 West 1/8-1/4 0.138 mi.	NORTHSTAR TREKKING DI 1910 RENSHAW WAY JUNEAU, AK 99801	BA N.STAR HELICOPTER RCRA NonGen / NLF	a 1007879133 AKR000201368
730 ft.	Site 4 of 4 in cluster T		
Relative: Higher	RCRA NonGen / NLR:	apport 11/10/2004	
Actual: 12 ft.	Date form received by a Facility name: Facility address:	NORTHSTAR TREKKING DBA N.STAR HELICOPTER 1910 RENSHAW WAY JUNEAU, AK 99801	
	EPA ID:	AKR000201368	
	Mailing address:	PO BOX 32540	
		JUNEAU, AK 99803	
	Contact: Contact address:	BOB ENGELBRECHT Not reported	
	Contact address.	Not reported	
	Contact country:	US	
	Contact telephone:	907-790-4530	
	Contact email:	ENGELBRECHT@ALASKA.COM	
	EPA Region:	10 New Occupation	
	Classification: Description:	Non-Generator Handler: Non-Generators do not presently generate hazardous waste	
	Owner/Operator Summary		
	Owner/operator name:	NORTHSTAR TREKKING	
	Owner/operator address	s: Not reported	
		Not reported	
	Owner/operator country		
	Owner/operator telepho Owner/operator email:	ne: Not reported Not reported	
	Owner/operator fax:	Not reported	
	Owner/operator extension		
	Legal status:	Private	
	Owner/Operator Type:	Operator	
	Owner/Op start date: Owner/Op end date:	04/01/1998 Not reported	
	Owner/Op end date.	Notropolica	
	Owner/operator name:	THI INC	
	Owner/operator address	KETCHIKAN, AK 99901	
	Owner/operator country		
	Owner/operator telepho Owner/operator email:		
	Owner/operator fax:	Not reported Not reported	
	Owner/operator extensio		
	·		

Map ID Direction		MAP FINDINGS]	
Distance Elevation	Site		Database(s)	EDR ID Number EPA ID Number
	NORTHSTAR TREKKING DBA N.S Legal status:	TAR HELICOPTER (Continued) Private Owner		1007879133
		01/01/2004		
	Owner/Op end date:	Not reported		
	Handler Activities Summary: U.S. importer of hazardous was Mixed waste (haz. and radioact Recycler of hazardous waste: Transporter of hazardous waste Treater, storer or disposer of H Underground injection activity: On-site burner exemption: Furnace exemption: Used oil fuel burner: Used oil fuel burner: Used oil processor: User oil refiner: Used oil fuel marketer to burne Used oil fuel marketer to burne Used oil Specification marketer Used oil transfer facility: Used oil transporter:	ive): No No e: Yes W: No No No No No No No No No		
	Violation Status:	No violations found		
U85 NW 1/8-1/4 0.172 mi. 909 ft.	CHANNEL CONSTRUCTION INC 2223 NORTH JORDAN AVE JUNEAU, AK 99801 Site 2 of 4 in cluster U		RCRA NonGen / NLR PADS	1015757153 AKR000002378
Relative: Higher	RCRA NonGen / NLR: Date form received by agency:	03/03/1997		
Actual:		CHANNEL CONSTRUCTION INC		
51 ft.	,	2223 NORTH JORDAN AVE JUNEAU, AK 99801 AKR000002378		
	5	TONSGARD CT JUNEAU, AK 99801-7201		
	Contact address:	W R JR TONSGARD 5600 TONSGARD CT JUNEAU, AK 99801-7201		
	Contact country:	US		
	1	907-780-4224 Not reported		
		10		
	Classification:	Non-Generator		
	Description:	Handler: Non-Generators do not presently genera	te hazardous waste	
	Owner/Operator Summary:			
	Owner/operator address:	W R TONSGARD JR 2223 NORTH JORDAN AVE JUNEAU, AK 99801		
		Not reported		
	Owner/operator telephone:	907-780-4224		
		Not reported		
	Owner/operator fax:	Not reported		
	Owner/operator fax: Owner/operator extension:	•		

Database(s)

EDR ID Number EPA ID Number

СНА

HANNEL CONSTRUCTION	INC (Continued)
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported
Handler Activities Summar	y:
U.S. importer of hazarde	ous waste: No
Mixed waste (haz. and r	radioactive): No
Recycler of hazardous v	waste: No
Transporter of hazardou	us waste: Yes
Treater, storer or dispos	ser of HW: No
Underground injection a	activity: No
On-site burner exemption	on: No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to	o burner: No
Used oil Specification m	
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

P.O. BOX 33359 JUNEAU, AK 99803

US 06/19/2004

Mailing address:

Mailing country: Cert. date:

Database(s)

EDR ID Number EPA ID Number

U86 NW 1/8-1/4 0.172 mi. 909 ft.	PORTABLE 191 2223 N. JORDAN AVE. JUNEAU, AK 99801 Site 3 of 4 in cluster U		ABANDONED MINES	1018260304 N/A
Relative: Higher Actual: 51 ft.	ABANDONED MINES: Mine ID: Mine Type: Mine Status Description: Mine Status Date: Coal (C) or Metal (M) Mine: Controller ID: Controller Name: Operator ID: Operator name: Address of Record Street: Address of Record PO Box: Address of Record City: Address of Record Zip Code: Assessment Address Street: Assessment Address Street: Assessment Address Street: Assessment Address State: Assessment Address State: Assessment Address Zip Code: Mine Health and Safety Address Street: Mine Health and Safety Address State: Mine Health and Safety Address Zip Code Mine Health and Safety Address State: Mine Health and Safety Address Zip Code Aine Health and Safety Address Zip Code Mine Health and Safety Address Zip Code	Juneau AK		

U87 NW	CHANNEL CONSTRUCTION INC	
1/8-1/4 0.175 mi.	JUNEAU (County), AK	
922 ft.	Site 4 of 4 in cluster U	
Relative: Higher Actual: 52 ft.	US MINES: Mine ID: SIC code(s): Entity name: Company:	5001723 141102 000000 000000 000000 000000 000000 PORTABLE 191 CHANNEL CONSTRUCTION INC
	Status: Status date: Operation Class: Number of shops: Number of plants: Latitude: Longitude:	4 20101010 non-Coal Mining 0 0 58 21 54 134 34 48
	Violations Details: Violation Number: Date Issued:	8554417 05/27/2010

Abandoned 10/10/2010

104(a)

Mine Status:

Status Date: Action Type: US MINES 1001195071 N/A

Database(s)

EDR ID Number EPA ID Number

INNEL CONSTRUCTION IN	C (Continued)
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: Date Issued: Mine Status: Status Date: Action Type: Date Abated: Citation/Order: Sig and Sub Designation: Proposed Penalty: Paid Penalty: Assessment Status code: Assess. Case Status code: Assessment Amount: Year:	6367887 03/31/2005 Abandoned 10/10/2010 104(a) 05/23/2005 Citation N Not reported Not reported
Violation Number:	6435840
Date Issued:	01/22/2009

Database(s)

EDR ID Number EPA ID Number

Mine Status:	Abandoned
Status Date:	10/10/2010
Action Type:	104(a)
Date Abated:	01/22/2009
Citation/Order:	Citation
Sig and Sub Designation:	Ν
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 9393 LA PEROUSE AVE JUNEAU, AK 99801	RCRA NonGen / NLR 1004670314 FINDS AKR000004283 ECHO	i
Relative:	RCRA NonGen / NLR:		
Higher	Date form received by agence	y:05/02/2000	
Actual:	Facility name:	T.W. HALL	
23 ft.	Facility address:	9393 LAPROUSE	
		JUNEAU, AK 99801	
	EPA ID:	AKR000004283	
	Mailing address:		
	Contact:	JUNEAU, AK 99801 DWAN HALL	
	Contact address:	9217 LONGRUNDRIVE	
	Contact address.	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 w	vaste: No	
	Mixed waste (haz. and radioa		
	Recycler of hazardous waste		
	Transporter of hazardous was		
	Treater, storer or disposer of	HW: No	

T W HALL (Continued)

MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

1004670314

Relative: Higher Actual: 52 ft.	US MINES: Mine ID: SIC code(s): Entity name: Company: Status: Status: Status: Operation Class: Number of shops: Number of plants: Latitude: Longitude:	5001722 142900 000000 000000 000000 000000 PORTABLE 235 CHANNEL CONSTRUCTION INC 2 20080522 non-Coal Mining 0 0 58 21 55 134 34 49		
0.194 mi. 1025 ft.	Site 1 of 2 in cluster V			
V89 NW 1/8-1/4	CHANNEL CONSTRUCTIO	N INC	US MINES	1016521834 N/A
	ECHO: Envid: Registry ID: DFR URL:	1004670314 110003036946 http://echo.epa.gov/detailed-facility-report?fid=110)003036946	
		this hyperlink while viewing on your computer to access tional FINDS: detail in the EDR Site Report.		
	Cons ever and prog	Information System AInfo is a national information system that supports the Resource servation and Recovery Act (RCRA) program through the tracking o its and activities related to facilities that generate, transport, treat, store, or dispose of hazardous waste. RCRAInfo allows RCR/ ram staff to track the notification, permit, compliance, and active action activities required under RCRA.		
	Registry ID:	110003036946		
	FINDS:			
	Violation Status:	No violations found		
	. Waste code: . Waste name:	NONE None		
	Used oil transfer facility Used oil transporter:			
	User oil refiner: Used oil fuel marketer t Used oil Specification r			
	Used oil fuel burner: Used oil processor:	Yes No		
	On-site burner exempti Furnace exemption:	on: No No		
	Underground injection	•		

Violations Details:

Database(s)

EDR ID Number EPA ID Number

Violation Number: Date Issued: Mine Status: Status Date: Action Type: Date Abated: Citation/Order: Sig and Sub Designation: Proposed Penalty: Paid Penalty: Assessment Status code: Assess. Case Status code: Assessment Amount: Year:	6444803 8/23/2017 Intermittent 5/22/2008 104(a) 8/23/2017 Citation N 116.00 Proposed Closed 116.00 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

Database(s)

EDR ID Number EPA ID Number

CHANNEL CONSTRUCTION INC (Continued)

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

Database(s)

EDR ID Number EPA ID Number

NNEL CONSTRUCTION IN	C (Continued
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

Database(s)

EDR ID Number EPA ID Number

ANNEL CONSTRUCTION IN	
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

Database(s)

EDR ID Number EPA ID Number

CHANNEL CONSTRUCTION INC (Continued)

Status Date: Action Type: Date Abated: Citation/Order: Sig and Sub Designation: Proposed Penalty: Paid Penalty: Assessment Status code: Assess. Case Status code: Assessment Amount: Year:	05/22/2008 104(a) 08/08/2012 Citation N 100 Closed Proposed 100 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

Database(s)

EDR ID Number EPA ID Number

CHANNEL CONSTRUCTION INC (Continued)

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:	Υ
Proposed Penalty:	124.00
Paid Penalty:	124.00
Assessment Status code:	Closed
Assess. Case Status code:	Proposed
Assessment Amount:	124.00
Year:	2007

<u>Click this hyperlink</u> while viewing on your computer to access 11 additional US_MINES: record(s) in the EDR Site Report.

V90 NW	MILLER CONSTRUCTION CO LTD		US MINES	101 N
1/8-1/4 0.194 mi.	JUNEAU (County), AK			
1025 ft.	Site 2 of 2 in cluster V			
Relative: Higher Actual: 52 ft.	SIC code(s): Entity name: Company: Status:	5001746 142900 000000 000000 000000 000000 MILLER CONSTRUCTION CO LTD MILLER CONSTRUCTION CO LTD 4 20171001		
	Number of shops: Number of plants: Latitude:	non-Coal Mining 0 0 58 21 55 134 34 49		
	Violations Details: Violation Number: Date Issued: Mine Status: Status Date: Action Type: Date Abated: Citation/Order: Sig and Sub Designation	6395825 5/24/2017 Abandoned 10/1/2017 104(a) 5/24/2017 Citation Y: N		

016521846 N/A

Database(s)

EDR ID Number EPA ID Number

ER CONSTRUCTION COL	ID (Continu
Proposed Penalty: Paid Penalty: Assessment Status code: Assess. Case Status code: Assessment Amount: Year:	116.00 116.00 Proposed Closed 116.00 2017
Violation Number: Date Issued: Mine Status: Status Date: Action Type: Date Abated: Citation/Order: Sig and Sub Designation: Proposed Penalty: Paid Penalty: Assessment Status code: Assess. Case Status code: Assessment Amount: Year:	6395601 5/24/2017 Abandoned 10/1/2017 104(a) 5/24/2017 Citation N 116.00 Proposed Closed 116.00 2017
Violation Number: Date Issued: Mine Status: Status Date: Action Type: Date Abated: Citation/Order: Sig and Sub Designation: Proposed Penalty: Paid Penalty: Assessment Status code: Assess. Case Status code: Assessment Amount: Year:	6444248 5/23/2017 Abandoned 10/1/2017 104(a) 5/23/2017 Citation N 116.00 Proposed Closed 116.00 2017
Violation Number: Date Issued: Mine Status: Status Date: Action Type: Date Abated: Citation/Order: Sig and Sub Designation: Proposed Penalty: Paid Penalty: Assessment Status code: Assess. Case Status code: Assessment Amount: Year:	6444325 5/23/2017 Abandoned 10/1/2017 104(a) 5/24/2017 Citation N 116.00 Proposed Closed 116.00 2017
Violation Number: Date Issued: Mine Status: Status Date: Action Type:	8789072 09/17/2014 Intermittent 07/15/2013 104(a)

Database(s)

EDR ID Number EPA ID Number

LER CONSTRUCTION COL	
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

Database(s)

EDR ID Number EPA ID Number

Mine Status: Status Date: Action Type: Date Abated: Citation/Order: Sig and Sub Designation: Proposed Penalty: Paid Penalty: Assessment Status code: Assess. Case Status code: Assessment Amount: Year:	Intermittent 07/15/2013 104(a) 08/18/2016 Citation Y 413.00 413.00 Closed Proposed 413.00 2016
Violation Number: Date Issued: Mine Status: Status Date: Action Type: Date Abated: Citation/Order: Sig and Sub Designation: Proposed Penalty: Paid Penalty: Assessment Status code: Assess. Case Status code: Assessment Amount: Year:	8881362 08/18/2016 Intermittent 07/15/2013 104(a) 08/18/2016 Citation Y 124.00 Closed Proposed 124.00 2016
Violation Number: Date Issued: Mine Status: Status Date: Action Type: Date Abated: Citation/Order: Sig and Sub Designation: Proposed Penalty: Paid Penalty: Assessment Status code: Assess. Case Status code: Assessment Amount: Year:	8881361 08/18/2016 Intermittent 07/15/2013 104(a) 08/22/2016 Citation N 114.00 Closed Proposed 114.00 2016
Violation Number: Date Issued: Mine Status: Status Date: Action Type: Date Abated: Citation/Order: Sig and Sub Designation: Proposed Penalty: Paid Penalty: Assessment Status code: Assess. Case Status code: Assessment Amount: Year:	6367943 07/27/2005 Intermittent 07/15/2013 104(a) 07/27/2005 Citation N 60.00 60.00 Closed Proposed 60.00 2005

Database(s)

EDR ID Number EPA ID Number

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

Database(s)

EDR ID Number EPA ID Number

MILLER CONSTRUCTION CO LTD (Continued)

	(
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

Database(s)

EDR ID Number EPA ID Number

1016521846

MILLER CONSTRUCTION CO LTD (Continued)

Paid Penalty:362Assessment Status code:ClosedAssess. Case Status code:ProposedAssessment Amount:362Year:2012

<u>Click this hyperlink</u> while viewing on your computer to access 27 additional US_MINES: record(s) in the EDR Site Report.

W91 WNW 1/4-1/2 0.276 mi. 1458 ft.	FAA JUNEAU SFOP 9341 GLACIER HIGHWAY JUNEAU, AK 99801 Site 1 of 2 in cluster W	AK SHWS S109255355 AK LUST N/A
Relative: Higher Actual: 20 ft.	SHWS: File Number: Staff: Facility Status: Latitude: Longitude: Hazard ID: Problem:	1513.38.051 Danielle Duncan, 9074655207 danielle.duncan@alaska.gov Active 58.366888 -134.588456 24941 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.

Database(s)

EDR ID Number EPA ID Number

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 Date.	
DEC Staff:	Update or Other Action
	Danielle Duncan Reviewed data for USTs on site and found that there are 3 USTs that
Action Description:	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.
	REORET has automationly 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 Date.	Update or Other Action
DEC Staff:	Danielle Duncan
Action Description:	Sent an update on the site needs this date.
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)

MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

S109255355

~~	JUNEAU SI OI (Continueu)		01032
	Action Date: Action: DEC Staff: Action Description:	3/28/2007 Update or Other Action * Not Assigned Not reported	
	Action Date: Action: DEC Staff: Action Description:	3/28/2007 Update or Other Action Anne Marie Palmieri 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 petrolet 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.	ım
	Action Date: Action: DEC Staff: Action Description:	3/28/2007 Update or Other Action Anne Marie Palmieri 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 Repor 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.	t,
	Action Date: Action: DEC Staff: Action Description:	3/24/2007 Exposure Tracking Model Ranking * Not Assigned Not reported	
	Action Date: Action: DEC Staff: Action Description:	3/10/2004 Update or Other Action Bruce Wanstall Project manager changed to Wanstall. File review shows that single UST facility ID has been used for numerous FAA facility locations in	

EDR ID Number Database(s) EPA ID Number

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: Action Description:	Melody Debenham Received final Contaminated Soil Removal and Groundwater Sampling
Action Description.	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

FAA JUNEAU SFOP Open 1999110002201 1513.38.051 Federal Aviation Administration 58.36688 -134.5884 2015 MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

	FAA JUNEAU SFOP (Continued		S109255355
	CS or Lust: Borough: Staff: Site Type: Horizontal Datum:	LUST Juneau Danielle Duncan Airport/Airfield Not reported	
W92 WNW 1/4-1/2 0.276 mi. 1458 ft.	USDOT FAA JUNEAU 9341 GLACIER HWY NAV AIDS JUNEAU, AK 99801 Site 2 of 2 in cluster W	SEMS-ARCHIVE RCRA NonGen / NLR PADS FINDS ECHO	1000456199 AK9690500179
Relative: Higher Actual: 20 ft.	SEMS Archive: Site ID: EPA ID: Cong District: FIPS Code: FF: NPL: Non NPL Status: Latitude: Longitude: SEMS Archive Detail: Region: Site ID:	1001753 AK9690500179 1 2110 Y Not on the NPL NFRAP-Site does not qualify for the NPL based on existing information 58.366667 -134.5833330000001	1
	EPA ID: Site Name: NPL: FF: OU: Action Code: Action Name: SEQ: Start Date: Finish Date: Qual: Current Action Lead:	AK9690500179 USDOT FAA JUNEAU STATION N Y 0 VS ARCH SITE 1 Not reported 1993-08-16 00:00:00 Not reported EPA Perf In-Hse	
	Region: Site ID: EPA ID: Site Name: NPL: FF: OU: Action Code: Action Name: SEQ: Start Date: Finish Date: Qual: Current Action Lead: Region: Site ID: EPA ID: Site Name:	10 1001753 AK9690500179 USDOT FAA JUNEAU STATION N Y 0 DS DISCVRY 1 1992-10-01 00:00:00 1992-10-01 00:00:00 Not reported Fed Fac 10 1001753 AK9690500179 USDOT FAA JUNEAU STATION	

Database(s)

EDR ID Number EPA ID Number

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	
CRA NonGen / NLR:		
	:: 02/04/2010	
Date form received by agency	USDOT FAA JUNEAU	
Facility name:	9341 GLACIER HWY NAV AIDS	
Facility address:	JUNEAU, AK 99801	
EPA ID:	AK9690500179	
Mailing address:	W 7TH BOX 14 AAL 471	
manny address.	ANCHORAGE, AK 99513-7587	
Contact:	CATHY BENEDIKTSSON	
Contact address:	222 W 7TH BOX 14 AAL 471	
Contaot audi 635.	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	
wner/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/Op start date:	Owner Not reported	

Database(s)

EDR ID Number EPA ID Number

Owner/Op end date:		Not reported	
Handler Activities Summ	nary:		
U.S. importer of haza	rdous w	ste: No	
Mixed waste (haz. an		tive): No	
Recycler of hazardous waste:		No	
Transporter of hazardous waste:			
Treater, storer or disposer of HW:			
Underground injection activity:			
On-site burner exemp	otion:	No	
Furnace exemption:		No	
Used oil fuel burner:		No	
Used oil processor:		No No	
User oil refiner: Used oil fuel marketer to burner:			
Used oil Specification			
Used oil transfer facil		No	
Used oil transporter:	ity.	No	
Historical Generators:			
Date form received b	y agency		
Site name:		USDOT FAA JUNEAU	
Classification:		Conditionally Exempt Small Quantity Generator	
Violation Status:		No violations found	
Evaluation Action Summ	nary:		
Evaluation date:		08/08/2005	
Evaluation:		COMPLIANCE EVALUATION INSPECTION ON-SITE	
Area of violation:		Not reported	
Date achieved compliance: N		Not reported	
Evaluation lead agen	cy:	EPA	
Evaluation date:		06/04/1999	
Evaluation:		NON-FINANCIAL RECORD REVIEW	
Area of violation:		Not reported	
Date achieved compl		Not reported	
Evaluation lead agen	cy:	EPA	
PADS:			
EPAID:	AK96	90500179	
Facility name:	JUN	AU FAA STATION	
Facility Address:	9341	GLACIER HIGHWAY	
	JUN	AU, AK 99801	
Facility country:	US		
Generator:	Yes		
Storer:	No		
Transporter:	No		
Disposer:	No		
Research facility:	No		
Smelter:	No		
Facility owner name:		RAL AVIATION ADMIN, AK REG	
Contact title:		eported	
Contact name:		Y MURPHY	
Contact tel:	907-	71-2124	
Contact extension:	N 1 - 1	eported	

Database(s)

EDR ID Number EPA ID Number

	USDOT FAA JUNEAU	J (Continued)	1000456199
	Contact Email: Mailing address: Mailing country: Cert. date:	Not reported 222 WEST 7TH AVE BOX 14 FAA-AAL-465 ANCHORAGE, AK 99513 US 09/30/1992	
	FINDS:		
	Registry ID:	110003044036	
	Environmental In	terest/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.	
		<u>Click this hyperlink</u> while viewing on your computer to access additional FINDS: detail in the EDR Site Report.	
	ECHO: Envid: Registry ID: DFR URL:	1000456199 110003044036 http://echo.epa.gov/detailed-facility-report?fid=110003044036	
93 WNW 1/4-1/2 0.348 mi. 1839 ft.	COMMERCIAL PROP 9351 GLACIER HIGH JUNEAU, AK 99801	ERTY - 9351 GLACIER HIGHWAY AK SHWS WAY AK INST CONTROL	S110762070 N/A
Relative: Higher Actual: 19 ft.	SHWS: File Number: Staff: Facility Status: Latitude: Longitude: Hazard ID: Problem:	1513.38.084 Not reported Cleanup Complete 58.366367 -134.591250 25608 On or about 11/10/2010, a release of diesel fuel from an abov heating oil tank system occurred at 9351 Glacier Highway. At of the release the building was occupied by a hair and nail sa Diesel range organics (DRO) were dectected above cleanup surface soil. About a cubic yard of sandy contaminated soil w removed from the site and taken to Bicknell Construction for incorporation into asphalt. The two original soil samples were after excavation.	t the time llon. levels in vas
	Actions: Action Date: Action: DEC Staff: Action Descriptic	9/11/2013 Update or Other Action Kristin Thompson n: Staff changed from Erik Norberg to Denise Elston.	

EDR ID Number Database(s)

EPA ID Number

Action Date: Action:	8/29/2011 Cleanup Complete D	Determination Issued	
DEC Staff:	Erik Norberg		
Action Description:	0	te at this site. Cleanup complete determination	
	issued.		
Action Date:	8/29/2011		
Action:	Institutional Control I	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:		Representative to become familiar with site. No	
		avement or a diesel smell detected. It was also	
		nd parking lot run off flows away from Duck	
	Creek.		
Action Date:	2/11/2011		
Action:	Site Added to Databa	ase	
DEC Staff:	Mitzi Read		
Action Description:	A new site has been	added to the database	
Action Date:	2/11/2011		
Action:	Exposure Tracking N	Addel Ranking	
DEC Staff:	Mitzi Read		
Action Description:	Heating Oil AST Sys	TM completed for source area id: 79041 name: stem - Diesel	
Action Date:	2/10/2011		
Action:	Spill Transferred fror	m Prevention Preparedness and Response Progra	am
DEC Staff:	Mitzi Read		
Action Description:	Spill transferred by F	PERP staff Sarah Moore. Spill no. 10119931401;	
·		; substance = diesel; quantity = ~150 gallons;	
	source = fuel filter ar	nd damaged compression fitting on line from	
	aboveground heating	g oil tank system.	
ntaminants:			
Staff:		Not reported	
Contaminate Name1:		Commercial Property - 9351 Glacier Highwa	/
Contaminate Level Descriptio	n1:	Between Method 2 Migration to Groundwate	r and Human
		Health/Ingestion/Inhalation	
Contaminate Media1:		Soil	
Control Type:		No ICs Required	
Control Details Description1:		Advance approval required to transport soil of	or groundwater off-site
Contaminant CTD:		Not reported	
Contaminant CDR:		Not reported	
Comments:		A small amount of heating fuel contamination foundation stem wall of the building, but this minimis and could not be excavated without	layer of soil is de

Inst Control:

Map ID	ſ	MAP FINDINGS		
Direction Distance Elevation	Site		Database(s)	EDR ID Number EPA ID Number
	COMMERCIAL PROPERTY - 93 Hazard ID: 25608	351 GLACIER HIGHWAY (Continued)		S110762070
	Facility Status: Cleanup			
94 West 1/4-1/2 0.380 mi. 2007 ft.	MENDENHALL WW TREATME 2009 RADCLIFFE ROAD, ADJA JUNEAU, AK 99801	NT PLANT ACENT TO JUNEAU INTERNATIONAL AIRPOR	AK SHWS	S108033073 N/A
Relative: Lower Actual: 3 ft.	SHWS: File Number: Staff: Facility Status: Latitude: Longitude: Hazard ID: Problem: Action Date: Action Date: Action Date: Action Date: Action Date: Action Date: Action Description:	1513.38.054 Danielle Duncan, 9074655207 danielle.dun Active 58.362045 -134.596441 3863 In 2002, the fuel transfer system leaked oil i to the ABF building on the north side of the below ground fuel leak contaminated the su the ultraviolet disinfection unit. The source of a buried fuel tank supply line to a backup ge north side of the facility. In 2008, a below gr the boiler fuel pipeline on the south side of t loss estimates range from 20- 30,000 gallor 9/10/2012 Update or Other Action Kristin Thompson Address updated in database to match the address from 9/1/2005 Update or Other Action Bill Janes Report for 7/24/05 groundwater sampling received this d the vicinity of the former source, still has levels of DRO a benzene above cleanup levels (86.1 mg/L DRO and 0.03 This event represents CBJ's final planned monitoring of groundwater wells. 8/4/2009 Site Characterization Workplan Approved	nto the wet well n facility. In 2004, a bsurface construct of the 2004 releas enerator located o ound leak was for he SBR building. Is for the 2008 sp the hard file.	ction of e was n the und in Fuel ill.
	DEC Staff: Action Description: Action Date: Action: DEC Staff: Action Description:	Bruce Wanstall ADEC reviewed and commented on a letter/report workp Utility Department for the Mendenhall Wastewater Treatr contaminated site. The workplan addresses concerns ar by the State for improved communications, site assessm controls on off-site migration of subsurface contaminatio water and soil. In a few weeks, new product recovery we operational and new ground water monitoring wells will b 8/24/2016 Report or Workplan Review - Other Bruce Wanstall DEC evaluated the Groundwater Monitoring Report subs	ment Plant ad requests made nent and site n of ground ells will be be installed.	

EDR ID Number Database(s) EPA ID Number

MENDENHALL WW TREATMENT PLANT (Continued)

	r LANT (Continued)	5
	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: Action: DEC Staff: Action Description:	7/24/2014 Update or Other Action Bruce Wanstall 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: Action:	7/24/2014 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: DEC Staff:	Report or Workplan Review - Other 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: DEC Staff: Action Description:	Site Visit Bruce Wanstall 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: Action: DEC Staff:	7/2/2004 Update or Other Action Bill Janes	
Action Description:	GW monitoring plan approved. Email approval is in Outlook folder.	
Action Date: Action:	7/10/2009 Update or Other Action	

EDR ID Number Database(s) EPA ID Number

Action Date: Action: DEC Staff: Action Description:	requesting prompt submittal of workplans for investigation and product recovery at the Wise property boundary. 6/5/2014 Report or Workplan Review - Other Bruce Wanstall 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	
Action: DEC Staff:	Report or Workplan Review - Other Bruce Wanstall 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	
	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	
	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 TAgH 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: Action: DEC Staff: Action Description:	6/26/2018 Update or Other Action Danielle Duncan 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: Action: DEC Staff: Action Description:	6/25/2018 Site Characterization Workplan Approved Danielle Duncan 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 disesl range organics (DRO), gasoline range organics (GRO), volatile organic compounds (VOCs), and polycyclic aromatic hydrocarbons (PAHs) will be reported.	
Action Date: Action: DEC Staff: Action Description:	6/20/2018 Update or Other Action Danielle Duncan 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: Action: DEC Staff:	5/5/2010 Report or Workplan Review - Other Bruce Wanstall	

EDR ID Number Database(s) EPA ID Number

MENDENHALL WW TREATMENT PLANT (Continued)

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: Action: DEC Staff: Action Description:	5/30/2012 Update or Other Action Bruce Wanstall 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: Action: DEC Staff: Action Description:	5/27/2011 Report or Workplan Review - Other Bruce Wanstall 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: Action: DEC Staff: Action Description:	5/25/2004 Meeting or Teleconference Held Bill Janes Telecon with Steve Haavig and Jim Dorn of Carson Dorn. CD will submit a plan for installing sentry monitoring wells.	
Action Date: Action: DEC Staff: Action Description:	 5/14/2013 Report or Workplan Review - Other Bruce Wanstall 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 	-

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MENDENHALL WW TREATMENT PLANT (Continued)

IDENHALL WW TREATMENT	PLANT (Continued)	S
	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: Action: DEC Staff: Action Description:	5/14/2008 Update or Other Action Bill Janes 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: Action: DEC Staff: Action Description:	5/13/2016 Update or Other Action Bruce Wanstall DEC evaluated a proposal by DOWL Engineering to advance geotechnica 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.	al
Action Date: Action: DEC Staff: Action Description:	5/12/2010 Update or Other Action Bruce Wanstall 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: Action: DEC Staff: Action Description:	5/12/2009 Meeting or Teleconference Held Bruce Wanstall 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.	

Database(s)

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MENDENHALL WW TREATMENT PLANT (Continued) Action Date: 4/3/2003 Update or Other Action 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 Update or Other Action Action: **Bruce Wanstall** DEC Staff: 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** Reviewed April 4 report on the 3/7/05 monitoring. MW-4 concentrations Action Description: 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 Update or Other Action 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 Meeting or Teleconference Held Action: 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 DEC approved 2011 4th Quarter Groundwater Monitoring Report completed Action Description: 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

TC5509586.2s Page 194

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MENDENHALL WW TREATMENT PLANT (Continued)

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: Action: DEC Staff: Action Description:

Action Date: Action: DEC Staff: Action Description:

Action Date: Action: DEC Staff: Action Description: 3/14/2003 Site Ranked Using the AHRM Bruce Wanstall Preliminary ranking.

3/13/2017

Report or Workplan Review - Other Bruce Wanstall 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.

3/1/2011

Report or Workplan Review - Other Bruce Wanstall 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 guarter 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.

EDR ID Number Database(s) EPA ID Number

MENDENHALL WW TREATMENT PLANT (Continued)

NDENHALL WW TREATMENT PLANT (Continued)			
Action Date: Action: DEC Staff: Action Description:	3/1/2004 Update or Other Action Bill Janes Karen Blue notified me that approximately 180 tons of petroleum-contaminated soil were shipped to Rabanco in WA State last Oct.		
Action Date: Action: DEC Staff: Action Description:	3/1/2004 Update or Other Action Bill Janes Emailed Karen Blue asking about status of stockpiled soil.		
Action Date: Action: DEC Staff: Action Description:	2/26/2008 Exposure Tracking Model Ranking Bill Janes Initial ranking with ETM completed.		
Action Date: Action: DEC Staff: Action Description:	2/25/2010 Update or Other Action Bruce Wanstall 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: Action: DEC Staff: Action Description:	12/9/2015 Report or Workplan Review - Other Bruce Wanstall 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 preser in recovery wells MW-8 and NMW-1 in August and in recovery well NMW 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.	nt	
Action Date: Action: DEC Staff: Action Description:	12/9/2015 Long Term Monitoring Established Bruce Wanstall 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		

EDR ID Number Database(s) EPA ID Number

MENDENHALL WW TREATMENT PLANT (Continued)

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 guarterly 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: Action: DEC Staff: Action Description:	12/31/2002 Site Added to Database Bruce Wanstall 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: Action: DEC Staff: Action Description:	11/5/2013 Update or Other Action Bruce Wanstall 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: Action: DEC Staff: Action Description:	11/4/2008 Exposure Tracking Model Ranking Bruce Wanstall 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

EDR ID Number Database(s) EPA ID Number

ENDENHALL WW TREATM		S108033073
	Airport Fuel Facility. Additional wells may be present even though the area is served by a municipal drinking water system.	
Action Date: Action: DEC Staff: Action Description:	11/26/2010 Report or Workplan Review - Other Bruce Wanstall 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: Action: DEC Staff: Action Description:	11/25/2008 Report or Workplan Review - Other Bruce Wanstall 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: Action: DEC Staff: Action Description:	11/24/2008 Potentially Responsible Party/State Interest Letter Sally Schlichting 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: Action: DEC Staff: Action Description:	11/21/2008 Meeting or Teleconference Held Bruce Wanstall 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	

EDR ID Number Database(s) EPA ID Number

	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 abou
	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.
	and north underground tuer tank to buildts talled.

Database(s)

EDR ID Number **EPA ID Number**

MENDENHALL WW TREATMENT PLANT (Continued)

S108033073

Action: DEC Staff: Action Description:	Report by CDI. The Rep groundwater sampling b monitoring wells, observ free product recovery fm Mendenhall River during period found free produ and MW-12. Each of the the property. The higher found in MW-8 and MW MW-12 had much less of DRO was detected in five ranged from the lowest the highest was at 12 m east, the west and the s was detected in five of s ranged from lowest at 0 MW-3. The wells are loo property, respectively. E seven wells sampled. T 0.0015mg/L in MW-1 wa for each of the respective	view - Other a 2011 3rd Quarter Groundwater Monitoring bort covers the following site activity: by CDI and the CBJ personnel weekly gauging of vations of the Mendenhall River for sheen and om groundwater. No sheen was observed on the g the period. Weekly well gauging during the ct in measureable volume in MW-4, MW-8, MW-9 ese four wells are located on the north side of st volumes of free product were consistently -9 and the free product measured in MW-4 and volume and was inconsistent during the period. ve out of seven wells sampled; concentrations at 0.11 mg/L in MW-13 to 1.9 mg/L in MW-1 and mg/L in MW-3. These wells are located on the south sides of the property, respectively. RRO seven wells sampled; the concentrations .26 mg/L in MW-1 to the highest at 1.8 mg/L in cated on the west and south sides of the BTEX compounds were detected in four of the he detection of benzene at a concentration of as the only result above Table C cleanup levels ve BTEX compounds. MW-1 is located on the y above the banks of the Mendenhall River.
Contaminants: Staff:		Danielle Duncan, 9074655207 danielle.duncan@alaska.gov
Contaminate Name1: Contaminate Level Descriptic Contaminate Media1:	on1:	Mendenhall WW Treatment Plant Not reported Not reported

Control Type: Control Details Description1: Contaminant CTD: Contaminant CDR: Comments:

Not reported Not reported Not reported Not reported Not reported

95 WNW 1/4-1/2 0.392 mi. 2071 ft.	SKATEBOARD PARK MENDENHALL LOOP ROAD, 1/4 N JUNEAU, AK 99801	NILE SOUTH OF EGAN	AK SHWS AK INST CONTROL AK VCP	S105464279 N/A
Relative: Higher Actual: 27 ft.	SHWS: File Number: Staff: Facility Status: Latitude: Longitude: Hazard ID: Problem:	work for the skateboarding possibly from fueling/mainte	nination encountered during site p facility. Sources not confirmed, bu enance activities in the past when A and prior to that the U.S. Depart	the

SKATEBOARD PARK (Continued)

SKATEBOARD FARR (Continue	u)	3103404279		
	the Army. Palmieri.	Cleanup occurring under VCP. Last staff assigned was		
	r annion.			
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			
		cale map; accuracy is high, within 10 meters.		
		svr ???G:\\SPAR\\Spar-Contaminated Sites\\38 Case		
		tes)\\1513 Juneau\\1513.38.038 Skateboard Park		
	Files (Containinated Si	les)//1313 Julieau//1313.30.030 Skaleboard Fark		
Action Date:	7/11/1997			
Action:	Voluntary Cleanup Pro	aram		
DEC Staff:	Anne Marie Palmieri	gram		
		an account on the MCD		
Action Description:	Application accepted to	or acceptance into the VCP.		
Action Date:	2/23/1998			
Action:	Site Closure Approved			
DEC Staff:	Anne Marie Palmieri			
Action Description:		ent on adjacent property this will be a new		
Action Description.	site.	an on adjacent property this will be a new		
	Sile.			
Action Date:	11/7/1997			
Action:	Site Added to Databas			
		6		
DEC Staff:	Sally Schlichting			
Action Description:	Not reported			
Action Date:	11/14/1997			
Action:	Cleanup Plan Approved			
DEC Staff:	Anne Marie Palmieri			
Action Description:		de = CAPA - Corrective Action Plan).		
Action Description.	(Old IN. Dase Action Co			
Contaminants:				
Staff:		Not reported		
Stall.		Not reponed		
Contaminate Name1:		Skateboard Park		
Contaminate Level Description	n1·	Not reported		
Contaminate Media1:		Not reported		
		Notropolica		
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:	1513.38.0	04		
Staff:	IC Unit. 90)74655229 dec.icunit@alaska.gov		
Facility Status:		Complete - Institutional Controls		
Latitude:	58.367676			
Longitude:	-134.5884			
÷				
Hazard ID:	2697 Concentra	tions of CDO and DTEV above the most concernative Mathed Two		
Problem:		tions of GRO and BTEX above the most conservative Method Two		
	0	to groundwater cleanup levels are present in soil in the		
	right-of-wa	ay corridor at the bus turnout construction site. The		

EDR ID Number Database(s) EPA ID Number

	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: DEC Staff:	GIS Position Updated 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: Action Description:	Bruce Wanstall 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: Action:	8/18/2005 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: Action: DEC Staff: Action Description:	7/3/2003 Update or Other Action Bruce Wanstall 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 wall deemed inaccesible due to water main.

6105464279

Database(s)

EDR ID Number **EPA ID Number**

SKATEBOARD PARK (Continued)

S105464279 Action Date: 3/8/2000 Site Ranked Using the AHRM Action: 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 Institutional Control Update Action: Kristin Thompson DEC Staff: 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 CS Database Notation And Letter To Landowner/RP Control Type: 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: 2697

Hazard ID: Facility Status: Action: Action Date: File Number:

Cleanup Complete - Institutional Controls Institutional Control Record Established 8/18/2005 1513.38.004

Hazard ID: 2697 Facility Status: **Cleanup Complete - Institutional Controls** Action: Institutional Control Compliance Review 12/13/2013 Action Date: File Number: 1513.38.004

SKATEBOARD PARK (Continued)

MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

	UNATEDUARD I ARR	(Commuted)	0100404210
	Hazard ID: Facility Status: Action: Action Date: File Number:	2697 Cleanup Complete - Institutional Controls Institutional Control Update 12/23/2013 1513.38.004	
	VCP: DEC File Numbe Facility Status: Staff: Hazard Id:	r: 1513.38.038 Cleanup Complete No Longer Assigned, 2696	
96 ENE 1/4-1/2 0.460 mi. 2430 ft.	GLACIER GARDENS 7600 GLACIER HIGH JUNEAU, AK 99801	RAINFOREST ADVENTURES AST SPILL NAY	AK SHWS S105273792 N/A
Relative: Higher Actual: 51 ft.	SHWS: File Number: Staff: Facility Status: Latitude: Longitude: Hazard ID: Problem:	1513.38.016 Not reported Cleanup Complete 58.359714 -134.548404 3709 An unknown volume of heating oil escaped th piping failure and followed the surface water of driveway into the roadside ditch, beneath the privately-owned wetlands. The owner and cor installed three oil recovery ponds and recover product by applying sorbent pads to the surfac conditions and erosion structures limited oil in in the drainage. In a removal action limited by structures in the storm water drainage, the ow yards of contaminated soil and stored it betwee DEC approval the contaminated soil was later Soil Recycling in Juneau where it was therman characterization of remaining soil contaminatid drainage around the geotextile liner and tiling	drainage along the highway and into nsultant Carson Dorn Inc red an unknown volume of ce of the water. Wet filtration to soils rerosion control uner excavated 50 cubic een liners on-site. With r transported to United Ily remediated. Site on was completed in the
	Actions: Action Date: Action: DEC Staff: Action Descriptio	9/4/2007 Exposure Tracking Model Ranking Not reported n: Intitial Ranking Complete for Source Area: 74684 (Autoge Action)	nerated
	Action Date: Action: DEC Staff: Action Descriptio	9/4/2007 Exposure Tracking Model Ranking Not reported n: Updated Ranking Complete for Source Area: 74684 (Auto Not reported	generated Action)
	Action Date: Action: DEC Staff: Action Descriptio	8/8/2006 Update or Other Action Bruce Wanstall n: File review and telephone contact made with adjacent pro Miller; by regular mail, I sent Mr. Miller a copy of the recen	

EDR ID Number Database(s) EPA ID Number

	latter to Powhow requesting a Site Cleanup Final Popert that included	
	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 Data:	6/6/2005	
Action Date: 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: Action:	6/11/2013 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.	

Site Type: Horizontal Datum:

MAP FINDINGS

EDR ID Number Database(s) EPA ID Number

DEC Staff:	Bruce Wanstall		
Action Description:	Ledger Code adde	ed.	
Action Date:	3/25/2004		
Action:	Update or Other A	ction	
DEC Staff:	Bruce Wanstall		
Action Description:	Discussion with B on the oil spill zon	ohay by telephone that site invest e.	tigation was needed
Action Date:	12/3/2001		
Action:	Site Added to Dat	abase	
DEC Staff:	Bruce Wanstall		
Action Description:	Heating Oil AST S	pill. Transfer from PERP	
Action Date:	12/3/2001		
Action:	Site Ranked Using	g the AHRM	
DEC Staff:	Bruce Wanstall		
Action Description:	Preliminary rankin	g.	
Action Date:	12/2/2003		
Action:	Spill Transferred from Prevention Preparedness and Response Program		
DEC Staff:	Bruce Wanstall		
Action Description:	Project managem	ent changed to Wanstall.	
ontaminants:			
Staff:		Not reported	
Contaminate Name1:		Glacier Gardens Rainfores	st Adventures AST Spill
Contaminate Level Descriptio	n1:	Other	
Contaminate Media1:		Soil	
Control Type:		No ICs Required	
Control Details Description1:			d to transport soil or groundwater off-s
Contaminant CTD:		Not reported	
Contaminant CDR:		Not reported	
Comments:		Not reported	
		·	
CE D. MORLEY, INCORPOR/ N. DOUGLAS HIGHWAY EAU, AK 99801	ATED		AK LUST S106166020 N/A
1 of 2 in cluster X			
IST:			
Eacility Nama:			

			-
	Contaminants: Staff:		Not reported
	Contaminate Name1: Contaminate Level Desc Contaminate Media1:	ription1:	Glacier Gardens Rainforest Adventu Other Soil
	Control Type: Control Details Descripti Contaminant CTD: Contaminant CDR: Comments:	on1:	No ICs Required Advance approval required to transp Not reported Not reported Not reported
X97 SE 1/4-1/2 0.469 mi. 2475 ft.	BRUCE D. MORLEY, INCOR 9128 N. DOUGLAS HIGHWA JUNEAU, AK 99801 Site 1 of 2 in cluster X		
Relative: Higher Actual: 33 ft.	LUST: Facility Name: Facility Status: Record Key: File ID: Oname: Lat/Lon: Lust Event ID: CS or Lust: Borough: Staff: Site Type:	BRUCE D. MORLEY, Cleanup Complete 1996110030401 1513.26.026 Bruce D. Morley 58.33970 -134.5527 1231 LUST Juneau No Longer Assigned Unknown	INCORPORATED

NAD83

Database(s)

EDR ID Number EPA ID Number

X98 SE 1/4-1/2	BRUCE D. MORLEY, INCORPO 9128 N. DOUGLAS HIGHWAY; JUNEAU, AK 99801	RATED AK SHWS S109256489 N/A				
0.469 mi. 2475 ft.	Site 2 of 2 in cluster X					
Relative: Higher Actual: 33 ft.	SHWS: File Number: Staff: Facility Status: Latitude: Longitude: Hazard ID: Problem:	1513.26.026 Not reported Cleanup Complete 58.339701 -134.552716 24560 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: Action: DEC Staff: Action Description:	12/12/2001 Update or Other Action Bill Janes Project Manager changed from Horwath to Bruce Wanstall				
	Action Date:11/22/1996Action:Leaking Underground Storage Tank Cleanup Initiated - PetroleumDEC Staff:Cynthia Pring-HamAction Description:Added by the Database Administrator.					
	Action Date: Action: DEC Staff: Action Description:	11/22/1996 Site Closure Approved * Not Assigned 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: Action: DEC Staff: Action Description:	10/30/1996 Site Added to Database * Not Assigned Not reported				
99 NW 1/2-1 0.656 mi. 3466 ft.	USFS DUCK CREEK ADMINIST NW CORNER OF ATLIN DRIVE JUNEAU, AK 99801					
Relative: Higher Actual: 45 ft.	SHWS: File Number: Staff: Facility Status: Latitude: Longitude: Hazard ID: Problem:	1513.38.071 Not reported Cleanup Complete 58.371900 -134.581580 4389 Soil contamination is present at a storage facility owned by the				

EDR ID Number Database(s) EPA ID Number

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.

		5
Actions: Action Date: Action: DEC Staff: Action Description:	4/17/2007 Site Ranked Using the / Anne Marie Palmieri Not reported	AHRM
Action Date: Action: DEC Staff: Action Description:	4/17/2007 Exposure Tracking Moc Anne Marie Palmieri ETM ranking	lel Ranking
Action Date: Action: DEC Staff: Action Description:	4/17/2007 Site Added to Database Mitzi Read Site added to the datab	
Action Date: Action: DEC Staff: Action Description:	removed from around th	eviewed ate. All lead contaminated soil has been ne Quonset huts. Residential cleanup level of Il confirmation samples.
Action Date: Action: DEC Staff: Action Description:	3/10/2009 Exposure Tracking Moc Anne Marie Palmieri A new updated ranking 75374 Facility.	lel Ranking with ETM has been completed for source area
Action Date: Action: DEC Staff: Action Description:	3/10/2009 Cleanup Complete Dete Anne Marie Palmieri Letter sent to the USFS	
Action Date: Action: DEC Staff: Action Description:		date; additional characterization field work 21. Removal scheduled for the spring
Contaminants: Staff:		Not reported
Contaminate Name1: Contaminate Level Descriptio Contaminate Media1:	n1:	USFS Duck Creek Administration < Method 2 Most Stringent Soil
Control Type:		No ICs Required

Control Type: Control Details Description1: Contaminant CTD: No ICs Required Advance approval required to transport soil or groundwater off-site. Not reported

	Г			
Map ID Direction	l	MAP FINDINGS		
Distance	Sito		Dotobooo(a)	EDR ID Number
Elevation	Site		Database(s)	EPA ID Number
	USFS DUCK CREEK ADMINIS	TRATION (Continued)		S108540253
	Contaminant CDR: Comments:	Not reported Not reported		
	Comments.	Not reported		
100 West 1/2-1 0.661 mi. 3488 ft.	BICKNELL 2275 BRANDY LANE JUNEAU / DOUGLAS, AK 998	01	AK SHWS AK SPILLS	S117718815 N/A
Relative:	SHWS:			
Higher Actual:	File Number: Staff:	1513.38.112 Amy Rodman, 9074655368 , amy.rodman@	alaska.gov	
18 ft.	Facility Status:	Active	alaonalgot	
	Latitude: Longitude:	58.364667 -134.603573		
	Hazard ID:	26908		
	Problem:	In September 2017 a release of diesel fuel or return line on a 500-gallon aboveground heat Inc. An estimated 40 gallons of diesel were in surface adjacent to the west end of the shop Initial response actions included removal of of approximately 6 cubic yards of contamina below the ground surface. Excavation activit to protect the structural integrity of the adjac to water infiltration in the excavated area. So from the sidewalls of the excavation only. Di ethylbenzene, xylenes, 1- and 2-methylnaph 1,3,5-trimethylbenzene, and naphthalene ref cleanup levels.	ting oil tank at B released to the g building on site. the tank and exc ted soil up to 2 fe ies were limited i ent buildings and bil samples were esel range organ thalene, 1,2,4- a	icknell round avation eet in order due taken nics, nd
	Actions: Action Date:	9/14/2017		
	Action Date.	9/14/2017 Potentially Responsible Party/State Interest Letter		
	DEC Staff:	Mitzi Read	1-	
	Action Description:	Potentially Responsible Party / State Interest Letter sent Bicknell, Inc. by PPRP staff Kelley Tu.	to	
	Action Date:	8/24/2018		
	Action:	Site Characterization Report Approved		
	DEC Staff: Action Description:	Amy Rodman Site assessment report approval letter mailed to RP, ema	ailed to	
		consultant. Work plan to address groundwater contamina September 28, 2018.	ation due on	
	Action Date:	8/23/2018		
	Action: DEC Staff:	Exposure Tracking Model Ranking Mitzi Read		
	Action Description:	Initial ranking with ETM completed for source area id: 80. Damaged Line on 500-Gallon Diesel Heating Oil Tank	274 name:	
	Action Date: Action: DEC Staff:	8/22/2018 Spill Transferred from Prevention Preparedness and Res Mitzi Read	ponse Program	
	Action Description:	Mitzi Read Spill transferred by PPRP staff Brian Doyle. Spill no. 171 spill date = 9/7/17; substance = diesel; quantity = ~40 ga source = damaged return line on 500-gallon above grour tank.	llons;	

Database(s)

EDR ID Number EPA ID Number

S117718815

BICKNELL (Continued)

Action Date: Action: DEC Staff: Action Description:

8/22/2018 Site Added to Database Mitzi Read A new site has been added to the database

Contaminants: Staff:

Amy Rodman, 9074655368 , amy.rodman@alaska.gov

Contaminate Name1: Contaminate Level Description1: Contaminate Media1: Bicknell Inc Not reported 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 58.36420 Latitude: 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

Map ID	
Direction	
Distance	
Elevation	Site

BICKNELL (Continued)

Quantity Potential:

80

MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

S117718815

	Unit: Cause: Cause Type: Responsible Party: Response: Source Type: Latitude: Longitude:	Gallons Vehicle Leak, All Structural/Mechanical BICKNELL CONSTRUCTION - NO ENTRY, NO ENTRY Field Visit/s Heavy Equipment 58.36420 -134.6040		
Y101 NW 1/2-1 0.691 mi.	VALLEY TESORO 9102 MENDENHALL MALL ROAD JUNEAU, AK 99801		AK SHWS AK LUST	S118973342 N/A
3649 ft.	Site 1 of 2 in cluster Y			
Relative: Higher Actual: 29 ft.	SHWS: File Number: Staff: Facility Status: Latitude: Longitude: Hazard ID: Problem:	1513.26.081 Danielle Duncan, 9074655207 danielle.duncan Active 58.372630 -134.586502 26640 In June 2016, fill ports for four underground stor were upgraded at the Valley Tesoro in Juneau. A conducted when it was determined that gaskets to the drop tubes had been compromised. Relea from overfills, to surrounding soil were documen buckets. Analytical samples were collected at tw locations, one of which exceeded the DEC migra cleanup level for benzene.In late 2017, soil and was sampled and multiple contaminants of conc operations were identified at concentrations abo levels. The investigation is on-going.	age tanks (US A site assessive sealing the final ases of fuel, p ted at four sp vo of the buck ation to ground groundwater vern related to	ment was Il ports ossibly ill et dwater on site fueling
	Actions:	8/20/2017		
	Action Date: Action:	8/29/2017 Update or Other Action		
	DEC Staff:	Danielle Duncan		
	Action Description:	Consultant drilled wells and found some contamination and f product. Investigation is ongoing.	ree	
	Action Date:	8/1/2018		
	Action:	Site Visit		
	DEC Staff: Action Description:	Danielle Duncan Site visit with ISM to discuss soil, groundwater, and potential	vapor	
		intrusion.	vapoi	
	Action Date: Action: DEC Staff: Action Description:	7/3/2018 Site Characterization Workplan Approved Danielle Duncan Approved the Groundwater Monitoring Work Plan prepared to Consulting LLC this date. The current work is to measure the groundwater and to sample all 9 wells and analyze them for range organics (GRO), diesel range organics (DRO), residua organics (RRO), benzene, toluene, ethylbenzene, and xylene and polycyclic aromatic hydrocarbons (PAHs). Please note the according to Appendix E of the 2017 ADEC Field Sampling C	e depth to gasoline al range es (BTEX), hat	

according to Appendix F of the 2017 ADEC Field Sampling Guidance, the

EDR ID Number Database(s) EPA ID Number

VALLEY TESORO (Continued)	
	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: Action Description:	Mitzi Read A new site has been added to the database
	10/00/0017
Action Date: Action:	10/30/2017 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

Y102

Relative: Higher Actual:

Longitude:

29 ft.

NW 1/2-1 0.691 mi. 3649 ft. MAP FINDINGS

EDR ID Number Database(s) EPA ID Number

LEY TESORO (Continued)		S118973342
DEC Staff: Action Description:	Bruce Wanstall 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	
JST:		
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:		
Staff:	Danielle Duncan	
Site Type: Horizontal Datum:	Gas Station WGS84	
Honzontal Datam.		
LEY TESORO	AK SHWS	U004116318
2 MENDENHALL MALL RD EAU, AK 99801	AK UST AK Financial Assurance	N/A
2 of 2 in cluster Y		
HWS:		
File Number:	1513.26.035	
Staff:	Not reported	
Facility Status:	Cleanup Complete	
Latitude:	58.372890 -134 584893	
LODOITHOP.	-1.34 20489.3	

-134.584893

EDR ID Number Database(s) EPA ID Number

VALLEY TESORO (Conti	nued) U004116318
Hazard ID: Problem:	24906 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: Tank Product:	12000 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

Database(s)

EDR ID Number EPA ID Number

U004116318

VALLEY TESORO (Continued)

Tack Capacity:	10000
Tank Product:	Gasoline
Installed Date:	05/08/1976
Regulated Tank:	Yes

Tank ID: **Tank Status:** Tack Capacity: Tank Product: Installed Date: Regulated Tank:

5 Permanently Out of Use 5000 Gasoline 05/08/1976

Yes

Tank ID: Tank Status: Tack Capacity: Tank Product: Installed Date: Regulated Tank: 6 Permanently Out of Use 2000 Gasoline 05/08/1976 Yes

Tank ID: Tank Status: Tack Capacity: Tank Product: Installed Date: Regulated Tank: 7 Permanently Out of Use 2000 Gasoline 05/08/1976 Yes

Tank ID:

Tank Status: Tack Capacity: Tank Product: Installed Date: Regulated Tank: 8 Permanently Out of Use 5000 Diesel 05/08/1984 Yes

Tank ID: Tank Status:

Tack Capacity: Tank Product:

Installed Date:

Regulated Tank:

Currently in Use 6000 Diesel 11/01/1990 Yes

9

Tank ID: **Tank Status:** Tack Capacity: Tank Product:

Installed Date:

Regulated Tank:

10 **Currently in Use** 6000 Gasoline 11/01/1990 Yes

Tank ID: **Tank Status:** Tack Capacity: 11 Currently in Use 6000

Database(s)

EDR ID Number **EPA ID Number**

VALLEY TESORO (Continued)

Tank Product:	Gasoline
Installed Date:	11/01/1990
Regulated Tank:	Yes

AK Financial Assurance 1: Region: 1 Financial Responsibility: Facility ID: Facility Type: Owner ID: Owner Name: Owner Addr: Owner City: Owner State:

WITH PROOF OF FINANCIAL RESPONSIBILITY 455 Gas Station 9520 Delta Western, Inc. 450 Alaskan Way S, Ste 707 Seattle WA 98104 Seattle, WA 98104 07/01/2018 07/01/2019

103 MENDENHALL MALL HOTS 9105 MENDENHALL MALL ROAD JUNEAU, AK 99801

SHWS:

Owner Zip:

Owner City,St,Zip:

Policy Begin Date: Policy End Date:

NW 1/2-1 0.711 mi. 3755 ft.

Relative:

AK SHWS S108670394 N/A

Reidlive.		
Higher	File Number:	1513.38.073
Actual:	Staff:	Not reported
24 ft.	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
		TC5509586.2s Page

U004116318

Database(s)

EDR ID Number EPA ID Number

MENDENHALL MALL HOTS (Continued)

r	IDENHALL MALL HOIS (Cor	ntinued)	S1086
	Action: DEC Staff: Action Description:	Exposure Tracking Model Ranking Mitzi Read Initial ranking completed.	
	Action Date: Action: DEC Staff: Action Description:	8/14/2007 Site Added to Database Mitzi Read Site added to the database.	
	Action Date: Action: DEC Staff: Action Description:	7/30/2007 Spill Transferred from Prevention Preparedness and Response Program Mitzi Read 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: Action: DEC Staff: Action Description:	7/28/2009 Report or Workplan Review - Other Bruce Wanstall 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: Action: DEC Staff: Action Description:	5/9/2008 Update or Other Action Bruce Wanstall ADEC requested that the responsible party submit a workplan for sequential well sampling to establish a concentration trend for regulatory site closure.	
	Action Date: Action: DEC Staff: Action Description:	5/21/2008 Report or Workplan Review - Other Bruce Wanstall 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: Action: DEC Staff: Action Description:	4/1/2010 Update or Other Action Traci Nebeker Check Received \$2138.20 from Law 03/02/10	
	Action Date: Action: DEC Staff: Action Description:	2/3/2010 Update or Other Action Bruce Wanstall DEC assisted the former owner of the Mendenhall Mall HOTs facility with cost recovery questions via electronic mail	
	Action Date: Action:	2/3/2010 Exposure Tracking Model Ranking	

EDR ID Number Database(s) EPA ID Number

S108670394

MENDENHALL MALL HOTS (Continued)

DEC Staff: Action Description:	Bruce Wanstall A new updated ranking with ETM has been completed for source area 75435 Petroleum at HOTs 1, 2, and 3.
Action Date: Action: DEC Staff: Action Description:	12/4/2009 Potentially Responsible Party/State Interest Letter Bruce Wanstall 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: Action: DEC Staff: Action Description:	12/12/2011 Cleanup Complete Determination Issued Bruce Wanstall 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: Action: DEC Staff: Action Description:	11/4/2011 Exposure Tracking Model Ranking Bruce Wanstall A new updated ranking with ETM has been completed for source area 75435 Petroleum at HOTs 1, 2, and 3.
Action Date: Action: DEC Staff: Action Description:	10/4/2007 Site Characterization Workplan Approved Bruce Wanstall 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: Action: DEC Staff: Action Description:	10/16/2007 Meeting or Teleconference Held Bruce Wanstall 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: Action: DEC Staff: Action Description:	1/7/2008 Report or Workplan Review - Other Bruce Wanstall 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

104 SSW 1/2-1 0.779 mi. 4112 ft. Relative: Lower Actual: 2 ft. MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

S108670394

MENDENHALL MALL HOTS (Continued)

plan for a second sell sampling in 2009 is requested.

Contaminants: Staff:	Not reported
Contaminate Name1: Contaminate Level Description1: Contaminate Media1:	Mendenhall Mall HOTs Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation Soil
Control Type: Control Details Description1: Contaminant CTD: Contaminant CDR: Comments:	No ICs Required Advance approval required to transport soil or groundwater off-site. Not reported Not reported 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: Contaminate Level Description1: Contaminate Media1:	Mendenhall Mall HOTs < Table C Groundwater
Control Type: Control Details Description1: Contaminant CTD: Contaminant CDR: Comments:	No ICs Required Advance approval required to transport soil or groundwater off-site. Not reported Not reported 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 RRC 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.
ESIDENCE - MISTY LANE HHOT 0648 MISTY LANE, DOUGLAS ISLAND NOF UNEAU, AK 99801	AK SHWS S106802261 RTH END AK INST CONTROL N/A
SHWS: File Number: Staff: Facility Status: Latitude: Longitude: Hazard ID: Problem:	1513.38.062 IC Unit, 9074655229 dec.icunit@alaska.gov Cleanup Complete - Institutional Controls 58.337222 -134.595278 4063 In October 2004, oil sheen was observed on a slough that collects

A

EDR ID Number Database(s) EPA ID Number

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

	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

Database(s) EPA ID

EDR ID Number EPA ID Number

RESIDENCE - MISTY LANE HHO	T (Continued)	S106802261
	system already set for next follow-up in 2020.	
Action Date: Action: DEC Staff: Action Description:	12/7/2004 Leaking Underground Storage Tank Corrective Action Underway Bruce Wanstall 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: Action: DEC Staff: Action Description:	12/7/2004 Site Ranked Using the AHRM Bruce Wanstall Property is on Gastineau Channel shoreline within one mile of the Mendenhall Wetlands State Game Refuge.	
Action Date: Action: DEC Staff: Action Description:	12/22/2015 Institutional Control Update Kristin Thompson An IC reminder letter was issued to the responsible party on this date.	
Action Date: Action: DEC Staff: Action Description:	12/2/2004 Site Added to Database Bruce Wanstall Heating oil release to surface soil from partially buried storage tank.	
Action Date: Action: DEC Staff: Action Description:	12/2/2004 Spill Transferred from Prevention Preparedness and Response Program Bruce Wanstall PERP File no. 1513.02.283 - spill 04-11-99-277 - transferred 11-16-04. Not reported	
Action Date: Action: DEC Staff: Action Description:	11/10/2010 Institutional Control Record Established Bruce Wanstall 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: Action: DEC Staff: Action Description:	11/10/2010 Cleanup Complete Determination Issued Bruce Wanstall 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	

EDR ID Number Database(s) EPA ID Number

RESIDENCE - MISTY LANE HHOT (Continued)

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 Institutional Control Compliance Review Action: 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 Update or Other Action 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 Exposure Tracking Model Ranking Action: DEC Staff: Bruce Wanstall A new updated ranking with ETM has been completed for source area Action Description: 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 A new updated ranking with ETM has been completed for source area Action Description: 75037 partially buried heating oil tank.

S106802261

TC5509586.2s Page 222

Database(s) E

IDENCE - MISTY LANE HHO	OT (Continued)	S106802261
Action Date: Action: DEC Staff: Action Description:	the off-site migration	Review - Other surface water sampling report data that addresses pathway for heating oil contamination of soil under the residence.
ontaminants:		
Staff:		IC Unit, 9074655229 dec.icunit@alaska.gov
Contaminate Name1: Contaminate Level Descripti	ion1:	Residence - Misty Lane HHOT Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation
Contaminate Media1:		Soil
Control Type: Control Details Description1	:	Signed CS Determination Movement or use of contaminated material (including on site) in a manner that re Regay Potropules will sign and return the Cleanup Complete ICs
Contaminant CTD: Contaminant CDR:		Peggy Petropulos will sign and return the Cleanup Complete-ICs Agreement and Signature Page within 30 days of letter reciept. 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 Descripti	ion1:	Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation
Contaminate Media1:		Soil
Control Type:		Signed CS Determination
Control Details Description1 Contaminant CTD:		Groundwater Use Restrictions Peggy Petropulos will sign and return the Cleanup Complete-ICs
Contaminant CDR:		Agreement and Signature Page within 30 days of letter reciept. The installation of ground water wells on the property requires prior
Comments:		approval from ADEC. 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: Contaminate Level Descripti	ion1:	Residence - Misty Lane HHOT Between Method 2 Migration to Groundwater and Human
Contaminate Media1:		Health/Ingestion/Inhalation Soil
Control Type: Control Details Description1	:	Signed CS Determination Other
Contaminant CTD:		Peggy Petropulos will sign and return the Cleanup Complete-ICs Agreement and Signature Page within 30 days of letter reciept. Required every five years.

EDR ID Number Database(s) EPA ID Number

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: Contaminate Level Description1: Contaminate Media1:	Residence - Misty Lane HHOT Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation Soil
Contaminant CDR:Agreement and Signature Page within 30 days of I Changes surface grade or hydraulic condition coul petroleum bound in surface material on the proper on surface water is a water quality violation. When boom and sorbent pad control measures shall be a the source where sheen is detected and the violati immediately reported to the ADEC. ADEC will com petroleum source (petrogenic) and not a natural or source (biogenic). Sheen may require a work plan cleanup.Comments:Sample analysis of surface water in contact with re indicates that in situ remedial treatment of contami successful in reducing DRO concentration below h	 New Construction Restrictions Peggy Petropulos will sign and return the Cleanup Complete-ICs Agreement and Signature Page within 30 days of letter reciept. 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. 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
Staff:	IC Unit, 9074655229 dec.icunit@alaska.gov
Contaminate Name1: Contaminate Level Description1: Contaminate Media1:	Residence - Misty Lane HHOT Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation Soil
Control Type: Control Details Description1: Contaminant CTD: Contaminant CDR: Comments:	Signed CS Determination Advance approval required to transport soil or groundwater off-site. Peggy Petropulos will sign and return the Cleanup Complete-ICs Agreement and Signature Page within 30 days of letter reciept. Standard condition. 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: Contaminate Level Description1: Contaminate Media1:	Residence - Misty Lane HHOT Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation Soil

Database(s)

EDR ID Number EPA ID Number

S106802261
Signed CS Determination Excavation / Soil Movement Restrictions Peggy Petropulos will sign and return the Cleanup Complete-ICs
Agreement and Signature Page within 30 days of letter reciept. 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. 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.
IC Unit, 9074655229 dec.icunit@alaska.gov
Residence - Misty Lane HHOT
Between Method 2 Migration to Groundwater and Human
Health/Ingestion/Inhalation Soil
Notice of Environmental Contamination (Deed Notice)
Movement or use of contaminated material (including on site) in a manner that re-
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.
Standard condition.
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.
IC Unit, 9074655229 dec.icunit@alaska.gov
Residence - Misty Lane HHOT
Between Method 2 Migration to Groundwater and Human
Health/Ingestion/Inhalation Soil
Notice of Environmental Contamination (Deed Notice)
Groundwater Use Restrictions
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.
The installation of ground water wells on the property requires prior
approval from ADEC. Sample analysis of surface water in contact with remediated soil

TC5509586.2s Page 225

EDR ID Number Database(s) EPA ID Number

RESIDENCE - MISTY LANE HHOT (Continued)

Staff:

Contaminate Name1: Contaminate Level Description1:

Contaminate Media1:

Control Type: Control Details Description1: Contaminant CTD:

Contaminant CDR: Comments:

Staff:

Contaminate Name1: Contaminate Level Description1:

Contaminate Media1:

Control Type: Control Details Description1: Contaminant CTD:

Contaminant CDR:

Comments:

Staff:

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.

IC Unit, 9074655229 dec.icunit@alaska.gov

Residence - Misty Lane HHOT Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation Soil

Notice of Environmental Contamination (Deed Notice) Other

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.

Required every five years.

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.

IC Unit, 9074655229 dec.icunit@alaska.gov

Residence - Misty Lane HHOT Between Method 2 Migration to Groundwater and Human Health/Ingestion/Inhalation Soil

Notice of Environmental Contamination (Deed Notice) New Construction Restrictions

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.

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.

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.

IC Unit, 9074655229 dec.icunit@alaska.gov

Database(s) E

EDR ID Number EPA ID Number

RESIDENCE - MISTY LANE HHOT (Continued) S106802261 Contaminate Name1: Residence - Misty Lane HHOT Between Method 2 Migration to Groundwater and Human Contaminate Level Description1: 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:4063Facility Status:Cleanup Complete - Institutional ControlsAction:Institutional Control Record EstablishedAction Date:11/10/2010File Number:1513.38.062

Hazard ID: 4063 Facility Status: Cleanup Complete - Institutional Controls

Database(s)

EDR ID Number EPA ID Number

RESIDENCE - MISTY LANE HHOT (Continued)

Action:	Institutional Control Compliance Review
Action Date:	10/9/2014
File Number:	1513.38.062

Hazard ID:4063Facility Status:Cleanup Complete - Institutional ControlsAction:Institutional Control UpdateAction Date:12/22/2015File 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

10005 CRAZY HORSE DRIVE, MENDENHALL VALLEY

S106802261

AK SHWS S104893267 AK ENG CONTROLS N/A AK INST CONTROL

4261 ft. Relative: Higher

Actual:

33 ft.

105

West

1/2-1 0.807 mi.

> SHWS: File Number: Staff: Facility Status: Latitude: Longitude: Hazard ID: Problem:

JUNEAU, AK 99801

E&L AUTO

1513.38.022 IC Unit, 9074655229 dec.icunit@alaska.gov Cleanup Complete - Institutional Controls 58.365556 -134.606389

1183

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: DEC Staff:

Action:

Action Date:

Action Date:

Action Description:

9/8/1999 Update or Other Action Sally Schlichting \$200 from the Robinsons.

9/30/1999 Update or Other Action

Database(s)

EDR ID Number EPA ID Number

E&L AUTO (Continued	a) s	510 4
DEC Staff: Action Description	Sally Schlichting \$200 received from the Robinsons.	
Action Date: Action: DEC Staff: Action Description	9/28/2005 Update or Other Action Bill Janes Capping occurred this past August.	
Action Date: Action: DEC Staff: Action Description	9/28/1996 Update or Other Action Sally Schlichting 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: Action: DEC Staff: Action Description	 9/18/2007 Update or Other Action Bruce Wanstall 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: Action: DEC Staff: Action Description	9/18/2000 Update or Other Action Bruce Wanstall EPA funded CERCLIS Site Reassessment changed ranking from High to Lov Priority.	w
Action Date: Action: DEC Staff: Action Description	9/17/2007 Exposure Tracking Model Ranking Bruce Wanstall Initial ETM ranking two source areas on the property, the shop floor sump and the battery salvage debris area	
Action Date: Action: DEC Staff: Action Description	9/12/2003 Meeting or Teleconference Held Bill Janes Telecon meeting with Ridgway to discuss asphalt emulsifcation as a treatment alternative	
Action Date: Action: DEC Staff: Action Description	 9/11/2017 Institutional Control Update Evonne Reese 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: Action: DEC Staff: Action Description	8/27/2007 Update or Other Action Bruce Wanstall Payment received from Dougs Inc to cover ADEC cleanup oversight expenses (\$300.00).	

Database(s)

EDR ID Number EPA ID Number

E&L AUTO (Continued)	
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

EDR ID Number Database(s) EPA ID Number

S104893267

E&L AUTO (Continued) 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 Update or Other Action 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 Update or Other Action Action: DEC Staff: **Evonne Reese** Action Description: Project manager name changed from Wanstall to IC Unit. Action Date: 5/15/2015 Institutional Control Update Action: DEC Staff: Kristin Thompson Action Description: An IC reminder letter was issued to the responsible party on this date. 5/15/2001 Action Date: Action: Update or Other Action DEC Staff: **Bill Janes** Approximte date. Stockpile screening completed. About 300 tons of Action Description: 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 Notice of Violation Action: Sally Schlichting DEC Staff: 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

Database(s)

EDR ID Number EPA ID Number

E&L AUTO (Continued)

Auto (continued)	
	pertinent to the Notice of Violation.
Action Date: Action: DEC Staff: Action Description:	4/4/2001 Meeting or Teleconference Held Bill Janes 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: Action: DEC Staff: Action Description:	4/22/2002 Update or Other Action Bill Janes 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: Action: DEC Staff: Action Description:	4/11/2001 Update or Other Action Bill Janes 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: Action: DEC Staff: Action Description:	4/1/2010 Update or Other Action Traci Nebeker Check Received \$300 from Law 03/18/10
Action Date: Action: DEC Staff: Action Description:	4/1/2002 Update or Other Action Bill Janes 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: Action: DEC Staff: Action Description:	3/4/2002 Update or Other Action Bill Janes Project tickler update - No action at this time. Wait another month to call Nancy.
Action Date: Action: DEC Staff: Action Description:	3/2/2007 Update or Other Action Bruce Wanstall Met with the owner at the site; the asphalt cap is intact; discussed filling data gaps to allow finishing the conditional closure and also about staying in touch with DOL Environmental Section.
Action Date: Action: DEC Staff: Action Description:	3/18/1997 Cleanup Plan Approved Sally Schlichting (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.

Database(s)

E&L AUTO (Continued)		S104893267
Action Date: Action: DEC Staff: Action Description:	3/16/2012 Institutional Control Compliance Review Bruce Wanstall 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: Action: DEC Staff: Action Description:	2/7/2008 Institutional Control Record Established Bruce Wanstall 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: Action: DEC Staff: Action Description:	12/4/2000 Update or Other Action Bill Janes \$200 received by Law.	
Action Date: Action: DEC Staff: Action Description:	12/31/1998 Update or Other Action Sally Schlichting File information sent to Kim Ogle of EPA RCRA at Region 10.	
Action Date: Action: DEC Staff: Action Description:	12/22/2011 Update or Other Action Bruce Wanstall 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: Action: DEC Staff: Action Description:	12/21/2011 Exposure Tracking Model Ranking Bruce Wanstall A new updated ranking with ETM has been completed for source area 78257 Fuel Containment Pad.	

EDR ID Number Database(s) EPA ID Number

E&L AUTO (Continued)

AUTO (Continued)	
Action Date: Action: DEC Staff: Action Description:	12/21/2011 Exposure Tracking Model Ranking Bruce Wanstall A new updated ranking with ETM has been completed for source area 78256 Battery Salvage Debris.
Action Date: Action: DEC Staff: Action Description:	12/20/2001 Update or Other Action Bill Janes 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: Action: DEC Staff: Action Description:	12/16/2005 Update or Other Action Bruce Wanstall 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: Action: DEC Staff: Action Description:	12/10/2001 Update or Other Action Bill Janes 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: Action: DEC Staff: Action Description:	12/1/1994 Meeting or Teleconference Held No Longer Assigned Conference with EPA over remedial action.
Action Date: Action: DEC Staff: Action Description:	11/9/2000 Update or Other Action Bill Janes \$200 check received by Law.
Action Date: Action: DEC Staff: Action Description:	11/8/2000 Update or Other Action Bill Janes \$300 check received by Law.
Action Date: Action: DEC Staff: Action Description:	11/7/2000 Update or Other Action Bill Janes Meeting with Alan Walker representing the Makis'. Timeline for project completion drafted. See site log this date for details.
Action Date: Action: DEC Staff: Action Description:	11/6/1998 Update or Other Action Sally Schlichting Request for screening the stockpile of Pb contaminated soils.
Action Date: Action: DEC Staff:	11/3/2000 Update or Other Action Bill Janes

Database(s)

E&L AUTO (Continued)		6104893267
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, Compensatio	n
·	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	
Action Description.	results. Five samples range from 550 ppm up to 3400 ppm. One sample	
	at 25,000 ppm.	
	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	
ACTION DATE.		

EDR ID Number Database(s) EPA ID Number

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
celon Description.	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.
toton Description.	
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
tetion Description.	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.
	W200 GIEGN IECEIVED BY LAW.
Action Date:	1/20/2012
Action:	Update or Other Action

Database(s)

DEC Staff:	Evonne Reese	
Action Description:		the Recorder's Office.
Action Date:	1/17/2012	
Action:		Determination Issued
DEC Staff:	Bruce Wanstall	
Action Description:		a review of the environmental records associated
		ite located at 10005 Crazy Horse Drive in Juneau,
		e information provided to date, DEC has determined t concentrations remaining on site do not pose an
		human health or the environment and no further
		equired as long as the site is in compliance with
		onal controls. A letter is attached to the site
	record that summari	zes the decision process used to determine the
		s of this site and provides a summary of the
		nsidered in the Cleanup Complete with ICs
	determination.	
Contaminants: Staff:		IC Unit, 9074655229 dec.icunit@alaska.gov
Stall.		C Unit, 9074033229 dec.icum @alaska.gov
Contaminate Name1:		E&L Auto
Contaminate Level Descript	ion1:	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
		control measures including a site diagram and photograph show t
		cap locations. Specific maintenance and regular reporting to the D are requirements that the landowner is must perform in support of
		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. Notificati
		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 Descript	ion1:	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
		control measures including a site diagram and photograph show the
		cap locations. Specific maintenance and regular reporting to the E are requirements that the landowner is must perform in support of
		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

Database(s)

E&L AUTO (Continued)	S104893267
Contaminate Name1: Contaminate Level Description1: Contaminate Media1:	E&L Auto Other Soil
Control Type: Control Details Description1: Contaminant CTD:	Notice of Environmental Contamination (Deed Notice) Other 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.

Database(s)

EDR ID Number EPA ID Number

S104893267

E&L AUTO (Continued)

Comments:

Staff:

Contaminate Name1: Contaminate Level Description1: Contaminate Media1:

Control Type: Control Details Description1: Contaminant CTD:

Contaminant CDR: Comments:

Staff:

Contaminate Name1: Contaminate Level Description1: Contaminate Media1:

Control Type: Control Details Description1: Contaminant CTD:

Contaminant CDR:

Comments:

Staff:

Contaminate Name1: Contaminate Level Description1: Contaminate Media1:

Control Type: Control Details Description1: Contaminant CTD:

Contaminant CDR:

Comments:

Not reported

IC Unit, 9074655229 dec.icunit@alaska.gov

E&L Auto Other Soil

Notice of Environmental Contamination (Deed Notice) Movement or use of contaminated material (including on site) in a manner that rest 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. Standard condition. Not reported

IC Unit, 9074655229 dec.icunit@alaska.gov

E&L Auto Other Soil

Notice of Environmental Contamination (Deed Notice) Restricted to Industrial / Commercial Land Use 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. 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.

Not reported

IC Unit, 9074655229 dec.icunit@alaska.gov

E&L Auto Other Soil

Notice of Environmental Contamination (Deed Notice) Maintenance / Inspection Of Engineering Controls 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. 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. Not reported

Database(s)

EDR ID Number EPA ID Number

S104893267

E&L AUTO (Continued)

Staff:

Contaminate Name1: Contaminate Level Description1: Contaminate Media1:

Control Type: Control Details Description1: Contaminant CTD:

Contaminant CDR:

Comments:

Staff:

Contaminate Name1: Contaminate Level Description1: Contaminate Media1:

Control Type: Control Details Description1: Contaminant CTD:

Contaminant CDR:

Comments:

Staff:

Contaminate Name1: Contaminate Level Description1: Contaminate Media1:

Control Type: Control Details Description1: Contaminant CTD:

Contaminant CDR:

IC Unit, 9074655229 dec.icunit@alaska.gov

E&L Auto > Human Health/Ingestion/Inhalation Soil

Notice of Environmental Contamination (Deed Notice) Excavation / Soil Movement Restrictions

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.

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. the greatest concentration of total lead in soil confirmation samples collected from residual soil at the site was 2,550 mg/kg.

IC Unit, 9074655229 dec.icunit@alaska.gov

E&L Auto > Human Health/Ingestion/Inhalation Soil

Notice of Environmental Contamination (Deed Notice) Advance approval required to transport soil or groundwater off-site. 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. In accordance with 75.325(i) transporting of soil and/or water off-site requires notification to ADEC. Standard condition. the greatest concentration of total lead in soil confirmation samples collected from residual soil at the site was 2,550 mg/kg.

IC Unit, 9074655229 dec.icunit@alaska.gov

E&L Auto > Human Health/Ingestion/Inhalation Soil

Notice of Environmental Contamination (Deed Notice) Other

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.

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

EDR ID Number Database(s) EPA ID Number

E&L A

AUTO (Continued)	S104893267
Comments:	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. 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: Contaminate Media1:	> Human Health/Ingestion/Inhalation Soil
Control Type:	Notice of Environmental Contamination (Deed Notice)
Control Details Description1: Contaminant CTD:	Groundwater Use Restrictions 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
Contaminant CDR:	institutional control agreement with the DEC. Installation of groundwater wells is prohibited without prior approval
Comments:	from ADEC. 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: Contaminate Level Description1: Contaminate Media1:	E&L Auto > Human Health/Ingestion/Inhalation Soil
Control Type: Control Details Description1: Contaminant CTD:	Notice of Environmental Contamination (Deed Notice) When Contaminated Soil is Accessible, Remediation Should Occur 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
Contaminant CDR:	institutional control agreement with the DEC. 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
Comments:	approved work plan. 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: Contaminate Level Description1: Contaminate Media1:	E&L Auto > Human Health/Ingestion/Inhalation Soil
Control Type: Control Details Description1: Contaminant CTD:	Notice of Environmental Contamination (Deed Notice) Movement or use of contaminated material (including on site) in a manner that re 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

Database(s) El

EDR ID Number EPA ID Number

S104893267

E&L AUTO (Continued)

Contaminant CDR: Comments:

Staff:

Contaminate Name1: Contaminate Level Description1: Contaminate Media1:

Control Type: Control Details Description1: Contaminant CTD:

Contaminant CDR:

Comments:

Staff:

Contaminate Name1: Contaminate Level Description1: Contaminate Media1:

Control Type: Control Details Description1: Contaminant CTD:

Contaminant CDR:

Comments:

Staff:

Contaminate Name1: Contaminate Level Description1: Contaminate Media1:

Control Type: Control Details Description1: Contaminant CTD: institutional control agreement with the DEC. Standard condition. the greatest concentration of total lead in soil confirmation samples collected from residual soil at the site was 2,550 mg/kg.

IC Unit, 9074655229 dec.icunit@alaska.gov

E&L Auto > Human Health/Ingestion/Inhalation Soil

Notice of Environmental Contamination (Deed Notice) Restricted to Industrial / Commercial Land Use

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.

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.

the greatest concentration of total lead in soil confirmation samples collected from residual soil at the site was 2,550 mg/kg.

IC Unit, 9074655229 dec.icunit@alaska.gov

E&L Auto > Human Health/Ingestion/Inhalation Soil

Notice of Environmental Contamination (Deed Notice) Maintenance / Inspection Of Engineering Controls 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. 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. the greatest concentration of total lead in soil confirmation samples

collected from residual soil at the site was 2,550 mg/kg.

IC Unit, 9074655229 dec.icunit@alaska.gov

E&L Auto > Human Health/Ingestion/Inhalation Soil

Signed CS Determination Excavation / Soil Movement Restrictions Contaminated Sites Database notation provides notice to landowner (current or prospective) that future land-use cannot be changed from

Database(s)

EDR ID Number EPA ID Number

E&L AUTO (Continued)

Contaminant CDR:

Comments:

Staff:

Contaminate Name1: Contaminate Level Description1: Contaminate Media1:

Control Type: Control Details Description1: Contaminant CTD:

Contaminant CDR:

Comments:

Staff:

Contaminate Name1: Contaminate Level Description1: Contaminate Media1:

Control Type: Control Details Description1: Contaminant CTD:

Contaminant CDR:

Comments:

Staff:

Contaminate Name1: Contaminate Level Description1: Contaminate Media1:

Control Type:

S104893267

industrial-only and disruption of subsurface soil and/or pore water on the property is not allowed without ADEC coordination. 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. the greatest concentration of total lead in soil confirmation samples collected from residual soil at the site was 2,550 mg/kg.

IC Unit, 9074655229 dec.icunit@alaska.gov

E&L Auto > Human Health/Ingestion/Inhalation Soil

Signed CS Determination

Advance approval required to transport soil or groundwater off-site. 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. In accordance with 75.325(i) transporting of soil and/or water off-site requires notification to ADEC. Standard condition. the greatest concentration of total lead in soil confirmation samples collected from residual soil at the site was 2,550 mg/kg.

IC Unit, 9074655229 dec.icunit@alaska.gov

E&L Auto > Human Health/Ingestion/Inhalation Soil

Signed CS Determination Other

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. 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.

the greatest concentration of total lead in soil confirmation samples collected from residual soil at the site was 2,550 mg/kg.

IC Unit, 9074655229 dec.icunit@alaska.gov

E&L Auto > Human Health/Ingestion/Inhalation Soil

Signed CS Determination

Database(s)

E&L AUTO (Continued)	S104893267
Control Details Description1: Contaminant CTD:	Groundwater Use Restrictions 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: Contaminate Level Description1: Contaminate Media1:	E&L Auto > Human Health/Ingestion/Inhalation Soil
Control Type: Control Details Description1: Contaminant CTD:	Signed CS Determination When Contaminated Soil is Accessible, Remediation Should Occur 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
Contaminant CDR:	the property is not allowed without ADEC coordination. 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
Comments:	approved work plan. 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: Contaminate Level Description1: Contaminate Media1:	E&L Auto > Human Health/Ingestion/Inhalation Soil
Control Type: Control Details Description1: Contaminant CTD:	Signed CS Determination Movement or use of contaminated material (including on site) in a manner that res 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: Comments:	Standard condition. 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: Contaminate Level Description1: Contaminate Media1:	E&L Auto > Human Health/Ingestion/Inhalation Soil
Control Type: Control Details Description1: Contaminant CTD:	Signed CS Determination Restricted to Industrial / Commercial Land Use 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

Database(s)

EDR ID Number EPA ID Number

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 > Human Health/Ingestion/Inhalation Contaminate Level Description1: 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. IC Unit, 9074655229 dec.icunit@alaska.gov Staff: Contaminate Name1: E&L Auto Contaminate Level Description1: Other Contaminate Media1: Soil Signed CS Determination Control Type: 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

EDR ID Number Database(s) EPA ID Number

E&L AUTO (Continued)

Contaminant CDR:

Comments:

Staff:

Contaminate Name1: Contaminate Level Description1: Contaminate Media1:

Control Type: Control Details Description1: Contaminant CTD:

Contaminant CDR:

Comments:

Staff:

Contaminate Name1: Contaminate Level Description1: Contaminate Media1:

Control Type: Control Details Description1: Contaminant CTD:

Contaminant CDR:

Comments:

Staff:

Contaminate Name1: Contaminate Level Description1: Contaminate Media1:

Control Type: Control Details Description1: Contaminant CTD:

S104893267

industrial-only and disruption of subsurface soil and/or pore water on the property is not allowed without ADEC coordination. In accordance with 75.325(i) transporting of soil and/or water off-site requires notification to ADEC. Standard condition. Not reported

IC Unit, 9074655229 dec.icunit@alaska.gov

E&L Auto Other Soil

Signed CS Determination Other

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. 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. Not reported

IC Unit, 9074655229 dec.icunit@alaska.gov

E&L Auto Other Soil

Signed CS Determination

Groundwater Use Restrictions

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. Installation of groundwater wells is prohibited without prior approval from ADEC.

Not reported

IC Unit, 9074655229 dec.icunit@alaska.gov

E&L Auto Other Soil

Signed CS Determination

When Contaminated Soil is Accessible, Remediation Should Occur 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.

Database(s)

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 preparty is not allowed without ADEC apardiaction
Contaminant CDR:	the property is not allowed without ADEC coordination. 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

EDR ID Number Database(s) EPA ID Number

E&L AUTO (Continued)

S104893267 damaged or disruption of its integrity becomes necessary.

Comments: Not reported ENG CONTROLS: 1513.38.022 File Number: **Cleanup Complete - Institutional Controls** Facility Status: 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 1513.38.022 File Number: Hazard ID: 1183 **Cleanup Complete - Institutional Controls** Facility Status: Action: Institutional Control Compliance Review Action Date: 3/16/2012 File Number: 1513.38.022 Hazard ID: 1183 **Cleanup Complete - Institutional Controls** Facility Status: 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 1513.38.022 File Number: 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** Institutional Control Update Action: 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 Cleanup Complete - Institutional Controls Facility Status: Action: Institutional Control Update

Map ID Direction		MAP FINDINGS		
Distance Elevation	Site		Database(s)	EDR ID Number EPA ID Number
	E&L AUTO (Continued)			S104893267
	Action Date: 10/6/20 ² File Number: 1513.38			
106 NNW 1/2-1 0.859 mi. 4535 ft.	RESIDENCE - NANCY STREET 8905 NANCY STREET JUNEAU, AK 99801	r JNU	AK SHWS	S107504671 N/A
Relative: Higher Actual: 31 ft.	SHWS: File Number: Staff: Facility Status: Latitude: Longitude: Hazard ID: Problem:	1513.38.065 Not reported Cleanup Complete 58.375556 -134.577500 3710 Heating oil spill estimated at 300 gallons w toppled over. Sixty cubic yards of contamir and remediated off-site. A small amount of trapped beneath the foundation of the neig	nated soil was exca	avated was
	Action S: Action Date: Action: DEC Staff: Action Description: Action Date: Action: DEC Staff: Action Description: Action Date: Action: DEC Staff: Action Description: Action Date: Action Description:	 9/28/2005 Site Added to Database Bruce Wanstall surface heating oil spill estimated at 300 gallons 9/28/2005 GIS Position Updated Bruce Wanstall Lat long data entered for residence. Metadata include Tweb utility data projected on USGS 1:24,000 scale topol saved at jnusvr G:\\SPAR\\Spar-Contaminated Sites\\3 (Contaminated Sites)\\1513 Juneau\\1513.38.065 Resides Spill. Accuracy estimated at 100 meters. 9/28/2005 Spill Transferred from Prevention Preparedness and ReBruce Wanstall Spill 01-1199-086-04, file1513-02-244 5/20/2001 Cleanup Plan Approved Bruce Wanstall The DEC approved transport of an estimated volume of petroleum contaminated material to the Juneau Lance where the soil was treated by incineration. Final placen 	ographic map 8 Case Files dence Nancy Stree esponse Program f two cubic yards ffill facility	et
	Action Date: Action: DEC Staff: Action Description:	soil was for solid waste cover material at the landfill. 4/10/2001 Cleanup Plan Approved Bruce Wanstall An estimated volume of 60 cubic yards of contaminated transported with approval of the DEC to United Soil Re facility in Juneau where the soil was thermally remedia released by the DEC for final placement at a non-speci environmentally non-sensitive location.	d material was cycling ted and	

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NW

1/2-1 0.869 mi. 4590 ft. Relative: Higher Actual: 20 ft.

Latitude: Longitude: Hazard ID:

Problem:

MAP FINDINGS

EDR ID Number Database(s) EPA ID Number

RESIDENCE - NANCY STREET JNU (Continued)

IDENCE - NANCI SINCEI			310/3040/1
Action Date:	11/3/2005		
Action:	Site Characterization R	Penort Approved	
		report Approved	
DEC Staff:	Bruce Wanstall		
Action Description:		al and Site Assessment Report reviewed; Cleanup	
	Final Report approved.		
Action Date:	11/22/2005		
Action:	Site Closure Approved		
DEC Staff:	Bruce Wanstall		
Action Description:		to responsible party; copied to consultant	
· · · · · · · · · · · · · · · · · · ·		ence. Letter saved at G:\\SPAR\\Spar-Contaminate	d
		Contaminated Sites)\\1513 Juneau\\1513.38.065	
	Residence Nancy Stree		
Action Date:	10/21/2005		
Action:	Cleanup Level(s) Appre	oved	
DEC Staff:	Bruce Wanstall	oved	
Action Description:		eport from SART file transfer recovery project	
		y data for QA/QC. Method Two, Tables B1 and B2	,
		ter 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 ass	essment has ingestion, inhalation, and dermal	
	pathways complete for	residential land use scenario. Area serviced by	
	the City and Borough c	of Juneau Public Water System.	
ontaminants: Staff:		Not reported	
Stall.		Not reported	
Contaminate Name1:		Residence - Nancy Street Jnu	
Contaminate Level Descripti	on1:	Not reported	
Contaminate Media1:		Not reported	
Control Type:		No ICs Required	
Control Details Description1	:	Advance approval required to transport soil or g	roundwater off-sit
Contaminant CTD:		Not reported	
Contaminant CDR:		Not reported	
Comments:		For more information about this site, contact DE	C at (907) 465-53
RBEND / DIMOND PARK		AK SHWS	
RIVERSIDE DRIVE, 1/2 MIL	E NORTH OF EGAN DR.	AK INST CONTROL	N/A
EAU, AK 99801			
HWS:			
File Number:	1513.38.0	07	
Staff:)74655229 dec.icunit@alaska.gov	
Facility Status:	Cleanup C	Complete	
Latitude:	58.376300		
·····			

-134.592000 299

Buried drums of asphalt uncovered, soil contamination, sampling was

EDR ID Number Database(s) EPA ID Number

RIVERBEND / DIMOND PARK	(Continued) S10489328
	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

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EDR ID Number Database(s) EPA ID Number

RIVERBEND / DIMOND PARK (Continued)

S104893282

	oninacaj
	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: Action Description:	Sally Schlichting Public information fact sheet distributed to parents and public.
Action Description.	Public information fact sheet distributed to parents and public.
Action Date:	8/1/1996
Action: DEC Staff:	Update or Other Action 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: DEC Staff:	Update or Other Action
Action Description:	Sally Schlichting 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: DEC Staff:	Update or Other Action Sally Schlichting
Action Description:	Revised approval of CAP.
Action Date: Action:	7/27/2018 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.

EDR ID Number Database(s) EPA ID Number

RIVERBEND / DIMOND PARK (Continued)

ERBEND / DIMOND PARK (Continued)				
Action Date: Action: DEC Staff: Action Description:	7/23/2018 Meeting or Teleconference Held Danielle Duncan Met with J. Ginter of Nortech to discuss the work plan to excavate tar seep locations. Work planned for this Friday.			
Action Date: Action: DEC Staff: Action Description:	7/22/1999 Update or Other Action Sally Schlichting June 99 test pit data; January 99 geophysical survey results received. Not reported			
Action Date: Action: DEC Staff: Action Description:	6/30/2000 Site Characterization Workplan Approved Bill Janes 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: Action: DEC Staff: Action Description:	6/25/2018 Workplan Requested Danielle Duncan Site re-opened and a work plan has been requested.			
Action Date: Action: DEC Staff: Action Description:	6/25/2018 Site Visit Danielle Duncan 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: Action: DEC Staff: Action Description:	6/25/1996 Interim Removal Action Approved Sally Schlichting 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: Action: DEC Staff: Action Description:	6/24/1998 Update or Other Action Sally Schlichting 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: Action: DEC Staff: Action Description:	6/21/2018 Site Reopened Danielle Duncan 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			

EDR ID Number Database(s) EPA ID Number

RIVERBEND / DIMOND PARK (Continued)

Action Date: Action: DEC Staff: Action Description:	6/2/1997 Update or Other Action Sally Schlichting 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: Action: DEC Staff: Action Description:	5/8/2003 Institutional Control Record Established Bill Janes 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: Action: DEC Staff: Action Description:	4/27/2000 Meeting or Teleconference Held Bill Janes Teleconference with Emerald, CBJ, Minter and Baxter regarding comments on draft workplan and Minter's April 24 reply letter.
Action Date: Action: DEC Staff: Action Description:	4/2/1998 Update or Other Action Sally Schlichting Remediation plan and pilot study to evaluate effectiveness of Enzyme Treatment Technology approved.
Action Date:	4/13/2000

EDR ID Number Database(s) EPA ID Number

RIVERBEND / DIMOND PARK (Continued)

t	RBEND / DIMOND PARK (C	ontinued)	S104
	Action: DEC Staff: Action Description:	Update or Other Action Sally Schlichting Letter requesting changes to November 1, 1999 draft workplan sent to Minter.	
	Action Date: Action: DEC Staff: Action Description:	3/8/2001 Update or Other Action Mike Jaynes Cost Recovery received for \$1439.01 from Red Samm Construction.	
	Action Date: Action: DEC Staff: Action Description:	3/3/2004 Update or Other Action Bill Janes Email to CBJ telling them that property development tag may be removed at this time. Asked for response on their decision.	
	Action Date: Action: DEC Staff: Action Description:	2/5/2003 Update or Other Action Bill Janes Final cleanup report received from Steve Minter incorporating requested modifications to the draft.	
	Action Date: Action: DEC Staff: Action Description:	2/3/2003 Update or Other Action Bill Janes 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: Action: DEC Staff: Action Description:	2/28/2003 Update or Other Action Bill Janes 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: Action: DEC Staff: Action Description:	2/22/2002 Update or Other Action Mike Jaynes 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: Action: DEC Staff: Action Description:	2/19/2004 Long Term Monitoring Complete Bill Janes 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: Action: DEC Staff:	2/13/2003 Update or Other Action Bill Janes	

EDR ID Number Database(s) EPA ID Number

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: Action: DEC Staff: Action Description:	12/18/1998 Update or Other Action Sally Schlichting Stockpile plan II approval to move and stockpile soil at property near Montana Creek.
Action Date: Action: DEC Staff: Action Description:	12/17/1993 Update or Other Action Sally Schlichting 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: Action: DEC Staff: Action Description:	12/13/2013 Institutional Control Compliance Review Evonne Reese IC review conducted. According to the 2/19/2004 action regarding groundwater sampling, the ICs can be removed.
Action Date: Action: DEC Staff: Action Description:	12/13/2013 Institutional Control Record Removed Evonne Reese 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: Action: DEC Staff: Action Description:	11/16/2000 Update or Other Action Bill Janes 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: Action: DEC Staff: Action Description:	10/8/1996 Update or Other Action Sally Schlichting Score updated on database to reflect new information.
Action Date: Action: DEC Staff: Action Description:	10/7/1999 Update or Other Action Sally Schlichting FOIA request from an Alan Stanhope for file copy was filled.
Action Date: Action: DEC Staff: Action Description:	10/4/2000 Update or Other Action Bill Janes Discussed plan with Minter. See details on my site log this date.

EDR ID Number Database(s) EPA ID Number

RIVERBEND / DIMOND PARK (Continued)

Action Date: Action: DEC Staff:	10/23/2003 Update or Other Action 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: DEC Staff:	Meeting or Teleconference Held 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: Action Description:	Sally Schlichting 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: Action Description:	Sally Schlichting (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: Action Description:	Sally Schlichting Undated draft workplan (September 99) received from Steve Minter.
Action Date:	10/1/1987
Action:	Preliminary Assessment Approved
DEC Staff: Action Description:	No Longer Assigned 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: DEC Staff:	Update or Other Action 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: DEC Staff:	Update or Other Action
Action Description:	Sally Schlichting ADEC request for CAP addressing a number of issues.
Contaminants:	
Staff:	IC Unit, 9074655229 dec.icunit@alaska.gov

Database(s)

EDR ID Number EPA ID Number

S104893282

RIVERBEND / DIMOND PARK (Continued)

Contaminate Name1: Contaminate Level Description1: Contaminate Media1:

Control Type: Control Details Description1: Contaminant CTD: Contaminant CDR: Comments: Riverbend / Dimond Park < Table C Groundwater

No ICs Required Advance approval required to transport soil or groundwater off-site. Not reported Not reported 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:299Facility Status:Cleanup CompleteAction:Institutional Control Compliance ReviewAction Date:12/13/2013File Number:1513.38.007

Hazard ID:299Facility Status:Cleanup CompleteAction:Institutional Control Record RemovedAction Date:12/13/2013File Number:1513.38.007

108 NW 1/2-1 0.902 mi. 4762 ft.	RESIDENCE - 2822 MARSHA AVENUE 2822 MARSHA AVENUE JUNEAU, AK 99801	AK SHWS S118454846 N/A
Relative: Higher Actual: 25 ft.	SHWS: File Number: Staff: Facility Status: Latitude: Longitude: Hazard ID: Problem:	1513.38.097 Amy Rodman, 9074655368 amy.rodman@alaska.gov Active 58.375368 -134.583907 26468 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

tank at that time, but the existing fuel lines were connected to the new tank. An undetermined amount of diesel was released to the grour 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.

Database(s)

EDR ID Number EPA ID Number

RESIDENCE - 2822 MARSHA AVENUE (Continued)

S118454846

Actions:	- (22.42		
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 Work plan request letter mailed to RP via USPS C	Cortified mail Work	
Action Description:			
	plan due on updated deadline of September 17, 2	016.	
Action Date:	2/27/2017		
Action:	Potentially Responsible Party/State Interest Letter		
DEC Staff:	Christy Howard		
Action Description:	Potentially responsible party/state interest letter se	end to landowner	
	with request for updated information.		
Action Date:	11/6/2015		
Action:	Spill Transferred from Prevention Preparedness a	nd Rosponso Program	
DEC Staff:	Mitzi Read	nd Response Flogram	
Action Description:	Spill transferred by PPR staff Bob Mattson. Spill n	0 13110010601	
Action Description.	spill date = 7/15/13; substance = diesel; quantity =		
	source = fuel line from heating oil tank.	~230 gallolis,	
	source = ruer line from heating on 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	a id: 79837 name:	
	Heating Oil Tank Fuel Line		
Contaminants:			
Staff:	Amy Rodman, 90746553	68 amy.rodman@alaska.gov	
Contaminate Name1:	Residence - 2822 Marsh	a Avenue	
Contaminate Level Descript	on1: Not reported		
Contaminate Media1:	Not reported		
Control Type:	Not reported		
Control Details Description1	•		
Contaminant CTD:	Not reported		
Contaminant CDR:	Not reported		
Comments:	Not reported		

Not reported

Contaminant CTD: Contaminant CDR: Comments:

Database(s)

EDR ID Number EPA ID Number

109 NW 1/2-1 0.933 mi. 4925 ft.	RESIDENCE - 2921 GLACIERWOO 2921 GLACIERWOOD COURT JUNEAU, AK 99801	COURT AK SHW	S S117849273 N/A
Relative: Higher Actual: 23 ft.	SHWS: File Number: Staff: Facility Status: Latitude: Longitude: Hazard ID: Problem:	1513.38.094 Danielle Duncan, 9074655207 danielle.duncan@alaska.g Active 58.375628 -134.589056 26331 On November 26, 2013 a 550-gallon aboveground heating removed from the residence at 2921 Glacierwood Court ir inspection the tank was determined to have several pinho tank had been filled but then was out a couple months late sure if it was stolen or leaked out. The aboveground stora (AST) was replaced with another AST. Approximately 24 of petroleum-contaminated soil were removed and sample re remaining soil contamination is below DEC cleanup levels analysis indicates diesel range organics (DRO) and benze present above the DEC groundwater cleanup levels.On Ju Nortech mobilized to the site and collected three groundw from the three monitoring wells. The results of these analy indicated that monitoring wells TSP-1 and TSP-3 were fre petroleum contamination above ADEC cleanup levels. Ho monitoring well TSP-2, west of the footprint of the old AST 6 inches of free product in it and had a concentration of D mg/L) greatly exceeding the ADEC cleanup level of 1.5 m data indicate that the groundwater on site has substantial contamination and requires more time and/or treatment be can be closed out on the ADEC database. Update: 1/25/1 monitoring continues and product is still being recovered. petroleum skimmer will be installed this spring.	oil tank was Juneau. Upon e leaks. The r - not ge tank ubic yards of sults indicate Groundwater ne are ne 22, 2015 ater samples ses e from vever, had about RO (1,420 J/L. These DRO fore the site ': Groundwater
	Action: DEC Staff: Action Description: Action Date: Action: DEC Staff: Action Description:	20/2016 odate or Other Action unielle Duncan ec'd an email from the RP stating that Nortech is writing up a bort on groundwater flow at the site. 7/2015 eport or Workplan Review - Other unielle Duncan ec'd Nortech's report titled RE: 2921 Glacierwood Court, Juneau, aska Heating Oil Release. 7/2015	
	DEC Staff: Action Description: Action Date: Action: DEC Staff: Action Description:	posure Tracking Model Ranking inielle Duncan new updated ranking with ETM has been completed for source area 725 550-Gallon Heating Oil AST. 7/2015 e Characterization Report Approved inielle Duncan proved Nortech's groundwater monitoring report titled RE: 2921 acierwood Court, Juneau, Alaska Heating Oil Release. The results	

EDR ID Number Database(s) EPA ID Number

	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: Action: DEC Staff: Action Description:	7/7/2016 Update or Other Action Danielle Duncan Spoke to the homeowner and they will request a groundwater flow direction study. Also, product is still being removed using sorbents
Action Date: Action: DEC Staff: Action Description:	from the monitoring well closest to the street. 7/3/2018 Site Characterization Report Approved Danielle Duncan 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: Action: DEC Staff: Action Description:	7/13/2015 Update or Other Action Danielle Duncan 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: Action: DEC Staff: Action Description:	5/8/2018 Update or Other Action Danielle Duncan Site/right-of-way access has been granted and additional groundwater monitoring wells will be installed.
Action Date: Action: DEC Staff: Action Description:	5/2/2017 Site Characterization Report Approved Danielle Duncan 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 cleanu level of 1.5 milligrams per liter (mg/L). These concentrations ranged from 2.4 - 288 mg/L DRO.
Action Date: Action: DEC Staff: Action Description:	5/16/2016 Update or Other Action Danielle Duncan Sent a letter today requesting that a groundwater flow investigation

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EDR ID Number Database(s) EPA ID Number

Action Date:	4/5/2016	
Action: DEC Staff:	Site Visit Danielle Duncan	
Action Description:	Visited the site today with Nortech and observed the locations of the	
Action Description.	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 Spake to RP today, they plan on having the trees out down to access	
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	

EDR ID Number Database(s) EPA ID Number

RESIDENCE - 2921 GLACIERWO		
	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 sind June of 2014 when it was first sampled.	ce
Action Date: Action: DEC Staff: Action Description:	2/8/2016 Report or Workplan Review - Other Danielle Duncan 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: Action: DEC Staff: Action Description:	2/7/2018 Meeting or Teleconference Held Danielle Duncan 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: Action: DEC Staff: Action Description:	2/5/2016 Report or Workplan Review - Other Danielle Duncan Rec'd 14-1043 Product Removal January16this date submitted by Nortech.	
Action Date: Action: DEC Staff: Action Description:	2/5/2015 Update or Other Action Danielle Duncan Introduced myself to RP and discussed decreasing groundwater contamination and future quarterly sampling.	
Action Date: Action: DEC Staff: Action Description:	12/1/2015 Report or Workplan Review - Other Danielle Duncan Rec'd RE: 2921 Glacierwood Court, Juneau, Alaska, Monitoring Well Activities this date.	
Action Date: Action: DEC Staff: Action Description:	11/4/2015 Report or Workplan Review - Other Danielle Duncan Rec'd quarterly report October 2015, this date.	
Action Date: Action: DEC Staff: Action Description:	11/27/2013 Potentially Responsible Party/State Interest Letter Mitzi Read Potentially responsible party / State interest letter sent to landowner by PERP staff Bob Mattson.	
Action Date:	11/20/2015	

EDR ID Number Database(s) EPA ID Number

RESIDENCE - 2921 GLACIERWOOD COURT (Continued) Action: Site Characterization Report Approved DEC Staff: Danielle Duncan Sent approval letter re: Nortech's RE: 2921 Glacierwood Court, Action Description: 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 Update or Other Action 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 A new updated ranking with ETM has been completed for source area Action Description: 79725 550-Gallon Heating Oil AST. Action Date: 10/1/2015 Site Characterization Report Approved Action: DEC Staff: Danielle Duncan Rec'd the letter report titled: RE: 2921 Glacierwood Court, Juneau. Action Description: Alaska Monitoring Well Activities, dated October 1st 2015, and

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RESIDENCE - 2921 GLACIERWOOD COURT (Continued)

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	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: Action: DEC Staff: Action Description:	1/8/2016 Report or Workplan Review - Other Danielle Duncan Rec'd RE: 2921 Glacierwood Court, Juneau, Alaska, Monitoring Well Activities this date.
Action Date: Action: DEC Staff: Action Description:	1/6/2016 Update or Other Action Danielle Duncan The initial (past) excavation at the site was conducted to the extent of the house foundation and was limited by trees/roots.
Action Date: Action: DEC Staff: Action Description:	1/5/2016 Report or Workplan Review - Other Danielle Duncan 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: Action: DEC Staff: Action Description:	1/5/2015 Spill Transferred from Prevention Preparedness and Response Program Mitzi Read 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: Action: DEC Staff: Action Description:	1/25/2018 Report or Workplan Review - Other Danielle Duncan 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).

EDR ID Number Database(s) EPA ID Number

RESIDENCE - 2921 GLACIERWOOD COURT (Continued)

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Action Date: Action: DEC Staff: Action Description:	1/14/2015 Exposure Tracking Model Ranking Mitzi Read 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

A new site has been added to the database

Contaminants:

Action Description:

Staff:

Danielle Duncan, 9074655207 danielle.duncan@alaska.gov

Contaminate Name1: Contaminate Level Description1: Contaminate Media1:

Control Type: Control Details Description1: Contaminant CTD: Contaminant CDR: Comments: Residence - 2921 Glacierwood Court Not reported Not reported

Not reported Not reported Not reported Not reported 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

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 3 Telephone 215-814-5418

EPA Region 4 Telephone 404-562-8033

EPA Region 5 Telephone 312-886-6686

EPA Region 10 Telephone 206-553-8665 EPA Region 6 Telephone: 214-655-6659

EPA Region 7 Telephone: 913-551-7247

EPA Region 8 Telephone: 303-312-6774

EPA Region 9 Telephone: 415-947-4246

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	Source: EPA
Date Data Arrived at EDR: 03/28/2018	Telephone: 800-424-9346
Date Made Active in Reports: 06/22/2018	Last EDR Contact: 12/03/2018
Number of Days to Update: 86	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: 03/01/2018Source: Environmental Protection AgencyDate Data Arrived at EDR: 03/28/2018Telephone: (206) 553-1200Date Made Active in Reports: 06/22/2018Last EDR Contact: 12/03/2018Number of Days to Update: 86Next Scheduled EDR Contact: 01/07/2019Data 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	Source: Department of the Navy
Date Data Arrived at EDR: 10/25/2018	Telephone: 843-820-7326
Date Made Active in Reports: 12/07/2018	Last EDR Contact: 10/15/2018
Number of Days to Update: 43	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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/28/2018	Telephone: 703-603-0695
Date Made Active in Reports: 09/14/2018	Last EDR Contact: 11/28/2018
Number of Days to Update: 17	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	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 09/27/2018	Telephone: 907-451-2143
Date Made Active in Reports: 10/24/2018	Last EDR Contact: 11/07/2018
Number of Days to Update: 27	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	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 08/10/2018	Telephone: 907-465-5301
Date Made Active in Reports: 08/20/2018	Last EDR Contact: 11/14/2018
Number of Days to Update: 10	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	Source: EPA, Region 5
Date Data Arrived at EDR: 05/18/2018	Telephone: 312-886-7439
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 10/26/2018
Number of Days to Update: 63	Next Scheduled EDR Contact: 02/04/2019
	Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage LUSTs on Indian land in Alaska, Idaho, Oregor		
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 Ta LUSTs on Indian land in Florida, Mississippi ar		
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 Ta LUSTs on Indian land in Arizona, California, Ne		
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 Ta LUSTs on Indian land in Iowa, Kansas, and Ne		
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 Ta LUSTs on Indian land in New Mexico and Okla		
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 Ta A listing of leaking underground storage tank lo		
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	

State and tribal registered storage tank lists

FEM	A UST: Underground Storage Tank Listing A listing of all FEMA owned underground storage	ge 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		s are regulated under Subtitle I of the Resource Conservation and Recovery ate department responsible for administering the UST program. Available
	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	e 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
INDI	AN UST R10: Underground Storage Tanks on I The Indian Underground Storage Tank (UST) of Iand in EPA Region 10 (Alaska, Idaho, Oregon,	latabase provides information about underground storage tanks on Indian
	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
INDI		dian Land latabase provides information about underground storage tanks on Indian ⁄aii, 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
INDI		dian Land latabase provides information about underground storage tanks on Indian th Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).
	Date of Government Version: 04/25/2018	Source: EPA Region 8

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	Source: EPA
Date Data Arrived at EDR: 05/18/2018	Telephone:
Date Made Active in Reports: 07/20/2018	Last EDR Co
Number of Days to Update: 63	Next Schedu
, ,	Data Data a

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	Source: EPA Region 5
Date Data Arrived at EDR: 05/18/2018	Telephone: 312-886-6136
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 10/26/2018
Number of Days to Update: 63	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	Source: EPA Region 7
Date Data Arrived at EDR: 05/18/2018	Telephone: 913-551-7003
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 10/26/2018
Number of Days to Update: 63	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	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 09/27/2018	Telephone: 907-451-2143
Date Made Active in Reports: 10/24/2018	Last EDR Contact: 11/07/2018
Number of Days to Update: 27	Next Scheduled EDR Contact: 02/25/2019
	Data Release Frequency: Semi-Annually

	Operation
Inst Control: Contaminated Sites with Institutional Contaminated sites that have institutional con	
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 Listin A listing of voluntary cleanup priority sites loc	5
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 Prog	ram.
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 Lisitn A listing of voluntary cleanup priority sites loc	
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	
PROMNETED St. Identified and/or Proposed Prov	unfielde Ottee

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 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.

	A listing of Recycling centers in the state of Ala	15/0.
	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
IND	IAN ODI: Report on the Status of Open Dumps Location of open dumps on Indian land.	on Indian Lands
	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 Subtitle D Criteria.	that does not comply with one or more of the Part 257 or Part 258
	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
DEE	BRIS REGION 9: Torres Martinez Reservation II A listing of illegal dump sites location on the To County and northern Imperial County, Californi	prres Martinez Indian Reservation located in eastern Riverside
	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 Li	and 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	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 02/13/2018	Telephone: 907-269-7543
Date Made Active in Reports: 03/21/2018	Last EDR Contact: 11/16/2018
Number of Days to Update: 36	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	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 03/27/2018	Telephone: 202-366-4555
Date Made Active in Reports: 06/08/2018	Last EDR Contact: 09/25/2018
Number of Days to Update: 73	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	Source: Department of Environmental Conservation Telephone: 907-465-5242 Last EDR Contact: 10/15/2018
Number of Days to Update: 6	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: 07/21/2010Source: FirstSearchDate Data Arrived at EDR: 01/03/2013Telephone: N/ADate Made Active in Reports: 02/08/2013Last EDR Contact: 01/03/2013Number of Days to Update: 36Next Scheduled EDR Contact: N/AData 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	Sourc
Date Data Arrived at EDR: 10/04/2018	Telep
Date Made Active in Reports: 11/16/2018	Last E
Number of Days to Update: 43	Next

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 Pa	rties	
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 gener of PCB's who are required to notify the EPA o	rators, transporters, commercial storers and/or brokers and disposers f 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	
	m (ICIS) supports the information needs of the national enforcement e needs of the National Pollutant Discharge Elimination System (NPDES)	
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	
	y Commission and contains a list of approximately 8,100 sites which ch are subject to NRC licensing requirements. To maintain currency, s.	
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	

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	Source: Department of Energy
Date Data Arrived at EDR: 08/07/2009	Telephone: 202-586-8719
Date Made Active in Reports: 10/22/2009	Last EDR Contact: 12/05/2018
Number of Days to Update: 76	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 Belease Frequency: Varies
	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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/30/2017	Telephone: 202-566-0517
Date Made Active in Reports: 12/15/2017	Last EDR Contact: 10/26/2018
Number of Days to Update: 15	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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2007
Number of Days to Update: 40	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	e 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
INDI	AN RESERV: Indian Reservations This map layer portrays Indian administered la than 640 acres.	nds of the United States that have any area equal to or greater
	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
UMI	RA: Uranium Mill Tailings Sites	for fodoral government use in national defense programs. When the mills

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 or ar melybdonum) and ponferrous (Nonferrous metal mines are facilities that extract performus metals, such		

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).

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	Source: Dep
Date Data Arrived at EDR: 06/19/2018	Telephone:
Date Made Active in Reports: 09/14/2018	Last EDR Co
Number of Days to Update: 87	Next Schedu
	Data Releas

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

9

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 09/02/2018SDate Data Arrived at EDR: 09/05/2018TDate Made Active in Reports: 09/14/2018LNumber of Days to Update: 9N

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

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.

Telephone: 907-269-7802

Telephone: 907-465-5480

Last EDR Contact: 09/18/2018

Data Release Frequency: Varies

Last EDR Contact: 09/24/2018

Data Release Frequency: Varies

Next Scheduled EDR Contact: 01/07/2019

Next Scheduled EDR Contact: 12/31/2018

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

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

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

Source: Department of Environmental Conservation

Source: Department of Environmental Conservation

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	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 07/01/2013	Telephone: N/A
Date Made Active in Reports: 01/17/2014	Last EDR Contact: 06/01/2012
Number of Days to Update: 200	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

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).

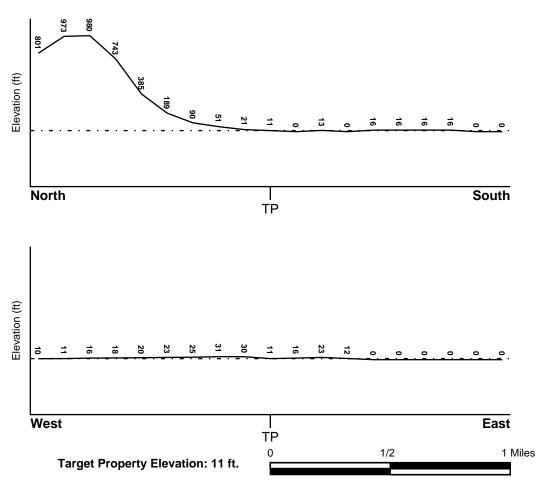
TOPOGRAPHIC INFORMATION

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



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 02110C1526D 02110C1533D 02110C1529D	FEMA FIRM Flood data FEMA FIRM Flood data FEMA FIRM Flood data FEMA FIRM Flood data
NATIONAL WETLAND INVENTORY	
NWI Quad at Target Property Not Reported	NWI Electronic <u>Data Coverage</u> N

LOCATION

FROM TP

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 Not Reported GENERAL DIRECTION GROUNDWATER FLOW

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

GEOLOGIC AGE IDENTIFICATION

Era:	- Category: -	
System:	-	
Series:	•	
Code:	N/A (decoded above as Era, System & Series)	

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name:	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

Soil Layer Information							
	Βοι	indary		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	<u>USGS4000</u> 0010708	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

FEDERAL USGS WELL INFORMATION

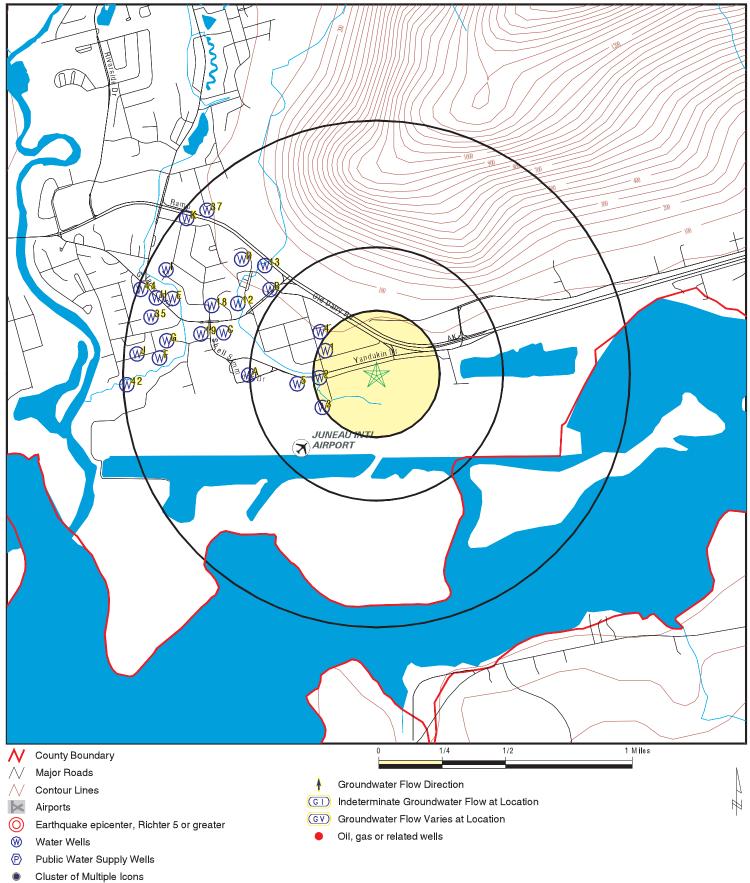
MAP ID	WELL ID	LOCATION FROM TP
F26	USGS40000010729	1/2 - 1 Mile West
E27	USGS40000010757	1/2 - 1 Mile WNW
E28	USGS40000010758	1/2 - 1 Mile WNW
E29	USGS40000010755	1/2 - 1 Mile WNW
E30	USGS40000010756	1/2 - 1 Mile WNW
F31	USGS40000010722	1/2 - 1 Mile West
H32	USGS40000010759	1/2 - 1 Mile WNW
133	USGS40000010773	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
139	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

		LOCATION
MAP ID	WELL ID	FROM TP
No PWS System Found	I	

Note: PWS System location is not always the same as well location.

PHYSICAL SETTING SOURCE MAP - 5509586.2s



1/WNW 1/8 - 1/4 Mile Higher Organization ID: USGS-AK Organization Name: Monitor Location: CD04006631ACDA1 003 Type: Description: Not Reported HUC: Drainage Area: Not Reported Drainage Area Units Contrib Drainage Area: Not Reported Contrib Drainage Area Aquifer: Not Reported Construction Date: Aquifer Type: Not Reported Construction Date: Well Depth: 40 Well Depth Units: Well Hole Depth: 41 Well Hole Depth Units: Ground water levels,Number of Measurements: 1 Level reading date: Feet below surface: 12.00 Feet to sea level: Note: Not Reported Feet to sea level: Mote: Not Reported Feet to sea level: More: Not Reported Higher Organization ID: USGS-AK Organization Name: Monitor Location: CD04006631ACDC1 002 Type: Description: Not Reported HUC: Drainage Area: Not Reported Drainage Area Units	Well 19010301 s: Not Reported rea Unts: Not Reported Not Reported 19730127 ft ft t
Monitor Location:CD04006631ACDA1003Type:Description:Not ReportedHUC:Drainage Area:Not ReportedDrainage Area UnitsContrib Drainage Area:Not ReportedContrib Drainage AreaAquifer:Not ReportedContrib Drainage AreaAquifer:Not ReportedConstruction Date:Well Depth:40Well Depth Units:Well Hole Depth:41Well Hole Depth Units:Ground water levels,Number of Measurements:1Level reading date:Feet below surface:12.00Feet to sea level:Note:Not ReportedFeet to sea level:Vest118 - 1/4 MileHigherOrganization ID:USGS-AKOrganization Name:Monitor Location:CD04006631ACDC1002Type:Description:Not ReportedHUC:Drainage Area:Not ReportedHUC:Drainage Area:Not ReportedHUC:Drainage Area:Not ReportedContrib Drainage Area UnitsContrib Drainage Area:Not ReportedDrainage Area UnitsContrib Drainage Area:Not ReportedContrib Drainage AreaMonitor Location:Not ReportedDrainage AreaDrainage Area:Not ReportedDrainage AreaDrainage Area:Not ReportedContrib Drainage AreaContrib Drainage Area:Not ReportedContrib Drainage AreaContrib Drainage Area:Not ReportedFormation Type:Aquifer:Not ReportedFormation Type: <t< th=""><th>Well 19010301 s: Not Reported rea Unts: Not Reported Not Reported 19730127 ft hits: ft 1973-01-27</th></t<>	Well 19010301 s: Not Reported rea Unts: Not Reported Not Reported 19730127 ft hits: ft 1973-01-27
Feet below surface: 12.00 Feet to sea level: Note: Not Reported Feet to sea level: 2 West 1/4 Mile 1/8 - 1/4 Mile USGS-AK Organization Name: Monitor Location: CD04006631ACDC1 002 Type: Description: Not Reported HUC: Drainage Area: Not Reported Drainage Area Units Contrib Drainage Area: Not Reported Contrib Drainage Area Aquifer: Not Reported Formation Type: Aquifer Type: Not Reported Construction Date:	
West 1/8 - 1/4 Mile Higher VSGS-AK Organization Name: Organization ID: USGS-AK Organization Name: Monitor Location: CD04006631ACDC1 002 Type: Description: Not Reported HUC: Drainage Area: Not Reported Drainage Area Units Contrib Drainage Area: Not Reported Contrib Drainage Area Units Aquifer: Not Reported Formation Type: Aquifer Type: Not Reported Construction Date:	
Organization ID:USGS-AKOrganization Name:Monitor Location:CD04006631ACDC1 002Type:Description:Not ReportedHUC:Drainage Area:Not ReportedDrainage Area UnitsContrib Drainage Area:Not ReportedContrib Drainage AreaAquifer:Not ReportedFormation Type:Aquifer Type:Not ReportedConstruction Date:	FED USGS USGS40000010698
Well Depth:43.5Well Depth Units:Well Hole Depth:43.5Well Hole Depth Units:	Well 19010301 s: Not Reported rea Unts: Not Reported Not Reported 1960 ft
Ground water levels,Number of Measurements:31Level reading date:Feet below surface:10.16Feet to sea level:Note:Not Reported	1984-04-11 Not Reported
Level reading date:1984-04-06Feet below surface:Feet to sea level:Not ReportedNote:	9.07 Not Reported
Level reading date:1984-03-22Feet below surface:Feet to sea level:Not ReportedNote:	8.65 Not Reported
Level reading date:1984-03-16Feet below surface:Feet to sea level:Not ReportedNote:	9.15 Not Reported
Level reading date:1984-03-12Feet below surface:Feet to sea level:Not ReportedNote:	9.11 Not Reported
Level reading date:1984-03-01Feet below surface:Feet to sea level:Not ReportedNote:	8.79 Not Reported
Level reading date:1984-02-09Feet below surface:Feet to sea level:Not ReportedNote:	8.38
Level reading date: 1984-02-02 Feet below surface:	Not Reported

Feet to sea level:	Not Reported	Note:
Level reading date:	1984-01-27	Feet below surface:
Feet to sea level:	Not Reported	Note:
Level reading date:	1984-01-13	Feet below surface:
Feet to sea level:	Not Reported	Note:
Level reading date:	1984-01-06	Feet below surface:
Feet to sea level:	Not Reported	Note:
Level reading date:	1983-12-29	Feet below surface:
Feet to sea level:	Not Reported	Note:
Level reading date:	1983-12-05	Feet below surface:
Feet to sea level:	Not Reported	Note:
Level reading date:	1983-11-23	Feet below surface:
Feet to sea level:	Not Reported	Note:
Level reading date:	1983-11-10	Feet below surface:
Feet to sea level:	Not Reported	Note:
Level reading date:	1983-11-07	Feet below surface:
Feet to sea level:	Not Reported	Note:
Level reading date:	1983-10-28	Feet below surface:
Feet to sea level:	Not Reported	Note:
Level reading date:	1983-09-29	Feet below surface:
Feet to sea level:	Not Reported	Note:
Level reading date:	1983-09-23	Feet below surface:
Feet to sea level:	Not Reported	Note:
Level reading date:	1983-09-08	Feet below surface:
Feet to sea level:	Not Reported	Note:
Level reading date:	1983-09-01	Feet below surface:
Feet to sea level:	Not Reported	Note:
Level reading date:	1983-08-26	Feet below surface:
Feet to sea level:	Not Reported	Note:
Level reading date:	1983-08-19	Feet below surface:
Feet to sea level:	Not Reported	Note:
Level reading date:	1983-08-15	Feet below surface:
Feet to sea level:	Not Reported	Note:
Level reading date:	1983-08-05	Feet below surface:
Feet to sea level:	Not Reported	Note:
Level reading date:	1983-07-29	Feet below surface:
Feet to sea level:	Not Reported	Note:
Level reading date:	1983-07-21	Feet below surface:
Feet to sea level:	Not Reported	Note:

1983-07-15

Not Reported

Level reading date:

Feet to sea level:

9.22 9.18 8.91 8.54 8.29 8.72 7.92 8.00 8.69 7.00 8.40 8.10 9.64 6.30 9.35

9.25

Feet below surface:

Note:

Not Reported

9.68 Not Reported

9.64 Not Reported

9.18 Not Reported

10.10 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 1/4 - 1/2 Mile Higher		FED U	JSGS USGS40000010688
Organization ID: Monitor Location: Description: HUC: Drainage Area Units: Contrib Drainage Area Unts: Formation Type: Construction Date: Well Depth Units: Well Hole Depth Units:	USGS-AK CD04006631DBAD1 022 OBS WELL DRIVEN INTO STREAM 19010301 Not Reported Not Reported Quaternary System 19990629 ft ft	Organization Name: Type: //BED BY USGS-DUCK CR 19 Drainage Area: Contrib Drainage Area: Aquifer: Aquifer: Well Depth: Well Hole Depth:	USGS Alaska Water Science Center Well Not Reported Not Reported Unconfined single aquifer 3.06 3.06
Ground water levels,Number of Feet below surface: Note:	Measurements: 2 -1.83 Not Reported	Level reading date: Feet to sea level:	2001-04-10 Not Reported
Level reading date:	1999-06-29	Feet below surface:	-1.63
Feet to sea level:	Not Reported	Note:	Not Reported

4 NW 1/4 - 1/2 Mile Higher

FED USGS USGS40000010716

Organization ID:	USGS-AK		Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006631ADBD1 019)	Туре:	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 M	leasurements:	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: Monitor Location: Description: HUC: Drainage Area Units: Contrib Drainage Area Unts: Formation Type: Construction Date: Well Depth Units: Well Hole Depth Units:	USGS-AK CD04006631ACDC2 002 OBS WELL DRIVEN INTO STREAM 19010301 Not Reported Not Reported Quaternary System 19990629 ft ft	Organization Name: Type: BED BY USGS-DUCK CR 2 Drainage Area: Contrib Drainage Area: Aquifer: Aquifer Type: Well Depth: Well Hole Depth:	Well 20 Not F Not F Not F	S Alaska Water Science Center Reported Reported Reported onfined single aquifer
Ground water levels,Number of Feet below surface: Note:	f Measurements: 4 -1.35 Not Reported	Level reading date: Feet to sea level:		-04-10 Reported
Level reading date: Feet to sea level:	2000-03-14 Not Reported	Feet below surface: Note:	0.35 Not F	Reported
Level reading date: Feet to sea level:	2000-03-10 Not Reported	Feet below surface: Note:	0.02 Not F	Reported
Level reading date: Feet to sea level:	1999-06-29 Not Reported	Feet below surface: Note:	-1.37 Not F	Reported
A6 West 1/2 - 1 Mile			FED USGS	USGS40000010709
Higher Organization ID: Monitor Location: Description: Drainage Area: Contrib Drainage Area: Aquifer: Aquifer: Aquifer Type: Well Depth: Well Hole Depth:	USGS-AK CD04006631BDAC1 012 Not Reported Not Reported Not Reported Not Reported Not Reported 9 15	Organization Name: Type: HUC: Drainage Area Units: Contrib Drainage Area Ur Formation Type: Construction Date: Well Depth Units: Well Hole Depth Units:	Well 1901 Not F nts: Not F Not F	S Alaska Water Science Center 0301 Reported Reported Reported 0425
A7 West 1/2 - 1 Mile Higher			FED USGS	USGS40000010710
Organization ID: Monitor Location: Description:	USGS-AK CD04006631ACBC1 015 JORDAN AVE NR JORDAN CREEK	Organization Name: Type: FOOTBRIDGE	USG Well	S Alaska Water Science Center

Description: HUC: Drainage Area Units: Contrib Drainage Area Unts: Formation Type: USGS-AKOrgaCD04006631ACBC1015TypeJORDAN AVE NR JORDAN CREEK FOOT19010301DrainNot ReportedContNot ReportedAquiQuaternary SystemAqui

Type: COTBRIDGE Drainage Area: Contrib Drainage Area: Aquifer: Aquifer Type:

Not Reported Not Reported Not Reported Not Reported

Construction Date: Well Depth Units: Well Hole Depth Units:	199705 ft ft		Well Depth: Well Hole Depth:	8 8
·····				
Ground water levels,Number Feet below surface:	2.36	41	Level reading date: Feet to sea level:	2003-11-08 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: Feet to sea level:	1999-05-02 Not Reported	Feet below surface:	0.83
Note:	A nearby site that taps the same aqu	ifer 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: Feet to sea level:	1997-05-29 Not Reported	Feet below surface: Note:	1.2 Not Reported
reet to sea level.	Not Reported		
A8 Vest //2 - 1 Mile Higher		FED	USGS USGS40000010704
Organization ID: Monitor Location: Description: Drainage Area: Contrib Drainage Area: Aquifer: Aquifer Type: Well Depth: Well Hole Depth:	USGS-AK CD04006631BDDB1 013 Not Reported Not Reported Not Reported Not Reported Not Reported 8 30	Organization Name: Type: HUC: Drainage Area Units: Contrib Drainage Area Unts: Formation Type: Construction Date: Well Depth Units: Well Hole Depth Units:	USGS Alaska Water Science Cente Well 19010301 Not Reported Not Reported Not Reported 19840325 ft ft
39 IW /2 - 1 Mile ligher		FED	USGS USGS40000010749
Organization ID: Monitor Location: Description: Drainage Area: Contrib Drainage Area: Aquifer: Aquifer Type: Well Depth: Well Hole Depth:	USGS-AK CD04006631ABBD2 008 Not Reported Not Reported Not Reported Not Reported Not Reported 100 100	Organization Name: Type: HUC: Drainage Area Units: Contrib Drainage Area Unts: Formation Type: Construction Date: Well Depth Units: Well Hole Depth Units:	USGS Alaska Water Science Cente Well 19010301 Not Reported Not Reported 19650917 ft ft
310 IW /2 - 1 Mile ligher		FED	USGS USGS40000010750
Organization ID: Monitor Location: Description: Drainage Area: Contrib Drainage Area: Aquifer: Aquifer Type: Well Depth: Well Hole Depth:	USGS-AK CD04006631ABBD1 008 Not Reported Not Reported Not Reported Not Reported Not Reported 36 36	Organization Name: Type: HUC: Drainage Area Units: Contrib Drainage Area Unts: Formation Type: Construction Date: Well Depth Units: Well Hole Depth Units:	USGS Alaska Water Science Cente Well 19010301 Not Reported Not Reported Not Reported 19600101 ft ft

istance levation		Data	base	EDR ID Number
11 NW 2 - 1 Mile igher		FED	USGS	USGS40000010725
Organization ID:	USGS-AK	Organization Name:	USG	S Alaska Water Science Cen
Monitor Location:	CD04006631BACD3 006	Туре:	Well	
Description:	Not Reported	HUC:	1901	0301
Drainage Area:	Not Reported	Drainage Area Units:	Not R	eported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:		eported
Aquifer:	Not Reported	Formation Type:		eported
Aquifer Type:	Not Reported	Construction Date:	1966	
Well Depth:	70	Well Depth Units:	ft	
Well Hole Depth:	70	Well Hole Depth Units:	ft	
Ground water levels.Number of	f Magguramanta:	Loval reading data	1060	02.02
Feet below surface:		Level reading date: Feet to sea level:		02-03
Note:	14.00 Not Reported	Feet to sea level:	NOT P	eported
2 /NW 2 - 1 Mile		FED	USGS	USGS40000010747
igher				
Organization ID:	USGS-AK	Organization Name:		S Alaska Water Science Cen
Monitor Location:	CD04006631BAAD1 021	Туре:	Well	
Description:		REAMBED BY USGS-DUCK CR 21		
HUC:	19010301	Drainage Area:		eported
Drainage Area Units:	Not Reported	Contrib Drainage Area:		eported
Contrib Drainage Area Unts:	Not Reported	Aquifer:		eported
Formation Type:	Quaternary System	Aquifer Type:		nfined single aquifer
Construction Date:	19990806	Well Depth:	6	
Well Depth Units:	ft	Well Hole Depth:	6	
•	ft			
Well Hole Depth Units:				10.11
•	f Measurements: 3	Level reading date:	2001	10-11
Well Hole Depth Units:	f Measurements: 3 2.62	Level reading date: Feet to sea level:		eported
Well Hole Depth Units: Ground water levels,Number of		0		
Well Hole Depth Units: Ground water levels,Number of Feet below surface:	2.62	0		
Well Hole Depth Units: Ground water levels,Number of Feet below surface: Note:	2.62 Not Reported	Feet to sea level:	Not R 4.61	
Well Hole Depth Units: Ground water levels,Number of Feet below surface: Note: Level reading date: Feet to sea level: Level reading date:	2.62 Not Reported 2001-04-12 Not Reported 2000-03-14	Feet to sea level: Feet below surface:	Not R 4.61 Not R	eported
Well Hole Depth Units: Ground water levels,Number of Feet below surface: Note: Level reading date: Feet to sea level: Level reading date: Feet to sea level:	2.62 Not Reported 2001-04-12 Not Reported 2000-03-14 Not Reported	Feet to sea level: Feet below surface: Note: Feet below surface:	Not R 4.61 Not R	eported
Well Hole Depth Units: Ground water levels,Number of Feet below surface: Note: Level reading date: Feet to sea level: Level reading date:	2.62 Not Reported 2001-04-12 Not Reported 2000-03-14	Feet to sea level: Feet below surface: Note: Feet below surface:	Not R 4.61 Not R	eported

1/2 - 1 Mile Higher

> Organization ID: Monitor Location: Description: HUC: Drainage Area Units:

USGS-AK Organization Name: CD04006631ABBA1 020 Type: MAP NO. CHANGED FROM 015 TO 020 3/31/99 19010301 Drainage Area: Not Reported Contrib Drainage Area: USGS Alaska Water Science Center Well

Not Reported 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
		•	35
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		Not Reported
Note.	Not Reported		
14 /NW		FED	USGS USGS40000010727
/2 - 1 Mile igher			
Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Center
Monitor Location:	CD04006631BACD2 006	Туре:	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
-		-	
Feet below surface: Note: 15 /NW /2 - 1 Mile	7.00	Feet to sea level:	
Feet below surface: Note: 15 /NW /2 - 1 Mile igher Organization ID:	7.00 Not Reported	Feet to sea level:	Not Reported
Feet below surface: Note: 15 /NW /2 - 1 Mile igher Organization ID: Monitor Location:	7.00 Not Reported USGS-AK CD04006631BACD1 006	Feet to sea level:	Not Reported
Feet below surface: Note: 15 /NW /2 - 1 Mile igher Organization ID:	7.00 Not Reported	Feet to sea level:	Not Reported USGS USGS40000010739 USGS Alaska Water Science Cente
Feet below surface: Note: 15 /NW /2 - 1 Mile igher Organization ID: Monitor Location:	7.00 Not Reported USGS-AK CD04006631BACD1 006	Feet to sea level: FED Organization Name: Type:	Not Reported USGS USGS40000010739 USGS Alaska Water Science Cente Well
Feet below surface: Note: 15 /NW /2 - 1 Mile igher Organization ID: Monitor Location: Description:	7.00 Not Reported USGS-AK CD04006631BACD1 006 Not Reported	Feet to sea level: FED Organization Name: Type: HUC:	Not Reported USGS USGS40000010739 USGS Alaska Water Science Cente Well 19010301
Feet below surface: Note: 15 /NW /2 - 1 Mile igher Organization ID: Monitor Location: Description: Drainage Area:	7.00 Not Reported USGS-AK CD04006631BACD1 006 Not Reported Not Reported	Feet to sea level: FED Organization Name: Type: HUC: Drainage Area Units:	Not Reported USGS USGS40000010739 USGS Alaska Water Science Cente Well 19010301 Not Reported
Feet below surface: Note: 15 /NW /2 - 1 Mile igher Organization ID: Monitor Location: Description: Drainage Area: Contrib Drainage Area:	7.00 Not Reported USGS-AK CD04006631BACD1 006 Not Reported Not Reported Not Reported Not Reported	Feet to sea level: FED Organization Name: Type: HUC: Drainage Area Units: Contrib Drainage Area Units:	Not Reported USGS USGS40000010739 USGS Alaska Water Science Cente Well 19010301 Not Reported Not Reported
Feet below surface: Note: 15 /NW /2 - 1 Mile igher Organization ID: Monitor Location: Description: Drainage Area: Contrib Drainage Area: Aquifer:	7.00 Not Reported USGS-AK CD04006631BACD1 006 Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported	Feet to sea level: FED Organization Name: Type: HUC: Drainage Area Units: Contrib Drainage Area Units: Formation Type:	Not Reported USGS USGS40000010739 USGS Alaska Water Science Cente Well 19010301 Not Reported Not Reported Not Reported Not Reported
Feet below surface: Note: 15 /NW /2 - 1 Mile igher Organization ID: Monitor Location: Description: Drainage Area: Contrib Drainage Area: Aquifer: Aquifer Type:	7.00 Not Reported USGS-AK CD04006631BACD1 006 Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported	Feet to sea level: FED Organization Name: Type: HUC: Drainage Area Units: Contrib Drainage Area Units: Formation Type: Construction Date:	Not Reported USGS USGS40000010739 USGS Alaska Water Science Center Well 19010301 Not Reported Not Reported Not Reported Not Reported 19630710
Feet below surface: Note: 15 /NW 2 - 1 Mile igher Organization ID: Monitor Location: Description: Drainage Area: Contrib Drainage Area: Aquifer: Aquifer Type: Well Depth: Well Hole Depth:	7.00 Not Reported USGS-AK CD04006631BACD1 006 Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported S2 52	Feet to sea level: FED Organization Name: Type: HUC: Drainage Area Units: Contrib Drainage Area Units: Formation Type: Construction Date: Well Depth Units: Well Hole Depth Units:	Not Reported USGS USGS40000010739 USGS Alaska Water Science Cente Well 19010301 Not Reported Not Reported Not Reported 19630710 ft ft
Feet below surface: Note: 15 /NW 2 - 1 Mile igher Organization ID: Monitor Location: Description: Drainage Area: Contrib Drainage Area: Aquifer: Aquifer Type: Well Depth: Well Hole Depth: Ground water levels,Number of	7.00 Not Reported USGS-AK CD04006631BACD1 006 Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported S2 52	Feet to sea level: FED Organization Name: Type: HUC: Drainage Area Units: Contrib Drainage Area Units: Formation Type: Construction Date: Well Depth Units: Well Hole Depth Units: Level reading date:	Not Reported USGS USGS40000010739 USGS Alaska Water Science Cente Well 19010301 Not Reported Not Reported Not Reported 19630710 ft ft
Feet below surface: Note: 15 /NW /2 - 1 Mile igher Organization ID: Monitor Location: Description: Drainage Area: Contrib Drainage Area: Aquifer: Aquifer Type: Well Depth: Well Hole Depth: Ground water levels,Number of Feet below surface:	7.00 Not Reported USGS-AK CD04006631BACD1 006 Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported S2 52 52 52 52	Feet to sea level: FED Organization Name: Type: HUC: Drainage Area Units: Contrib Drainage Area Units: Formation Type: Construction Date: Well Depth Units: Well Hole Depth Units:	Not Reported USGS USGS40000010739 USGS Alaska Water Science Center Well 19010301 Not Reported Not Reported Not Reported 19630710 ft ft
Feet below surface: Note: 15 /NW 2 - 1 Mile igher Organization ID: Monitor Location: Description: Drainage Area: Contrib Drainage Area: Aquifer: Aquifer Type: Well Depth: Well Hole Depth: Ground water levels,Number of	7.00 Not Reported USGS-AK CD04006631BACD1 006 Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported S2 52	Feet to sea level: FED Organization Name: Type: HUC: Drainage Area Units: Contrib Drainage Area Units: Formation Type: Construction Date: Well Depth Units: Well Hole Depth Units: Level reading date:	Not Reported USGS USGS40000010739 USGS Alaska Water Science Center Well 19010301 Not Reported Not Reported Not Reported 19630710 ft ft
Feet below surface: Note: Note: 15 /NW 2 - 1 Mile igher Organization ID: Monitor Location: Description: Drainage Area: Contrib Drainage Area: Aquifer: Aquifer Type: Well Depth: Well Depth: Well Hole Depth: Ground water levels,Number of Feet below surface: Note:	7.00 Not Reported USGS-AK CD04006631BACD1 006 Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported S2 52 52 52 52	Feet to sea level: FED Organization Name: Type: HUC: Drainage Area Units: Contrib Drainage Area Units: Formation Type: Construction Date: Well Depth Units: Well Hole Depth Units: Level reading date:	Not Reported USGS USGS40000010739 USGS Alaska Water Science Center Well 19010301 Not Reported Not Reported Not Reported 19630710 ft ft
Feet below surface: Note: 15 /NW /2 - 1 Mile igher Organization ID: Monitor Location: Description: Drainage Area: Contrib Drainage Area: Aquifer: Aquifer Type: Well Depth: Well Hole Depth: Ground water levels,Number of Feet below surface:	7.00 Not Reported USGS-AK CD04006631BACD1 006 Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported S2 52 52 52 52	Feet to sea level: FED O Organization Name: Type: HUC: Drainage Area Units: Contrib Drainage Area Units: Formation Type: Construction Date: Well Depth Units: Well Hole Depth Units: Well Hole Depth Units: Level reading date: Feet to sea level:	Not Reported USGS USGS40000010739 USGS Alaska Water Science Center Well 19010301 Not Reported Not Reported Not Reported 19630710 ft ft
Feet below surface: Note: Note: 15 NW 2 - 1 Mile igher Organization ID: Monitor Location: Description: Drainage Area: Contrib Drainage Area: Aquifer: Aquifer Type: Well Depth: Well Hole Depth: Well Hole Depth: Well Hole Depth: Ground water levels,Number of Feet below surface: Note: 16 W 2 - 1 Mile	7.00 Not Reported USGS-AK CD04006631BACD1 006 Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported S2 52 52 52 52	Feet to sea level: FED O Organization Name: Type: HUC: Drainage Area Units: Contrib Drainage Area Units: Formation Type: Construction Date: Well Depth Units: Well Hole Depth Units: Well Hole Depth Units: Level reading date: Feet to sea level:	Not Reported USGS USGS40000010739 USGS Alaska Water Science Cente Well 19010301 Not Reported Not Reported Not Reported 19630710 ft ft 1963-07-10 Not Reported
Feet below surface: Note: Note: 7 15 NWW 2 - 1 Mile igher Organization ID: Monitor Location: Description: Drainage Area: Contrib Drainage Area: Aquifer: Aquifer Type: Well Depth: Well Hole Depth: Well Hole Depth: Well Hole Depth: Ground water levels,Number of Feet below surface: Note: 16 W 2 - 1 Mile igher Organization ID:	7.00 Not Reported USGS-AK CD04006631BACD1 006 Not Reported Not Reported Not Reported Not Reported Not Reported S2 52 * Measurements: 1 8.00 Not Reported USGS-AK	Feet to sea level: FED O Organization Name: Type: HUC: Drainage Area Units: Contrib Drainage Area Units: Formation Type: Construction Date: Well Depth Units: Well Hole Depth Units: Well Hole Depth Units: Level reading date: Feet to sea level: FED O FED O	Not Reported USGS USGS40000010739 USGS Alaska Water Science Center Well 19010301 Not Reported Not Reported Not Reported 19630710 ft ft 1963-07-10 Not Reported USGS USGS40000010769 USGS Alaska Water Science Center
Feet below surface: Note: Note: Note: 7 15 /NW /2 - 1 Mile igher Organization ID: Monitor Location: Description: Drainage Area: Contrib Drainage Area: Aquifer: Aquifer Type: Well Depth: Well Depth: Well Hole Depth: Well Hole Depth: Well Hole Depth: Well Hole Depth: Note: 16 W /2 - 1 Mile igher	7.00 Not Reported USGS-AK CD04006631BACD1 006 Not Reported Not Reported Not Reported Not Reported Not Reported S2 52 * Measurements: 1 8.00 Not Reported USGS-AK CD04006630DCCA1 035	Feet to sea level: FED O Organization Name: Type: HUC: Drainage Area Units: Contrib Drainage Area Units: Formation Type: Construction Date: Well Depth Units: Well Hole Depth Units: Well Hole Depth Units: Level reading date: Feet to sea level: Feet to sea level:	Not Reported USGS USGS40000010739 USGS Alaska Water Science Center Well 19010301 Not Reported Not Reported Not Reported 19630710 ft ft usgs USGS40000010769

HUC: Drainage Area Units: Contrib Drainage Area Unts: Formation Type: Construction Date: Well Depth Units: Well Hole Depth Units:	19010301 Not Reported Not Reported Quaternary System 19990629 ft ft	Drainage Area: Contrib Drainage Area: Aquifer: Aquifer Type: Well Depth: Well Hole Depth:	Not Reported Not Reported Not Reported Unconfined single aquifer 3.97 3.97
Ground water levels,Number of Feet below surface: Note:	Measurements: 3 0.26 Not Reported	Level reading date: Feet to sea level:	2001-10-11 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

Organization ID: USGS-AK Organization Name: USGS Alaska Water Science Center CD04006630DCCC1 034 Monitor Location: Type: Well OBS WELL DRIVEN INTO STREAMBED BY USGS-DUCK CR 22 Description: HUC: 19010301 Drainage Area: Not Reported Contrib Drainage Area: Drainage Area Units: Not Reported Not Reported Contrib Drainage Area Unts: Not Reported Aquifer: Not Reported Formation Type: Quaternary System Aquifer Type: Unconfined single aquifer 19990806 Well Depth: Construction Date: 5.4 Well Depth Units: Well Hole Depth: 5.4 ft Well Hole Depth Units: ft 5 2001-10-11 Ground water levels, Number of Measurements: Level reading date: 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 Not Reported Feet below surface: 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

Organization ID: Monitor Location: USGS-AK CD04006631BABD1 010 Organization Name: Type: USGS Alaska Water Science Center Well

USGS40000010751

FED USGS

FED USGS

USGS40000010764

Description: Drainage Area: Contrib Drainage Area: Aquifer: Aquifer Type: Well Depth: Well Hole Depth:	Not Reported Not Reported Not Reported Not Reported 42 42	HUC: Drainage Area Units: Contrib Drainage Area Unts: Formation Type: Construction Date: Well Depth Units: Well Hole Depth Units:	19010301 Not Reported Not Reported Not Reported 19650918 ft ft
9 /NW /2 - 1 Mile igher		FED	USGS USGS40000010740
Organization ID: Monitor Location: Description: Drainage Area: Contrib Drainage Area: Aquifer: Aquifer Type: Well Depth: Well Hole Depth:	USGS-AK CD04006631BACB1 005 Not Reported Not Reported Not Reported Not Reported 80 120	Organization Name: Type: HUC: Drainage Area Units: Contrib Drainage Area Unts: Formation Type: Construction Date: Well Depth Units: Well Hole Depth Units:	USGS Alaska Water Science Cente Well 19010301 Not Reported Not Reported Not Reported 19600616 ft ft
Ground water levels,Number of Feet below surface: Note:	Measurements: 1 5.00 Not Reported	Level reading date: Feet to sea level:	1960-06-16 Not Reported
20 /NW /2 - 1 Mile igher		FED	USGS USGS40000010754
Organization ID: Monitor Location: Description: HUC: Drainage Area Units: Contrib Drainage Area Unts: Formation Type: Construction Date: Well Depth Units: Well Hole Depth Units:	USGS-AK CD04006630CDCB1 027 KA-SEE-AN DRIVE BEHIND FIRST (19010301 Not Reported Not Reported Quaternary System 199706 ft ft	Organization Name: Type: CHURCH OF GOD Drainage Area: Contrib Drainage Area: Aquifer: Aquifer Type: Well Depth: Well Hole Depth:	USGS Alaska Water Science Cente Well Not Reported Not Reported Not Reported Not Reported 17.5 18
Ground water levels,Number of Feet below surface: Note:	Measurements: 43 5.92 Not Reported	Level reading date: Feet to sea level:	2003-12-27 Not Reported
Level reading date: Feet to sea level: Level reading date:	2003-11-08 Not Reported 2003-09-27	Feet below surface: Note: Feet below surface:	7.86 Not Reported 5.53
Feet to sea level: Level reading date: Feet to sea level:	2003-08-27 Not Reported 2003-08-20 Not Reported	Feet below surface: Note: Note:	Not Reported 7.95 Not Reported

Level reading date:

2003-08-10

8.66

Feet below surface:

Feet to sea level:	Not Reported	Note:
Level reading date:	2003-07-06	Feet below surface:
Feet to sea level:	Not Reported	Note:
Level reading date:	2003-06-21	Feet below surface:
Feet to sea level:	Not Reported	Note:
Level reading date:	2003-06-11	Feet below surface:
Feet to sea level:	Not Reported	Note:
Level reading date:	2003-06-02	Feet below surface:
Feet to sea level:	Not Reported	Note:
Level reading date:	2003-05-25	Feet below surface:
Feet to sea level:	Not Reported	Note:
Level reading date:	2003-05-17	Feet below surface:
Feet to sea level:	Not Reported	Note:
Level reading date:	2003-05-14	Feet below surface:
Feet to sea level:	Not Reported	Note:
Level reading date:	2003-05-08	Feet below surface:
Feet to sea level:	Not Reported	Note:
Level reading date:	2003-05-03	Feet below surface:
Feet to sea level:	Not Reported	Note:
Level reading date:	2003-04-26	Feet below surface:
Feet to sea level:	Not Reported	Note:
Level reading date:	2003-04-19	Feet below surface:
Feet to sea level:	Not Reported	Note:
Level reading date:	2002-03-22	Feet below surface:
Feet to sea level:	Not Reported	Note:
Level reading date:	2001-10-11	Feet below surface:
Feet to sea level:	Not Reported	Note:
Level reading date:	2001-08-15	Feet below surface:
Feet to sea level:	Not Reported	Note:
Level reading date:	2001-04-24	Feet below surface:
Feet to sea level:	Not Reported	Note:
Level reading date:	2001-04-12	Feet below surface:
Feet to sea level:	Not Reported	Note:
Level reading date:	2001-04-10	Feet below surface:
Feet to sea level:	Not Reported	Note:
Level reading date:	2000-11-04	Feet below surface:
Feet to sea level:	Not Reported	Note:
Level reading date:	2000-10-27	Feet below surface:
Feet to sea level:	Not Reported	Note:
Level reading date:	2000-09-24	Feet below surface:

Feet to sea level:

Note:

Not Reported An obstruction was encountered in the well above the water surface (no water level recorded).

Not Reported

9.28

9.80

10.33

10.25

10.22

10.19

10.38

10.43

10.29

10.14

10.00

9.44

6.20

8.05 Not Reported

9.45

8.67

8.60

6.31

6.06

Level reading date: Feet to sea level:	2000-05-15 Not Reported	Feet below surface:	Not Reported
Note:	An obstruction was encountered in th	ne well above the water surface (no	o water level recorded).
Level reading date:	2000-04-16	Feet below surface:	Not Reported
Feet to sea level: Note:	Not Reported An obstruction was encountered in the	e well above the water surface (no	water level recorded)
Note.	An obstruction was choodilicited in th		
Level reading date:	2000-04-08	Feet below surface:	Not Reported
Feet to sea level: Note:	Not Reported An obstruction was encountered in the	a well above the water surface (no	water lovel recorded)
Note.	An obstruction was encountered in th	ie weil above the water surface (ht	o water level lecolded).
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 Not Deported	Feet below surface:	5.78 Not Departed
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
Lovel reading data:	1998-03-12	Feet below surface:	9.62
Level reading date: 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: Feet to sea level:	1997-07-13 Not Reported	Feet below surface: Note:	5.3 Not Reported
reel 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: Feet to sea level:	1997-06-19 Not Reported	Feet below surface:	6.6 Not Reported
	Not Reported	Note:	Not Reported

Map ID Direction Distance Elevation		Data	base EDR ID Number
F21 West 1/2 - 1 Mile		FED	USGS USGS40000010721
Higher 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
Cround water levels Number	of Measurements: 8	Lovel reading data	2000-07-12
Ground water levels,Number Feet below surface:	4.77 of Measurements. 6	Level reading date: Feet to sea level:	Not Reported
Note:	A.77 Not Reported	reet 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

USGS-AK USGS Alaska Water Science Center Organization ID: Organization Name: CD04006631BBDB1 017 Monitor Location: Type: Well NEAR CORNER BERNERS AVE AND OLD GLACIER HIGHWAY Description: HUC: 19010301 Not Reported Drainage Area: Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported Aquifer: Not Reported Formation Type: Aquifer Type: Not Reported **Quaternary System** Construction Date: 199706 Well Depth: 8.8 Well Depth Units: Well Hole Depth: ft 15 Well Hole Depth Units: ft

Ground water levels, Number of Measurements:

76

Level reading date:

2004-01-14

USGS40000010743

FED USGS

Feet below surface:	1.70
Note:	Not Reported
Level reading date:	2003-12-27
Feet to sea level:	Not Reported
Level reading date:	2003-11-08
Feet to sea level:	Not Reported
Level reading date:	2003-09-28
Feet to sea level:	Not Reported

Level reading date: Feet to sea level:

2003-09-27 Not Reported

2003-08-20 Not Reported

2003-08-10 Not Reported

2003-07-06 Not Reported

2003-06-21 Not Reported

2003-06-11 Not Reported

2003-06-02 Not Reported

2003-05-25 Not Reported

2003-05-17 Not Reported

2003-05-14 Not Reported

2003-05-08 Not Reported

2003-05-03 Not Reported

2003-04-26 Not Reported

2003-04-19 Not Reported

2002-07-02 Not Reported

2002-06-26 Not Reported

2002-06-25 Not Reported

Feet below surface: Note:

Feet to sea level:

Feet below surface: Note:

1.43

Not Reported

Not Reported

2.72 Not Reported

0.20 Not Reported

0.77 Not Reported

2.65 Not Reported

3.22 Not Reported

3.70 Not Reported

3.90 Not Reported

4.55 Not Reported

4.34 Not Reported

4.34 Not Reported

4.18 Not Reported

4.36 Not Reported

4.58 Not Reported

4.44 Not Reported

4.24 Not Reported

3.87 Not Reported

2.71 Not Reported

2.86 Not Reported

2.89 Not Reported

Leve	reading date:	
Feet	to sea level:	

Level reading date: Feet to sea level:

2002-06-13 Not Reported

2002-06-12 Not Reported

2002-06-06 Not Reported

2002-03-22 Not Reported

2001-10-11 Not Reported

2001-08-14 Not Reported

2001-04-24 Not Reported

2001-04-12 Not Reported

2001-04-10 Not Reported

2000-11-04 Not Reported

2000-10-27 Not Reported

2000-09-07 Not Reported

2000-08-16 Not Reported

2000-08-06 Not Reported

2000-07-30 Not Reported

2000-07-24 Not Reported

2000-07-20 Not Reported

2000-07-12 Not Reported

2000-07-05 Not Reported

2000-06-26 Not Reported

2000-06-18 Not Reported Feet below surface: Note: Feet below surface:

Note:

Feet below surface: Note:

Feet below surface: Note:

Feet below surface: Note:

Feet below surface: Note:

Feet below surface: Note:

Feet below surface: Note:

Feet below surface: Note:

Feet below surface: Note:

Feet below surface: Note:

Feet below surface: Note:

Feet below surface: Note:

Feet below surface: Note:

Feet below surface: Note:

Feet below surface: Note:

Feet below surface: Note:

Feet below surface: Note:

Feet below surface: Note:

Feet below surface: Note:

Feet below surface: Note: 2.59 Not Reported

2.66 Not Reported

3.26 Not Reported

3.81 Not Reported

1.65 Not Reported

2.75 Not Reported

3.92 Not Reported

3.41 Not Reported

3.25 Not Reported

1.80 Not Reported

1.60 Not Reported

0.69 Not Reported

1.65 Not Reported

1.44 Not Reported

1.08 Not Reported

1.60 Not Reported

2.32 Not Reported

2.40 Not Reported

1.81 Not Reported

2.26 Not Reported

2.82 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: Feet to sea level:	1998-08-04 Not Reported	Feet below surface:	2.64
Note:	A nearby site that taps the same aqu	liter was being pumped.	
Level reading date: Feet to sea level: Note:	1998-07-02 Not Reported A nearby site that taps the same aqu	Feet below surface: ifer was being pumped.	3.53
	4000.00.47	Faat balan andaaa	2.05
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

Organization ID: Monitor Location: Description: Drainage Area: Contrib Drainage Area: Aquifer: Aquifer Type: Well Depth: Well Hole Depth: USGS-AK CD04006631BBAA5 007 Not Reported Not Reported Not Reported Not Reported Not Reported 60 60

FED USGS U

USGS40000010753

Organization Name:UType:WHUC:19Drainage Area Units:NContrib Drainage Area Unts:NFormation Type:NConstruction Date:19Well Depth Units:ftWell Hole Depth Units:ft

USGS Alaska Water Science Center Well 19010301 Not Reported Not Reported Not Reported 19590101 ft

Map ID Direction Distance				
Elevation			Database	EDR ID Number
G24 West 1/2 - 1 Mile Higher			FED USGS	USGS40000010741
Organization ID: Monitor Location: Description: HUC: Drainage Area Units: Contrib Drainage Area Unts: Formation Type: Construction Date: Well Depth Units: Well Hole Depth Units:	USGS-AK CD04006631BBDD1 016 Corner Cessna&Alex Holden,left bank 19010301 Not Reported Not Reported Quaternary System 199705 ft	Organization Name: Type: Duck Creek Drainage Area: Contrib Drainage Area: Aquifer: Aquifer: Aquifer Type: Well Depth: Well Hole Depth:	Well Not F Not F Not F	S Alaska Water Science Center Reported Reported Reported Reported
Ground water levels,Number of Feet below surface: Note:	Measurements: 62 7.97 Not Reported	Level reading date: Feet to sea level:		-12-27 Reported
Level reading date:	2003-11-08	Feet below surface:	8.87	Reported
Feet to sea level:	Not Reported	Note:	Not F	
Level reading date:	2003-09-27	Feet below surface:	7.50	Reported
Feet to sea level:	Not Reported	Note:	Not F	
Level reading date:	2003-08-20	Feet below surface:	8.92	Reported
Feet to sea level:	Not Reported	Note:	Not F	
Level reading date:	2003-08-10	Feet below surface:	9.38	Reported
Feet to sea level:	Not Reported	Note:	Not F	
Level reading date:	2003-07-06	Feet below surface:	9.80	Reported
Feet to sea level:	Not Reported	Note:	Not F	
Level reading date:	2003-06-21	Feet below surface:	9.94	Reported
Feet to sea level:	Not Reported	Note:	Not F	
Level reading date:	2003-06-02	Feet below surface:	10.35	5
Feet to sea level:	Not Reported	Note:	Not F	Reported
Level reading date:	2003-05-25	Feet below surface:	10.32	2
Feet to sea level:	Not Reported	Note:	Not F	Reported
Level reading date:	2003-05-17	Feet below surface:	10.04	l
Feet to sea level:	Not Reported	Note:	Not F	Reported
Level reading date:	2003-05-14	Feet below surface:	10.32	2
Feet to sea level:	Not Reported	Note:	Not F	Reported
Level reading date:	2003-05-08	Feet below surface:	10.54	l
Feet to sea level:	Not Reported	Note:	Not F	Reported
Level reading date:	2003-05-03	Feet below surface:	10.42	2
Feet to sea level:	Not Reported	Note:	Not F	Reported
Level reading date:	2003-04-26	Feet below surface:	10.19)
Feet to sea level:	Not Reported	Note:	Not F	Reported

Level reading date:	
Feet to sea level:	

Level reading date: Feet to sea level:

2003-04-19
Not Reported

2002-07-02 Not Reported

2002-06-13 Not Reported

2002-06-06 Not Reported

2002-03-22 Not Reported

2001-10-11 Not Reported

2001-08-15 Not Reported

2001-04-24 Not Reported

2001-04-12 Not Reported

2001-04-10 Not Reported

2000-11-04 Not Reported

2000-10-27 Not Reported

2000-09-24 Not Reported

2000-09-07 Not Reported

2000-08-17 Not Reported

2000-08-06 Not Reported

2000-07-30 Not Reported

2000-07-20 Not Reported

2000-07-12 Not Reported

2000-07-05 Not Reported

2000-06-26 Not Reported Note: Feet below surface:

Note:

Feet below surface:

Feet below surface: Note:

9.78 Not Reported

8.32 Not Reported

8.81 Not Reported

9.32 Not Reported

9.80 Not Reported

8.12 Not Reported

8.94 Not Reported

9.86 Not Reported

9.33 Not Reported

9.27 Not Reported

8.24 Not Reported

8.14 Not Reported

8.01 Not Reported

7.46 Not Reported

8.24 Not Reported

8.06 Not Reported

7.72 Not Reported

8.62 Not Reported

8.65 Not Reported

8.39 Not Reported

8.60 Not Reported

Level reading date:
Feet to sea level:

Level reading date: Feet to sea level:

2000-06-18 Not Reported

2000-06-11 Not Reported

2000-05-30 Not Reported

2000-05-15 Not Reported

2000-04-08 Not Reported

2000-03-14 Not Reported

2000-03-10 Not Reported

2000-02-21 Not Reported

1999-12-30 Not Reported

1999-12-26 Not Reported

1999-11-20 Not Reported

1999-10-23 Not Reported

1999-10-09 Not Reported

1999-07-07 Not Reported

1999-07-06 Not Reported

1999-05-02 Not Reported

1998-03-12 Not Reported

1997-08-06 Not Reported

1997-07-16 Not Reported

1997-07-13 Not Reported

1997-07-10 Not Reported Feet below surface: Note: Feet below surface:

Feet below surface: Note:

Note:

Feet below surface: Note: 8.91 Not Reported

8.81 Not Reported

8.67 Not Reported

9.16 Not Reported

8.14 Not Reported

9.99 Not Reported

9.78 Not Reported

10.06 Not Reported

8.16 Not Reported

7.33 Not Reported

8.02 Not Reported

7.10 Not Reported

7.53 Not Reported

8.89 Not Reported

8.82 Not Reported

8.09 Not Reported

9.86 Not Reported

8.04 Not Reported

7.50 Not Reported

6.9 Not Reported

8.4 Not Reported

Level reading date: Feet to sea level:	1997-07-03	Feet below surface: Note:	8.0 Not Perperted
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: Feet to sea level:	1997-06-24	Feet below surface:	8.3 Not Deported
Feel lo 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		FED	USGS USGS40000010728
1/2 - 1 Mile Higher			
Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Cente
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		FED	USGS USGS40000010729
1/2 - 1 Mile Higher			
Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Cente
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
Cround water layele Number	r of Mooouromonto:	Loval roading data	1069.05.10
Ground water levels,Number		Level reading date: Feet to sea level:	1968-05-10 Not Reported
Feet below surface:	7.40 Not Reported	Feel to sea level.	Not Reported

Not Reported

Note:

Distance Elevation		Data	base	EDR ID Number
E27 WNW 1/2 - 1 Mile Higher		FED	USGS	USGS40000010757
Organization ID: Monitor Location: Description: Drainage Area: Contrib Drainage Area: Aquifer: Aquifer Type: Well Depth: Well Hole Depth:	USGS-AK CD04006631BBAA3 007 Not Reported Not Reported Not Reported Not Reported A5 45	Organization Name: Type: HUC: Drainage Area Units: Contrib Drainage Area Unts: Formation Type: Construction Date: Well Depth Units: Well Hole Depth Units:	Well 1901 Not F Not F	S Alaska Water Science Cente 0301 Reported Reported Reported 50101
E28 WNW 1/2 - 1 Mile Higher		FED	USGS	USGS40000010758
Organization ID: Monitor Location: Description: Drainage Area: Contrib Drainage Area: Aquifer: Aquifer Type: Well Depth: Well Hole Depth:	USGS-AK CD04006631BBAA4 007 Not Reported Not Reported Not Reported Not Reported 50 66	Organization Name: Type: HUC: Drainage Area Units: Contrib Drainage Area Unts: Formation Type: Construction Date: Well Depth Units: Well Hole Depth Units:	Well 1901 Not F Not F	S Alaska Water Science Cente 0301 Reported Reported Reported 30529
Ground water levels,Number Feet below surface: Note:	of Measurements: 1 5.30 Not Reported	Level reading date: Feet to sea level:		8-05-29 Reported
E29 WNW 1/2 - 1 Mile Higher		FED	USGS	USGS40000010755
Organization ID: Monitor Location: Description: Drainage Area: Contrib Drainage Area: Aquifer: Aquifer Type: Well Depth: Well Hole Depth:	USGS-AK CD04006631BBAA1 007 Not Reported Not Reported Not Reported Not Reported A3 43	Organization Name: Type: HUC: Drainage Area Units: Contrib Drainage Area Unts: Formation Type: Construction Date: Well Depth Units: Well Hole Depth Units:	Well 1901 Not F Not F	S Alaska Water Science Cente 0301 Reported Reported Reported 1201

- Contrib Drainage Area: Aquifer: Aquifer Type: Well Depth: Well Hole Depth:
- Not Reported Not Reported Not Reported 43 43

Map ID Direction Distance Elevation

E30 WNW 1/2 - 1 Mile Higher

Organization ID: Monitor Location: Description: Drainage Area: Contrib Drainage Area: Aquifer: Aquifer Type: Well Depth: Well Hole Depth:

F31 West 1/2 - 1 Mile Higher

Organization ID: USGS-AK Organization Name: USGS Alaska Water Science Center Monitor Location: CD04006631CDAD1 023 Type: Well HUC: 19010301 Description: AW-2, DC-2 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 Not Reported Well Hole Depth: Not Reported Well Hole Depth Units: 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 Not Reported Note: 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

Feet below surface:

Note:

Level reading date: Feet to sea level:

CD04006631BBAA2 007 Not Reported Not Reported Not Reported Not Reported Not Reported

USGS-AK

262

262

2000-05-16

Not Reported

FED USGS USGS40000010756

Database

Organization Name: Type: HUC: Drainage Area Units: Contrib Drainage Area Unts: Formation Type: Construction Date: Well Depth Units: Well Hole Depth Units:

USGS Alaska Water Science Center Well 19010301 Not Reported Not Reported Not Reported 19630513

EDR ID Number

FED USGS

ft

ft

USGS40000010722

9.36

Not Reported

Distance Elevation		Data	base	EDR ID Number
H32 WNW 1/2 - 1 Mile Higher		FED	USGS	USGS40000010759
Organization ID:	USGS-AK	Organization Name:	USG	S Alaska Water Science Cent
Monitor Location:	CD04006631BBAB1 004	Туре:	Well	
Description:	Not Reported	HUC:	1901	
Drainage Area:	Not Reported	Drainage Area Units:		Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:		Reported
Aquifer:	Not Reported	Formation Type:		Reported
Aquifer Type:	Not Reported	Construction Date:	1971	1229
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 F	Reported
Note:	Not Reported			
33 WNW 1/2 - 1 Mile Higher		FED	USGS	USGS40000010773
Organization ID:	USGS-AK	Organization Name:	USG	S Alaska Water Science Cent
Monitor Location:	CD04006630CCDA1 018	Туре:	Well	
Description:	Not Reported	HUC:	1901	
Drainage Area:	Not Reported	Drainage Area Units:		Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:		Reported
Aquifer:	Not Reported	Formation Type:		Reported
Aquifer Type:	Not Reported	Construction Date:	1962	0101
Well Depth:	42	Well Depth Units:	ft	
Well Hole Depth:	42	Well Hole Depth Units:	ft	
J34 Nest		FED	USGS	USGS40000010730
1/2 - 1 Mile Higher				
Organization ID:	USGS-AK	Organization Name:	USG	S Alaska Water Science Cent
Monitor Location:	CD04006631BBCC1 011	Type:	Well	
Description:	Not Reported	HUC:	1901	0301
Drainage Area:	Not Reported	Drainage Area Units:		Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:		Reported
Aquifer:	Not Reported	Formation Type:		Reported
Aquifer Type:	Not Reported	Construction Date:	1968	0511
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 F	Reported

Map ID Direction				
Distance Elevation		Data	abase	EDR ID Number
35 WNW 1/2 - 1 Mile Higher		FED	USGS	USGS40000010752
Organization ID: Monitor Location: Description: Drainage Area: Contrib Drainage Area: Aquifer: Aquifer Type: Well Depth: Well Hole Depth:	USGS-AK CD04006631BBBD1 009 Not Reported Not Reported Not Reported Not Reported Not Reported 39.5 47	Organization Name: Type: HUC: Drainage Area Units: Contrib Drainage Area Unts: Formation Type: Construction Date: Well Depth Units: Well Hole Depth Units:	Well 1901 Not F Not F Not F	S Alaska Water Science Center 0301 Reported Reported Reported 0807
Ground water levels,Number c Feet below surface: Note:	of Measurements: 1 10.80 Not Reported	Level reading date: Feet to sea level:		-08-07 Reported
J36 West 1/2 - 1 Mile Higher		FED	USGS	USGS40000010723
Organization ID: Monitor Location: Description: Drainage Area: Contrib Drainage Area: Aquifer: Aquifer Type: Well Depth: Well Hole Depth:	USGS-AK CD04006631DDAD1 025 AW-6, DC-6 Not Reported Not Reported Unconfined single aquifer 17.8 Not Reported	Organization Name: Type: HUC: Drainage Area Units: Contrib Drainage Area Unts: Formation Type: Construction Date: Well Depth Units: Well Hole Depth Units:	Well 1901 Not F Not F Quat 1993 ft	Reported Reported ernary System
Ground water levels,Number c Feet below surface: Note:	of Measurements: 8 8.52 Not Reported	Level reading date: Feet to sea level:		-07-12 Reported
Level reading date: Feet to sea level:	2000-07-05 Not Reported	Feet below surface: Note:	7.68 Not F	Reported
Level reading date: Feet to sea level:	2000-06-27 Not Reported	Feet below surface: Note:	8.74 Not F	Reported
Level reading date: Feet to sea level:	2000-06-18 Not Reported	Feet below surface: Note:	8.74 Not F	Reported
Level reading date: Feet to sea level:	2000-06-11 Not Reported	Feet below surface: Note:	8.84 Not F	Reported
Level reading date: Feet to sea level:	2000-06-01 Not Reported	Feet below surface: Note:		Reported
Level reading date: Feet to sea level:	2000-05-25 Not Reported	Feet below surface: Note:	8.84 Not F	Reported
Level reading date:	2000-05-16	Feet below surface:	9.22	

Feet to sea level:	Not Reported	Note:	Not Reported
, W 2 - 1 Mile gher		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

- Organization ID: Monitor Location: Description: HUC: Drainage Area Units: Contrib Drainage Area Unts: Formation Type: Construction Date: Well Depth Units: Well Hole Depth Units:
- USGS-AK Organization Name: CD04006631BBBA1 018 Type: OLD GLACIER HWY, DOWNSTREAM FRM FAA DRIVEWAY 19010301 Drainage Area: Not Reported Contrib Drainage Area: Not Reported Aquifer: Quaternary System Aquifer Type: 199705 Well Depth: Well Hole Depth: ft ft

FED USGS

USGS40000010763

USGS Alaska Water Science Center Well

Not Reported Not Reported Not Reported Not Reported 11

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
Landara Revidera	0000 00 04			0.00
Level reading date: Feet to sea level:	2003-06-21 Not Reported		Feet below surface: Note:	3.22 Not Reported
	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
Lovel reading date:	2003-05-25		Feet below surface:	3.90
Level reading date: Feet to sea level:	Not Reported		Note:	Not Reported
Level reading date:	2003-05-17		Feet below surface:	3.83 Nat Demontrad
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
	0000 05 00			0.75
Level reading date: Feet to sea level:	2003-05-03 Not Reported		Feet below surface: Note:	3.75 Not Reported
	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: Feet to sea level:	2002-06-13 Not Reported		Feet below surface: Note:	-0.12 Not Reported
reet to sea level.	Not Reported		NOLE.	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
Lovel reading data:	2001 04 12		Feet below surface:	2.55
Level reading date: Feet to sea level:	2001-04-12 Not Reported		Note:	2.55 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 t	the head cou	uld not be measured without addit	onal 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 co	uld not be measured without addit	onal equipment.
Lovel reading data:	2000.06.26	Feet below surface:	0.71
Level reading date: Feet to sea level:	2000-06-26 Not Reported	Note:	Not Reported
reet 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		and any instant
Note:	The site was flowing, but the head co	uid not be measured without additi	onal 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 co	uld not be measured without addition	onal 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 co	uld not be measured without addition	onal 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 co	uld not be measured without addition	onal equipment.
Level reading date:	1999-12-25	Feet below surface:	Not Poportod
Feet to sea level:	Not Reported	Feet below sufface.	Not Reported
Note:	The site was flowing, but the head co	uld not be measured without additi	onal equipment.
	5,		
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 co	uld not be measured without addition	onal equipment.
Level reading date:	1999-10-09	Feet below surface:	Not Reported
Feet to sea level:	Not Reported	Teer below sufface.	Not Reported
Note:	The site was flowing, but the head co	uld not be measured without additi	onal equipment.
	Ū.		
Level reading date:	1999-07-06	Feet below surface:	1.78
Feet to sea level:	Not Reported	Note:	Not Reported
Lovel reading data:	1999 05 02	Faat balow surface:	-1.86
Level reading date: Feet to sea level:	1999-05-02	Feet below surface: Note:	-1.86 Not Reported
	Not Reported		
	Not Reported	Note.	
Level reading date:	1998-08-04	Feet below surface:	1.76
Level reading date: Feet to sea level:			·

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

l39 WNW 1/2 - 1 Mile Higher

Organization ID: Monitor Location: Description: Drainage Area: Contrib Drainage Area: USGS-AK CD04006630CCDA2 018 Not Reported Not Reported Not Reported

FED USGS USGS40000010771

Organization Name: Type: HUC: Drainage Area Units: Contrib Drainage Area Unts: USGS Alaska Water Science Center Well 19010301 Not Reported Not Reported

Aquifer:
Aquifer Type:
Well Depth:
Well Hole Depth:

Not Reported Not Reported 53 Not Reported

Formation Type: Construction Date: Well Depth Units: Well Hole Depth Units:

Not Reported Not Reported ft Not Reported

FED USGS

K40 NW 1/2 - 1 Mile Higher

Organization ID: Monitor Location: Description: Drainage Area: Contrib Drainage Area: Aquifer: Aquifer Type: Well Depth: Well Hole Depth:

J41 West Higher

USGS-AK CD04006630CDBA1 019 Not Reported Not Reported Not Reported Not Reported Not Reported 70 Not Reported

Organization Name: Type: HUC: Drainage Area Units: Contrib Drainage Area Unts: Formation Type: Construction Date: Well Depth Units: Well Hole Depth Units:

USGS Alaska Water Science Center Well 19010301 Not Reported Not Reported Not Reported 19650101 ft Not Reported

USGS40000010787

FED USGS USGS40000010745 1/2 - 1 Mile USGS-AK USGS Alaska Water Science Center Organization ID: Organization Name: Monitor Location: CD04006536AADA1 003 Type: Well Description: Not Reported HUC: 19010301 Drainage Area Units: Not Reported Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported Contrib Drainage Area: Not Reported Formation Type: Aquifer: Not Reported 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 to sea level: Not Reported Feet below surface: 6.72 Note: Not Reported

42 West 1/2 - 1 Mile Lower

Organization ID:	USGS-AK	Organization Name:	USGS Alaska Water Science Cente
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

Level reading date:

Ground water levels, Number of Measurements:

8

2000-07-12

USGS40000010717

FED USGS

Feet below surface: Note:	9.99 Not Reported	Feet to sea level:	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 0	14	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

1/2 - 1 Mile Higher

Organization ID: Monitor Location: Description: HUC: Drainage Area Units: Contrib Drainage Area Unts: Formation Type: Construction Date: Well Depth Units: Well Hole Depth Units:

USGS-AK Organization Name: CD04006630CCCD2 017 Type: OLD GLACIER HWY UPSTREAM FRM FAA DRIVEWAY 19010301 Drainage Area: Not Reported Contrib Drainage Area: Not Reported Aquifer: **Quaternary System** Aquifer Type: 19970508 Well Depth: Well Hole Depth: ft ft

FED USGS USGS40000010765

USGS Alaska Water Science Center Well

Not Reported Not Reported Not Reported Not Reported 12 12

Ground water levels,Number of		Level reading date:	2003-11-08
Feet below surface: Note:	2.12 Not Reported	Feet to sea level:	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 Not Departed
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: Note:	Not Reported An obstruction was encountered in	the well above the water surface	(no water level recorded)
Level reading date: Feet to sea level:	2001-10-11 Not Reported	Feet below surface:	Not Reported
Note:	The site was flowing, but the head	could not be measured without a	dditional 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: Feet to sea level:	2001-04-10 Not Reported	Feet below surface: Note:	1.62 Not Reported
Level reading date: Feet to sea level:	2000-11-04 Not Reported	Feet below surface:	Not Reported
Note:	The site was flowing, but the head co	ould not be measured without addit	ional equipment.
Level reading date: Feet to sea level:	2000-10-27 Not Reported	Feet below surface:	Not Reported
Note:	The site was flowing, but the head co	ould not be measured without addit	ional equipment.
Level reading date: Feet to sea level:	2000-09-24 Not Reported	Feet below surface:	Not Reported
Note:	The site was flowing, but the head co	ould not be measured without addit	ional equipment.
Level reading date: Feet to sea level:	2000-09-07 Not Reported	Feet below surface:	Not Reported
Note:	The site was flowing, but the head co	ould not be measured without addit	ional equipment.
Level reading date: Feet to sea level:	2000-08-16 Not Reported	Feet below surface:	Not Reported
Note:	The site was flowing, but the head co	ould not be measured without addit	ional equipment.
Level reading date: Feet to sea level:	2000-08-06 Not Reported	Feet below surface:	Not Reported
Note:	The site was flowing, but the head co	ould not be measured without addit	ional equipment.
Level reading date: Feet to sea level:	2000-07-30 Not Reported	Feet below surface:	Not Reported
Note:	The site was flowing, but the head co	ould not be measured without addit	ional equipment.
Level reading date: Feet to sea level:	2000-07-20 Not Reported	Feet below surface:	Not Reported
Note:	The site was flowing, but the head co	ould not be measured without addit	ional equipment.
Level reading date: Feet to sea level:	2000-07-12 Not Reported	Feet below surface:	Not Reported
Note:	The site was flowing, but the head co	ould not be measured without addit	ional equipment.
Level reading date: Feet to sea level:	2000-07-05 Not Reported	Feet below surface: Note:	-1.30 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: Feet to sea level:	2000-06-11 Not Reported	Feet below surface: Note:	0.68 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: Feet to sea level:	2000-05-15 Not Reported	Feet below surface: Note:	1.87 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: Feet to sea level: Note:	2000-04-08 Not Reported The site was flowing, but the head cc	Feet below surface:	Not Reported
	-		
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 Not Deported	Feet below surface:	Not Reported
Feet to sea level: Note:	Not Reported The site was flowing, but the head c	ould not be measured without addi	tional equipment.
Level reading date:	1999-12-25	Feet below surface:	Not Reported
Feet to sea level: Note:	Not Reported The site was flowing, but the head c	ould not be measured without addi	tional equipment.
Level reading date:	1999-10-23	Feet below surface:	Not Reported
Feet to sea level: Note:	Not Reported The site was flowing, but the head c	ould not be measured without addi	tional equipment.
Level reading date:	1999-10-09	Feet below surface:	Not Reported
Feet to sea level: Note:	Not Reported The site was flowing, but the head c	ould not be measured without addi	tional 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.Numbe	r of Measurements: 1	Level reading date:	1975-02-10
Feet below surface:	12.50	Feet to sea level:	Not Reported
Note:	Not Reported		Hornopolicu

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%

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

FORM-NULL-PVC

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Thank you for your business. Please contact EDR at 1-800-352-0050 with any questions or comments.

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A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

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: Source: N/A U.S. Geological Survey

Target Property Address: 8425 LIVINGSTON WAY JUNEAU, AK 99801

Click on Map ID to see full detail.

MAP	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
ID A1	JUNEAU AAOF 300-GAL	8425 LIVINGSTON DR	AK RGA LUST	LLEVATION	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		ТР
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.
118	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.
133	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.
135	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.

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

Target Property Address: 8425 LIVINGSTON WAY JUNEAU, AK 99801

Click on Map ID to see full detail.

MAP	SITE NAME	ADDRESS		ELATIVE EVATION	DIST (ft. & mi.) DIRECTION
ID 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, ECH	O 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

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	AKD983073321
	Registry ID:: 110003039809 ECHO	
	Registry ID: 110003039809	
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.

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.)	135	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 EPA ID:: AK0000385617	8892 YANDUKIN DR	0 - 1/8 (0.000 mi.)	51	21
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 - Ins Facility Status: Cleanup Complete Hazard ID: 1755 Hazard ID: 24385	1850 CREST STREET, N titutional Controls	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 - Institut Hazard ID: 25156	SHELL SIMMONS DRIVE ional Controls	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 - Institut Hazard ID: 24532	9151 GLACIER HWY; ional Controls	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 - Institut Hazard ID: 24743	9225 CESSNA DRIVE ional Controls	W 0 - 1/8 (0.065 mi.)	Q72	26
UNOCAL - #5785- AIRP Facility Status: Cleanup Complete - Institut Hazard ID: 2984 Hazard ID: 23568	9190 GLACIER HIGHWAY ional Controls	WNW 0 - 1/8 (0.076 mi.)	S76	27
JUNEAU AIRPORT TRAVE Facility Status: Cleanup Complete - Institut Hazard ID: 4517	9200 GLACIER HIGHWAY ional Controls	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.)	778	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 - Institut 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 - Instit Hazard ID: 1183	10005 CRAZY HORSE DR utional Controls	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 - Instit Hazard ID: 24511	1650 MAPLESDEN WAY utional Controls	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 - Instit Hazard ID: 4063	10648 MISTY LANE, DO utional Controls	SSW 1/2 - 1 (0.779 mi.)	104	34

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 - Ins	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 - Ins	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 - Ins	9225 CESSNA DRIVE	W 0 - 1/8 (0.065 mi.)	Q73	26
UNOCAL - #5785- AIRP eventid: 23568 Facility Status: Cleanup Complete - Ins	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 - Inst	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.)	133	16

Lower Elevation	Address	Direction / Distance	Map ID	Page
AERO SERVICES, INC. Facility Id: 1375 Tank Status: Permanently Out of Use	1890 RENSHAW WAY	W 1/8 - 1/4 (0.137 mi.)	Т83	29
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
JUNEAU & DOUGLAS TEL Facility Id: 143 Tank Status: Permanently Out of Use	9229 CESSNA DR	W 0 - 1/8 (0.036 mi.)	Q71	26
FAA JUNEAU Facility Id: 1020 Tank Status: Permanently Out of Use	9230 CESSNA DR	WNW 0 - 1/8 (0.023 mi.)	Q62	23
PAUL'S CHEVRON Facility Id: 928 Tank Status: Permanently Out of Use	9151 GLACIER HWY	WNW 0 - 1/8 (0.022 mi.)	P59	23
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
JUNEAU DAIRIES DISTR Facility Id: 51 Tank Status: Permanently Out of Use	8403 AIRPORT BLVD	0 - 1/8 (0.000 mi.)	H53	21
WARD AIR INC Facility Id: 2725 Tank Status: Permanently Out of Use	8991 YANDUKIN DR	0 - 1/8 (0.000 mi.)	F50	20
CAMERON PLUMBING & H Facility Id: 2726 Tank Status: Permanently Out of Use	1850 CREST ST	0 - 1/8 (0.000 mi.)	E47	19
JUNEAU AIRPORT Facility Id: 2157 Tank Status: Permanently Out of Use	SHELL SIMMONS DR AT	0 - 1/8 (0.000 mi.)	44	19
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
PACIFIC TELECOM, INC Facility Id: 2687 Tank Status: Permanently Out of Use	2075 JORDAN AVE	0 - 1/8 (0.000 mi.)	J40	17
ALASKA AIRLINES - JU Facility Id: 1570 Tank Status: Permanently Out of Use	1873 SHELL SIMMONS D	0 - 1/8 (0.000 mi.)	G36	16
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

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 Facility Status: Cleanup Complete - In Hazard ID: 1755	1850 CREST STREET, N stitutional Controls	0 - 1/8 (0.000 mi.)	E41	17
CBJ JUNEAU AIRPORT M Facility Status: Cleanup Complete - In Hazard ID: 25156	SHELL SIMMONS DRIVE stitutional Controls	W 0 - 1/8 (0.010 mi.)	N54	21
CHEVRON - AIRPORT (P Facility Status: Cleanup Complete - In Hazard ID: 24532	9151 GLACIER HWY; stitutional Controls	WNW 0 - 1/8 (0.022 mi.)	P60	23
PTI- JUNEAU CESSNA D Facility Status: Cleanup Complete - In Hazard ID: 24743	9225 CESSNA DRIVE stitutional Controls	W 0 - 1/8 (0.065 mi.)	Q72	26
UNOCAL - #5785- AIRP Facility Status: Cleanup Complete - In Hazard ID: 2984 Hazard ID: 23568	9190 GLACIER HIGHWAY stitutional Controls	WNW 0 - 1/8 (0.076 mi.)	S76	27
JUNEAU AIRPORT TRAVE Facility Status: Cleanup Complete - In Hazard ID: 4517	9200 GLACIER HIGHWAY stitutional Controls	WNW 0 - 1/8 (0.112 mi.)	\$77	27
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 - In Hazard ID: 2697	MENDENHALL LOOP ROAD stitutional Controls	WNW 1/4 - 1/2 (0.392 mi.)	95	32
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 DEC File Number: 1513.26.056 Facility Status: Cleanup Complete - Inst Hazard Id: 24743	9225 CESSNA DRIVE	W 0 - 1/8 (0.065 mi.)	Q72	26
SKATEBOARD PARK DEC File Number: 1513.38.038 Facility Status: Cleanup Complete Hazard Id: 2696	MENDENHALL LOOP ROAD	WNW 1/4 - 1/2 (0.392 mi.)	95	32
Lower Elevation	Address	Direction / Distance	Map ID	Page
TEMSCO HELICOPTERS - DEC File Number: 1513.26.053 Facility Status: Cleanup Complete - Inst Hazard Id: 24511	1650 MAPLESDEN WAY	E 0 - 1/8 (0.033 mi.)	R64	24

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 EPA ID:: AKD983068669	8345 OLD DAIRY RD	0 - 1/8 (0.000 mi.)	B11	10
HALS BODY SHOP EPA ID:: AKR000000919	1990 ALPINE AVE	0 - 1/8 (0.000 mi.)	l18	12
CAPITAL CITY CLEANER EPA ID:: AKD983071887	8745 GLACIER HWY STE	0 - 1/8 (0.000 mi.)	M26	14
RITZ CAMERA CENTERS EPA ID:: AKR000003186	8745 GLACIER HWY #43	0 - 1/8 (0.000 mi.)	M27	14
YUKON OFFICE SUPPLY EPA ID:: AKD983075037	2075 JORDAN AVE	0 - 1/8 (0.000 mi.)	J31	15
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
<i>T W HALL</i> 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 Gove Mine ID:: 5001723	rnment Version: 08/01/2018	NW 1/8 - 1/4 (0.175 mi.)	U87	30
CHANNEL CONSTRUCTION Database: US MINES, Date of Gove Mine ID:: 5001722	rnment Version: 08/01/2018	NW 1/8 - 1/4 (0.194 mi.)	V89	30
MILLER CONSTRUCTION Database: US MINES, Date of Gove Mine ID:: 5001746	rnment Version: 08/01/2018	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

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.

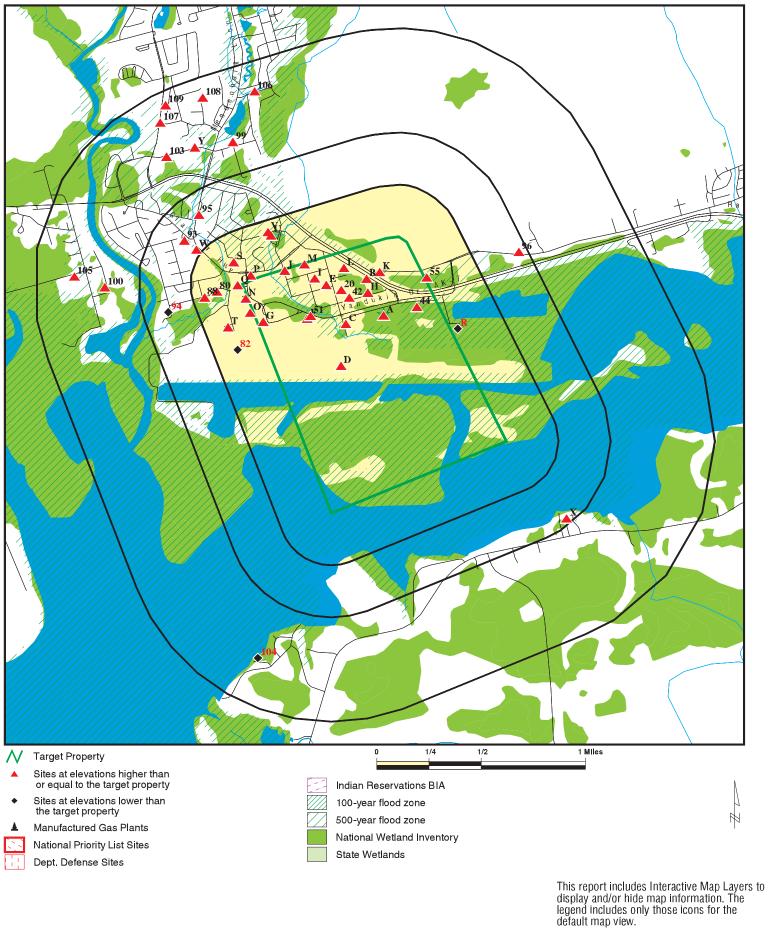
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CAPITAL CITY CLEANER	2092 JORDAN AVE STE	0 - 1/8 (0.000 mi.)	J22	13
STARHILL ENTERPRISES	8745 GLACIER HWY STE	0 - 1/8 (0.000 mi.)	M28	14

Count: 24 records.

ORPHAN SUMMARY

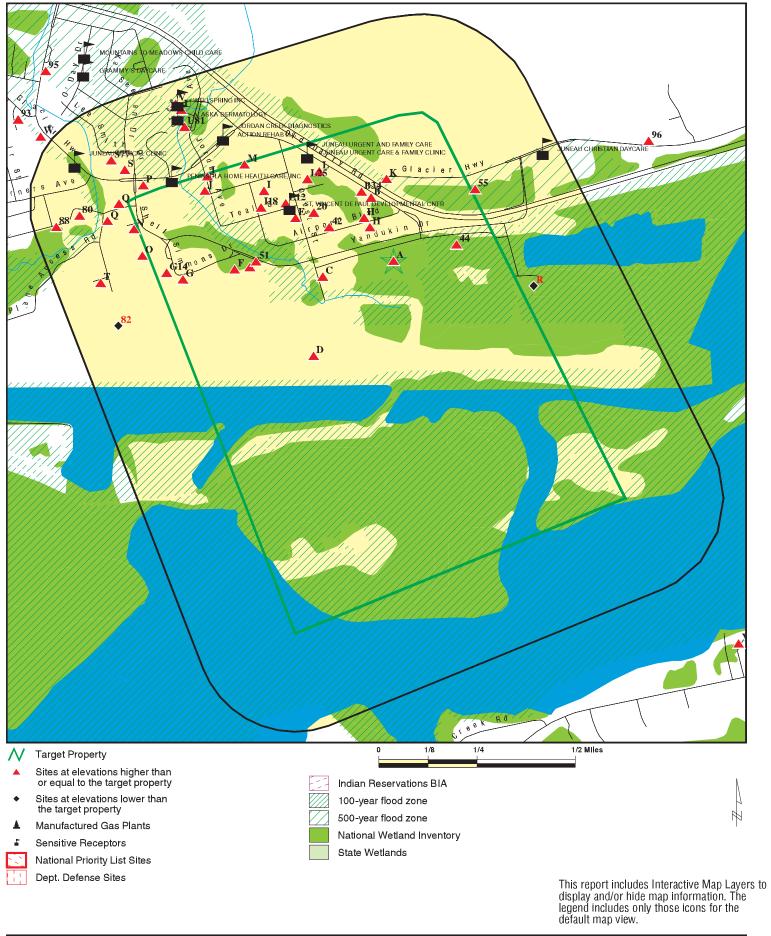
City	EDR ID	Site Name	Site Address	Zip	Database(s)
JUNEAU	S108185311	JUNEAU -JIA- TAXIWAY REHABILITATIO	AIRPORT	99801	AK NPDES
JUNEAU	S116466155	DELTA WESTERN JUNEAU AIRPORT FUEL	ALEX HOLDEN WAY; JUNEAU AIRPOR		AK RGA LUST
JUNEAU	S116466154	DELTA WESTERN JUNEAU AIRPORT FUEL	ALEX HOLDEN WAY JUNEAU AIRPORT		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



SITE NAME: Juneau	CLIENT: AECOM
ADDRESS: 8425 Livingston Way	CONTACT: Brittany Kirchmann
Juneau AK 99801	INQUIRY #: 5509586.2s
LAT/LONG: 58,35764 / 134,568524	DATE: December 12, 2018 9:59 am
EAT/20104. 30:03/ 04/ 104:300324	

DETAIL MAP - 5509586.2S



SITE NAME:	 CLIENT: CONTACT	AECOM Brittany Kirchmann
		5509586.2s December 12, 2018 9:59 am
Brinzonia.	DATE.	2000111501 12; 2010 0.00 dill

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMEN	TAL RECORDS							
Federal NPL site list								
NPL Proposed NPL NPL LIENS	1.000 1.000 1.000		0 0 0	0 0 0	0 0 0	0 0 0	NR NR NR	0 0 0
Federal Delisted NPL si	te list							
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY SEMS	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0
Federal CERCLIS NFRA	P site list							
SEMS-ARCHIVE	0.500		1	0	1	NR	NR	2
Federal RCRA CORRAC	TS facilities li	ist						
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-COR		acilities list						
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generato	rs list							
RCRA-LQG RCRA-SQG RCRA-CESQG	0.250 0.250 0.250	1	0 0 9	0 0 1	NR NR NR	NR NR NR	NR NR NR	0 0 11
Federal institutional cor engineering controls re								
LUCIS US ENG CONTROLS US INST CONTROL	0.500 0.500 0.500		0 0 0	0 0 0	0 0 0	NR NR NR	NR NR NR	0 0 0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equiva	alent CERCLIS	S						
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 l	lists						
AK LUST INDIAN LUST	0.500 0.500	1	18 0	0 0	2 0	NR NR	NR NR	21 0
State and tribal register	ed storage tar	nk lists						
FEMA UST	0.250		0	0	NR	NR	NR	0

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
AK UST AK AST INDIAN UST	0.250 0.250 0.250	1	21 0 0	1 0 0	NR NR NR	NR NR NR	NR NR NR	23 0 0
State and tribal institution control / engineering control / engin		es						
AK ENG CONTROLS AK INST CONTROL	0.500 0.500		1 7	0 0	0 2	NR NR	NR NR	1 9
State and tribal voluntar	y cleanup sit	es						
AK VCP INDIAN VCP	0.500 0.500		2 0	0 0	1 0	NR NR	NR NR	3 0
State and tribal Brownfie	elds sites							
AK BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMEN	NTAL RECORD	s						
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / S Waste Disposal Sites			-	-	-			-
AK SWRCY INDIAN ODI ODI DEBRIS REGION 9 IHS OPEN DUMPS	0.500 0.500 0.500 0.500 0.500		0 0 0 0	0 0 0 0	0 0 0 0	NR NR NR NR NR	NR NR NR NR NR	0 0 0 0
Local Lists of Hazardous Contaminated Sites	s waste /							
US HIST CDL AK CDL US CDL	TP TP TP		NR NR NR	NR NR NR	NR NR NR	NR NR NR	NR NR NR	0 0 0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency I	Release Repo	orts						
HMIRS AK SPILLS AK SPILLS 90	TP TP TP		NR NR NR	NR NR NR	NR NR NR	NR NR NR	NR NR NR	0 0 0
Other Ascertainable Rec	cords							
RCRA NonGen / NLR FUDS DOD SCRD DRYCLEANERS US FIN ASSUR EPA WATCH LIST	0.250 1.000 1.000 0.500 TP TP		7 0 0 NR NR	3 0 0 NR NR	NR 0 0 NR NR	NR 0 NR NR NR	NR NR NR NR NR	10 0 0 0 0 0

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	NŘ	NR	NR	NR	ŏ
TRIS	TP		NR	NR	NR	NR	NR	Õ
SSTS	TP		NR	NR	NR	NR	NR	õ
ROD	1.000		0	0	0	0	NR	ŏ
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 CONSENT	TP 1.000		NR 0	NR	NR 0	NR 0	NR NR	0 0
INDIAN RESERV	1.000		0	0 0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		Ő	õ	Ő	NR	NR	õ
LEAD SMELTERS	TP		NR	NR	NŘ	NR	NR	õ
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
AKAIRS	TP		NR	NR	NR	NR	NR	0
AK COAL ASH	0.500		0	0	0	NR	NR	0
AK DRYCLEANERS AK Financial Assurance	0.250 TP		0 NR	0 NR	NR NR	NR NR	NR NR	0 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 HISTORICA	L RECORDS							
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		2	NŘ	NŘ	NR	NR	2
EDR Hist Cleaner	0.125		2	NR	NR	NR	NR	2
EDR RECOVERED GOVERN	MENT ARCHI	VES						
Exclusive Recovered Go	vt. Archives							
AK RGA LF	TP		NR	NR	NR	NR	NR	0

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
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

Map ID	MAP FINDINGS		
Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
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 ld: 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

Map ID Direction	MAP FINDINGS		
Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
A5 Target Property	JUNEAU ARMY AVIATION OPERATING FACILTY 8425 LIVINGSTON WAY JUNEAU, AK 99801	AK UST	U004116156 N/A
Actual: 11 ft.	Click here for full text details AK UST Facility Id: 3223 Tank Status: Permanently Out of Use		
A6 Target Property	JUNEAU AAOF 300-GAL USED OIL TANK 8425 LIVINGSTON DR., JUNEAU, AK	AK RGA LUST	S116469406 N/A
Actual: 11 ft.	Click here for full text details		
A7 Target Property	JUNEAU AAOF 300-GAL USED OIL TANK 8425 LIVINGSTON DR. JUNEAU, AK 99801	AK LUST	S105096403 N/A
Actual: 11 ft.	Click here for full text details AK LUST eventid: 23037 Facility Status: Cleanup Complete		
B8 < 1/8 1 ft.	MENDENHALL CHRYSLER (OLD SITE) 8345 OLD DAIRY RD JUNEAU, AK 99801	AK UST	U003951987 N/A
Relative: Higher	Click here for full text details AK UST Facility Id: 2711 Tank Status: Permanently Out of Use		
C9 < 1/8 1 ft.	CBJ GLACIER VALLEY FIRE STATION 1700 CREST DRIVE JUNEAU, AK 99801	AK LUST	S105096375 N/A
Relative: Higher	Click here for full text details AK LUST eventid: 25160 Facility Status: Cleanup Complete		

Map ID		MAP FINDINGS]	
Direction Distance Elevation	Site		Database(s)	EDR ID Number EPA ID Number
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			

Map ID	MAP FINDINGS		
Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
G14 < 1/8 1 ft.	FAA JUNEAU STATION JUNEAU AIRPORT JUNEAU, AK 99801	AK SHWS	S107504829 N/A
Relative: Higher	Click here for full text details AK SHWS Hazard ID: 2975 Hazard ID: 1450 Facility Status: Cleanup Complete Facility Status: Active		
H15 < 1/8 1 ft.	DOUGLAS TRUCKING INC. 8400 AIRPORT BLVD JUNEAU, AK 99801	AK LUST AK UST	U003330829 N/A
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 < 1/8 1 ft.	CHANNEL FLYING JUNEAU AIRPORT 8995 YANDUKIN DRIVE, JUNEAU AIRPORT JUNEAU, AK 99801	AK SHWS	S117849292 N/A
Relative: Higher	Click here for full text details AK SHWS Hazard ID: 26362 Facility Status: Active		
C17 < 1/8 1 ft.	CBJ GLACIER VALLEY FIRE STATION 1700 CREST DRIVE JUNEAU, AK 99801	AK SHWS	S109255392 N/A
Relative: Higher	Click here for full text details AK SHWS Hazard ID: 25160 Facility Status: Cleanup Complete		

Map ID		MAP FINDINGS]	
Direction Distance Elevation	Site		Database(s)	EDR ID Number EPA ID Number
l18	HALS BODY SHOP 1990 ALPINE AVE		RCRA NonGen / NLR FINDS	1001085225 AKR000000919
< 1/8 1 ft.	JUNEAU, AK 99801		ECHO	
Relative:	Click here for full text deta	il <u>s</u>		
Higher	RCRA NonGen / NLR EPA Id: AKR000000919			
	FINDS Registry ID:: 110003038533	3		
	ECHO Registry ID: 110003038533			
C19	GLACIER FIRE STATION		AK UST	U003140262
< 1/8 1 ft.	1700 CREST DR JUNEAU, AK 99801			N/A
Relative:	Click here for full text deta	ils		
Higher	AK UST Facility Id: 2167 Tank Status: Permanently (Dut of Use		
20	HALS BODY SHOP		AK UST	U003141425
< 1/8 1 ft.	P. O. BOX 2177, 1990 ALPIN JUNEAU, AK 99803	EAVE		N/A
Relative: Higher	Click here for full text deta AK UST Facility Id: 944 Tank Status: Permanently C			
J21	FORMER CAPITAL CITY CL		AK SHWS	S118659598
< 1/8 1 ft.	2092 JORDAN AVE. SUITE 5 JUNEAU, AK 99801	95 NUGGET MALL		N/A
Relative:	Click here for full text deta	il <u>s</u>		
Higher	AK SHWS Hazard ID: 26537 Facility Status: Active			

F

Map ID	MAP FINDINGS		
Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
J22 < 1/8 1 ft.	CAPITAL CITY CLEANERS 2092 JORDAN AVE STE 595 JUNEAU, AK 99801	EDR Hist Cleaner	1019948324 N/A
Relative: Higher	Click here for full text details		
K23 < 1/8 1 ft.	CBJ - LEMON CREEK LIFT STATION ADJ. TO TIA INSURANCE BLDG. & THE BIKE PATH ALONG EGAN HIGHW JUNEAU, AK 99801	AK LUST	S105246771 N/A
Relative: Higher	Click here for full text details AK LUST eventid: 24631 Facility Status: Cleanup Complete		
K24 < 1/8 1 ft.	CBJ - LEMON CREEK LIFT STATION ADJ. TO TIA INSURANCE BLDG. & THE BIKE PATH ALONG EGAN HIGHW JUNEAU, AK 99801	AK SHWS	S109255309 N/A
Relative: Higher	Click here for full text details AK SHWS Hazard ID: 24631 Facility Status: Cleanup Complete		
L25 < 1/8 1 ft.	VALLEY LUMBER 8525 OLD DAIRY RD JUNEAU, AK 99801	RCRA-CESQG FINDS ECHO	1004670276 AKR000002238
Relative: Higher	Click here for full text details RCRA-CESQG EPA Id: AKR000002238		
	FINDS Registry ID:: 110003038203		
	ECHO Registry ID: 110003038203		

Map ID		MAP FINDINGS		
Direction Distance Elevation	Site		Database(s)	EDR ID Number EPA ID Number
M26 < 1/8 1 ft.	CAPITAL CITY CLEANERS 8745 GLACIER HWY STE 595 JUNEAU, AK 99801		RCRA NonGen / NLR FINDS ECHO	1000264307 AKD983071887
Relative: Higher	Click here for full text details RCRA NonGen / NLR EPA ld: AKD983071887			
	FINDS Registry ID:: 110003040236			
	ECHO Registry ID: 110003040236			
M27 < 1/8 1 ft.	RITZ CAMERA CENTERS #40 8745 GLACIER HWY #432 JUNEAU, AK 99803		RCRA NonGen / NLR FINDS ECHO	1004670295 AKR000003186
Relative: Higher	Click here for full text details RCRA NonGen / NLR EPA Id: AKR000003186			
	FINDS Registry ID:: 110006852405			
	ECHO Registry ID: 110006852405			
M28 < 1/8 1 ft.	STARHILL ENTERPRISES 8745 GLACIER HWY STE 295 JUNEAU, AK 99801		EDR Hist Cleaner	1018602095 N/A
Relative: Higher	Click here for full text details			
L29 < 1/8 1 ft.	USDA FS OLD DAIRY RD 8465 OLD DAIRY RD JUNEAU, AK 99801		RCRA-CESQG FINDS ECHO CA HAZNET	1004433687 AK4122300151
Relative: Higher	Click here for full text details RCRA-CESQG EPA Id: AK4122300151			
	FINDS			

Map ID Direction	MAP FINDINGS		
Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
	USDA FS OLD DAIRY RD (Continued) Registry ID:: 110003044287		1004433687
	ECHO Registry ID: 110003044287		
	CA HAZNET GEPAID: AK4122300151		
L30 < 1/8 1 ft.	USFS JUNEAU RANGER DISTRICT WAREHOUSE 8465 OLD DAIRY ROAD JUNEAU, AK 99801	AK SHWS	S108540255 N/A
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 R 2075 JORDAN AVE JUNEAU, AK 99801	CRA NonGen / NLR FINDS ECHO	1000817139 AKD983075037
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.		AK UST	U003331115 N/A

Map ID Direction	MAP FINDINGS		
Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
133 < 1/8	MENDENHALL AUTO CENTER 8725 MALLARD ST JUNEAU, AK 99801	AK UST	U001960041 N/A
< 1/8 1 ft.	JUNEAU, AR 39001		
Relative: Higher	Click here for full text details AK UST Facility Id: 2146		
	Tank Status: Permanently Out of Use		
B34 < 1/8	T & S WELDING INC. 8355 OLD DAIRY RD JUNEAU, AK 99801	AK UST	U003139523 N/A
1 ft.			
Relative: Higher	Click here for full text details AK UST Facility Id: 1192 Tank Status: Permanently Out of Use		
135	MENDENHALL AUTO CTR	RCRA-CESQG	1004670123
< 1/8 1 ft.	8725 MALLARD ST JUNEAU, AK 99801	FINDS ECHO	AK0000001115
Relative:	Click here for full text details		
Higher	RCRA-CESQG EPA Id: AK000001115		
	FINDS Registry ID:: 110003371440		
	ECHO Registry ID: 110003371440		
G36 < 1/8 1 ft.	ALASKA AIRLINES - JUNEAU CARGO BUILDI 1873 SHELL SIMMONS DR JUNEAU CARGO BUILDING JUNEAU, AK 99801	AK UST	U004115643 N/A
Relative:	Click here for full text details		
Higher	AK UST Facility Id: 1570 Tank Status: Permanently Out of Use		

Map ID Direction	MAP FINDINGS		
Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
G37 < 1/8 1 ft.	JUNEAU AIRFIELD AND GARRISON 1873 SHELL-SIMMONS DRIVE JUNEAU, AK 99801	SEMS-ARCHIVE	1001814646 AKSFN1002180
Relative: Higher	Click here for full text details SEMS-ARCHIVE Site ID: 1002180 EPA Id: AKSFN1002180		
G38 < 1/8 1 ft.	JUNEAU INTL ARPRT MAINT SVCS BLDG 1873 SHELL SIMMONS DR #200 JUNEAU, AK 99801	RCRA-CESQG	1000856046 AK0000084020
Relative: Higher	Click here for full text details RCRA-CESQG EPA Id: AK0000084020		
D39 < 1/8 1 ft.	DELTA AIR LINES JUNEAU JUNEAU INTL ARPRT JUNEAU, AK 99801	RCRA NonGen / NLR	1000394869 AKD152465670
Relative: Higher	Click here for full text details RCRA NonGen / NLR EPA Id: AKD152465670		
J40 < 1/8 1 ft.	PACIFIC TELECOM, INC 2075 JORDAN AVE JUNEAU, AK 99801	AK UST	U004115942 N/A
Relative: Higher	Click here for full text details AK UST Facility Id: 2687 Tank Status: Permanently Out of Use		
E41 < 1/8 1 ft.	CAMERON PLUMBING AND HEATING 1850 CREST STREET, NEAR YANDUKIN DRIVE JUNEAU, AK 99801	AK SHWS AK LUST AK INST CONTROL	S105273790 N/A
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		

MAP FINDINGS

EDR ID Number Database(s) EPA ID Number

Elevation			
	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	N C MACHINERY CO JUNEAU	RCRA-CESQG	1000123250
	8850 AIRPORT BLVD	AK LUST	
< 1/8 1 ft.	JUNEAU, AK 99803	AK UST FINDS	
111.		ECHO	
Relative:	Click here for full text details		
Higher	RCRA-CESQG		
	EPA ld: AKD035418979		
	AK LUST		
	eventid: 24505 Facility Status: Cleanup Complete		
	AKUST		
	Facility Id: 828 Tank Status: Permanently Out of Use		
	FINDS Registry ID:: 110003043448		
	ECHO Registry ID: 110003043448		
H43	PETROLEUM SVCS INC	RCRA NonGen / NLR	1000473430
. 1/0	8401 AIRPORT BLVD JUNEAU, AK 99803		AKD983069121
< 1/8 1 ft.	JUNEAU, AK 39003	ECHO	
	Click here for full text details		
Relative: Higher	RCRA NonGen / NLR		
	EPA Id: AKD983069121		
	FINDS		
	Registry ID:: 110003040780		

ECHO

Registry ID: 110003040780

Map ID	MAP FINDINGS		
Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
44 < 1/8 1 ft.	JUNEAU AIRPORT SHELL SIMMONS DR AT N APRON JUNEAU, AK 99801	AK LUST AK UST	U003140252 N/A
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 < 1/8 1 ft.	NC MACHINERY COMPANY 8550 AIRPORT BLVD; JUNEAU, AK 99801	AK SHWS	S109256445 N/A
Relative: Higher	Click here for full text details AK SHWS Hazard ID: 24505 Facility Status: Cleanup Complete		
H46 < 1/8 1 ft.	JUNEAU DAIRIES DISTRICT, INCORPORATED 8403 AIRPORT BLVD., LOTS 20, 21 & 22 BLOCK M VALLEY CENTRE S JUNEAU, AK 99801	AK SHWS	S109256439 N/A
Relative: Higher	Click here for full text details AK SHWS Hazard ID: 24490 Facility Status: Cleanup Complete		
E47 < 1/8 1 ft.	CAMERON PLUMBING & HEATING, INC. 1850 CREST ST JUNEAU, AK 99801	AK UST	U000730012 N/A
Relative: Higher	Click here for full text details AK UST Facility Id: 2726 Tack Status: Permananthy Out of Use		

Tank Status: Permanently Out of Use

Map ID	MAP FINDINGS		
Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
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 AK LUST AK UST FINDS ECHO	1000904399 AK0000385625
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		

Map ID	MAP FINDINGS		
Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
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		

Map ID Direction		S	
Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
55 NE < 1/8 0.010 mi. 55 ft.	FRED MEYER #158 FUEL STOP 8181 GLACIER HWY JUNEAU, AK 99801	AK UST AK Financial Assurance AK NPDES	U004116415 N/A
Relative:	Click here for full text details		
Higher	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.	DELTA AIR CARGO JUNEAU INTERNATIONAL AIRPORT JUNEAU, AK 99801	AK LUST	U003140141 N/A
Relative:	Click here for full text details		
Higher	AK LUST eventid: 24902 Facility Status: Cleanup Complete		
O57 West < 1/8 0.016 mi.	DELTA AIR CARGO JUNEAU INTERNATIONAL AIRPORT JUNEAU, AK 99801	AK SHWS	S109256693 N/A
82 ft. Relative:	Click here for full text details		
Higher	AK SHWS Hazard ID: 24902 Facility Status: Cleanup Complete		
P58 WNW < 1/8 0.022 mi. 116 ft.	CHEVRON - AIRPORT (PAUL'S CHEVRON) 9151 GLACIER HWY JUNEAU, AK 99801	AK LUST	S104891675 N/A
Relative: Higher	Click here for full text details		
nynei	AK LUST eventid: 24532 Facility Status: Cleanup Complete - Institutional Controls		

Map ID	MAP FINDINGS		
Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
P59 WNW < 1/8 0.022 mi. 116 ft.	PAUL'S CHEVRON 9151 GLACIER HWY JUNEAU, AK 99801	AK UST	U003141408 N/A
Relative:	Click here for full text details		
Higher	AK UST Facility Id: 928 Tank Status: Permanently Out of Use		
P60 WNW < 1/8 0.022 mi. 116 ft.	CHEVRON - AIRPORT (PAUL'S CHEVRON) 9151 GLACIER HWY; JUNEAU, AK 99801	AK SHWS AK ENG CONTROLS AK INST CONTROL	S109254667 N/A
Relative:	Click here for full text details		
Higher	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.	EMIGS CHEVRON 9151 GLACIER HWY JUNEAU, AK 99801	EDR Hist Auto	1021462288 N/A
Relative: Higher	Click here for full text details		
Q62 WNW < 1/8 0.023 mi.	FAA JUNEAU 9230 CESSNA DR JUNEAU, AK 99801	AK UST	U004115416 N/A
119 ft. Relative:	Click here for full text details		
Higher	AK UST Facility Id: 1020 Tank Status: Permanently Out of Use		

Tank Status: Permanently Out of Use

Map ID	MAP FINDINGS		
Direction Distance Elevation	Site		EDR ID Number EPA ID Number
		Database(s)	
Q63 West < 1/8 0.027 mi. 141 ft.	DELTA WESTERN JUNEAU AIRPORT FUEL STORAGE 9203 CESSNA DRIVE; JUNEAU INTERNATIONAL AIRPORT JUNEAU, AK 99801	AK SHWS AK LUST	S109255032 N/A
Relative:	Click here for full text details		
Higher	AK SHWS Hazard ID: 23308 Facility Status: Cleanup Complete		
	AK LUST eventid: 23308 Facility Status: Cleanup Complete		
R64 East < 1/8 0.033 mi.	TEMSCO HELICOPTERS - JNU HELIPORT 1650 MAPLESDEN WAY JUNEAU, AK	AK VCP	S109254664 N/A
175 ft.	Click here for full text details		
Relative: Lower	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.	TEMSCO HELICOPTERS 1650 MAPLEADEN WAY JUNEAU, AK 99801	AK LUST	S122315768 N/A
Relative:	Click here for full text details		
Lower	AK LUST eventid: 24507 Facility Status: Cleanup Complete		
R66 East < 1/8 0.033 mi. 175 ft.	TEMSCO HELICOPTERS, INC. 1650 MAPLESDEN WAY AK Fina JUNEAU, AK 99801	AK UST ncial Assurance	U004115945 N/A
Relative:	Click here for full text details		
Lower	AK UST Facility Id: 270 Tank Status: Permanently Out of Use Tank Status: Currently in Use		

AK Financial Assurance

Facility Id: 270

Map ID	MAP FINDINGS		
Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
R67 East < 1/8 0.033 mi. 175 ft.	TEMSCO HELICOPTERS 1650 MAPLEADEN WAY; JUNEAU, AK 99801	AK SHWS	S109256446 N/A
Relative: Lower	Click here for full text details AK SHWS Hazard ID: 24507 Facility Status: Cleanup Complete		
R68 East < 1/8 0.033 mi. 175 ft.	TEMSCO HELICOPTERS - JUNEAU HELIPORT 1650 MAPLESDEN WAY JUNEAU, AK 99801	AK LUST	S122315769 N/A
Relative: Lower	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.	TEMSCO HELICOPTERS - JUNEAU HELIPORT 1650 MAPLESDEN WAY JUNEAU, AK 99801	AK SHWS AK INST CONTROL	U003331078 N/A
Relative: Lower	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.	AERO SERVICES, JUNEAU AIRPORT "F"GATE 9203 SHELL SIMMONS DRIVE JUNEAU, AK 99801	AK SHWS AK LUST	S109349499 N/A
189 ft. Relative: Higher	Click here for full text details AK SHWS Hazard ID: 23170 Facility Status: Cleanup Complete		
	AK LUST eventid: 23170 Facility Status: Cleanup Complete		

Map ID	MAP FINDINGS		
Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
Q71 West < 1/8 0.036 mi. 191 ft. Relative: Higher	JUNEAU & DOUGLAS TELCO. 9229 CESSNA DR JUNEAU, AK 99803 Click here for full text details AK UST Facility Id: 143	AK UST	U004115583 N/A
Q72 West < 1/8 0.065 mi. 342 ft.	PTI- JUNEAU CESSNA DRIVE 9225 CESSNA DRIVE JUNEAU, AK 99803	AK SHWS AK INST CONTROL AK VCP	S109254684 N/A
Relative: Higher	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.	PTI- JUNEAU CESSNA DRIVE 9225 CESSNA DRIVE JUNEAU, AK 99803	AK LUST	S105096354 N/A
Relative: Higher	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.	MIKE'S AIRPORT EXPRESS 9190 GLACIER HWY AF JUNEAU, AK 99801	AK UST (Financial Assurance	U003141313 N/A
Relative: Higher	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		
		TC55	09586.2s Page 26

Map ID	MAP FINDINGS		
Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
	MIKE'S AIRPORT EXPRESS (Continued) Facility Id: 816		U003141313
S75 WNW < 1/8 0.076 mi.	MIKES AIRPORT UNION 9190 GLACIER HWY JUNEAU, AK 99801	EDR Hist Auto	1022106396 N/A
399 ft. Relative: Higher	Click here for full text details		
S76 WNW < 1/8 0.076 mi.	UNOCAL - #5785- AIRPORT UNION 9190 GLACIER HIGHWAY JUNEAU, AK 99801	AK SHWS AK LUST AK INST CONTROL	S104893243 N/A
399 ft. Relative: Higher	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.	JUNEAU AIRPORT TRAVELODGE HOTEL 9200 GLACIER HIGHWAY, TRAVELODGE HOTEL JUNEAU, AK 99803	AK SHWS AK INST CONTROL	S108940957 N/A
594 ft. Relative: Higher	<u>Click here for full text details</u> AK SHWS Hazard ID: 4517 Facility Status: Cleanup Complete - Institutional Controls		
	AK INST CONTROL Hazard ID: 4517 Facility Status: Cleanup Complete - Institutional Controls		

Map ID Direction	MAP FINDINGS		
Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
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 Click here for full text details AK SHWS	AK SHWS AK LUST	S109254969 N/A
	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.	ALASKA AIRLINES - JUNEAU CARGO BUILDING 1915 ALEX HOLDEN WAY JUNEAU, AK 99801	AK LUST	S105453951 N/A
Relative: Higher	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.	JUNEAU AIRPORT FUELING FACILITY 2085 ALEX HOLDEN WAY JUNEAU, AK 99801	AK SHWS	S104893281 N/A
Relative: Higher	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.	2207 NORTH JORDAN AVE. JUNEAU, AK 99801	BANDONED MINES	1024248009 N/A
Relative:	Click here for full text details		

F

Relative: Higher

Map ID	MAP FINDINGS		
Direction Distance Elevation	Site	 Database(s)	EDR ID Number EPA ID Number
82 WSW 1/8-1/4 0.136 mi. 716 ft.	ALASKA COASTAL AIRLINES JUNEAU INTL ARPRT BLK H LOT 7 JUNEAU, AK 99801	RCRA-CESQG	1000904403 AK0000444174
Relative: Lower	Click here for full text details RCRA-CESQG EPA Id: AK0000444174		
T83 West 1/8-1/4 0.137 mi.	AERO SERVICES, INC. 1890 RENSHAW WAY JUNEAU, AK 99801	AK UST	U003998651 N/A
721 ft. Relative: Higher	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.	NORTHSTAR TREKKING DBA N.STAR HELICOPTER 1910 RENSHAW WAY JUNEAU, AK 99801	RCRA NonGen / NLR	1007879133 AKR000201368
Relative: Higher	Click here for full text details RCRA NonGen / NLR EPA Id: AKR000201368		
U85 NW 1/8-1/4 0.172 mi. 909 ft.	CHANNEL CONSTRUCTION INC 2223 NORTH JORDAN AVE JUNEAU, AK 99801	RCRA NonGen / NLR PADS	1015757153 AKR000002378
Relative: Higher	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.	PORTABLE 191 2223 N. JORDAN AVE. JUNEAU, AK 99801	ABANDONED MINES	1018260304 N/A
Relative: Higher	Click here for full text details		

Map ID	MAP FIN	DINGS	
Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
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	RCRA NonGen / NLR FINDS ECHO	1004670314 AKR000004283
V89	FINDS Registry ID:: 110003036946 ECHO Registry ID: 110003036946 CHANNEL CONSTRUCTION INC	US MINES	1016521834
NW 1/8-1/4 0.194 mi. 1025 ft. Relative: Higher	JUNEAU (County), AK <u>Click here for full text details</u> US MINES Mine ID:: 5001722		N/A
V90 NW 1/8-1/4 0.194 mi. 1025 ft. Relative: Higher	MILLER CONSTRUCTION CO LTD JUNEAU (County), AK <u>Click here for full text details</u> US MINES Mine ID:: 5001746	US MINES	1016521846 N/A

Mine ID:: 5001746

Map ID Direction		MAP FINDINGS]	
Distance Elevation	Site		Database(s)	EDR ID Number EPA ID Number
W91 WNW 1/4-1/2 0.276 mi. 1458 ft.	FAA JUNEAU SFOP 9341 GLACIER HIGHWAY JUNEAU, AK 99801 Click here for full text detail	3	AK SHWS AK LUST	S109255355 N/A
Relative: Higher	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.	USDOT FAA JUNEAU 9341 GLACIER HWY NAV AID JUNEAU, AK 99801	S	SEMS-ARCHIVE RCRA NonGen / NLR PADS FINDS ECHO	1000456199 AK9690500179
Relative: Higher	Click here for full text detail: SEMS-ARCHIVE Site ID: 1001753 EPA Id: AK9690500179	3		
	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.	COMMERCIAL PROPERTY - 9 9351 GLACIER HIGHWAY JUNEAU, AK 99801	351 GLACIER HIGHWAY	AK SHWS AK INST CONTROL	S110762070 N/A
1839 ft. Relative: Higher	Click here for full text details AK SHWS Hazard ID: 25608 Facility Status: Cleanup Com			

AK INST CONTROL Hazard ID: 25608 Facility Status: Cleanup Complete

		5	
Map ID	MAP FINDINGS		
Direction Distance		J	EDR ID Number
Elevation	Site	Database(s)	EPA ID Number
94 West 1/4-1/2	MENDENHALL WW TREATMENT PLANT 2009 RADCLIFFE ROAD, ADJACENT TO JUNEAU INTERNATIONAL AIRPOR JUNEAU, AK 99801	AK SHWS	S108033073 N/A
0.380 mi. 2007 ft.			
Relative: Lower	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.	SKATEBOARD PARK MENDENHALL LOOP ROAD, 1/4 MILE SOUTH OF EGAN JUNEAU, AK 99801	AK SHWS AK INST CONTROL AK VCP	S105464279 N/A
Relative:	Click here for full text details		
Higher	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.	GLACIER GARDENS RAINFOREST ADVENTURES AST SPILL 7600 GLACIER HIGHWAY JUNEAU, AK 99801	AK SHWS	S105273792 N/A
2430 ft. Relative:	Click here for full text details		
Higher	AK SHWS Hazard ID: 3709 Facility Status: Cleanup Complete		
X97 SE 1/4-1/2 0.469 mi. 2475 ft.	BRUCE D. MORLEY, INCORPORATED 9128 N. DOUGLAS HIGHWAY JUNEAU, AK 99801	AK LUST	S106166020 N/A
Relative: Higher	Click here for full text details		
5	AK LUST eventid: 24560 Facility Status: Cleanup Complete		

Map ID	MAP FINDINGS		
Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
X98 SE 1/4-1/2 0.469 mi. 2475 ft.	BRUCE D. MORLEY, INCORPORATED 9128 N. DOUGLAS HIGHWAY; JUNEAU, AK 99801	AK SHWS	S109256489 N/A
Relative: Higher	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.	USFS DUCK CREEK ADMINISTRATION NW CORNER OF ATLIN DRIVE & TESLIN STREET JUNEAU, AK 99801	AK SHWS	S108540253 N/A
Relative: Higher	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.	BICKNELL 2275 BRANDY LANE JUNEAU / DOUGLAS, AK 99801	AK SHWS AK SPILLS	S117718815 N/A
Relative: Higher	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.	VALLEY TESORO 9102 MENDENHALL MALL ROAD JUNEAU, AK 99801	AK SHWS AK LUST	S118973342 N/A
Relative: Higher	Click here for full text details AK SHWS Hazard ID: 26640 Facility Status: Active		
	AK LUST eventid: 26640		

eventid: 26640 Facility Status: Open

Map ID	MAP FINDINGS		
Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
Y102 NW 1/2-1 0.691 mi.	VALLEY TESORO 9102 MENDENHALL MALL RD JUNEAU, AK 99801	AK SHWS AK UST AK Financial Assurance	U004116318 N/A
3649 ft. Relative:	Click here for full text details		
Higher	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.	MENDENHALL MALL HOTS 9105 MENDENHALL MALL ROAD JUNEAU, AK 99801	AK SHWS	S108670394 N/A
Relative:	Click here for full text details		
Higher	AK SHWS Hazard ID: 4448 Facility Status: Cleanup Complete		
104 SSW 1/2-1 0.779 mi.	RESIDENCE - MISTY LANE HHOT 10648 MISTY LANE, DOUGLAS ISLAND NORTH END JUNEAU, AK 99801	AK SHWS AK INST CONTROL	S106802261 N/A
4112 ft. Relative:	Click here for full text details		
Lower	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.	E&L AUTO 10005 CRAZY HORSE DRIVE, MENDENHALL VALLEY JUNEAU, AK 99801	AK SHWS AK ENG CONTROLS AK INST CONTROL	S104893267 N/A
4261 ft. Relative:	Click here for full text details		
Higher	AK SHWS Hazard ID: 1183		

MAP FINDINGS

EDR ID Number Database(s) EPA ID Number

	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		
6 W -1 59 mi. 85 ft.	RESIDENCE - NANCY STREET JNU 8905 NANCY STREET JUNEAU, AK 99801	AK SHWS	S107504671 N/A
ative:	Click here for full text details		
her	AK SHWS Hazard ID: 3710 Facility Status: Cleanup Complete		
, / -1 69 mi.	RIVERBEND / DIMOND PARK 2900 RIVERSIDE DRIVE, 1/2 MILE NORTH OF EGAN DR JUNEAU, AK 99801	AK SHWS AK INST CONTROL	S104893282 N/A
90 ft.	Click here for full text details		
ative: her	AK SHWS Hazard ID: 299 Facility Status: Cleanup Complete		
	AK INST CONTROL Hazard ID: 299 Facility Status: Cleanup Complete		
8 / -1 02 mi.	RESIDENCE - 2822 MARSHA AVENUE 2822 MARSHA AVENUE JUNEAU, AK 99801	AK SHWS	S118454846 N/A
52 ft.	Click here for full text details		
ative: Iher	AK SHWS Hazard ID: 26468		

Facility Status: Active

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	Map ID Direction		MAP FINDINGS		
Elevation Site Database(s) EPA ID Number	Distance	-			EDR ID Number
	Elevation	Site		Database(s)	EPA ID Number

109 **RESIDENCE - 2921 GLACIERWOOD COURT** NW 2921 GLACIERWOOD COURT JUNEAU, AK 99801 1/2-1 0.933 mi. 4925 ft.

Click here for full text details

AK SHWS

Hazard ID: 26331 Facility Status: Active

Relative: Higher

AK SHWS S117849273 N/A

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

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

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 D	ata	PennWell Corporation			
-			'			

St Acronym

Full Name

Government Agency

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).

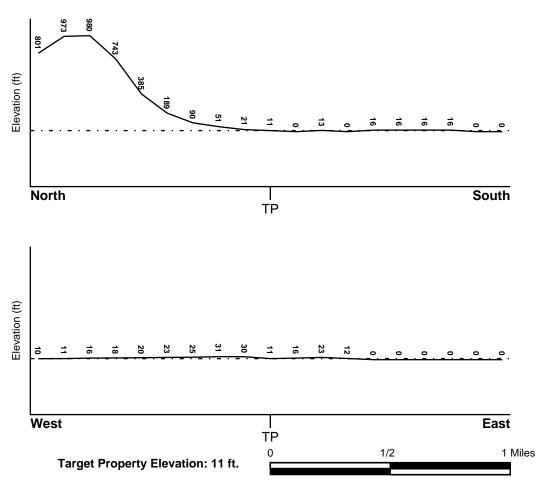
TOPOGRAPHIC INFORMATION

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



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 02110C1526D 02110C1533D 02110C1529D	FEMA FIRM Flood data FEMA FIRM Flood data FEMA FIRM Flood data FEMA FIRM Flood data
NATIONAL WETLAND INVENTORY	
NWI Quad at Target Property Not Reported	NWI Electronic <u>Data Coverage</u> N

LOCATION

FROM TP

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 Not Reported GENERAL DIRECTION GROUNDWATER FLOW

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

GEOLOGIC AGE IDENTIFICATION

Era:	- Category: -	
System:	-	
Series:	•	
Code:	N/A (decoded above as Era, System & Series)	

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name:	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							
	Βοι	indary		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

GEOCHECK[®] - PHYSICAL SETTING SOURCE SUMMARY

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	<u>USGS4000</u> 0010708	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

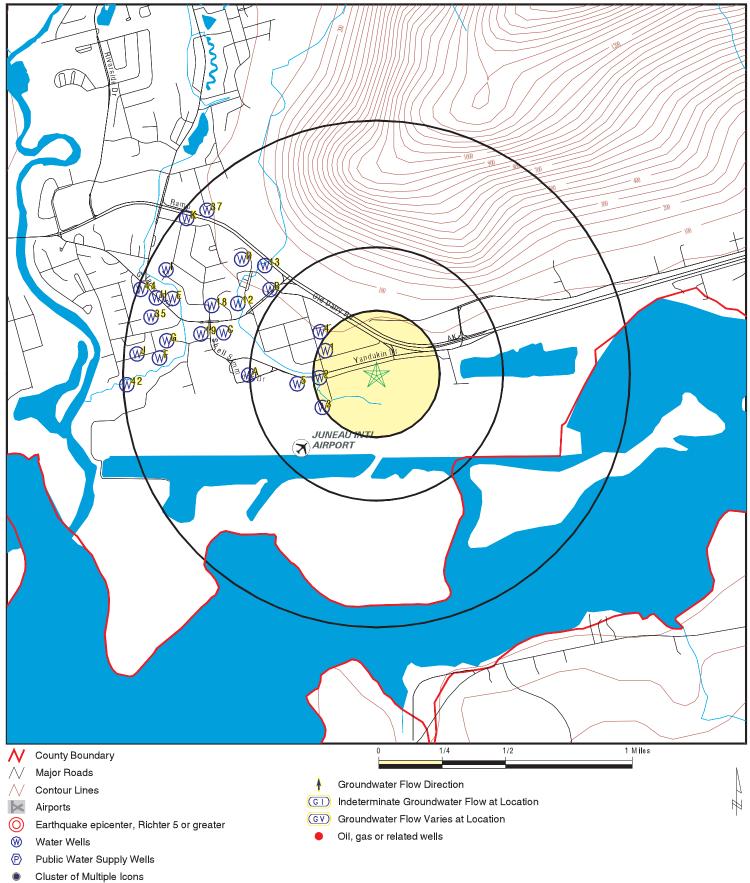
MAP ID	WELL ID	LOCATION FROM TP
F26	USGS40000010729	1/2 - 1 Mile West
E27	USGS40000010757	1/2 - 1 Mile WNW
E28	USGS40000010758	1/2 - 1 Mile WNW
E29	USGS40000010755	1/2 - 1 Mile WNW
E30	USGS40000010756	1/2 - 1 Mile WNW
F31	USGS4000010722	1/2 - 1 Mile West
H32	USGS40000010759	1/2 - 1 Mile WNW
133	USGS40000010773	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
139	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

		LOCATION
MAP ID	WELL ID	FROM TP
No PWS System Found	I	

Note: PWS System location is not always the same as well location.

PHYSICAL SETTING SOURCE MAP - 5509586.2s



Map ID Direction Distance Elevation	Database EDR ID Number
1 WNW <u>Click here for full text details</u> 1/8 - 1/4 Mile Higher	FED USGS USGS40000010708
2 West <u>Click here for full text details</u> 1/8 - 1/4 Mile Higher	FED USGS USGS40000010698
3 WSW <u>Click here for full text details</u> 1/4 - 1/2 Mile Higher	FED USGS USGS40000010688
4 NW <u>Click here for full text details</u> 1/4 - 1/2 Mile Higher	FED USGS USGS40000010716
5 West <u>Click here for full text details</u> 1/4 - 1/2 Mile Higher	FED USGS USGS40000010699
A6 West <u>Click here for full text details</u> 1/2 - 1 Mile Higher	FED USGS USGS40000010709
A7 West <u>Click here for full text details</u> 1/2 - 1 Mile Higher	FED USGS USGS40000010710
A8 West <u>Click here for full text details</u> 1/2 - 1 Mile Higher	FED USGS USGS40000010704
B9 NW <u>Click here for full text details</u> 1/2 - 1 Mile Higher	FED USGS USGS40000010749 Page: 1

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 Page: 2

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 Page: 3

Map ID Direction Distance		Detabase	
Elevation E28 WNW 1/2 - 1 Mile Higher	Click here for full text details	Database	EDR ID Number
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
133 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 Page: 4

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
l39 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 Page: 5

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

FL **PA Interview Questionnaire - Other** Facility: Interviewer: Date/Time: 9/U Can your name/role be used in the PA Report? Y br N Interviewee: Title: FD. Fine Chuef Can you recommend anyone we can interview? **Phone Number:** Y or N Email: Roles or activities with the Facility/Years working at the Facility: chief talking w/ mansactorer, well SINCharge of ARF Finchighly division exquee 19 Statin Statin Builtin on this locatus. seeman 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? weller 6 carbon chain Chambard CM6 **Known Uses** Use all for class proam. Procurement Disposition Do use Class A: B for traine Storage (Mixed) Use doam for destry having Chengrand Storage (Solution) 2601 Showed Lave Traing Cent phere Sied in Inventory, Off-Spec ON airport grants Containment SOP on Filling Hesting ARF truck into Leaking Vehicles Nozzle and Suppression the Flow System Testing 400 gal carterin in truck **Dining Facilities** Vehicle Washing 5. Steys in tack. get flushed ast - She Ramp Washing Fuel Spill Washing and ocatus on Map- Setting pand **Fueling Stations** Airport tests rhott (not dor pros) -> Apport fesce Fire Lynn, = ARF. Chrome Plating or Waterproofing

PZ/2 Facility: F.D. **PA Interview Questionnaire - Other** Interviewer: Date/Time: goes into tank und grand & Starty in aty waste who treats it. DEC Knows knowsall this. la Accidents since 1979 Dry for an was used on arport Army (sourd des northan the E.S. Annow a Ban Juasa vol. FF @old Jed protein soam. >1au 70-80 OLD Fire Clue Recc: late 80s, cerly 905 stopped using protein Joan "hell" hant is justa cistan used for trucks Q > On pond, docsitforna. pone som ges. not Froth

P1/1 **PA Interview Questionnaire - Other** Facility: Interviewer Date/Time: 9/4/1 Can your name/role be used in the PA Report?/Y or N Interviewee: Title: Facility Countre ? Can you recommend anyone we can interview? Phone Number: (or N - F.D. Email: Roles or activities with the Facility/Years working at the Facility: time last ot. (and 1011 NOT her 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? There been discharged or used have Known Uses Use Fundat is Only source Procurement mit use or Lischarge Disposition Storage (Mixed) - Belore no a Storage (Solution) Inventory, Off-Spec Containment aqueral location SOP on Filling Leaking Vehicles Nozzle and Suppression -PNO Crashes on Au port System Testing **Dining Facilities** Vehicle Washing au Shan Ramp Washing Fuel Spill Washing and **Fueling Stations** Chrome Plating or kiling - Alvoservices; Waterproofing -> Salmon Creek Dam -> community 20 intake inter

P1/2 TUNEAU Facility: AAOI **PA Interview Questionnaire - Other** Interviewe Date/Time:__________ Can your name/role be used in the PA Report? (V) or N Interviewee: Can you recommend anyone we can interview? Title: Support plot/Aughe Phone Number: VUN Y or N **Email:** Roles or activities with the Facility/Years working at the Facility: 18 months a this hauge iveraft Maran Deplayed 2004 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 Sunasy solum Use Same location Procurement Disposition in mid-80's Storage (Mixed) Storage (Solution) 102 waste - had no the AFFF Inventory, Off-Spec Containment SOP on Filling Leaking Vehicles News trainy y Nozzle and Suppression System Testing ma **Dining Facilities** - +01 Vehicle Washing Stored in 5 Ramp Washing Fuel Spill Washing and **Fueling Stations** ann Chrome Plating or 50 17 WO) d Waterproofing photo E trimat in arctic backentary Eurorthmap

P2/2 PA Interview Questionnaire - Other Facility: Interviewer: Date/Time: 0 New 7 <u>____</u> vaince 4 19ton Tracking Trimat The dere lion hars we a ercen 15 ONIN H20 H w 1-, D Ē

Appendix B.2

Visual Site Inspection Checklists

Visual Site Inspection Checklist

Recorded by: ARNG Contact: Date and Time: 9/4/15 Method of visit (walking, driving, adjacent): Dwalk Source/Release Information Jwalk Site Name / Area Name / Unique ID: Jwalk Site / Area Acreage: Beal FState DoCo Historic Site Use (Brief Description): Bet coast quard: Alaska Sleik freepris use it Aut it has been Avai Mut quards., Current Site Use (Brief Description): Image: Stepring of the site/area? 1. Was PFAS used (or spilled) at the site/area? Yugo 1a. If yes, document how PFAS was used and usage time (e.g., fire fighting training 2001 to 2014):
Date and Time: Method of visit (walking, driving, adjacent): Source/Release Information Site Name / Area Name / Unique ID: Site / Area Acreage: Historic Site Use (Brief Description): Let coast quard : Alas been Aven / Mat Grads., Physical barriers or access restrictions: 1. Was PFAS used (or spilled) at the site/area?
Method of visit (walking, driving, adjacent): Dr. Walk Source/Release Information Site Name / Area Name / Unique ID: Site / Area Acreage: Historic Site Use (Brief Description): Historic Site Use (Brief Description): Physical barriers or access restrictions: 1. Was PFAS used (or spilled) at the site/area? Y/N
Source/Release Information Site Name / Area Name / Unique ID: Site / Area Acreage: Historic Site Use (Brief Description): Current Site Use (Brief Description): Physical barriers or access restrictions: 1. Was PFAS used (or spilled) at the site/area? Y/N
Site Name / Area Name / Unique ID: Site / Area Acreage: Site / Area Acreage: Real Estate Doco Historic Site Use (Brief Description): Iet coast quart ? A(as ka Steck froopris use it lost it has been Avm' Mat' Quard's., Current Site Use (Brief Description): Image: Avm' Mat' Quard's., Physical barriers or access restrictions: Image: Aven' Mat' Quard's., 1. Was PFAS used (or spilled) at the site/area? Y/N
Site / Area Acreage: Historic Site Use (Brief Description): Current Site Use (Brief Description): Physical barriers or access restrictions: 1. Was PFAS used (or spilled) at the site/area? Y/(N)
Historic Site Use (Brief Description): Let coast quad : A(as ka Steph from product of the steph such it has been Arm' Mat ' quad's., Current Site Use (Brief Description): Maximum from the steph such it has been Arm' Mat ' quad's., Physical barriers or access restrictions: Maximum from the steph such it has been Arm' Mat ' quad's., 1. Was PFAS used (or spilled) at the site/area? Y 100
Current Site Use (Brief Description): Image: Arm Alaf Guad S., Physical barriers or access restrictions: Image: Arm Alaf Guad S., 1. Was PFAS used (or spilled) at the site/area? Y/N
Physical barriers or access restrictions: Image: Apple state s
1. Was PFAS used (or spilled) at the site/area?
2. Has usage been documented? 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?

Visual Survey Inspection Log

	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?
neilin	has been performed on Ramp.
Iransport / Po Migration Poter	athway Information
	drainage flow off installation?
	1a. If so, note observation and location: FIAT. See map of drain
	1a. If so, note observation and location: FIAT, see map of drain Standardur rin way is logic point
2. Is there channe	elized flow within the site/area?
	2a. If so, please note observation and location:
	Dravay Stell out Front
	· · · ·
3. Are monitoring	g or drinking water wells located near the site?
	3a. If so, please note the location: No Drugking the wetts.
	they we de and iter to
4. Are surface wa	there is near the site? $Y(N)$
	4a. If so, please note the location:
5. Can wind disp	ersion information be obtained?
	5a. If so, please note and observe the location.
	Wind goes to North
5. Does an adjace	ent non-ARNG PFAS source exist? Y/N
5	6a. If so, please note the source and location.

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):	-
Botha Frel is now stored in out Building	
2. Is the site/area vegetated?	
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:	
	-1
4. Does the site/area exhibit any areas of ponding or standing water?	
4a. If yes, describe the location and extent of the ponding:	-
4a. If yes, describe the location and extent of the ponding: <u>same puble</u> 1 Acat ponD for aircraft cantolle	ad
	-
Receptor Information	
1. Is access to the site restricted?	
1a. If so, please note to what extent:	
	-
	-
2. Who can access the site? Site Workers / Construction Workers / Trespassers / Residential / Recreational	
2a. Circle all that apply, note any not covered above:	
za. Oncie an unat appry, note any not covered above.	-
	_
3. Are residential areas located near the site?	
3a. If so, please note the location/distance: IR(r) = 4I/LDN Not a lot a	Fun
14 onec	
4. Are any schools/day care centers located near the site?	itz R
4a. If so, please note the location/distance/type:	15 have
	Sam
cay care on map	we
5. Are any wetlands lageted near the site? V/N	-
5. Are any wetlands located near the site? Y/N	
5a. If so, please note the location/distance/type:	-
Float place pond, River	

Visual Survey Inspection Log

Additional Notes

Photographic Log

Photo ID/Name	Date & Location	Photograph Description

@least 3/4 FUIL E 3 Duris

Appendix B.3

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.

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

<u>Nearby Mendenhall WWTP:</u> "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

<u>Treatment at all of the CBJ WWTPS include</u>: "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

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 \mathbf{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. 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

