



Alaska Department of Environmental Conservation

Reuse & Redevelopment Initiative

Brownfield Assessment



Joe Ward Slough Former Dumpsite

Site Assessment/Limited Field Investigation

Fort Yukon, Alaska

Submitted to:
Department of Environmental Conservation
Brownfield Program



By:
OASIS Environmental, Inc
June 29, 2007

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ACRONYMS AND ABBREVIATIONS

AAC.....	Alaska Administrative Code
bgs	below ground surface
BTEX.....	benzene, toluene, ethylbenzene, and total xylenes
COPC.....	contaminants of potential concern
CSM	conceptual site model
4,4'-DDD	4,4'-dichloro-diphenyl-dichloroethane
4,4'-DDE.....	4,4'-dichloro-diphenyl-ethylene
4,4'-DDT.....	4,4'-dichloro-diphenyl-trichloroethane
DEC.....	Department of Environmental Conservation
DRO	diesel range organic compounds
GRO	gasoline range organic compounds
IDW	investigation-derived waste
LEL.....	lower explosive limit
NOAA.....	National Oceanic and Atmospheric Administration
NTP.....	Notice-to-Proceed
OASIS	OASIS Environmental, Inc.
PAH.....	polynuclear aromatic hydrocarbons
PCB.....	polychlorinated biphenyls
PID	photoionization detector
ppm	parts per million
QAPP	Quality Assurance Project Plan
RRO	residual range organic compounds
SA/LFI	site assessment/limited field investigation
SHWS	State Hazardous Waste Site
SQuiRT	Screening Quick Reference Tables
SVOC.....	semivolatile organic compounds
TBA	Targeted Brownfield Assessment
VORTAC	Very High Frequency Omni-Directional Radio Range Tactical Air Navigation Aid

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EXECUTIVE SUMMARY

OASIS Environmental, Inc., performed a Phase I Site Assessment and a Limited Field Investigation (SA/LFI) at the Joe Ward Slough Former Dumpsite in Fort Yukon, Alaska, on behalf of Alaska Department of Environmental Conservation (DEC). The objective of the SA/LFI was to assess the levels of chemical contaminants at the site so the community can evaluate the reuse of the site for a rifle range or aboveground storage tank farm. The assessment will also be used to determine whether chemical contamination from the site is impacting the adjacent water bodies: Joe Ward Slough, Yukon River, or Porcupine River.

The investigation confirmed the presence of a debris disposal area encompassing nearly four acres. Direct exposure to the waste is the primary exposure pathway. No exposure through ground water or surface water was identified. There is a high potential for containers of hazardous material to be present within the disposal area, though no containers with any contents were observed on the surface or in the exploratory trenches.

Environmental records were reviewed and community interviews were performed to gather information about the site. A field investigation was performed, including the collection of soil and surface water samples and installation of temporary soil gas screening points. Ground water was not sampled because permafrost or seasonally frozen soil was encountered. Six shallow trenches were advanced around the perimeter of the dumpsite (defined by solid waste observed in trenches), and samples were collected from immediately above the frozen soil layer in each trench, approximately 3-5 feet below ground surface (bgs). Surface water samples were collected at four locations from water bodies near the dumpsite. Six temporary soil gas points were installed near each trench to a depth of approximately four feet bgs, and tested in the field to determine the organic vapor, oxygen, and carbon dioxide levels.

Analytical results showed that substances of potential concern were limited to metals and organochlorinated pesticides. Mercury, arsenic, barium, cadmium, chromium, selenium, and 4,4'-dichloro-diphenyl-trichloroethane (4,4'-DDT) were detected in the soil above established screening levels, defined as one-tenth the 18 AAC 75 Method 2, Under 40 Inch Zone criteria for soil. Only arsenic levels in soil exceeded the 18 AAC 75 cleanup criteria and only mercury is considered potentially anthropogenic in origin. Other metals concentrations appear to be typical of those found naturally occurring in Alaska and do not appear to be indicative of contamination leaching from the landfill. Contamination was not detected in the surface water samples.

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1. PROJECT DESCRIPTION

Under Notice-to-Proceed (NTP) 18-9028-13-19, Alaska Department of Environmental Conservation (DEC) tasked OASIS Environmental, Inc. (OASIS) to conduct a Phase I Environmental Site Assessment (SA) and a limited field investigation (LFI) at the Joe Ward Slough Former Dumpsite, located on the western end of the village of Fort Yukon, Alaska (see Figure 1). This report presents the results of both the Phase I and the LFI. It is the fourth deliverable under NTP 18-9028-13-19, following a Preliminary Planning and Scoping Meeting Summary (OASIS, 2007a), a Quality Assurance Project Plan (QAPP) (OASIS, 2007b) and a site characterization work plan (OASIS, 2007c). This document presents the results and findings of the SA/LFI, performed in accordance with the work plan and QAPP.

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2. PHASE I ENVIRONMENTAL SITE ASSESSMENT

2.1. Introduction

2.1.1. Purpose

Alaska DEC is conducting this investigation based on a Brownfield Assessment Request submitted by the Native Village of Fort Yukon to Alaska DEC's Brownfield program. This assessment was requested in order to assess the levels of chemical contaminants at the site so the community can evaluate reuse of the site for a rifle range or aboveground storage tank farm. The community is also concerned that contamination may be leaching into the adjacent slough, which is used for subsistence fishing and recreational swimming.

The purpose of this SA is to identify *recognized environmental conditions* through *all appropriate inquiry* and evaluate the likelihood that the landfill site has been impacted with hazardous materials or petroleum products from activities conducted on or near the site.

ASTM defines the term *recognized environmental condition* as the presence or likely presence of any *hazardous substances* or *petroleum products* on a *property* under circumstances that indicate an existing release, a past release, or a material threat of a release of any *hazardous substances* or *petroleum products* into structures on the property or into the ground, ground water, or surface water of the property. A recognized environmental condition may include the presence or likely presence of hazardous substances or petroleum products under conditions in compliance with laws. Recognized environmental conditions do not include *de minimis* conditions that do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

This report includes information gathered from federal, state, and local agencies; personal interviews with people familiar with the sites and surrounding properties; review of site photographs and historical aerial photographs, and a site visit conducted by an OASIS representative.

2.1.2. Scope of Services

OASIS conducted the following tasks to accomplish the project objective:

- Researched past activities that occurred at the site to identify any former operations that may have impacted the property with hazardous substances or petroleum products. This task included interviewing residents of nearby properties and interviewing the current owner/occupant of the properties;
- Reviewed local published government agency documents to identify any properties within a 1-mile radius of the site with a reported release of hazardous

materials or petroleum products. OASIS obtained a government records search report from Environmental Data Resources, Inc. (EDR);

- Reviewed historical aerial photographs of the site;
- Performed a site walk around the property; and
- Prepared this report with SA findings, conclusions, and recommendations.

2.1.3. Significant Assumptions

Environmental assessments provide information regarding the environmental condition of a particular property or facility. This report is a professional opinion and judgment, based upon information obtained during the course of performance of the services.

Environmental conditions may exist at the site that cannot be identified only by visual observation. Where the scope of services is limited to observations made during site reconnaissance, interviews, and/or review of readily available reports and literature, any conclusions and/or recommendations are necessarily based in part on information supplied by others, the accuracy or sufficiency of which may not be independently reviewed by OASIS.

No investigation is thorough enough to exclude the presence of hazardous substances, petroleum products, or contamination resulting from spills of these products at a given site. Therefore, if no hazardous substances or materials or petroleum products are identified during the assessment, such a finding should not be construed as a guarantee of the absence of such materials or contamination due to such materials on the property, but rather should only be considered the results of services performed within the scope, limitations, and cost of the work performed.

2.1.4. Limitations and Exceptions

Any opinions and/or recommendations presented apply to site conditions existing at the time of performance of services. OASIS is unable to report on or accurately predict events that may impact the site following performance of the described services, whether occurring naturally or caused by external forces. OASIS assumes no responsibility for conditions that OASIS is not authorized to investigate, or conditions generally recognized as environmentally unacceptable at the time services are performed. OASIS is not responsible for changes in applicable environmental standards, practices or regulations following performance of services.

Preparation of this SA did not include the collection or analysis of soil, ground water, surface water, or air samples. The scope of the Brownfield Assessment included a limited field investigation, in which investigative trenches were advanced and soil and surface water samples were collected and analyzed for petroleum hydrocarbons, metals, PCBs and pesticides. Results of the LFI are presented in Section 3 of this report.

2.1.5. Special Terms and Conditions

The SA activities were conducted in accordance with the American Society of Testing Materials (ASTM) guidelines E 1527-05 for SAs with generally accepted practices and procedures. Our professional judgment to assess the potential for contamination is based on limited data; no other warranty is given or implied by this report.

2.2. SITE DESCRIPTION

2.2.1. Location

The project site is a former dumpsite located approximately ¼ mile northwest of the southwest end of the of Fort Yukon Municipal Airport runway. Figure 2 shows the landfill boundaries over current-day features.

2.2.2. Site and Vicinity General Characteristics

The former dumpsite covers approximately 160,000 square feet (based on the 1971 aerial photograph) and resides in the bed of a former flow channel of the Yukon River. Debris is still present on the ground surface; regardless, the disposal area and surrounding land has largely revegetated with grasses and small spruce trees. The site was previously used for waste disposal by the Hudson Stuck Memorial Hospital and later by the village clinic from approximately 1948 to 1970. The 1971 aerial photograph shows the site shortly after significant disposal was halted.

Old transformers from the power plant also may have been disposed of at the site. A small pond is located approximately 100 feet southwest of the site, a small stream headwater is located about 200 feet west of the site and the Joe Ward Slough is located about 100 feet north of the northern boundary of the former landfill. Site drainage is to the north, into Joe Ward Slough.

2.2.3. Current Use of the Property

Current use of the property is limited to possible recreational activities such as hiking, berry picking and hunting. There is no evidence of all terrain vehicle usage on the site.

2.2.4. Description of Structures, Roads, and Other Improvements on the Site

A 1971 aerial photograph of the site shows three access roads or trails into the area. These roads, while still present, are only passable by foot because they are overgrown with alder, spruce, and other brush. As a part of the investigation, the backhoe blazed a path using the northeast and south trails. The small trees and brush had to be pushed aside and removed to provide access. The nearest useable road parallels the site approximately 300 to 500 feet to the east and south.

2.2.5. Description of Adjoining Properties

Property adjacent to the former landfill is undeveloped and heavily vegetated. The nearest dwelling is located about 450 feet southeast and upgradient from the site.

Section 2.3 discusses the nearest potential contaminated sites located near the property.

2.2.6. User Provided Information

User provided information is presented in Section 2.5, Interviews.

2.2.7. Title Records

None provided.

2.2.8. Environmental Liens or Activity and Use Limitations

None provided.

2.2.9. Specialized Knowledge

Interviews with local people familiar with the site indicated that most of the waste disposed at the landfill was household waste, with some automobiles, car batteries, and 55-gallon drums. They also indicated drums were reportedly leaking “sludge.”

2.2.10. Valuation Reduction for Environmental Issues

Not applicable.

2.2.11. Owner, Property Manager, and Occupant Information

The Gwichyaa Zhee Gwich'in Tribal Government (Native Village of Fort Yukon) is the landowner. Contact information is provided below:

Native Village of Fort Yukon,
Gary Lawrence, Tribal Environmental Manager
PO Box 126, Fort Yukon, Alaska 99740,

The site is not occupied nor is there any evidence it has ever been occupied, other than for use as a landfill.

2.2.12. Reason for Performing Phase I

This Phase I and follow up LFI were conducted as an initial stage of a Brownfields assessment of the site. Brownfields sites are generally considered to be abandoned or underutilized properties (especially industrial and commercial facilities) where redevelopment or expansion may be complicated by possible environmental contamination (real or perceived). Any 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 is a potential Brownfields site. The purpose of the program is to remove environmental hazards from communities; relieve pressures to develop pristine open space and farmland (also called greenspace); and revitalize communities by creating jobs, and returning property to productive use and local tax rolls.

The specific objectives of this work are to identify COPCs at the site and to determine whether the COPCs could be negatively impacting Joe Ward Slough, or the Yukon and Porcupine Rivers. Because the site is a former dumpsite, the field screening and laboratory samples were analyzed using a variety of methods in an attempt to identify a comprehensive list of contaminants.

2.3. Government and Historical Records Review

2.3.1. Standard Environmental Record Sources

Regulatory agency database information was obtained from an EDR Radius Map with GeoCheck®, which maps and lists sites in federal, state, and local government environmental databases with existing conditions or regulatory status that may have the potential to impact the site. The complete EDR database report is included as Appendix C. OASIS also reviewed available reports at the Anchorage DEC office as well as the DEC Contaminated Sites database on the department's website.

Record searches of 37 federal environmental databases identified no sites within a 1-mile radius of the site. However, state and local records identified one State Hazardous Waste Site (SHWS) located approximately $\frac{3}{4}$ mile northeast of the dumpsite that is operated by the Alaska Army National Guard. Diesel range organic compounds (DRO) and gasoline range organic compounds (GRO) in soil samples near the guard building exceeded Alaska DEC Method 2 cleanup levels.

Sixteen other sites in Fort Yukon did not have sufficient information for mapping. Further research was done and information for those sites is summarized as follows:

- Eight sites are associated with the Long Range Radar Station that is approximately 1 mile northwest of the dumpsite. Contaminants at these sites are mainly petroleum hydrocarbons, with some solvents and 4,4'-dichloro-diphenyl-trichloroethane (4,4'-DDT).
- Two sites are Federal Aviation Administration sites and are identified as the Fort Yukon Very High Frequency Omni-Directional Radio Range Tactical Air Navigation Aid VORTAC and the Fort Yukon Quarters Facility. The VORTAC is located adjacent to Joe Ward Slough and Hospital Lake and is approximately $\frac{1}{10}$ mile northwest of the dumpsite. The VORTAC site had DRO, GRO, and benzene, toluene, ethylbenzene, and total xylenes (BTEX) contamination resulting from underground storage tanks; however, the contamination has been removed and the site has received regulatory closure. The Fort Yukon Quarters Facility is a collection of structures approximately $\frac{3}{4}$ mile northeast of the airport. Contamination at the Fort Yukon Quarters Facility includes polynuclear aromatic hydrocarbons (PAHs), DRO, GRO, and BTEX.
- The Alaska Commercial Company Marina Site is located approximately $\frac{3}{4}$ mile east-northeast of the Joe Ward Slough former dumpsite. DRO-contaminated soil has been removed at this site, and the site has received regulatory closure status.

- The Fort Yukon School is located approximately ½ mile east-northeast of the dumpsite. DRO and BTEX contamination in the soil surrounding the school tank farm was discovered during preparation for sewage piping rerouting.
- The Fort Yukon Old Warehouse site is located approximately ¾ mile east-northeast of the former dumpsite. Stained surface soil was contaminated with DRO, GRO, and solvents. The site has received regulatory closure.
- The Fort Yukon Dump is an unpermitted solid waste landfill approximately ¾ mile northeast of the former dumpsite.
- The Yukon Flats Rural Center is a site located approximately ½ mile east of the former dumpsite. Approximately 80 cubic yards of DRO and benzene-contaminated soil were excavated from a heating oil tank release, with approximately 40 cubic yards remaining beneath the building.

The City of Fort Yukon Water Supply site is located approximately ¾ mile east-northeast of the former dumpsite. Contamination has not been found from an unconfirmed diesel spill.

2.3.2. Additional Environmental Record Sources

Perusal of DEC files for sites at or near Fort Yukon, as described above, constitutes additional environmental record search.

2.3.3. Physical Setting Sources

An approximately 7.5-minute topographic map of the site is provided as Figure 1.

2.3.3.1. Soil and Geologic Conditions

Trenching performed during the LFI component of this project revealed that permafrost was present approximately five feet below ground surface at the site. The landfill is in a relict channel of the Yukon River. Soils from the surface down to permafrost were generally sands and silts.

2.3.3.2. Ground water Conditions

The permafrost rendered installation of well points impossible with the hand tools available. Regardless, the presence of permafrost throughout the site makes it very unlikely that ground water is present anywhere near the ground surface. Ground water is expected to be present near the site within the thaw bulbs associated with surface water. Data regarding the extent of the thaw bulbs are not available, but it is unlikely they extend beneath the site.

2.3.4. Historical Use Information

OASIS reviewed historical use information to assess whether any other past activities at the site could pose environmental concerns. OASIS's research included review of the following information sources:

- Color aerial photograph dated 2001 (enclosed as Figure 2)
- Black and white aerial photograph dated 1971 (enclosed as Figure 3)

- Black and white aerial photograph dated 1963 (enclosed as Figure 4)
- cursory review of aerial photographs from 1983, 1984 and 1993 (not included in report).
- A town meeting was held at 2:00 pm on May 29, 2007. Interviews were scheduled with elders in the community and former employees of the Hudson Stuck Memorial Hospital, but the local community members were unable to attend the interview sessions arranged by the Native Village of Fort Yukon Tribal Environmental Manager.

2.3.4.1. Aerial Photo Review

Aerial photographs from July 1963, June 1971, January 1983, May 1984, August 1993, July 2000, and June 2001 were available. Photographs from 1983, 1984 and 1993 were viewed, but deemed not necessary for the report because they essentially showed the revegetation process at the site from the 1971 photograph. Copies of the 1963, 1971, and 2001 photographs are provided as Figures 4, 3, and 2, respectively. In the 1963 photograph, access roads to the site are clearly visible and a truck can be seen near the site. The disposal area in 1963 is mainly confined to an area of 150 by 100 feet, with some scattered debris east of the site and along the east-west road. By 1971 the site was expanded considerably, debris had been strewn along an 800-foot-long swath approximately 200 feet in width (roughly 4 acres). The southwest access road was actually covered with debris. In the 2001 photograph the site appears much as it does today. The debris has largely been vegetated over, the access roads are only faintly visible, and there is no evidence of recent waste disposal in the area.

In general, site conditions since 1971 have not changed considerably. As indicated above, the site has become overgrown with vegetation since it is no longer heavily used. The water flow adjacent to the site has slowed considerably since 1971, as Hospital Lake is no longer directly connected to the Porcupine River, except possibly during flood stages of the river.

2.3.4.2. Database Review

Results of the database review are documented in Section 2.3.1.

2.3.5. Community Interviews

The results of community interviews are documented in Section 2.5.

2.3.6. Historical Use Information on Adjoining Properties

The earliest available aerial photograph was from 1971. In the 1971 photograph there is evidence of clearing 200 feet northwest of the site. This area has been overgrown by 2001. Access roads are clearly visible in 1971. By 2001, the access roads are partially obscured. The site inspection verified that the access roads had not been used for many years and were largely overgrown.

No development in adjacent properties is evidenced from the photographs. Vegetation present in 1971 was still present in 2001 and additional vegetation was now present in areas showing cleared vegetation on tundra damaged by vehicle use in the earlier photograph.

By 2001 an area approximately 500 feet due east of the site, and east of the road, has been cleared and there is evidence of some new road scars west of the road and east of the northern end of the site.

2.4. Site Reconnaissance

From 29 to 31 May 2007 Julie Clark and Zack Kirk from OASIS performed the field work for the SA/LFI. Photographs of the site are provided in Appendix B. In general, the surface of the site is strewn with all manner of debris: car bodies, plastics, rusty cans, drums, lumber, etc. Grasses and small bushes and trees are growing over and around much of the waste. There was no evidence of recent disposal events, sludge leaking from drums or petroleum-related staining, and no sheen was observed on any nearby surface water. All of the waste appears aged: metal is rusted, bullet holes are in the drums, plastic shows extensive ultraviolet light related degradation, there is no odor, and no remnants of putrescible waste.

As previously stated, historic access roads to the site were overgrown, showing no recent usage.

Adjacent property was essentially undisturbed and undeveloped, except for access roads and historically scarified areas a few hundred feet away.

2.5. Interviews

The Phase I ASTM recommends interviews with the owner or owner representative, local government officials, and others. These categories of interviewees are not applicable to Ft. Yukon because the site is owned by the village but was never actively managed by anyone. Local knowledge is often best gained through public meetings or conversations with village elders.

Interviews with community members were conducted and facilitated by the tribal office. The first set of interviews was conducted at a community meeting that occurred on May 29, 2007 at 2:00 pm in the Native Village of Fort Yukon tribal office. Community members voiced their concerns about transformers and drums disposed of at the former landfill. Other environmental issues were discussed, but specific information regarding types of waste and location of wastes within the Joe Ward Slough former dumpsite was not provided.

A second set of community interviews with elders and former Hudson Stuck Memorial Hospital employees was arranged by the Native Village of Fort Yukon Tribal Environmental Manager. Village elders were not able to meet at the specified time, but the Tribal Environmental Manager indicated that he had spoken with Grafton Bergman, John Thomas, and Doris Ward. The community members indicated that most of the waste disposed at the landfill was household waste, with some automobiles, car

batteries, and 55-gallon drums. They also indicated drums were reportedly leaking sludge.

2.6. Findings and Conclusions

2.6.1. Findings

The following findings were developed:

- The main disposal area encompasses approximately 160,000 square feet.
- All manner of debris is present, but no drums containing fluid or obvious soil contamination was observed.
- Significant disposal at the site commenced circa 1940 and ceased circa 1970.
- There is no development adjacent to the site, the nearest developments are structures about 400 feet from the eastern edge of the disposal area.
- There are no indications of historic development nearby. There are some nearby areas where vegetation has been removed, but no evidence of buildings was found.
- The site is underlain by permafrost.
- The presence of permafrost is evidence that there is no ground water directly beneath the site.
- Access to the site is uncontrolled and there is evidence of use for target shooting.

2.6.2. Opinion

Based on the findings the site represents a recognized environmental condition. The actual volume and contents of the solid waste debris present are largely unknown and could present a risk to human health or the environment.

The presence of permafrost and an apparent reduction in water volume in nearby surface water bodies mitigate the potential risk of exposure via ground or surface water.

Direct exposure to the solid waste represents the most significant exposure pathway. Digging into or disturbing the site would likely increase the potential for direct exposure and could result in leaking from hazardous fluids contained in drums or other containers (note that no containers with liquids were visible at the site).

Development on the site would be very difficult because the debris would need to be removed before any buildings could be constructed. As debris is removed it is possible that drums containing liquid hazardous material could be encountered.

Capping the site with soil could increase the potential for release of hazardous substances because the added weight of the soil and compaction could damage or rupture containers of hazardous materials.

Development adjacent to the site would be undesirable. While the presence of permafrost will inhibit contaminant migration, the waste represents both a physical

hazard and a potential direct exposure hazard. In addition, the waste would likely stigmatize any nearby development.

Additional Investigation to assess impacts to nearby surface water and the presence of contaminants in soil is warranted and was performed during the LFI part of this project.

2.6.3. Data Gaps

The types and amounts of hazardous materials present are not known.

Impact to ground water, if present, soils, and nearby surface water is not known.

The exact dates when disposal commenced and ceased are not known; however, aerial photograph review, interviews, and other records fix the start date of disposal to the late 1940s to early 1950s and the end date to the early 1970s.

2.6.4. Conclusion

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527 of the Joe Ward Slough Former Dumpsite. No recognized environmental conditions were identified, with the exception of the following:

- Numerous disposed containers of unknown origin or original contents (no containers containing liquids were found).
- Damage or degradation of containers could have resulted in past releases of hazardous substances,
- The likely presence of additional containers, potentially still containing hazardous substances, which are beneath the surface layer of debris and soil, but not visible.

OASIS confirmed that an approximately 160,000-square-foot area was used as a landfill for more than 30 years. The entire site is strewn with solid waste. The landfill is located in a relict stream bed with dense vegetation surrounding the disposal area. Consequently, is considered unlikely the site was excavated and backfilled. The shallow dry stream bed was simply filled with waste and natural processes have been revegetating the site since the 1970s.

The presence of an extensive amount of solid waste of unknown origin and quantity constitutes a recognized environmental condition.

3. LIMITED FIELD INVESTIGATION

3.1. Introduction

3.1.1. Objectives and Work Scope

Based on the results of the Phase I Environmental Site Assessment, a review of existing information and a scoping meeting between The Village of Fort Yukon, Alaska DEC, and OASIS on December 19, 2006, the following scope of work was developed for the site characterization of the Joe Ward Slough Former Dumpsite:

- Conduct local community interviews to document the historic use of the site and identify the likely waste types present at the site. This effort was intended to augment the limited information anticipated from a records review of the site as specified in ASTM E1527-05.
- Use field screening and laboratory analysis to identify the contaminants of potential concern (COPC) in site soil, ground water, and surface water.
- Determine whether additional assessment or corrective action may be necessary before beneficial reuse of the site may occur.

3.1.2. Project Organization

- Property Owner – Native Village of Fort Yukon, PO Box 126, Fort Yukon, Alaska 99740, Gary Lawrence, Tribal Environmental Director
- Mary-Beth Solomon and Nancy James are the Native Village of Fort Yukon representatives.
- Garry Weber is a heavy equipment operator from Ft. Yukon who provided support for the effort.
- Third-Party Environmental Assessor – OASIS Environmental, 825 W 8th Ave, Suite 200, Anchorage, Alaska, 99501.
- Alaska DEC Certified Laboratory – SGS Environmental Services, 200 W Potter Drive, Anchorage, Alaska, 99518

3.1.3. Regulatory Framework

The following guidance documents and regulations have been used to develop a regulatory framework for this project:

- DEC, 18 Alaska Administrative Code (AAC) 75, *Oil and Other Hazardous Substances Pollution Control*, as amended through December 30, 2006;
- DEC, *Underground Storage Tanks Procedure Manual*, November 7, 2002;
- DEC, *Draft Guidance on Developing Conceptual Site Models*, November 30, 2005, and
- National Oceanic and Atmospheric Administration (NOAA), *Screening Quick Reference Tables*, September 1999.

Results are being used to screen for COPCs. Analytical results for soil samples were evaluated using screening levels that are one-tenth the DEC's Method Two, Tables B1 and B2, Under 40-inch Zone criteria as described in 18 AAC 75.341. Analytical results for surface water are screened and evaluated using values presented in NOAA Screening Quick Reference Tables (SQuiRT). Analytical results from soil samples that exceed one-tenth the DEC cleanup levels are being considered COPCs for characterization and conceptual site model (CSM) development. Analytical results from surface water samples that exceed the NOAA SQuiRT tables are being considered COPCs for characterization and CSM development. Project screening criteria

3.1.4. Site Background

3.1.4.1. Historical Use

Historical use at the site has been as a landfill. All information assembled regarding historical use at the site is presented in the Phase I in Section 2 of this report.

3.1.4.2. Previous Investigations

Previous environmental actions have not been performed at the site. However, a Targeted Brownfield Assessment (TBA) was conducted at several sites in Fort Yukon in 1999. The TBA did not include assessment work at the Joe Ward Slough former dumpsite, but the 2000 Targeted Brownfield Assessment Report (Ecology and Environment, 2000) provides general information pertinent to this SA/LFI. Applicable cleanup levels are presented in Appendix A of the QAPP (OASIS, 2007b).

3.2. Site Assessment Activities

This section presents a summary of field activities employed to meet the scope of work. Site assessment activities included excavation of trenches and soil sampling, soil gas screening, and surface water sampling. Approximate locations of test trenches, surface water sample locations, and soil gas screening locations are presented on Figure 2. This section also describes deviations from the project work plan and investigation-derived waste (IDW) management. The results of the field activities are discussed in Section 3.3, Findings. Appendix A contains a copy of field notes, and Appendix B presents photographs depicting field activities.

3.2.1. Test Trenches and Soil Sampling

Shallow trenches were advanced using a backhoe at the anticipated boundaries of the dumpsite waste to document the site boundaries and collect soil samples for field screening and laboratory analysis. The backhoe was provided by the City of Fort Yukon. Each shallow trench began approximately 5 feet beyond the anticipated extent of the dumpsite and was advanced towards the center of the landfill. Once waste was observed in the trench, advancement ceased. Digging in the actual waste was avoided to the extent practicable.

In the northernmost trench, the initial excavation began approximately 5 feet beyond the anticipated northern extent of the dumpsite. Due to the amount of solid waste that was encountered in the first excavation, a second excavation was started about 20 feet to the north of the first trench. A large amount of solid waste was encountered in the second excavation. A third trench was excavated approximately 30 feet to 40 feet north of the second trench, where the northern edge of the solid waste was identified.

Permafrost or seasonally frozen soil was encountered in each of the six trenches, at depths ranging from 3-5 feet below ground surface (bgs).

A total of six samples were collected from trenches at the landfill boundaries as described below and presented on an aerial photograph designated Figure 2:

- Three excavation attempts were made before the northern extent of the former dumpsite was located. The third excavation was sampled;
- Two trenches were excavated and sampled along the eastern boundary of the landfill;
- Two trenches were excavated and sampled along the western boundary of the landfill; and
- One trench was excavated and sampled along the anticipated southern boundary of the landfill.

Soil samples were collected from immediately above the permafrost or seasonally frozen soil layer in each trench. Samples were field screened for organic contaminants with a photoionization detector (PID) using the headspace method described in the work plan for this project. The PID was calibrated to a 100 parts per million (ppm) isobutylene standard. Measurements from the PID were recorded in the field book. Soil samples collected from six of the trenches were submitted to the laboratory for analysis by the methods indicated in Table 3-2 of the QAPP (OASIS, 2007b).

3.2.2. Soil Gas Screening

Temporary soil gas screening points were used along the inner perimeter of the dumpsite to assess subsurface soil conditions. Following advancement of the soil gas probes to approximately 4 feet bgs at each location, soil gas samples were collected using small diameter tubing and field screened using a RKI multi-parameter meter. Soil gas samples were screened for organic vapors, oxygen, and carbon dioxide. Measurements from the RKI multi-meter were recorded in the field logbook. The RKI multi-parameter meter was calibrated to a 40 percent hexane standard, a 5 percent carbon dioxide standard, a 0 percent oxygen standard, and ambient air.

Soil gas screening was performed near each of the six test trench locations, along the inner perimeter of the former dumpsite.

3.2.3. Surface Water Sampling

Surface water samples were collected at locations where ground water would be most likely to transport and discharge contaminants from the dumpsite to adjacent surface water. Surface water quality parameters including temperature, conductivity, dissolved oxygen, pH, and oxidation-reduction potential were measured and recorded using a YSI 556 prior to sample collection at each site. Surface water samples were collected with a peristaltic pump and dedicated disposable tubing for each sample location.

Surface water samples were collected at four locations and analyzed by the methods indicated in Table 3-2 of the QAPP (OASIS, 2007b). Water samples collected for AK102/103, SW8081B, and SW8082 were collected in 500 ml containers rather than the 1 liter containers specified in the QAPP.

3.2.4. Work Plan and QAPP Deviations

Due to limitations encountered during field activities, the following deviations were made from work plan:

- Ground water samples were not collected. Permafrost or seasonally frozen soil was encountered in each test trench excavation, and ground water was not encountered.
- Six soil samples were collected and submitted for analysis, rather than the five described in the work plan.
- Water samples collected for AK102/103, SW8081B, and SW8082 were collected in 500 ml containers rather than the 1 liter containers specified in the QAPP.

3.2.5. Investigative Derived Waste Management

Site characterization field activities generated solid IDW. Solid IDW included used personal protective equipment and sampling equipment, such as disposable nitrile gloves, vinyl and silicon tubing, plastic baggies, paper towels, water filters (for metals), and used preservative vials. These non-hazardous items were contained in trash bags and disposed of in the City of Fort Yukon landfill. All soil samples collected but not sent to the off-site laboratory were disposed at or near the point of collection.

3.3. Findings

This section presents information gathered from an environmental records review and community interviews. The results from field soil gas and laboratory analytical sample soil and surface water samples collected at the Joe Ward Slough former dumpsite are also discussed in this section. Laboratory analytical results for soil samples are presented on Table 1, and results for surface water samples are presented on Table 2. Appendix D contains the complete laboratory analytical data report.

3.3.1. Environmental Records Review

A records review was performed for the Joe Ward Slough former dumpsite, including a review of historic aerial photos and an environmental database search. The findings are discussed in the following subsections.

3.3.2. Test Trenches and Soil Sampling

Test trenches were excavated in six areas of the former dumpsite to delineate the extent of buried solid waste at the site. Permafrost or seasonally frozen soil was encountered during excavation for each trench. Ground water was not encountered. Solid waste observations and analytical results are discussed below.

Solid waste that was encountered during performance of the field work for this project was predominantly household waste. Several empty rusted 55-gallon drums were located on the surface of the dumpsite, as well as abandoned cars and trucks. Visual evidence of petroleum hydrocarbon contamination was not noted. Transformers were not located during excavation or inspection of the site. The perimeter of the former dumpsite is overgrown with alder, birch, and spruce, making access difficult with heavy equipment. A photographic log of field activities and site conditions is presented as Appendix B.

Soil samples were collected near the bottom of each of the six trenches excavated near the perimeter of the former dumpsite. Soil analytical results are tabulated in Table 1, laboratory data sheets are provided in Appendix D.

Reportable levels of BTEX were not detected in samples collected from the trenches.

GRO concentrations that were below screening criteria were detected in one sample collected from trench FYUSO5 at the eastern perimeter of the site. GRO concentrations were not detected in the samples from the other five trenches.

DRO and residual range organic compounds (RRO) were detected at concentrations below screening criteria in samples collected from all trenches.

The metals data are difficult to interpret without site specific metals background data. If further study of the site is performed a background metals study is recommended.

Mercury was detected slightly above screening criteria, but below cleanup levels in the soil sample collected at Trench FYUSO1. Mercury was detected in each of the other five trenches at concentrations below screening criteria.

Arsenic was detected above screening criteria and cleanup levels in samples collected from all six trenches.

Barium, cadmium, and chromium concentrations were detected above screening criteria, but below cleanup levels in each of the six soil samples that were collected from the six trenches.

Lead and silver concentrations were detected below screening criteria in each of the soil samples collected from all six trenches.

Selenium concentrations were detected above screening criteria but below cleanup levels in samples collected from trenches FYUSO3 and FYUSO5. Selenium was also detected at concentrations below screening criteria in samples collected from trenches FYUSO1, FYUSO4, and FYUSO6. Selenium was not detected in the sample collected from trench FYUSO2.

Semivolatile organic compounds (SVOCs) were not detected in the sample collected from FYUSO5, nor were they detected in the duplicate sample from that location. Samples for SVOCs analysis were only collected at FYUSO5.

Polychlorinated biphenyl (PCB) compounds were not detected in any of the samples collected at the six trenches.

The pesticides 4,4'-dichloro-diphenyl-ethylene (4,4'-DDE), 4,4'-dichloro-diphenyl-dichloroethane (4,4'-DDD), and 4,4'-DDT were detected in the soil sample collected from FYUSO1. The concentration of 4,4'-DDT exceeded screening criteria but did not exceed cleanup levels. The other two compounds were detected at concentrations below screening criteria.

3.3.3. Soil Gas Screening

Soil gas screening was performed at six locations around the inner perimeter of the former dumpsite. Soil gas was screened for organic vapors, calibrated to hexane, oxygen, and carbon dioxide content. An RKL multi-gas meter was used to measure the concentrations of the soil gas constituents. Results of the soil gas screening are presented in Table 3 and discussed below.

- Organic vapor concentrations ranged from 55 ppm to 110 ppm.
- Oxygen concentrations ranged from 19.7 percent to 20.6 percent.
- Carbon dioxide concentrations were not detected.

3.3.4. Surface Water Sampling

Surface water samples were collected at four locations from a total of three surface water bodies near the Joe Ward Slough former dumpsite. The laboratory analytical results for the samples are discussed below.

Benzene, ethylbenzene, and xylenes were not detected in surface water samples. Toluene was detected at levels below the screening criteria in locations FYUSW3 and FYUSW4.

Low levels of GRO were detected in each of the surface water samples. There is no screening criteria for GRO in the SQuIRT tables.

Barium and chromium were detected at concentrations below screening criteria in each of the surface water samples.

Selenium was detected at concentrations below the screening criteria in locations FYUSW1, FYUSW2, and FYUSW3. Selenium was not detected in the sample collected from location FYUSW4.

Mercury, arsenic, cadmium, lead, and silver were not detected in any of the surface water samples.

SVOCs, PCBs, and pesticides were not detected in any surface water samples.

Analysis for the common anions sulfate, bromide, chloride, Nitrate, ortho-phosphate and nitrite was performed. The chlorine and nitrate anions were of primary interest because

elevated levels of either anion could indicate the presence of leachate from the landfill. The levels of both these indicator anions were two to three orders of magnitude below the water quality standard.

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4. QUALITY ASSURANCE REVIEW (QAR)

This section summarizes the results of the review performed by OASIS Environmental on analytical data from samples collected at the Joe Ward Slough Former Dumpsite (Ft. Yukon) to support the Phase I Assessment. The DEC Environmental Laboratory Data and Quality Assurance Requirements (DEC, 2006) and Environmental Protection Agency National Functional Guidelines for Organic Data Review (EPA, 2004) were followed for this report. The data were reviewed to determine the data quality and to evaluate potential impact on the usability of the data. The data quality objectives for the project were established to support the nature of the investigation. The review was performed using Level II reports that were provided by SGS Environmental Services Anchorage, Alaska. Analytical data, chain-of-custody documents, and an DEC data review checklist supporting this review are also provided.

The following quality control parameters were reviewed:

- Holding Times
- Sample Handling and Receiving
- Surrogate Percent Recovery
- Field Duplicate Sample Comparability
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Percent Recoveries and Relative Percent Difference (RPD)
- Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD) Percent Recoveries and RPD
- Instrument Continuing Calibration Verification Samples (CCVs)
- Method Blanks
- Trip Blanks

Soil and water samples were tested using the following methods for the associated analytes:

- AK101 gasoline range organic compounds (GRO)
- AK102 diesel range organic compounds (DRO)
- AK103 residual range organic compounds (RRO)
- SW8260B (BETX)
- SW8270C (Semi-Volatile Organic Compounds)
- SW6020 (RCRA Metals by ICP-MS)
- EPA 300.0 (Ion Chromatographic Analysis)
- SW 7470/7471 (Mercury)
- SW 8081/8082 (Pesticide/PCBs)
- SM20 2340B (Hardness)

All sample holding times were met. Two coolers were received by the laboratory in good condition and cooler temperatures were within acceptance criteria. Field duplicates that failed to meet method criteria for precision as measured by relative percent difference (>50%RPD) were also flagged as estimates (J flag). Most of the sample results in the primary samples and duplicates were non-detect or at levels near the PQL.

Sample dilutions were performed by the laboratory on samples containing high levels of contaminants when the concentration exceeded the range of the instrument calibration or in presence of high non-target analytes such as biogenic interference. These dilutions impacted the surrogate recoveries in some samples and elevated the practical quantitation limits (PQLs). Some surrogate recoveries did not meet acceptance criteria due to dilution that may have impacted the quality of the data. Samples that failed to meet method acceptance criteria for percent surrogate recovery were qualified with an estimate (J flag).

Laboratory quality control as measured by method blanks and LCS/LCSD recoveries met all method criteria for the purposes of the project except for the AK101-GRO water analyses. The associated sample results were below the PQL but above the MDL. The samples were flagged as estimates (J flag).

None of the analytical data were rejected as unusable. Overall, QA/QC results associated with the project indicate that measurement data are acceptable and defensible for project use.

5. CONCEPTUAL SITE MODEL

The following provides a preliminary human health conceptual site model for the Joe Ward Slough former landfill site. Appendix E contains a copy of Alaska DEC's Human Health Conceptual Site Model Flow Chart and Scoping Form.

Elements of CSM	Site Specific Factors
Source	Drums, vehicles, transformers, industrial medical waste, household waste
Release Mechanism	Spills, leaks, direct discharges
Impacted Media	Soil, possibly ground water, surface water, and sediment
Transport Mechanisms	Migration or leaching to subsurface, surface water, and sediment; uptake by plants and animals
Exposure Media	Soil, ground water, surface water, sediment, biota
Exposure Routes	Ingestion of soil, surface water, and wild foods; dermal absorption of contaminants in soil and surface water; direct contact with sediment
Receptors	Site visitors, construction workers, subsistence harvesters and consumers

Based on this model, the following pathways are considered complete at this time because they currently are complete or may become complete in the future if the site is developed for commercial activities:

Residential	Site Worker	Site Visitor	Subsistence Harvester/Consumer
None	Ingestion of Soil Direct Contact with Soil Ingestion of Surface Water Direct Contact with Surface Water Direct Contact With Sediment Ingestion of Wild Foods	Ingestion of Soil Direct Contact with Soil Ingestion of Surface Water Direct Contact with Surface Water Direct Contact With Sediment Ingestion of Wild Foods	Ingestion of Soil Direct Contact with Soil Ingestion of Surface Water Direct Contact with Surface Water Direct Contact With Sediment Ingestion of Wild Foods

Given that this site is being considered for reuse as a rifle range or an aboveground storage tank farm, future residential receptors are not considered realistic.

6. CONCLUSIONS AND RECOMMENDATIONS

6.1. Conclusions

OASIS conducted a site investigation of the former Joe Ward Slough Landfill site in Fort Yukon, Alaska, for Alaska DEC. This included the analysis of seven soil samples, five surface water samples, and six soil gas samples, as well as an environmental records review and community interviews. The findings from these activities are listed below:

- Six test trenches were advanced to delineate the extent of buried solid waste at the site. Permafrost or seasonally frozen soil was encountered in each trench. Soil samples were collected and analyzed for a variety of parameters in each trench. Though certain analytes were detected (see Table 1 and Appendix D), no analytes were detected above the action levels in 18 AAC 75.
- Soil gas oxygen levels near atmospheric and non-detect carbon dioxide concentrations indicate little to no biological activity at in the sub-surface. If significant amounts of organic contaminants were present at the site biological activity would be expected.
- Soil gas organic vapor concentrations are somewhat elevated. The elevated concentrations could be the result of natural organics at the site or recalcitrant volatile contaminants present at the site. Regardless, the organic vapor concentrations are quite low and fairly consistent across all six sample points, which is an indication that widespread volatile contamination is not present at the site. The consistency of the measurements, i.e. within a factor of 2, implies that the organic vapor concentrations are ubiquitous at the site and could represent natural background concentrations of organic vapors in the sub-surface.
- Surface water samples were collected at four locations near the former dumpsite. Though several analytes were detected, none were detected above the criteria listed in the NOAA SQuiRT tables. The GRO concentrations were near the laboratory detection limit and present in both the pond and upstream and downstream from the presumed site discharge point into the slough. As with the organic vapors, the ubiquitous, consistent, and low level GRO concentrations implies that the detected GRO is naturally occurring.
- Ground water was not sampled during this field effort since permafrost or seasonally frozen soil was encountered from 3-5 feet bgs in each test trench.
- Arsenic above cleanup level was detected in site soils. Arsenic is ubiquitous in Alaska and the concentrations of arsenic detected are within a typical range found in Alaska. Consequently, it is likely the arsenic is naturally occurring. Information regarding a possible source of arsenic contamination or much higher levels than those identified would be evidence that the arsenic was anthropogenic.

- It is unusual to find background levels of mercury. Consequently, while the concentration of mercury detected was below a cleanup level, it is likely anthropogenic in origin.
- The pesticide 4,4'-DDT was detected at a concentration below cleanup criteria. DDT is very recalcitrant and has a long history of use in Alaska. It is unclear if the DDT originated from waste at the site or historic use.

6.2. Evaluation of Findings

Based on the findings of this SA/LFI, low levels of soil contamination exist at the Joe Ward Slough former dumpsite. Mercury, arsenic, barium, cadmium, chromium, selenium, and 4,4'-DDT were detected in the soil above screening levels. Only arsenic was above cleanup levels defined in 18 AAC 75. Other than mercury, the metals are likely naturally occurring. No significant contamination was detected in nearby surface water bodies. Ground water was not sampled because permafrost or seasonally frozen soil was encountered at the time of this characterization.

Only soil samples from the periphery of the site and soil gas samples from within the site were evaluated. Consequently, it is possible that higher concentrations of contaminants are present within the solid waste mass.

This site is being considered for reuse as a rifle range or an aboveground storage tank farm. The landfill area possibly may be managed and capped in-place if development plans do not disturb the contaminated soil, buried containers or place human receptors in a position potentially to be exposed to contaminants.

Even if construction activities do not disturb the contaminated soil or mitigating actions are taken, Alaska DEC may require additional investigation or corrective action under the "site cleanup rules" of 18 AAC 75.325 if the contaminated soil is deemed to have the potential to impact human health or the environment.

This characterization also did not define the impact to ground water associated with the site. The ground water pathway may need to be assessed as a potential exposure route to contaminants if ground water is used for drinking water in future development.

6.3. Recommendations

The site appears stable at this time, i.e. there is no evidence of a major off-site contaminant plume. However, development could increase the risk of a contamination release.

Backfilling or capping the site would potentially endanger buried containers because the added weight of the backfill and the energy associated with driving heavy equipment on the site could rupture buried containers. Over time, waste would likely migrate to the surface through a simple soil cap.

If development plans call for construction of buildings or tank foundations then complete removal of the waste in the area of the foundation is recommended. Excavation of

waste at the site should only be performed if the contractor is prepared to retrieve and manage containers with unknown and possibly hazardous contents. Provisions to deal with batteries and other debris would also be necessary.

Prior to any development, a more invasive assessment focused on the area targeted for development is recommended. The assessment could involve segregating potentially hazardous wastes from non-hazardous solid waste. The non-hazardous solid waste could be moved to a permitted landfill or an area at the site could be designated and developed as an appropriate landfill. Such an investigation could possibly be conducted as the first phase of a construction/development project.

The University of Alaska Fairbanks will be performing a permafrost evaluation at Fort Yukon in the near future. If the study shows that permafrost is not present year-round or if permafrost is not sufficiently thick, monitoring wells, using a drill rig, should be installed and ground water should be sampled to determine if low-level soil contamination is migrating or leaching. In conjunction with the permafrost study, thermistors may be installed around the landfill to document the permafrost conditions. If thermistor data verifies that permafrost is present year-round it is unlikely that the site poses a significant risk to ground or surface waters, except for a flood event.

Metals concentrations should be compared to naturally occurring background levels for the area. Interpretation of the metals concentrations is uncertain without site specific background data.

7. REFERENCES

- Ecology and Environment, Inc., 2000. *Fort Yukon Targeted Brownfields Assessment Report, Fort Yukon, Alaska*, prepared for Region 10 Superfund Technical Assessment and Response Team, Seattle, Washington. August 2000.
- OASIS Environmental, Inc., 2007a. *Joe Ward Slough Former Dumpsite Phase I/II SA Fort Yukon, Alaska, Preliminary Planning and Scoping Meeting, 19 December 2006, Teleconference Meeting Summary*. January 22, 2007.
- OASIS Environmental, Inc., 2007b. *Quality Assurance Project Plan, Joe Ward Slough (Former Dumpsite), Fort Yukon, Alaska*. April 2007.
- OASIS Environmental, Inc., 2007c. *Site Assessment / Limited Field Investigation Final Work Plan, Joe Ward Slough Former Dumpsite, Fort Yukon, Alaska*. May 2007.

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TABLES

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Table 1
Soil Sample Analytical Data
Joe Ward Slough Former Dumpsite
Fort Yukon, Alaska
(all results reported in mg/Kg)

	COPC Screening Criteria ¹	18AAC75 Cleanup Level	Trench FYUS01	Trench FYUS02	Trench FYUS03	Trench FYUS04	Trench FYUS05	Trench FYUS05 07JWS007SO Dup of 07JWS005SO	Trench FYUS06
			07JWS001SO	07JWS002SO	07JWS003SO	07JWS004SO	07JWS005SO	07JWS005SO	07JWS006SO
Hydrocarbons									
GRO	30	300	ND (3.28)	ND (3.79)	ND (4.55)	ND (2.44)	4.91	1.03 J	ND (1.91)
Benzene	0.0237	0.02	ND (0.0171)	ND (0.0197)	ND (0.0237)	ND (0.0128)	ND (0.0220)	ND (0.0164)	ND (0.00998)
Toluene	0.54	5.4	ND (0.0657)	ND (0.0759)	ND (0.0091)	ND (0.0493)	ND (0.0384)	ND (0.0632)	ND (0.0384)
Ethylbenzene	0.55	5.5	ND (0.0329)	ND (0.0379)	ND (0.0455)	ND (0.0247)	ND (0.0423)	ND (0.0316)	ND (0.0192)
Total Xylenes	7.8	78	ND (0.0657)	ND (0.0759)	ND (0.0911)	ND (0.0493)	ND (0.0845)	ND (0.0632)	ND (0.0384)
DRO	25	250	2.38 J	3.16 J	7.75 J	3.53 J	12.6 J	11.4 J	2.67 J
RRO	1100	11000	23.6	20.7 J	200	30.7	157	106	25.9
RCRA Metals									
Mercury	0.0505	1.4	0.0521	0.0229 J	0.0362 J	0.0253 J	0.0256 J	0.0165 J	0.0162 J
Arsenic	1.26	2	8.57	7.09	8.05	6.75	9.7	8.8	6.39
Barium	110	1100	266	218	263	292	236	213	245
Cadmium	0.5	5	0.821	0.64	0.768	0.626	0.572	0.515	0.652
Chromium	2.6	26	21.7	18.9	22	18.8	20.9	19.3	16.7
Lead	40	400	6.56	5.69	5.98	6.02	7.05	6.55	4.84
Selenium	0.611	3.5	0.506 J	ND (0.538)	0.729	0.339 J	1.29	0.958	0.325 J
Silver	2.1	21	0.121	0.109	0.129	0.152	0.121 J	0.112 J	0.0981 J
Anions									
Nitrate-N	-	-	14	1.57	1.74	1.55	1.83	1.75	1.52
Bromide			ND (1.12)	ND (1.11)	ND (1.14)	ND (1.1)	ND (1.28)	ND (1.24)	ND (1.07)
Chloride	-	-	58.1	2.98	86.4	2.15	136	133	5.46
Nitrite-N			ND (1.12)	ND (1.11)	ND (1.14)	ND (1.1)	ND (1.28)	ND (1.24)	ND (1.07)
Ortho Phosphate-P	-	-	2.78 J	30.9	4.21 J	2.79 J	3.16 J	3.12 J	2.64 J
Sulfate	-	-	167	32.3	292	18.4	345	354	32.6
Pesticides									
1,2,4-Trichlorobenzene							ND (0.000316)	ND (0.000307)	
1,2-Dichlorobenzene							ND (0.000316)	ND (0.000307)	
1,3-Dichlorobenzene							ND (0.000316)	ND (0.000307)	
1,4-Dichlorobenzene							ND (0.000316)	ND (0.000307)	
2,4 - Dinitrotoluene							ND (0.000316)	ND (0.000307)	
2,4,5-trichlorophenol							ND (0.000316)	ND (0.000307)	
2,4,6-trichlorophenol							ND (0.000316)	ND (0.000307)	
2,4-Dichlorophenol							ND (0.000316)	ND (0.000307)	
2,4-Dimethylphenol							ND (0.000316)	ND (0.000307)	
2,4-Dinitrophenol							ND (0.00253)	ND (0.00246)	
2,6-Dinitrotoluene							ND (0.000316)	ND (0.00123)	
2-Chloronaphthalene							ND (0.000316)	ND (0.000307)	
2-Chlorophenol							ND (0.000316)	ND (0.000307)	
2-Methyl-4,6-dinitrophenol							ND (0.00253)	ND (0.000307)	
2-Methylnaphthalene							ND (0.000316)	ND (0.000307)	
2-Methylphenol (o-Cresol)							ND (0.000316)	ND (0.000307)	
2-Nitroaniline							ND (0.000316)	ND (0.000307)	
2-Nitrophenol							ND (0.000316)	ND (0.000307)	
3&4-Methylphenol							ND (0.000316)	ND (0.00123)	
3,3-Dichlorobenzidine							ND (0.000316)	ND (0.000307)	
3-Nitroaniline							ND (0.000316)	ND (0.000307)	
4-Bromophenyl-phenylether							ND (0.000316)	ND (0.000307)	
4-Chloro-3-methylphenol							ND (0.000316)	ND (0.000307)	
4-Chloroaniline							ND (0.000316)	ND (0.000307)	
4-Chlorophenyl-phenylether							ND (0.000316)	ND (0.000307)	
4-Nitroaniline							ND (0.000632)	ND (0.00246)	
4-Nitrophenol							ND (0.000126)	ND (0.000307)	
Acenaphthene							ND (0.000316)	ND (0.000307)	
Acenaphthylene							ND (0.000316)	ND (0.000307)	
Aniline							ND (0.000316)	ND (0.000307)	
Anthracene							ND (0.000316)	ND (0.000307)	
Azobenzene							ND (0.000316)	ND (0.000307)	
Benzo(a)Anthracene							ND (0.000316)	ND (0.000307)	
Benzo(a)pyrene							ND (0.000316)	ND (0.000307)	
Benzo(b)Floranthene							ND (0.000316)	ND (0.000307)	
Benzo(g,h,i)perylene							ND (0.000316)	ND (0.000307)	
Benzo(k)fluoranthene							ND (0.000316)	ND (0.000307)	
Benzoic acid							ND (0.0019)	ND (0.00184)	
Benzyl alcohol							ND (0.000316)	ND (0.000307)	
Bis(2-Chloroethoxy)methane							ND (0.000316)	ND (0.000307)	
Bis(2-Chloroethyl)ether							ND (0.000316)	ND (0.000307)	
Bis(2-chloro1methylethyl)Ether							ND (0.000316)	ND (0.000307)	
bis(2-Ethylhexyl)phthalate							ND (0.000316)	ND (0.000307)	
Butylbenzylphthalate							ND (0.000316)	ND (0.000307)	
Chrysene							ND (0.000316)	ND (0.000307)	
Dibenzo(a,h)anthracene							ND (0.000316)	ND (0.000307)	
Dibenzofuran							ND (0.000316)	ND (0.000307)	
Diethylphthalate							ND (0.000316)	ND (0.000307)	
Dimethylphthalate							ND (0.000316)	ND (0.000307)	
Di-n-butylphthalate							ND (0.000316)	ND (0.000307)	
di-n-Octylphthalate							ND (0.000316)	ND (0.000307)	
Fluoranthene							ND (0.000316)	ND (0.000307)	
Fluorene							ND (0.000316)	ND (0.000307)	
Hexachlorobenzene							ND (0.000316)	ND (0.000307)	
Hexachlorobutadiene							ND (0.000316)	ND (0.000307)	
Hexachlorocyclopentadiene							ND (0.000885)	ND (0.000861)	
Hexachloroethane							ND (0.000316)	ND (0.000307)	
Indeno[1,2,3-c,d] pyrene							ND (0.000316)	ND (0.000307)	
Isophorone							ND (0.000316)	ND (0.000307)	
Naphthalene							ND (0.000316)	ND (0.000307)	
Nitrobenzene							ND (0.000316)	ND (0.000307)	
N-Nitrosodimethylamine							ND (0.000316)	ND (0.000307)	
N-Nitroso-di-n-propylamine							ND (0.000316)	ND (0.000307)	
N-Nitrosodiphenylamine							ND (0.000316)	ND (0.000307)	
Pentachlorophenol							ND (0.00126)	ND (0.00123)	
Phenanthrene							ND (0.000316)	ND (0.000307)	
Phenol							ND (0.000316)	ND (0.000307)	
Pyrene							ND (0.000316)	ND (0.000307)	
gamma-Chlordane			ND (0.832)	ND (0.00825)	ND (0.00851)	ND (0.00827)	ND (0.00943)	ND (0.00928)	ND (0.00802)
alpha-Chlordane			ND (0.832)	ND (0.00825)	ND (0.00851)	ND (0.00827)	ND (0.00943)	ND (0.00928)	ND (0.00802)
alpha-BHC			ND (0.832)	ND (0.00825)	ND (0.00851)	ND (0.00827)	ND (0.00943)	ND (0.00928)	ND (0.00802)
beta-BHC			ND (0.832)	ND (0.00825)	ND (0.00851)	ND (0.00827)	ND (0.00943)	ND (0.00928)	ND (0.00802)
gamma-BHC (Lindane)			ND (0.832)	ND (0.00825)	ND (0.00851)	ND (0.00827)	ND (0.00943)	ND (0.00928)	ND (0.00802)
delta-BHC			ND (0.832)	ND (0.00825)	ND (0.00851)	ND (0.00827)	ND (0.00943)	ND (0.00928)	ND (0.00802)
Heptachlor			ND (1.11)	ND (0.011)	ND (0.0113)	ND (0.0110)	ND (0.0126)	ND (0.0124)	ND (0.0107)
Aldrin			ND (0.832)	ND (0.00825)	ND (0.00851)	ND (0.00827)	ND (0.00943)	ND (0.00928)	ND (0.00802)
Heptachlor epoxide			ND (1.11)	ND (0.011)	ND (0.0113)	ND (0.0110)	ND (0.0126)	ND (0.0124)	ND (0.0107)
Endosulfan I			ND (0.832)	ND (0.00825)	ND (0.00851)	ND (0.00827)	ND (0.00943)	ND (0.00928)	ND (0.0107)
4,4'-DDE	15	150	0.495J	ND (0.0110)	ND (0.0113)	ND (0.0110)	ND (0.0126)	ND (0.0124)	ND (0.0107)
Dieldrin			ND (1.11)	ND (0.0110)	ND (0.0113)	ND (0.0110)	ND (0.0126)	ND (0.0124)	ND (0.0107)
Endrin			ND (1.11)	ND (0.0110)	ND (0.0113)	ND (0.0110)	ND (0.0126)	ND (0.0124)	ND (0.0107)
Endosulfan II			ND (1.11)	ND (0.0110)	ND (0.0113)	ND (0.0110)	ND (0.0126)	ND (0.0124)	ND (0.0107)
4,4'-DDD	4.7	47	3.61 J	ND (0.0110)	ND (0.0113)	ND (0.0110)	ND (0.0126)	ND (0.0124)	ND (0.0107)
endrin aldehyde			ND (1.11)	ND (0.0110)	ND (0.0113)	ND (0.0110)	ND (0.0126)	ND (0.0124)	ND (0.0107)
4,4'-DDT	8.8	88	15.5 J	ND (0.0110)	ND (0.0113)	ND (0.0110)	ND (0.0126)	ND (0.0124)	ND (0.0107)
Endosulfan sulfate			ND (1.11)	ND (0.0110)	ND (0.0113)	ND (0.0110)	ND (0.0126)	ND (0.0124)	ND (0.0107)
endrin ketone			ND (1.11)	ND (0.0110)	ND (0.0113)	ND (0.0110)	ND (0.0126)	ND (0.0124)	ND (0.0107)
Methoxychlor			ND (1.11)	ND (0.0110)	ND (0.0113)	ND (0.0110)	ND (0.0126)	ND (0.0124)	ND (0.0107)
toxaphene			ND (27.7)	ND (0.275)	ND(0.284)	ND (0.276)	ND (0.314)	ND (0.309)	ND (0.267)
PCBs									
Aroclor-1016			ND (0.0055)	ND (0.0055)	ND (0.00567)	ND (0.00551)	ND (0.00629)	ND (0.00619)	ND (0.00535)
Aroclor-1221			ND (0.0055)	ND (0.0055)	ND (0.00567)	ND (0.00551)	ND (0.00629)	ND (0.00619)	ND (0.00535)
Aroclor-1232			ND (0.0055)	ND (0.0055)	ND (0.00567)	ND (0.00551)	ND (0.00629)	ND (0.00619)	ND (0.00535)
Aroclor-1242			ND (0.0055)	ND (0.0055)	ND (0.00567)	ND (0.00551)	ND (0.00629)	ND (0.00619)	ND (0.00535)
Aroclor-1248			ND (0.0055)	ND (0.0055)	ND (0.00567)	ND (0.00551)	ND (0.00629)	ND (0.00619)	ND (0.00535)
Aroclor-1254			ND (0.0055)	ND (0.0055)	ND (0.00567)	ND (0.00551)	ND (0.00629)	ND (0.00619)	ND (0.00535)
Aroclor-1260			ND (0.0055)	ND (0.0055)	ND (0.00567)	ND (0.00551)	ND (0.00629)	ND (0.00619)	ND (0.00535)

¹ - COPC screening criteria for soils is 10% of 18AAC75 Table B2 cleanup level, or the method PQL, whichever is greater

ND (0.0759) - Indicates that the analyte was not detected, with PQL for method in parantheses

J - Indicates that result is an estimate. Value shown is higher than the MDL but lower than the PQL for the analyte

Bolded results indicate that result exceeds screening criteria

Table 2
Surface Water Sample Analytical Data
Joe Ward Slough Former Dumpsite
Fort Yukon, Alaska
(all results reported in mg/L)

		Location FYUSW1	Location FYUSW2	Location FYUSW3	Location FYUSW3	Location FYUSW4
	COPC Screening Criteria ¹	07JWS001SW	07JWS002SW	07JWS003SW	07JWS005SW Dup of 07JWS003SW	07JWS004SW
Hydrocarbons						
GRO	-	0.0129 J	0.0226 J	0.0172 J	0.0154 J	0.0150 J
Benzene	0.005	ND (0.00040)	ND (0.00040)	ND (0.00040)	ND (0.00040)	ND (0.00040)
Toluene	1	ND (0.0010)	ND (0.0010)	0.000440 J	0.000550 J	0.000310 J
Ethylbenzene	0.7	ND (0.0010)	ND (0.0010)	ND (0.0010)	ND (0.0010)	ND (0.0010)
Total Xylenes	10	ND (0.0020)	ND (0.0020)	ND (0.0020)	ND (0.0020)	ND (0.0020)
DRO	-	0.190 J	0.209 J	0.212 J	0.211 J	0.722
RRO	-	0.895 J	0.853 J	1.09	0.496 J	1.16
RCRA Metals						
Arsenic		ND (.010)	ND (.010)	ND (.010)	ND (.010)	ND (.010)
Barium	2	0.0832	0.0438	0.0991	0.0925	0.0778
Cadmium		ND (.002)	ND (.002)	ND (.002)	ND (.002)	ND (.002)
Chromium	0.1	0.00353 J	0.00362 J	0.00367 J	0.00367 J	0.00326 J
Lead		ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
Mercury		ND (0.0002)	ND (0.0002)	ND (0.0002)	ND (0.0002)	ND (0.0002)
Selenium	0.005	0.00437 J	0.00415 J	0.00413 J	0.00445 J	ND (0.0100)
Silver		ND (0.002)	ND (0.002)	ND (0.002)	ND (0.002)	ND (0.002)
Anions						
Sulfate	-	22.4	27.4	26.8	26.8	2.53
Bromide		ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)
Chloride	230	2.35	0.626	0.831	0.838	4.16
Ortho Phosphate-P	-	0.124 J	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)
Nitrate-N	10	0.375	0.376	0.37	0.37	0.372
Nitrite-N		ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)
Hardness (as CaCO ₃)	-	341	83.8	130	118	157
Semivolatile Organics						
2-Methylphenol (o-Cresol)				ND (0.01)	ND (0.01)	
3&4-Methylphenol				ND (0.02)	ND (0.02)	
Hexachlorobutadiene				ND (0.01)	ND (0.01)	
2,4 - Dinitrotoluene				ND (0.01)	ND (0.01)	
Hexachlorobenzene				ND (0.01)	ND (0.01)	
Hexachloroethane				ND (0.01)	ND (0.01)	
Nitrobenzene				ND (0.01)	ND (0.01)	
Pentachlorophenol				ND (0.05)	ND (0.05)	
2,4,5-trichlorophenol				ND (0.01)	ND (0.01)	
2,4,6-trichlorophenol				ND (0.01)	ND (0.01)	
N-Nitrosodimethylamine				ND (0.01)	ND (0.01)	
N-Nitroso-di-n-propylamine				ND (0.01)	ND (0.01)	
Phenol				ND (0.01)	ND (0.01)	
Aniline				ND (0.01)	ND (0.01)	
Bis(2-Chloroethyl)ether				ND (0.01)	ND (0.01)	
Isophorone				ND (0.01)	ND (0.01)	
2-Chloroethylether				ND (0.01)	ND (0.01)	
2-Chlorophenol				ND (0.01)	ND (0.01)	
1,3-Dichlorobenzene				ND (0.01)	ND (0.01)	
2-Nitrophenol				ND (0.01)	ND (0.01)	
2,4-Dimethylphenol				ND (0.01)	ND (0.01)	
1,4-Dichlorobenzene				ND (0.01)	ND (0.01)	
Benzoic acid				ND (0.05)	ND (0.05)	
1,2-Dichlorobenzene				ND (0.01)	ND (0.01)	
Bis(2-chloro1methyl)Ether				ND (0.01)	ND (0.01)	
Bis(2 Chloroethoxy)methane				ND (0.01)	ND (0.01)	
Benzyl alcohol				ND (0.01)	ND (0.01)	
2,4-Dichlorophenol				ND (0.01)	ND (0.01)	
1,2,4-Trichlorobenzene				ND (0.01)	ND (0.01)	
Naphthalene				ND (0.01)	ND (0.01)	
4-Chloroaniline				ND (0.01)	ND (0.01)	
4-Chloro-3-methylphenol				ND (0.01)	ND (0.01)	
2-Methylnaphthalene				ND (0.01)	ND (0.01)	
Hexachlorocyclopentadiene				ND (0.03)	ND (0.03)	
2-Chloronaphthalene				ND (0.01)	ND (0.01)	
2-Nitroaniline				ND (0.01)	ND (0.01)	
Dimethylphthalate				ND (0.01)	ND (0.01)	
2,6-Dinitrotoluene				ND (0.01)	ND (0.01)	
Acenaphthylene				ND (0.01)	ND (0.01)	
3-Nitroaniline				ND (0.01)	ND (0.01)	
Acenaphthene				ND (0.01)	ND (0.01)	
2,4-Dinitrophenol				ND (0.05)	ND (0.05)	
4-Nitrophenol				ND (0.05)	ND (0.05)	
Dibenzofuran				ND (0.1)	ND (0.1)	
Diethylphthalate				ND (0.1)	ND (0.1)	
Flurene				ND (0.1)	ND (0.1)	
4-Chlorophenyl-phenylether				ND (0.1)	ND (0.1)	
4-Nitroaniline				ND (0.1)	ND (0.1)	
2-Methyl-4,6-dinitrophenol				ND (0.05)	ND (0.05)	
N-Nitrosodiphenylamine				ND (0.01)	ND (0.01)	
Azobenzene				ND (0.01)	ND (0.01)	
4-Bromophenyl-phenylether				ND (0.01)	ND (0.01)	
Phenanthrene				ND (0.01)	ND (0.01)	
Anthracene				ND (0.01)	ND (0.01)	
Di-n-butylphthalate				ND (0.01)	ND (0.01)	
Fluranthene				ND (0.01)	ND (0.01)	
Pyrene				ND (0.01)	ND (0.01)	
Butylbenzylphthalate				ND (0.01)	ND (0.01)	
3,3-Dichlorobenzidine				ND (0.01)	ND (0.01)	
Benzo(a)Anthracene				ND (0.01)	ND (0.01)	
Chrysene				ND (0.01)	ND (0.01)	
bis(2-Ethylhexyl)phthalate				ND (0.01)	ND (0.01)	
di-n-Octylphthalate				ND (0.01)	ND (0.01)	
Benzo(b)Floranthene				ND (0.01)	ND (0.01)	
Benzo(k)fluoranthene				ND (0.01)	ND (0.01)	
Benzo(a)pyrene				ND (0.01)	ND (0.01)	
Indeno[1,2,3-c,d] pyrene				ND (0.01)	ND (0.01)	
Dibenzo(a,h)anthracene				ND (0.01)	ND (0.01)	
Benzo(g,h,i)perylene				ND (0.01)	ND (0.01)	
Pesticides						
gamma-Chlordane		ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)
alpha-Chlordane		ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)
alpha-BHC		ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)
beta-BHC		ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)
gamma-BHC (Lindane)		ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)
delta-BHC		ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)
Heptachlor		ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)
Aldrin		ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)
Heptachlor epoxide		ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)
Endosulfan I		ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)
4,4'-DDE		ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)
Dieldrin		ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)
Endrin		ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)
Endosulfan II		ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)
4,4'-DDD		ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)
endrin aldehyde		ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)
4,4'-DDT		ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)
Endosulfan sulfate		ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)
endrin ketone		ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)
Methoxychlor		ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)	ND (0.00006)
toxaphene		ND (0.002)	ND (0.002)	ND (0.002)	ND (0.002)	ND (0.002)
PCBs						
Aroclor-1016		ND (0.0002)	ND (0.0002)	ND (0.0002)	ND (0.0002)	ND (0.0002)
Aroclor-1221		ND (0.0002)	ND (0.0002)	ND (0.0002)	ND (0.0002)	ND (0.0002)
Aroclor-1232		ND (0.0002)	ND (0.0002)	ND (0.0002)	ND (0.0002)	ND (0.0002)
Aroclor-1242		ND (0.0002)	ND (0.0002)	ND (0.0002)	ND (0.0002)	ND (0.0002)
Aroclor-1248		ND (0.0002)	ND (0.0002)	ND (0.0002)	ND (0.0002)	ND (0.0002)
Aroclor-1254		ND (0.0002)	ND (0.0002)	ND (0.0002)	ND (0.0002)	ND (0.0002)
Aroclor-1260		ND (0.0002)	ND (0.0002)	ND (0.0002)	ND (0.0002)	ND (0.0002)

¹ - COPC screening criteria for surface water are the SQuiRTs AWQC freshwater "chronic" values, values are listed only for substances that were detected.
ND (0.0759) - Indicates that the analyte was not detected, with PQL for method in paranthases
J - Indicates that result is an estimate. Value shown is higher than the MDL but lower than the PQL for the analyte
Bolded results indicate that result exceeds screening criteria

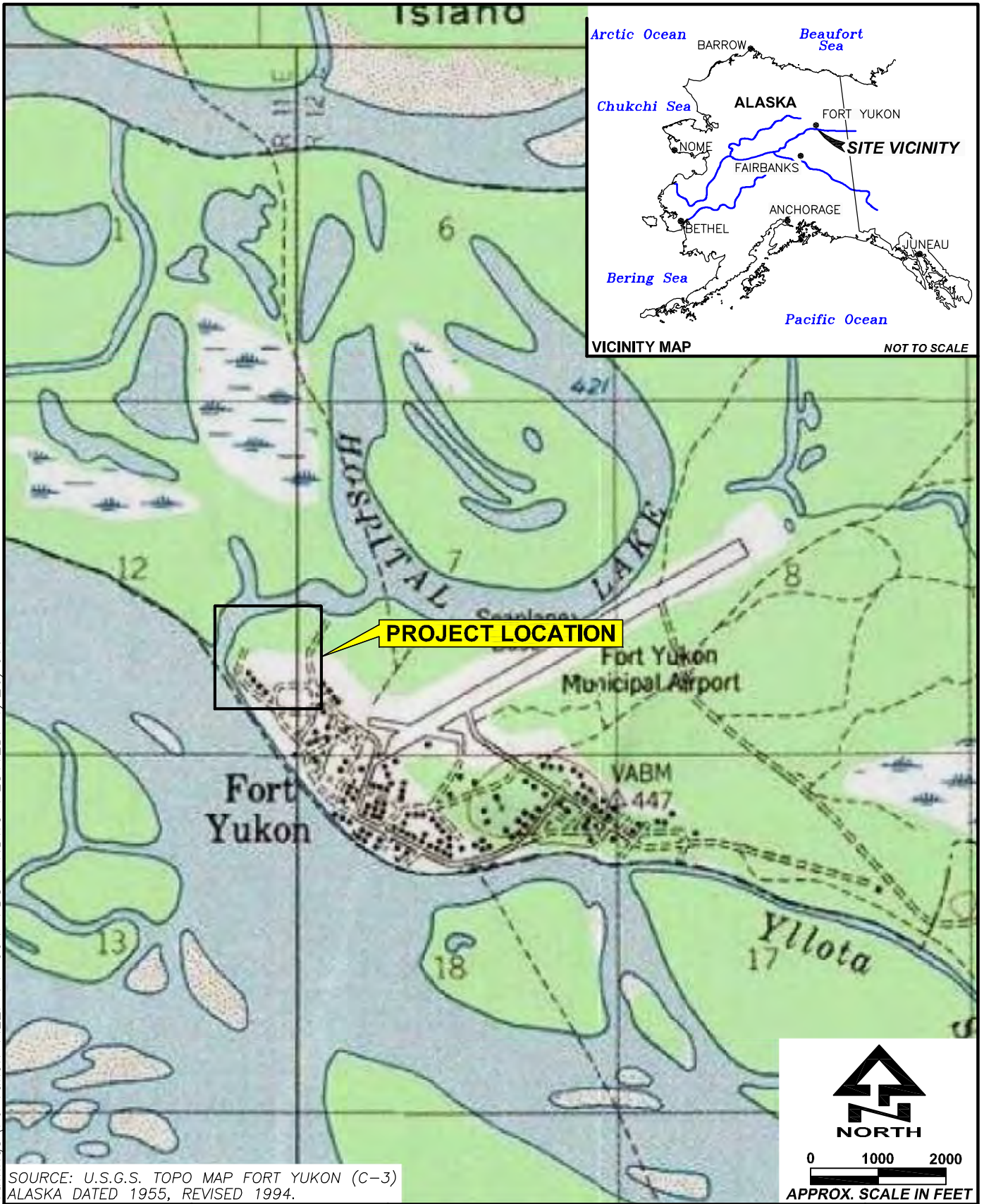
Table 3
Soil Gas Screening Results
Joe Ward Slough Former Dumpsite
Fort Yukon, Alaska

Soil Gas Point ID	Installation Depth (ft bgs)	Field Screening Measurements		
		Organic Vapors (ppm)	O ₂ (%)	CO ₂ (%)
SG1	4	55.0	20.6	0.0
SG2	4	110.0	20.5	0.0
SG3	4	100.0	20.4	0.0
SG4	4	95.0	19.7	0.0
SG5	4	60.0	20.0	0.0
SG6	4	110.0	20.5	0.0

FIGURES

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PATH: V:\Project Drawings\Ft Yukon FILE: 14-094-FDS-F1.DWG PLOTTED: 4/26/07.



DATE: APRIL 2007
CHKD: K.D.H.
DRAWN: C.E.H.
PROJ. No.: 14-094
825 W. 8th Ave., Anchorage,
AK 99501, (907) 258-4880

SITE LOCATION MAP

JOE WARD SLOUGH
FORMER DUMP SITE
Fort Yukon, Alaska


FIGURE

1

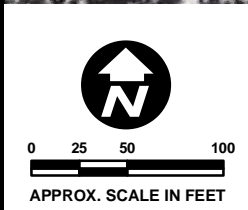



0
25
50
100

APPROX. SCALE IN FEET

	<p>DATE: June 2007</p> <p>CHKD: JRC</p> <p>DRAWN: CGS</p> <p>PROJ. NO.: 14-094</p> <p>825 W. 8th Ave., Suite 200 Anchorage, AK 99501 (907) 258-4880</p>	<div><div>HISTORICAL SITE PHOTO, JUNE 1971</div><div>JOE WARD SLOUGH FORMER DUMP SITE Fort Yukon, Alaska</div><div>Map Source: Aerial Orthophotograph, Aero-metric, June 8, 1971.</div></div>	<p>FIGURE</p> <p>3</p>
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	<p>DATE: June 2007</p> <p>CHKD: JRC</p> <p>DRAWN: CGS</p> <p>PROJ. NO.: 14-094</p> <p>825 W. 8th Ave., Suite 200 Anchorage, AK 99501 (907) 258-4880</p>	<p>HISTORICAL SITE PHOTO, 1963</p> <hr/> <p>JOE WARD SLOUGH FORMER DUMP SITE Fort Yukon, Alaska</p> <p>Map Source: Aerial Orthophotograph, Aero-metric, 1963.</p>	<p>FIGURE</p> <p>4</p>
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APPENDIX A

Field Notes

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Name OASIS Environmental

Address 800 W. 8th Ave. #200
Anchorage AK 99501

Phone (907) 258-4880

Project Fort Yukon

Joe Ward Slough Former Dumpsite

"Rite in the Rain" - a unique all-weather writing surface created to shed water and to enhance the written image. Makes it possible to write sharp, legible field data in any kind of weather.

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CONTENTS		
PAGE	REFERENCE	DATE
	Fort Yukon Tribal Council 662-2581	
	- Gary Lawrence - Env. Director	
	- Nancy James	
	- Margbeth Salome	
	City of Fort Yukon 662-2717	
	- Mike Jackson	
	Council of Athabaskan Tribal Gov't	
	662-2587	
	- Joy Shackley	

5/29/07 Fort Yukon Former Landfill J. Clark
Z. Kirk

0900 OASIS on site in Fort Yukon.

0915 Get picked up by Gary Lawrence, Env. Director at Ft. Yukon Tribal Council. Get brief tour of Ft. Yukon. Arrive at Tribal Council building. Pick up truck that we will be renting. Go to airport, pick up gear at Everett's Air Cargo.

1130 Stage gear at Tribal Council building.

1200 Prep for collecting surface water samples later in the day.

1300 J. Clark Z. Kirk head out to landfill site. Check out area, try to find boundaries.

1330 Sides of landfill very overgrown - may be hard to get backhoe in to dig trenches. Will come back to investigate later.

1400 Back to tribal council building. Have town council meeting to try to get info about landfill.

1500 Back out at landfill site to locate surface water sample locations.

1545 Have located all 5 surface water locations.

21

5/29/07

Fort Yukon Landfill

J. Clark
Z. Kirk

1600

Back to tribal council bldg. Call Everett's Air Cargo to check on status of calibration gases.

1630

Out to landfill site to begin collecting surface water samples.

1635

Calibrate YSI water quality meter.

1705

Set up at first surface water sampling location.

1720

Cannot get peristaltic pump to work - connections are very corroded.

1750

Back to tribal council building. Call Karl Hill to discuss problems. No answer, leave msg.

1900

Haven't heard back from Karl Hill (OASIS). Decide to go ahead and collect samples (surface water)

even though pump is not working. Will dip sample bottles in the water as close to the bottom as possible, & open up the lids underwater.

1930

Back out to Joe Ward Spagh former landfill, at first sample location.

1935

Collect sample at SW-1, to be analyzed for GRO, VOCs, DRO, PBO, Pesticides, PCBs, Metals,

5/29/07

Fort Yukon Landfill

J. Clark
Z. Kirk

1935 cont.

Mercury, Hardness, and Anions. Sample ID: 07JWS061SW.

YSI readings: Temp = 10.22°C, Cond. = 0.436 mS/cm, DO = 13.31, pH = 6.12, ORP = 115.4. Water is clear; very low turbidity.

2000

Arrive at 2nd surface water location (SW2), collect sample to be analyzed for parameters above (@ 1935 hrs.) Sample ID: 07JWS062SW.

YSI readings: Temp = 14.45°C, Cond. = 0.821 mS/cm, DO = 8.87, pH = 7.63, ORP = -23.8. Water has slight to med. turbidity.

2040

At 3rd surface water sample location (SW3). Collect sample for parameters above. Sample ID: 07JWS063SW. Collect duplicate sample called SW5, sample ID: 07JWS065SW at time 2200 hrs.

YSI readings: Temp = 15.45°C, Cond. = 0.818 mS/cm, DO = 8.27, pH = 7.83, ORP = -45.7

2140

At 4th and final surface water sample location (SW4). Collect sample for 5 parameters listed at 1935 hrs.

5/29/07 Fort Yukon Former Landfill

S. Clark
Z. Kirk

2140 cont.

Sample ID: 07JUS004SW.

YSI readings: Temp. = 13.74°C,

Cond. = 0.211 ms/cm, DO = 8.27, 7.90,

pH = 8.79, ORP = -41.2. Minimal

turbidity except when agitated.

Biogenic sheen observed.

2215

OASIS heads to tribal council building to label samples and put on ice. Collected 4 surface

water samples + 1 duplicate today.

No water flowing where samples

collected. See surface water

sample locations next page.

Finished labeling samples and

have them in cooler to chill.

Done for day.

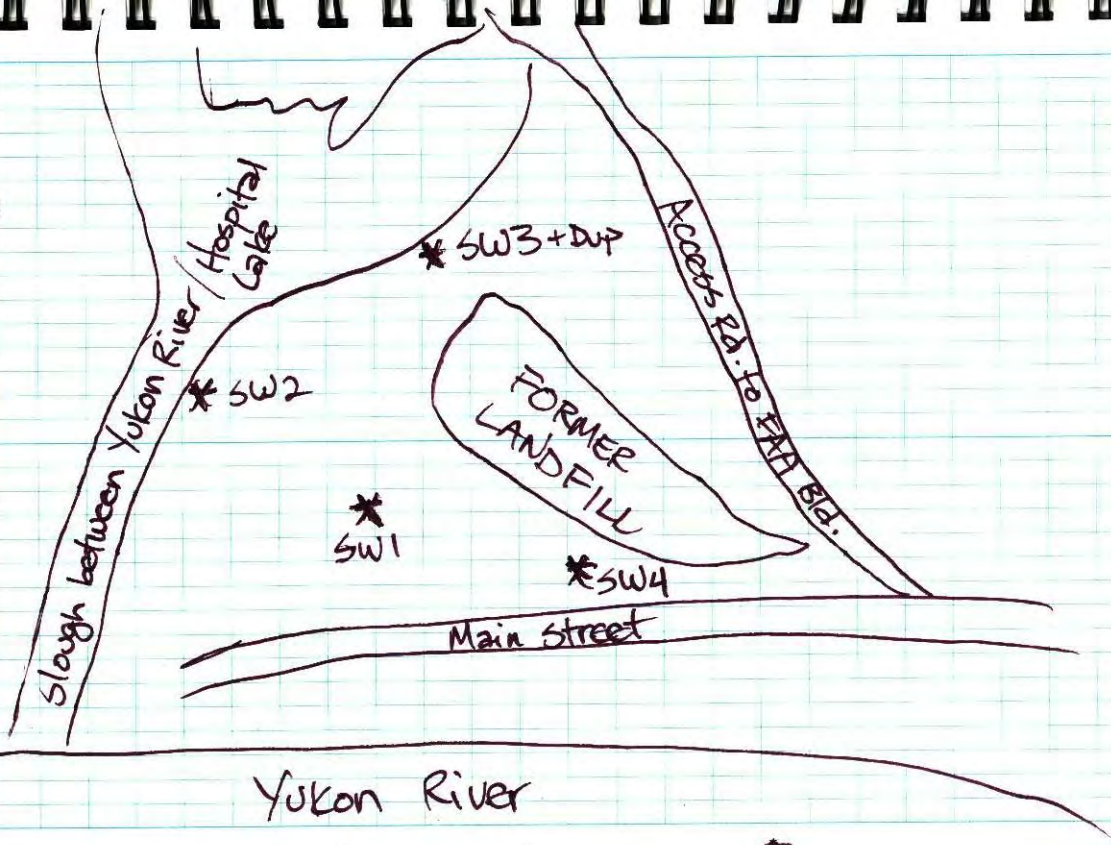
2345

Julie Clark
5/29/07

5/29/07 Fort Yukon Former Landfill

S. Clark
Z. Kirk

↑ N
NOT TO SCALE



5/30/07 Fort Yukon Former Landfill

J. Clark
Z. Kirk

- 0800 Call Karl Hill (OASIS). Talk to him about change in SW sample collection methodology - dipping container in water instead of using pump. Karl says he will try to get pump shipped up ASAP. Also tell Karl that landfill area is overgrown - it may be hard to get a backhoe to all proposed trench locations, especially on the east side.
- 0845 Prep for today's work. Plan for today: coordinate w/ City, get backhoe out to site and dig trenches.
- 0955 OASIS at landfill site. Meet w/ backhoe operator.
- 1005 Backhoe starts digging trench on south side of landfill, ~5-10' ^{south} of trail.
- 1010 Hit permafrost at ~4-5' bgs. Keep advancing trench north toward main trash pile.
- 1020 Finish digging trench on S side of landfill. Permafrost at ~5' bgs.
- 1025 Groundwater not encountered. Collect sample from south trench into 3 ziplock bags. Will PID screen and/or Retrolag and jar up lab

5/30/07 Fort Yukon Former Landfill

J. Clark
Z. Kirk

- 1025 sample later. Backhoe operator goes cont. up west side of landfill to dig another trench.
- 1030 Backhoe hits permafrost at ~3' bgs. Done at SW trench location.
- 1035 Collect sample into 3 bags at SW trench. Backhoe moves north to begin digging NW trench location
- 1045 Backhoe hits permafrost at ~4' bgs at NW trench. Done digging here.
- 1050 Collect sample at NW trench into 3 ziplock bags. (503)
- 1115 Begin digging trench on N side of landfill.
- 1125 Discontinue digging 1st trench on N side of landfill - a lot of debris present. Start digging another trench ~20' north of first hole.
- 1130 Still uncovering lots of debris - have not found north edge of landfill. Start digging a third trench 30-40' north of second trench.
- 1135 Third trench on N side looks good - not much debris. Trench ~50-100' south of slough. Hit permafrost ~5' bgs.

8)

5/30/07 Fort Yukon Former Landfill J. Clark
Z. Kirk

1140

Collect sample from N trench into 3 ziplock bags. Backhoe operator tries heading down east side of landfill thru lots of overgrowth.

1145

Backhoe starts digging southeast sample trench - looks like it is about across from NW sample point, but this about as far south we can get the backhoe into because of overgrowth.

1150

Collect SE sample into 3 ziplock bags. Trench is 4 ~' deep due to permafrost. Operator moves north on the east side of landfill to dig NE trench.

1200

Hit permafrost at ~5' bgs in NE trench. Done digging all 6 trenches - backhoe/operator leave site.

1205

Collect NE soil sample into 3 ziplock bags. (506)

1230

Head back to tribal council bldg. to lay out PID bags for warming/headspace readings and to call Karl Hill (OASIS) to inform him of progress.

9

5/30/07 Fort Yukon Former Landfill

J. Clark
Z. Kirk 9

1230
cont.

Will return to trenches later this afternoon to take GPS coordinates of sample locations, possibly soil gas samples

1235

Call Karl Hill (OASIS). Tell him we hit permafrost in all 6 trenches dug this morning, from 3' to 5' bgs. He thinks it is not going to be feasible to collect 6U samples due to permafrost.

- Peristaltic pump is on its way here, will arrive ~8:00 p.m.

Karl asks us to recollect the metals & anions from yesterday's surface water sample locations.

Karl will talk to ADEC to see if they would like us to recollect the rest of the parameters using the peristaltic pump, which was specified in the work plan.

- Karl would like us to go back out to the site and attempt to take soil gas readings ~3' bgs.

If PID readings from this a.m.'s samples are less than 50,

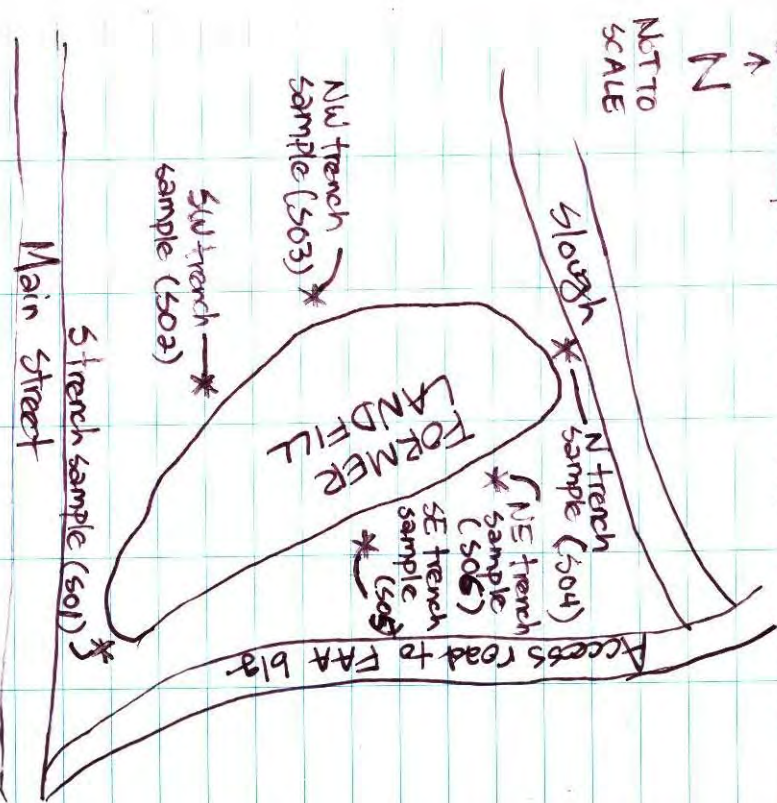
5/30/07 Fort Yukon Former Landfill

J. Clark
Z. Kirk

1035 Then soil gas readings need only be taken in the landfill.

If PID readings are above 50, soil gas readings will be taken outside the boundary of the landfill.

Soil sample locations shown below:



5/30/07 Fort Yukon Former Landfill

J. Clark
Z. Kirk

1400 Take PID readings from six soil samples collected this morning.

ID	PID ppm	odor
S trench (501)	1.2	None
SW trench (502)	1.2	None
NW trench (503)	1.1	None
N trench (504)	0.5	None
SE trench (505)	4.9	None
NE trench (506)	0.0	None
1410 Low PID readings - not necessary to perform PetroFlag analysis or take soil gas readings outside the boundary of landfill.		
1430 Onsite at landfill to collect soil gas readings within landfill boundary at/near this morning's trench locations.		
1440 Begin pounding in probe w/in landfill boundary on south side.		
1505 Take soil gas reading at south sample point (561). Hexane = 55 ppm		
Oxy = 20.6%, CO ₂ = 0%		
1530 Begin pounding probe in for soil gas reading on SW side.		
1546 Take soil gas reading at SW sample point (562). Hexane = 110 ppm, Oxy = 20.5 percent, CO ₂ = 0%.		

5/30/07 Fort Yukon Former Landfill

J. Clark
Z. Kirk

- 1600 OASIS to Tribal Council building, call Karl Hill. Let him know how soil gas readings are going. He says regarding surface water samples, Karl says to go ahead and recollect all analyses, just to be on the safe side.
- 1720 OASIS to airport to ask about cargo, flight times, etc.
- 1740 OASIS onsite at landfill. Begin pounding temporary probe on NW side of site for soil gas reading.
- 1750 Take soil gas reading at NW sample point ~~6667~~ (563). Hexane = 100 ppm, Oxy = 20.4%, CO₂ = 0%
- 1805 Pounding in probe for soil gas reading at the location of this morning's SE trench, aka 505. Will call this soil gas sample 565 so it corresponds w/ soil sample taken at same location.
- 1810 Take soil gas reading at SE sample point (sample 565). Hexane = 60 ppm Oxy = 20.0%, CO₂ = 0%
- 1820 Begin installing temporary probe w/ in landfill boundary near NE trench, sample point 506 / 566.

5/30/07 Fort Yukon Former Landfill

J. Clark
Z. Kirk

- 1825 Take soil gas reading at NE sample point (566). Hexane = 110 ppm Oxy = 20.5%, CO₂ = 0%
- 1835 Begin installing temporary probe on Northern side of the landfill.
- 1855 Take soil gas reading at N sample point (564). Hexane = 95 ppm Oxy = 19.7%, CO₂ = 0%
- 1905 Finished collecting soil gas samples. While collecting soil gas samples, also took GPS coordinates of both soil & soil gas sample locations from today
- 1915 OASIS leaves landfill site.
- 1945 Dinner / break.
- 2100 Label 12th soil samples collected earlier today. They have been chilling on ice until now. Soil sample info:
- 5 trench (501) ID = 67JWS60150 @ 1025 hrs
- SW trench (502) ID = 67JWS60350 @ 1035 hrs
- NW trench (503) ID = 67JWS60350 @ 1050 hrs
- N trench (504) ID = 67JWS60450 @ 1140 hrs
- SE trench (505) ID = 67JWS60550 @ 1150 hrs
- NE trench (506) ID = 67JWS60650 @ 1205 hrs
- 67JWS60750 is DUP of 505, @ 1215 hrs

4)
5/30/07 East Yukon Former Landfill

J. Clark
Z. Kirk

Soil sample info (cont.)

All soil samples to be analyzed for
GFO (AT 101), VOCs (8260B), DRO (AT
102), KFO (AT 103), Metals (6020),
Mercury (7471), Pesticides (8081),
PCBs (8082), Anions.

Done for day.

Julie Clark
5/30/07

5/31/07 East Yukon Former Landfill

J. Clark
Z. Kirk

0800 Misc. work - checking supplies, changing
out ice in coolers, prepping today's gear.

Plan for today: Resample surface
water samples collected 5/29/07, this
time using a peristaltic pump. Also,
meet w/ elders who may have info
on dumpsite.

0945 Pick up peristaltic pump / battery
charger from Warbelau's.

1000 Onsite at landfill to collect surface
water samples. Since first set of
surface water samples will not be
submitted, will keep the sample IDs
and sample location names the same.

1005 Calibrate YSI water quality meter.
1020 Set up at surface water sample
location SW4.

1025 Start purging w/ peristaltic, wait for
parameters to stabilize.

1035 YSI readings: Temp. = 18.15°C
Cond = 0.352 mS/cm DO = 10.11

pH = 7.02 ORP = -97.4

Sample SW4 for GFO, VOCs, DRO, KFO,
Pesticides, PCBs, Metals, Mercury, Hal-
ogens and Anions (same parameters
as before). ID: 07JWS004SW

16/1

5/31/07 Fort Yukon Former Landfill

T. Clark
Z. Kirk

1055

Finish at SW1. Go back to tribal council bldg. to meet / talk to elders.

1100

At tribal council bldg. Gary Lawrence tells OASIS that the elders could not meet, but he spoke to them while OASIS was out at site.

According to three elders:

Grafton Bergman, John Thomas, and

Doris Ward, most of the trash

disposed of at the old landfill

household trash, with some automobiles,

batteries, 55 gal drums. Some of the

drums reportedly had sludge leaking

out. Anything and everything seems

to have been disposed of at this

site, but mostly household items.

OASIS at landfill site, will head

to sample point SW1.

Set up at location SW1.

Start purging at SW1 w/peristaltic,

wait for readings to stabilize.

YSI readings: Temp = 13.50°C

Cond = 0.549 mS/cm DO = 9.47

pH = 5.38 ORP = -52.8

Sample SW1 for parameters listed above at 1035. ID: Ø7JWSØØ1SW

5/31/07 Fort Yukon Former Landfill

T. Clark
Z. Kirk

1225

Begin setting up at SW2.

1230

Begin purging at SW2, waiting for parameters to stabilize.

1240

YSI readings: Temp = 13.93°C

Cond = 0.164 mS/cm DO = 9.87

pH = 7.66 ORP = -72.8

Sample SW2 for analyses listed above at 1035. ID: Ø7JWSØØ2SW

1310

Set up at surface water location SW3.

1330

Begin purging at SW3; wait for readings to stabilize.

1335

YSI readings: Temp = 15.94°C

Cond = 0.333 mS/cm DO = 9.94

pH = 6.45 ORP = -90.2

Sample SW3 for parameters listed above. Take duplicate sample, labeled SW5, @ time 1400

1430

Sample ID for primary: Ø7JWSØØ3SW. Sample ID for duplicate: Ø7JWSØØ5SW.

1515

Finished surface water sampling. Take some more photos of landfill building. Get gear ready to go.

1630

Drop gear off at airport.

15

5/31/07 Fort Yukon Former Landfill

T. Clark
Z. Kirk

1940

Leave Fort Yukon on Frontier

Flying.

2015

Arrive in Fairbanks. Frontier
Cargo & Air Airlines Cargo

closed for the day - will have to

ship gear tomorrow.

2100

Get hotel room. Label samples
collected today. Done for day.

~~Julie Clark~~
~~5/31/07~~

6/1/07 Fort Yukon Former Landfill

T. Clark
Z. Kirk

19

0700 Drop off gear at Air Airlines

cargo.

0720 Head to airport for flight to
Anchorage.

0945 Arrive in Anchorage.

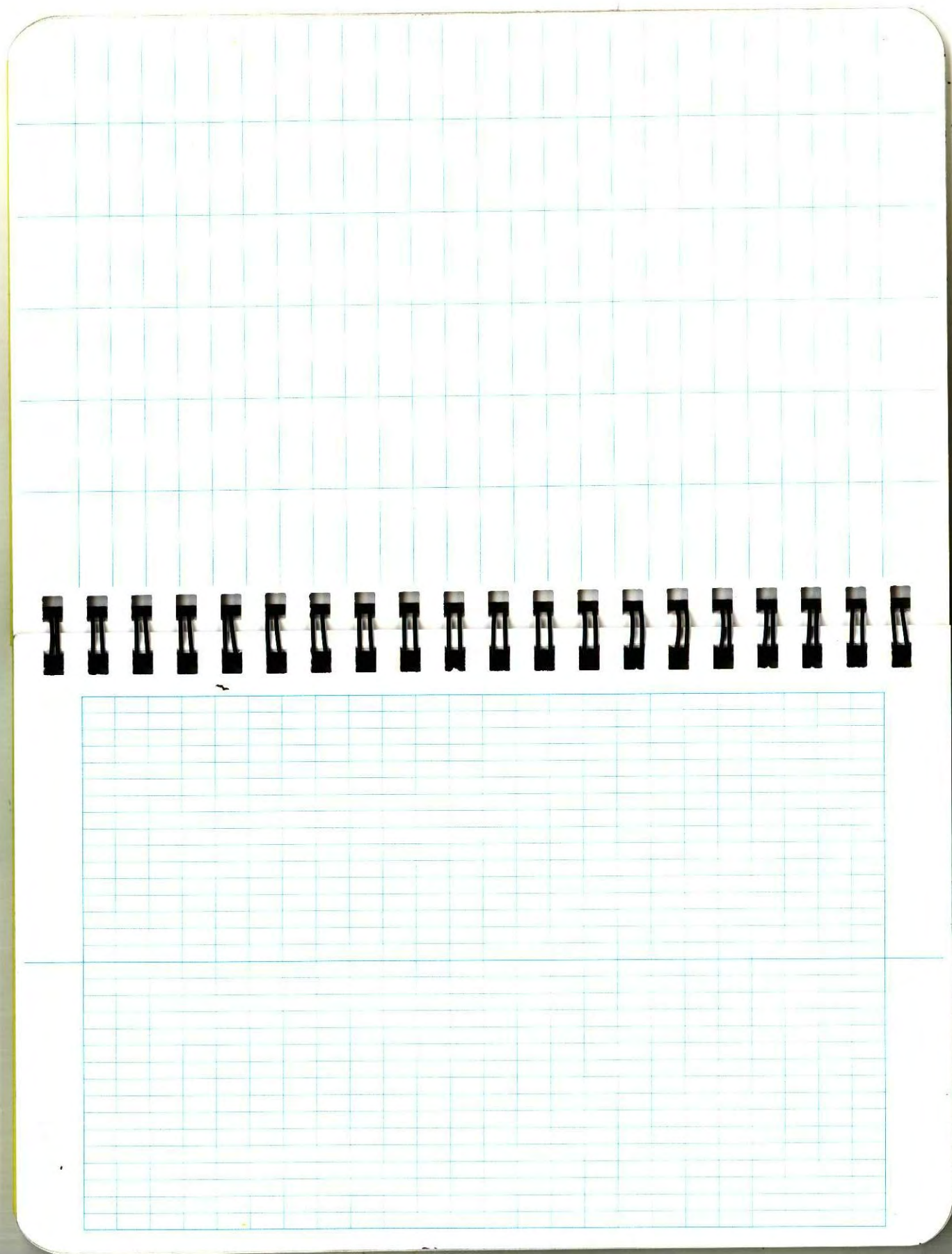
1030 Fill in chain of custody for all
Fort Yukon samples.

1220 Drop samples at SCS.

1240 Still at SCS, talk to Ken Hill/
Cody Black (OASIS) about adding
either PAH SIM or SVOCs 8270C
to requested analysis. Decide to
add SVOC analysis to primary &
duplicate water samples (07JWS0035u)
and 07JWS0055u) as well as
primary and duplicate soil samples
(07JWS00550 and 07JWS00750).

1310 Finished at lab. Done for day.

~~Julie Clark~~
~~6/1/07~~



APPENDIX B

Photographic Log

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**Appendix B
- Photographs**



Photograph 1 – Aerial view of Fort Yukon, Hospital Lake, and Yukon River. View looking south.



Photograph 2 – Preparing to dig trench at sample location SO1, on the south side of the former landfill. View looking north.

**Appendix B
- Photographs**



Photograph 3 – Digging trench on southern side of the former landfill (sample location SO1). View to the southeast.



Photograph 4 – Completed trench at soil sample location SO1, south of the former landfill. View looking north.

**Appendix B
- Photographs**



Photograph 5 – Trench at location SO2, the southwestern soil sample location. View to the east.

Appendix B
- Photographs



Photograph 6 – Digging trench at sample location SO4 on the northern side of the former landfill. View to the west.



Photograph 7 – Collecting laboratory analytical sample at surface water sample location SW1.

**Appendix B
- Photographs**



Photograph 8 – Measuring water parameters at surface water sample location SW2, view looking southwest.



Photograph 9 – Collecting surface water sample at SW4 location.

**Appendix B
- Photographs**



Photograph 10 – Main debris pile at the former landfill, view to the northeast.



Photograph 11 – Main debris pile at the former landfill, view to the southeast.

**Appendix B
- Photographs**



Photograph 12 – Vehicles disposed of at the former landfill, view to the west.



Photograph 13 – Main debris pile at the former landfill looking northwest.

**Appendix B
- Photographs**



Photograph 14 – Debris observed at the former landfill, looking northwest.



Photograph 15 – Drum observed at the former landfill.

Appendix B
- Photographs



Photograph 16 – Debris observed on the southern edge of the former landfill, view to the northwest.

APPENDIX C

EDR Environmental Records Review

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The EDR Radius Map with GeoCheck®

**Joe Ward Slough Site
NW Fort Yukon
Fort Yukon, AK 99740**

Inquiry Number: 1959317.1s

June 20, 2007

The Standard in Environmental Risk Information

440 Wheelers Farms Road
Milford, Connecticut 06461

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

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Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting Source Map	A-7
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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

NW FORT YUKON
FORT YUKON, AK 99740

COORDINATES

Latitude (North):	66.568100 - 66° 34' 5.2"
Longitude (West):	145.287600 - 145° 17' 15.4"
Universal Transverse Mercator:	Zone 6
UTM X (Meters):	575982.7
UTM Y (Meters):	7384088.5
Elevation:	413 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	N/A
Source:	USGS 7.5 min quad index

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

FEDERAL RECORDS

NPL	National Priority List
Proposed NPL	Proposed National Priority List Sites
Delisted NPL	National Priority List Deletions
NPL LIENS	Federal Superfund Liens
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CERC-NFRAP	CERCLIS No Further Remedial Action Planned
CORRACTS	Corrective Action Report
RCRA-TSDF	Resource Conservation and Recovery Act Information
RCRA-LQG	Resource Conservation and Recovery Act Information
RCRA-SQG	Resource Conservation and Recovery Act Information

EXECUTIVE SUMMARY

ERNS	Emergency Response Notification System
HMIRS	Hazardous Materials Information Reporting System
US ENG CONTROLS	Engineering Controls Sites List
US INST CONTROL	Sites with Institutional Controls
DOD	Department of Defense Sites
FUDS	Formerly Used Defense Sites
US BROWNFIELDS	A Listing of Brownfields Sites
CONSENT	Superfund (CERCLA) Consent Decrees
ROD	Records Of Decision
UMTRA	Uranium Mill Tailings Sites
ODI	Open Dump Inventory
TRIS	Toxic Chemical Release Inventory System
TSCA	Toxic Substances Control Act
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
SSTS	Section 7 Tracking Systems
LUCIS	Land Use Control Information System
DOT OPS	Incident and Accident Data
ICIS	Integrated Compliance Information System
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
US CDL	Clandestine Drug Labs
RADINFO	Radiation Information Database
LIENS 2	CERCLA Lien Information
PADS	PCB Activity Database System
MLTS	Material Licensing Tracking System
MINES	Mines Master Index File
FINDS	Facility Index System/Facility Registry System
RAATS	RCRA Administrative Action Tracking System

STATE AND LOCAL RECORDS

SWF/LF	Solid Waste Facilities
LUST	Leaking Underground Storage Tank Database
UST	Underground Storage Tank Database
AST	Regulated Aboveground Storage Tanks
AK Spills	Spills Database
ENG CONTROLS	Engineering Controls Site Listing
Inst Control	Contaminated Sites with Institutional Controls
VCP	Voluntary Cleanup Program sites
DRYCLEANERS	Drycleaner Facility Listing
BROWNFIELDS	Identified and/or Proposed Brownfields Sites
CDL	Illegal Drug Manufacturing Sites
NPDES	Wastewater Discharge Permit Listing
AIRS	AIRS Facility Listing

TRIBAL RECORDS

INDIAN RESERV	Indian Reservations
INDIAN LUST	Leaking Underground Storage Tanks on Indian Land
INDIAN UST	Underground Storage Tanks on Indian Land

EDR PROPRIETARY RECORDS

Manufactured Gas Plants	EDR Proprietary Manufactured Gas Plants
--------------------------------	---

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

EXECUTIVE SUMMARY

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property. Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STATE AND LOCAL RECORDS

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 SHWS list, as provided by EDR, and dated 03/12/2007 has revealed that there is 1 SHWS site within approximately 1 mile of the target property.

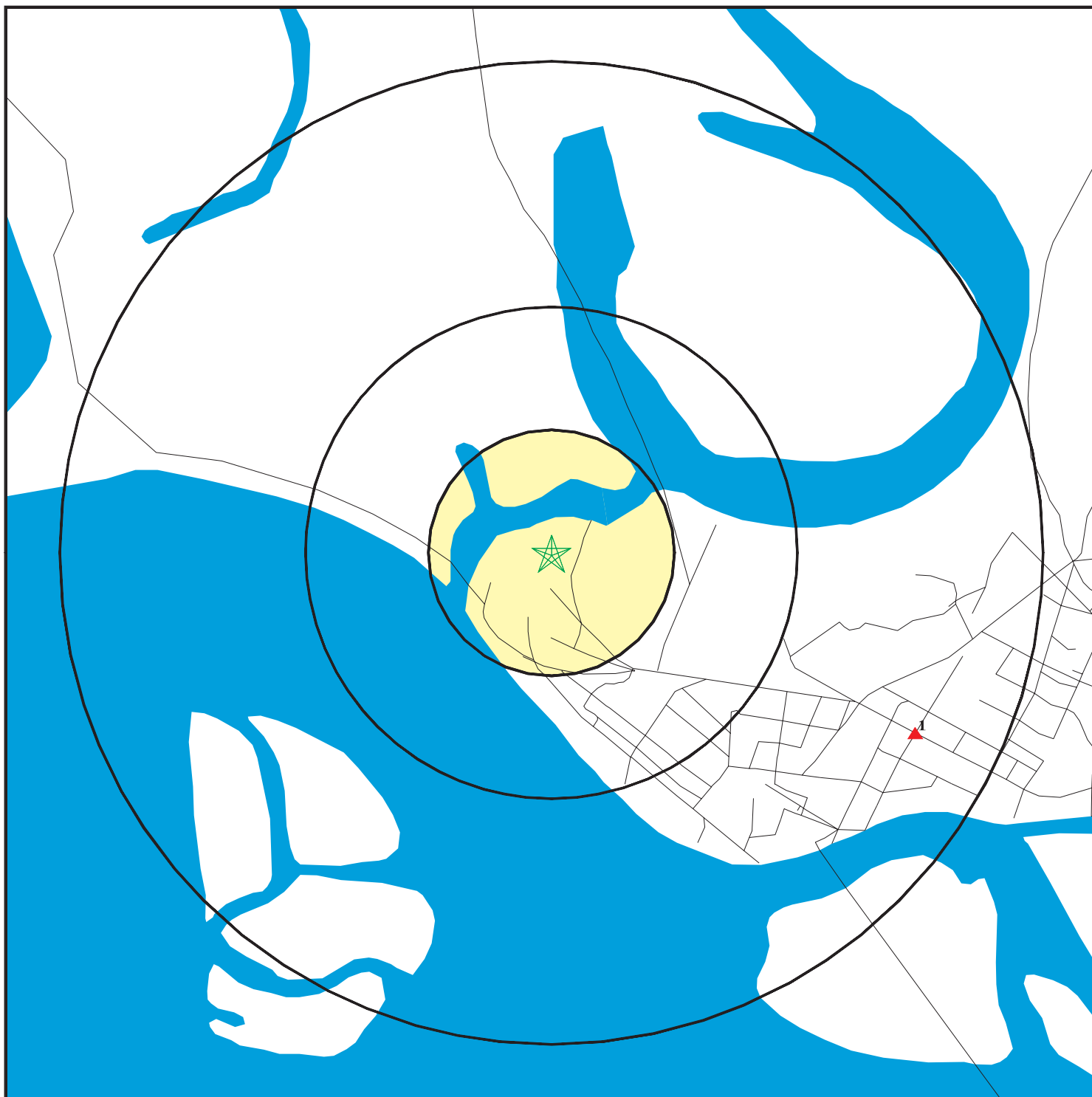
<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
AKARNG FORT YUKON FSA	3RD AVENUE / HILL STR	1/2 - 1 ESE	1	6

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped:

<u>Site Name</u>	<u>Database(s)</u>
FAA FORT YUKON VORTAC	SHWS
FAA FORT YUKON QUARTERS FACILITY	SHWS
FORT YUKON LRRS -POWER PLANT (SD03)	SHWS, Inst Control
CITY OF FORT YUKON WATER SUPPLY	SHWS
FORT YUKON LRRS -WASTE ACCUM (SS01)	SHWS
FORT YUKON LRRS -ROAD OILING (OT04)	SHWS
FORT YUKON LRRS -WHITE ALICE (OT05)	SHWS
FORT YUKON LRRS -LANDFILL #1 (LF02)	SHWS
FORT YUKON LRRS (ALL SITES)	SHWS
FORT YUKON LRRS LUST - (.26) (SS06)	SHWS
ALASKA COMMERCIAL COMPANY - MARINA	SHWS
FORT YUKON - OLD WAREHOUSE	SHWS
BFT - OLD LANDFILL JOE WARD SLOUGH	SHWS, BROWNFIELDS
FORT YUKON SCHOOL	SHWS
YUKON FLATS RURAL CENTER HOT	SHWS
FORT YUKON CITY DUMP	AK Spills, CERC-NFRAP
ARCO PRUDHOE BAY SITE	CERC-NFRAP
FORT YUKON LRRS INERT WASTE/NON-RACM LANDFILL	SWF/LF
FT YUKON UNIT OFFICE AFS	UST
TAPS PUMP STA 5 PROSPECT CREEK	RCRA-SQG, FINDS
TAPS PUMP STA 3	RCRA-SQG, FINDS
TAPS PUMP STA 4 PROSPECT CRK	RCRA-SQG, FINDS

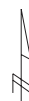
OVERVIEW MAP - 1959317.1s



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites

Indian Reservations BIA

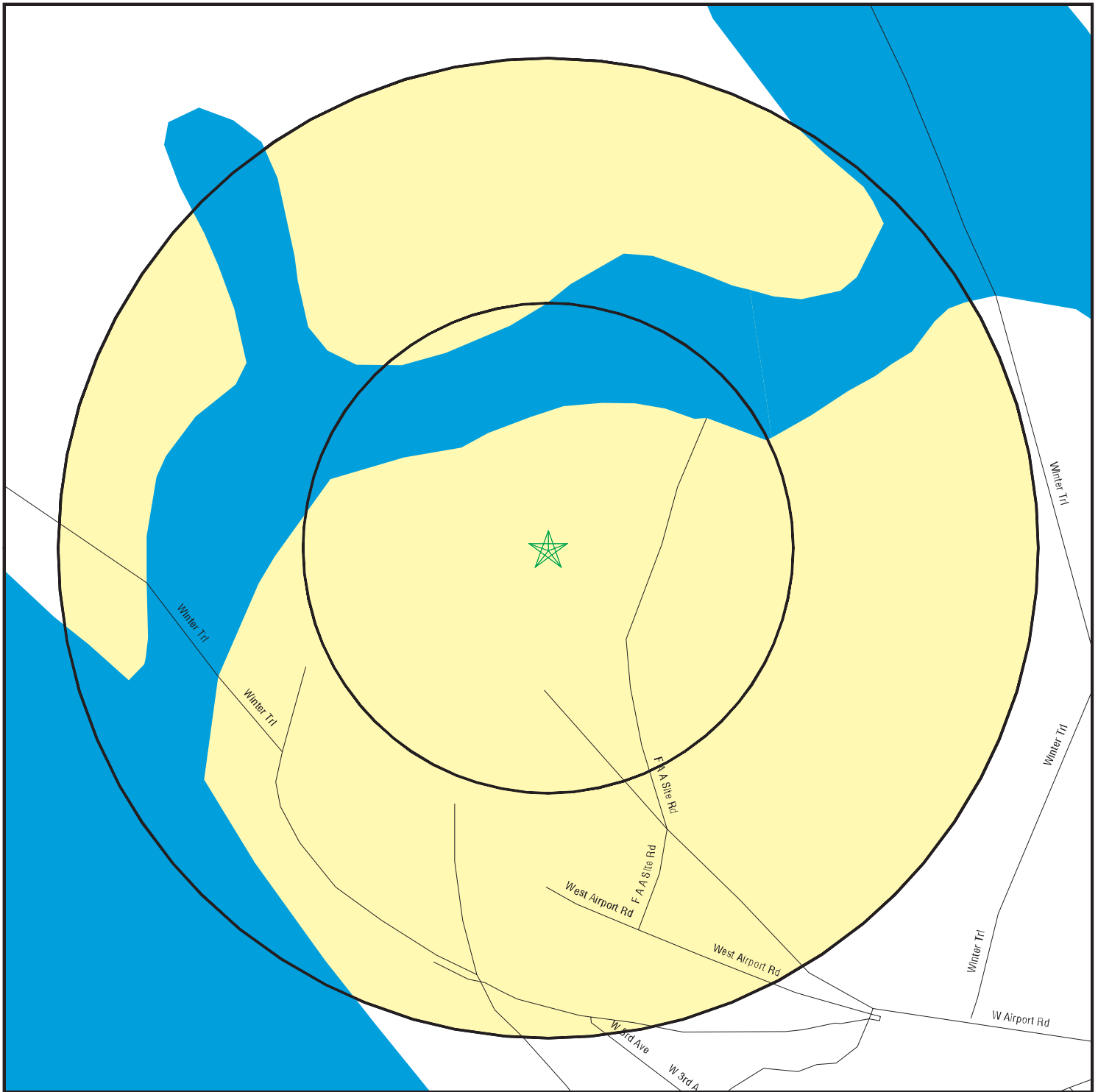
0 1/4 1/2 1 Miles



SITE NAME: Joe Ward Slough Site
 ADDRESS: NW Fort Yukon
 Fort Yukon AK 99740
 LAT/LONG: 66.5681 / 145.2876

CLIENT: Oasis Environmental
 CONTACT: Karl Hill
 INQUIRY #: 1959317.1s
 DATE: June 20, 2007 2:08 pm

DETAIL MAP - 1959317.1s



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ⚙ Manufactured Gas Plants
- ⚡ Sensitive Receptors
- 🚒 National Priority List Sites
- 🏠 Dept. Defense Sites

Indian Reservations BIA

0 1/16 1/8 1/4 Miles



SITE NAME: Joe Ward Slough Site
 ADDRESS: NW Fort Yukon
 Fort Yukon AK 99740
 LAT/LONG: 66.5681 / 145.2876

CLIENT: Oasis Environmental
 CONTACT: Karl Hill
 INQUIRY #: 1959317.1s
 DATE: June 20, 2007 2:08 pm

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<u>FEDERAL RECORDS</u>								
NPL		1.000	0	0	0	0	NR	0
Proposed NPL		1.000	0	0	0	0	NR	0
Delisted NPL		1.000	0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
CERCLIS		0.500	0	0	0	NR	NR	0
CERC-NFRAP		0.500	0	0	0	NR	NR	0
CORRACTS		1.000	0	0	0	0	NR	0
RCRA TSD		0.500	0	0	0	NR	NR	0
RCRA Lg. Quan. Gen.		0.250	0	0	NR	NR	NR	0
RCRA Sm. Quan. Gen.		0.250	0	0	NR	NR	NR	0
ERNS	TP		NR	NR	NR	NR	NR	0
HMIRS	TP		NR	NR	NR	NR	NR	0
US ENG CONTROLS		0.500	0	0	0	NR	NR	0
US INST CONTROL		0.500	0	0	0	NR	NR	0
DOD		1.000	0	0	0	0	NR	0
FUDS		1.000	0	0	0	0	NR	0
US BROWNFIELDS		0.500	0	0	0	NR	NR	0
CONSENT		1.000	0	0	0	0	NR	0
ROD		1.000	0	0	0	0	NR	0
UMTRA		0.500	0	0	0	NR	NR	0
ODI		0.500	0	0	0	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
LUCIS		0.500	0	0	0	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
LIENS 2	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
MINES		0.250	0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
<u>STATE AND LOCAL RECORDS</u>								
State Haz. Waste		1.000	0	0	0	1	NR	1
State Landfill		0.500	0	0	0	NR	NR	0
LUST		0.500	0	0	0	NR	NR	0
UST		0.250	0	0	NR	NR	NR	0
AST		0.250	0	0	NR	NR	NR	0
AK Spills	TP		NR	NR	NR	NR	NR	0
ENG CONTROLS		0.500	0	0	0	NR	NR	0
Inst Control		0.500	0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
VCP		0.500	0	0	0	NR	NR	0
DRYCLEANERS		0.250	0	0	NR	NR	NR	0
BROWNFIELDS		0.500	0	0	0	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
<u>TRIBAL RECORDS</u>								
INDIAN RESERV		1.000	0	0	0	0	NR	0
INDIAN LUST		0.500	0	0	0	NR	NR	0
INDIAN UST		0.250	0	0	NR	NR	NR	0
<u>EDR PROPRIETARY RECORDS</u>								
Manufactured Gas Plants		1.000	0	0	0	0	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

1
ESE
1/2-1
4361 ft.

AKARNG FORT YUKON FSA
3RD AVENUE / HILL STREET
FORT YUKON, AK 99740

SHWS **S105857297**
N/A

Relative:
Higher

SHWS:

Actual:
421 ft.

FS Facility Site ID: 67614
Hazard Id: 3072
Lat/Long: 66.565278 / -145.252222
Date Lat Lon Collected: Not reported
Horizontal Accuracy: Not reported
Horizontal Accuracy Unit ID: Not reported
Horizontal Description Code: Not reported
Horizontal Source Code: Not reported
Horizontal Datum Code: 3
Horizontal Method Code: I1
Vertical Method Code: Not reported
Vertical Datum Code: Not reported
Vertical Accuracy: Not reported
Source Scale Code: Not reported
Verification Code: Not reported
Federal Identifier: Not reported
Flag Mobile: 0
Description: 1998310103002
Near: No
Country: USA
Region DEC: Not reported
State Senate District: R
State Representative District: 36
Point Line Area Code: P
Meridian Code: F
Range: 012
Range Direction Code: E
Township: 020
Township Direction: N
Section: 18
Subdivision: Not reported
Block: Not reported
Log: Not reported
Date Created: 11/14/2005 11:11:36 AM
Hydrologic Unit: Not reported
Vertical Measure: Not reported
Quadrangle Id: 851
Flag Parent: Not reported
Fs Election District ID: 286
Comments: Not reported
Xref Location Id: 3072
Generic Name: Armory
Description: AKARNG Fort Yukon FSA
Lat/Long: 66.565278 / -145.252222
Date Collected: Not reported
Haccuracy: Not reported
Haccuracy Unit Id: Not reported
Description Code: Not reported
Hdatum Code: 3
Hmethod Code: I1
Hsource Code: Not reported
Vertical Measure: Not reported
Vaccuracy: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

AKARNG FORT YUKON FSA (Continued)

EDR ID Number
EPA ID Number

Database(s)

S105857297

Vdatum Code: Not reported
Vmethod Code: Not reported
Source Scale Code: Not reported
Verification Code: Not reported
Comment: Not reported
Near: No

DEC File #: 740.38.012

Region: 31

Rp Contact Id: 1254

Staff Id: 117

Analyte1: 164

Analyte3 Id: 0

Analyte Id: Not reported

Alternate Name: Not reported

Casrefnbr: Not reported

Drinking Water MCL: Not reported

Analysis Tool: Not reported

Affiliate Contact ID: Not reported

Affiliate Address ID: Not reported

Contact: Not reported

Contact Telephone: Not reported

Staff ID: Not reported

Staff User Name: Not reported

Staff Last Name: Not reported

Staff Phone: Not reported

Staff Extention: Not reported

Staff Fax: Not reported

Staff Email: Not reported

Staff Administrator: Not reported

Staff Sectionmanager: Not reported

Staff Inactive: Not reported

Staff Affiliation: Not reported

Problem Cmmnt: Petroleum contamination in soil. DRO reported at 19,000 mg/kg at one surface sample location.

Comment: NE1/4 Ne1/4 Section 18.

Spilldate: 1/30/1998

Categorycode: State Responsible Party Lead

Rp Programcode: RP Willing and Able

Statuscode: Inactive

Analyte2 Id: 0

Analyte Name: Not reported

Class: Not reported

CS Action Level: Not reported

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
COLDFOOT	1000375512	TAPS PUMP STA 5 PROSPECT CREEK	DALTON HWY MP 137	99740	RCRA-SQG, FINDS
DEADHORSE	1000376327	TAPS PUMP STA 3	DALTON HWY MP 313	99740	RCRA-SQG, FINDS
DEADHORSE	1004670170	TAPS PUMP STA 4 PROSPECT CRK	DALTON HWY MP 270	99740	RCRA-SQG, FINDS
FORT WAINWRIGHT	U003330776	FT YUKON UNIT OFFICE AFS	FORT YUKON UNIT OFFICE	99740	UST
FORT YUKON	S105555667	FAA FORT YUKON VORTAC	AIRPORT VICINITY	99740	SHWS
FORT YUKON	S107029153	FAA FORT YUKON QUARTERS FACILITY	AIRPORT VICINITY	99740	SHWS
FORT YUKON	S107029151	FORT YUKON LRRS -POWER PLANT (SD03)	APPROX. 1 MILE EAST OF	99740	SHWS, Inst Control
FORT YUKON	1003880113	FORT YUKON CITY DUMP	FORT YUKON	99740	AK Spills, CERC-NFRAP
FORT YUKON	S103785781	FORT YUKON LRRS INERT WASTE/NON-RACM LANDFILL	FORT YUKON LRRS	99740	SWF/LF
FORT YUKON	S107029145	CITY OF FORT YUKON WATER SUPPLY	FORT YUKON	99740	SHWS
FORT YUKON	S107029147	FORT YUKON LRRS -WASTE ACCUM (SS01)	1 MILE EAST OF FT. YUKON	99740	SHWS
FORT YUKON	S107029148	FORT YUKON LRRS -ROAD OILING (OT04)	1 MILE EAST OF FT. YUKON	99740	SHWS
FORT YUKON	S107029149	FORT YUKON LRRS -WHITE ALICE (OT05)	1 MILE EAST OF FT. YUKON	99740	SHWS
FORT YUKON	S107029150	FORT YUKON LRRS -LANDFILL #1 (LF02)	1 MILE EAST OF FT. YUKON	99740	SHWS
FORT YUKON	S107504472	FORT YUKON LRRS (ALL SITES)	1 MILE EAST OF FT. YUKON	99740	SHWS
FORT YUKON	S107029152	FORT YUKON LRRS LUST - (.26) (SS06)	NEW COMPOSITE BUILDING	99740	SHWS
FORT YUKON	S107029146	ALASKA COMMERCIAL COMPANY - MARINA	EAST OF SPRUCE	99740	SHWS
FORT YUKON	S107029154	FORT YUKON - OLD WAREHOUSE	S OF E. 3RD, E. OF SPRUCE	99740	SHWS
FORT YUKON	S107504761	BFT - OLD LANDFILL JOE WARD SLOUGH	OLD LANDFILL	99740	SHWS, BROWNFIELDS
FORT YUKON	S107863565	FORT YUKON SCHOOL	EAST SECOND AVENUE AND HILL STREET	99740	SHWS
FORT YUKON	S107596540	YUKON FLATS RURAL CENTER HOT	800 WILLIAM LOOLA STREET	99740	SHWS
PRUDHOE BAY	1002838972	ARCO PRUDHOE BAY SITE	NORTH SLOPE	99740	CERC-NFRAP

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

FEDERAL RECORDS

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: 01/25/2007	Source: EPA
Date Data Arrived at EDR: 01/31/2007	Telephone: N/A
Date Made Active in Reports: 03/12/2007	Last EDR Contact: 05/03/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 07/30/2007
	Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 09/27/2006	Source: EPA
Date Data Arrived at EDR: 11/01/2006	Telephone: N/A
Date Made Active in Reports: 11/22/2006	Last EDR Contact: 05/03/2007
Number of Days to Update: 21	Next Scheduled EDR Contact: 07/30/2007
	Data Release Frequency: Quarterly

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: 12/28/2006	Source: EPA
Date Data Arrived at EDR: 01/31/2007	Telephone: N/A
Date Made Active in Reports: 03/12/2007	Last EDR Contact: 05/03/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 07/30/2007
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 05/21/2007

Next Scheduled EDR Contact: 08/20/2007

Data Release Frequency: No Update Planned

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS 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). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 02/27/2007

Date Data Arrived at EDR: 03/21/2007

Date Made Active in Reports: 04/27/2007

Number of Days to Update: 37

Source: EPA

Telephone: 703-412-9810

Last EDR Contact: 06/20/2007

Next Scheduled EDR Contact: 09/17/2007

Data Release Frequency: Quarterly

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS 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 this 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. This 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 a potential NPL site.

Date of Government Version: 03/21/2007

Date Data Arrived at EDR: 04/27/2007

Date Made Active in Reports: 05/25/2007

Number of Days to Update: 28

Source: EPA

Telephone: 703-412-9810

Last EDR Contact: 06/15/2007

Next Scheduled EDR Contact: 09/17/2007

Data Release Frequency: Quarterly

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/14/2007

Date Data Arrived at EDR: 03/20/2007

Date Made Active in Reports: 04/27/2007

Number of Days to Update: 38

Source: EPA

Telephone: 800-424-9346

Last EDR Contact: 06/04/2007

Next Scheduled EDR Contact: 09/03/2007

Data Release Frequency: Quarterly

RCRA: Resource Conservation and Recovery Act Information

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS). 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. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/13/2006	Source: EPA
Date Data Arrived at EDR: 06/28/2006	Telephone: (206) 553-1200
Date Made Active in Reports: 08/23/2006	Last EDR Contact: 06/05/2007
Number of Days to Update: 56	Next Scheduled EDR Contact: 07/16/2007
	Data Release Frequency: Quarterly

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: 12/31/2006	Source: National Response Center, United States Coast Guard
Date Data Arrived at EDR: 01/24/2007	Telephone: 202-267-2180
Date Made Active in Reports: 03/12/2007	Last EDR Contact: 04/24/2007
Number of Days to Update: 47	Next Scheduled EDR Contact: 07/23/2007
	Data Release Frequency: Annually

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/31/2005	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 04/17/2007	Telephone: 202-366-4555
Date Made Active in Reports: 05/14/2007	Last EDR Contact: 04/17/2007
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/16/2007
	Data Release Frequency: Annually

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: 04/20/2007	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/26/2007	Telephone: 703-603-8905
Date Made Active in Reports: 05/25/2007	Last EDR Contact: 04/02/2007
Number of Days to Update: 29	Next Scheduled EDR Contact: 07/02/2007
	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: 04/20/2007	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/26/2007	Telephone: 703-603-8905
Date Made Active in Reports: 05/25/2007	Last EDR Contact: 04/02/2007
Number of Days to Update: 29	Next Scheduled EDR Contact: 07/02/2007
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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	Source: USGS
Date Data Arrived at EDR: 11/10/2006	Telephone: 703-692-8801
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 05/11/2007
Number of Days to Update: 62	Next Scheduled EDR Contact: 08/06/2007
	Data Release Frequency: Semi-Annually

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: 12/31/2005	Source: U.S. Army Corps of Engineers
Date Data Arrived at EDR: 09/20/2006	Telephone: 202-528-4285
Date Made Active in Reports: 11/22/2006	Last EDR Contact: 04/02/2007
Number of Days to Update: 63	Next Scheduled EDR Contact: 07/02/2007
	Data Release Frequency: Varies

US BROWNFIELDS: A Listing of Brownfields Sites

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become Brownfields Cleanup Revolving Loan Fund (BCRLF) cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: 04/04/2007	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/04/2007	Telephone: 202-566-2777
Date Made Active in Reports: 05/25/2007	Last EDR Contact: 06/11/2007
Number of Days to Update: 51	Next Scheduled EDR Contact: 09/10/2007
	Data Release Frequency: Semi-Annually

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: 08/23/2006	Source: Department of Justice, Consent Decree Library
Date Data Arrived at EDR: 03/06/2007	Telephone: Varies
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 04/23/2007
Number of Days to Update: 35	Next Scheduled EDR Contact: 07/23/2007
	Data Release Frequency: Varies

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: 03/27/2007	Source: EPA
Date Data Arrived at EDR: 03/27/2007	Telephone: 703-416-0223
Date Made Active in Reports: 04/27/2007	Last EDR Contact: 03/27/2007
Number of Days to Update: 31	Next Scheduled EDR Contact: 07/02/2007
	Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 12/31/2005	Source: Department of Energy
Date Data Arrived at EDR: 11/08/2006	Telephone: 505-845-0011
Date Made Active in Reports: 01/29/2007	Last EDR Contact: 05/17/2007
Number of Days to Update: 82	Next Scheduled EDR Contact: 06/18/2007
	Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/09/2004	Telephone: 800-424-9346
Date Made Active in Reports: 09/17/2004	Last EDR Contact: 06/09/2004
Number of Days to Update: 39	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

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: 12/31/2004	Source: EPA
Date Data Arrived at EDR: 06/22/2006	Telephone: 202-566-0250
Date Made Active in Reports: 08/23/2006	Last EDR Contact: 06/19/2007
Number of Days to Update: 62	Next Scheduled EDR Contact: 09/17/2007
	Data Release Frequency: Annually

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: 12/31/2002	Source: EPA
Date Data Arrived at EDR: 04/14/2006	Telephone: 202-260-5521
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 04/16/2007
Number of Days to Update: 46	Next Scheduled EDR Contact: 07/16/2007
	Data Release Frequency: Every 4 Years

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: 02/26/2007	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-566-1667
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 06/15/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 09/17/2007
	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: 02/26/2007	Source: EPA
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-566-1667
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 06/15/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 09/17/2007
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 12/31/2005	Source: EPA
Date Data Arrived at EDR: 03/13/2007	Telephone: 202-564-4203
Date Made Active in Reports: 04/27/2007	Last EDR Contact: 04/12/2007
Number of Days to Update: 45	Next Scheduled EDR Contact: 07/16/2007
	Data Release Frequency: Annually

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: 03/08/2007	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/12/2007	Telephone: 202-564-6023
Date Made Active in Reports: 05/14/2007	Last EDR Contact: 05/21/2007
Number of Days to Update: 32	Next Scheduled EDR Contact: 08/20/2007
	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: 05/01/2007	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/03/2007	Telephone: 202-343-9775
Date Made Active in Reports: 05/25/2007	Last EDR Contact: 05/03/2007
Number of Days to Update: 22	Next Scheduled EDR Contact: 07/30/2007
	Data Release Frequency: Quarterly

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: 12/01/2006	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 01/08/2007	Telephone: 202-307-1000
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 06/06/2007
Number of Days to Update: 3	Next Scheduled EDR Contact: 06/25/2007
	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: 06/15/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 09/17/2007
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 02/21/2007

Date Data Arrived at EDR: 04/03/2007

Date Made Active in Reports: 05/14/2007

Number of Days to Update: 41

Source: Environmental Protection Agency

Telephone: 202-564-5088

Last EDR Contact: 04/16/2007

Next Scheduled EDR Contact: 07/16/2007

Data Release Frequency: Quarterly

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: 12/09/2005

Date Data Arrived at EDR: 12/11/2006

Date Made Active in Reports: 01/11/2007

Number of Days to Update: 31

Source: Department of the Navy

Telephone: 843-820-7326

Last EDR Contact: 06/11/2007

Next Scheduled EDR Contact: 09/10/2007

Data Release Frequency: Varies

DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 02/14/2007

Date Data Arrived at EDR: 02/28/2007

Date Made Active in Reports: 04/10/2007

Number of Days to Update: 41

Source: Department of Transportation, Office of Pipeline Safety

Telephone: 202-366-4595

Last EDR Contact: 05/30/2007

Next Scheduled EDR Contact: 08/27/2007

Data Release Frequency: Varies

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 10/17/2006

Date Data Arrived at EDR: 11/29/2006

Date Made Active in Reports: 01/11/2007

Number of Days to Update: 43

Source: EPA

Telephone: 202-566-0500

Last EDR Contact: 06/08/2007

Next Scheduled EDR Contact: 08/06/2007

Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/05/2007

Date Data Arrived at EDR: 04/25/2007

Date Made Active in Reports: 05/25/2007

Number of Days to Update: 30

Source: Nuclear Regulatory Commission

Telephone: 301-415-7169

Last EDR Contact: 04/02/2007

Next Scheduled EDR Contact: 07/02/2007

Data Release Frequency: Quarterly

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: 02/06/2007

Date Data Arrived at EDR: 03/28/2007

Date Made Active in Reports: 05/14/2007

Number of Days to Update: 47

Source: Department of Labor, Mine Safety and Health Administration

Telephone: 303-231-5959

Last EDR Contact: 03/28/2007

Next Scheduled EDR Contact: 06/25/2007

Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 01/18/2007	Source: EPA
Date Data Arrived at EDR: 01/23/2007	Telephone: (206) 553-1200
Date Made Active in Reports: 02/27/2007	Last EDR Contact: 05/14/2007
Number of Days to Update: 35	Next Scheduled EDR Contact: 07/02/2007
	Data Release Frequency: Quarterly

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	Source: EPA
Date Data Arrived at EDR: 07/03/1995	Telephone: 202-564-4104
Date Made Active in Reports: 08/07/1995	Last EDR Contact: 06/04/2007
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/03/2007
	Data Release Frequency: No Update Planned

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: 12/31/2005	Source: EPA/NTIS
Date Data Arrived at EDR: 03/06/2007	Telephone: 800-424-9346
Date Made Active in Reports: 04/13/2007	Last EDR Contact: 06/12/2007
Number of Days to Update: 38	Next Scheduled EDR Contact: 09/10/2007
	Data Release Frequency: Biennially

STATE AND LOCAL RECORDS

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: 03/12/2007	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 03/19/2007	Telephone: 907-269-7546
Date Made Active in Reports: 04/24/2007	Last EDR Contact: 06/11/2007
Number of Days to Update: 36	Next Scheduled EDR Contact: 09/10/2007
	Data Release Frequency: Semi-Annually

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: 04/23/2007	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 04/24/2007	Telephone: 907-269-7632
Date Made Active in Reports: 05/14/2007	Last EDR Contact: 04/23/2007
Number of Days to Update: 20	Next Scheduled EDR Contact: 07/23/2007
	Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 03/13/2007
Date Data Arrived at EDR: 03/14/2007
Date Made Active in Reports: 04/24/2007
Number of Days to Update: 41

Source: Department of Environmental Conservation
Telephone: 907-465-5301
Last EDR Contact: 06/13/2007
Next Scheduled EDR Contact: 09/10/2007
Data Release Frequency: Semi-Annually

UST: Underground Storage Tank Database

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 03/13/2007
Date Data Arrived at EDR: 03/14/2007
Date Made Active in Reports: 04/12/2007
Number of Days to Update: 29

Source: Department of Environmental Conservation
Telephone: 907-269-7504
Last EDR Contact: 06/13/2007
Next Scheduled EDR Contact: 09/10/2007
Data Release Frequency: Semi-Annually

AST: Regulated Aboveground Storage Tanks

The list covers "regulated" facilities with storage capacities above 10,000 barrels (or 5,000 barrels of crude).

Date of Government Version: 01/05/2005
Date Data Arrived at EDR: 01/06/2005
Date Made Active in Reports: 02/02/2005
Number of Days to Update: 27

Source: Department of Environmental Conservation
Telephone: 907-465-5231
Last EDR Contact: 06/15/2007
Next Scheduled EDR Contact: 09/10/2007
Data Release Frequency: Varies

SPILLS: Spills Database

Oil and hazardous substance releases to be reported to the Department of Environmental Conservation.

Date of Government Version: 12/31/2006
Date Data Arrived at EDR: 01/29/2007
Date Made Active in Reports: 02/22/2007
Number of Days to Update: 24

Source: Department of Environmental Conservation
Telephone: 907-465-5242
Last EDR Contact: 06/04/2007
Next Scheduled EDR Contact: 07/30/2007
Data Release Frequency: Semi-Annually

ENG CONTROLS: Engineering Controls Site Listing

A listing of sites with engineering controls in place included in the Contaminated Sites.

Date of Government Version: 03/12/2007
Date Data Arrived at EDR: 03/19/2007
Date Made Active in Reports: 04/24/2007
Number of Days to Update: 36

Source: Department of Environmental Conservation
Telephone: 907-465-5301
Last EDR Contact: 06/11/2007
Next Scheduled EDR Contact: 09/10/2007
Data Release Frequency: Quarterly

Inst Control: Contaminated Sites with Institutional Controls

Contaminated sites that have institutional controls.

Date of Government Version: 03/12/2007
Date Data Arrived at EDR: 03/19/2007
Date Made Active in Reports: 04/24/2007
Number of Days to Update: 36

Source: Department of Environmental Conservation
Telephone: 907-269-3063
Last EDR Contact: 06/11/2007
Next Scheduled EDR Contact: 09/10/2007
Data Release Frequency: Semi-Annually

VCP: Voluntary Cleanup Program sites

Sites involved in the Voluntary Cleanup Program.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/12/2007
Date Data Arrived at EDR: 03/13/2007
Date Made Active in Reports: 04/24/2007
Number of Days to Update: 42

Source: Department of Environmental Conservation
Telephone: 907-451-2182
Last EDR Contact: 06/11/2007
Next Scheduled EDR Contact: 09/10/2007
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: 04/23/2007
Next Scheduled EDR Contact: 07/23/2007
Data Release Frequency: No Update Planned

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: 03/12/2007
Date Data Arrived at EDR: 03/19/2007
Date Made Active in Reports: 04/24/2007
Number of Days to Update: 36

Source: Department of Environmental Conservation
Telephone: 907-451-2166
Last EDR Contact: 06/11/2007
Next Scheduled EDR Contact: 09/10/2007
Data Release Frequency: Varies

CDL: Illegal Drug Manufacturing Sites

A list of properties that have been determined to be illegal drug manufacturing sites.

Date of Government Version: 03/13/2007
Date Data Arrived at EDR: 03/14/2007
Date Made Active in Reports: 04/24/2007
Number of Days to Update: 41

Source: Department of Environmental Conservation
Telephone: 907-269-7543
Last EDR Contact: 06/13/2007
Next Scheduled EDR Contact: 09/10/2007
Data Release Frequency: Varies

NPDES: Wastewater Discharge Permit Listing
A listing of permitted wastewater facilities.

Date of Government Version: 11/24/2006
Date Data Arrived at EDR: 11/27/2006
Date Made Active in Reports: 12/21/2006
Number of Days to Update: 24

Source: Department of Environmental Conservation
Telephone: 907-465-5480
Last EDR Contact: 06/04/2007
Next Scheduled EDR Contact: 07/16/2007
Data Release Frequency: Varies

AIRS: AIRS Facility Listing
A listing of permitted airs facilities.

Date of Government Version: 05/10/2007
Date Data Arrived at EDR: 05/10/2007
Date Made Active in Reports: 05/17/2007
Number of Days to Update: 7

Source: Department of Environmental Conservation
Telephone: 907-451-2103
Last EDR Contact: 05/07/2007
Next Scheduled EDR Contact: 08/06/2007
Data Release Frequency: Varies

TRIBAL RECORDS

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: USGS
Telephone: 202-208-3710
Last EDR Contact: 05/11/2007
Next Scheduled EDR Contact: 08/06/2007
Data Release Frequency: Semi-Annually

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: 02/19/2007
Date Data Arrived at EDR: 02/27/2007
Date Made Active in Reports: 04/04/2007
Number of Days to Update: 36

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 05/21/2007
Next Scheduled EDR Contact: 08/20/2007
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 09/06/2006
Date Data Arrived at EDR: 10/04/2006
Date Made Active in Reports: 11/08/2006
Number of Days to Update: 35

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 05/21/2007
Next Scheduled EDR Contact: 08/20/2007
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 01/04/2005
Date Data Arrived at EDR: 01/21/2005
Date Made Active in Reports: 02/28/2005
Number of Days to Update: 38

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 05/21/2007
Next Scheduled EDR Contact: 08/20/2007
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Minnesota, Mississippi and North Carolina.

Date of Government Version: 03/20/2007
Date Data Arrived at EDR: 04/16/2007
Date Made Active in Reports: 05/14/2007
Number of Days to Update: 28

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 05/21/2007
Next Scheduled EDR Contact: 08/20/2007
Data Release Frequency: Semi-Annually

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 12/01/2006
Date Data Arrived at EDR: 12/01/2006
Date Made Active in Reports: 01/29/2007
Number of Days to Update: 59

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 05/21/2007
Next Scheduled EDR Contact: 08/20/2007
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 03/01/2007
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/04/2007
Number of Days to Update: 34

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 05/21/2007
Next Scheduled EDR Contact: 08/20/2007
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 03/30/2007	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/30/2007	Telephone: 415-972-3372
Date Made Active in Reports: 04/27/2007	Last EDR Contact: 05/21/2007
Number of Days to Update: 28	Next Scheduled EDR Contact: 08/20/2007
	Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land

Date of Government Version: 03/01/2007	Source: EPA Region 10
Date Data Arrived at EDR: 03/01/2007	Telephone: 206-553-2857
Date Made Active in Reports: 04/04/2007	Last EDR Contact: 05/21/2007
Number of Days to Update: 34	Next Scheduled EDR Contact: 08/20/2007
	Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land

Date of Government Version: 03/26/2007	Source: EPA Region 9
Date Data Arrived at EDR: 03/27/2007	Telephone: 415-972-3368
Date Made Active in Reports: 04/27/2007	Last EDR Contact: 05/21/2007
Number of Days to Update: 31	Next Scheduled EDR Contact: 08/20/2007
	Data Release Frequency: Quarterly

INDIAN UST R4: Underground Storage Tanks on Indian Land

Date of Government Version: 03/20/2007	Source: EPA Region 4
Date Data Arrived at EDR: 04/16/2007	Telephone: 404-562-9424
Date Made Active in Reports: 05/14/2007	Last EDR Contact: 05/21/2007
Number of Days to Update: 28	Next Scheduled EDR Contact: 08/20/2007
	Data Release Frequency: Semi-Annually

INDIAN UST R6: Underground Storage Tanks on Indian Land

Date of Government Version: 01/11/2007	Source: EPA Region 6
Date Data Arrived at EDR: 01/12/2007	Telephone: 214-665-7591
Date Made Active in Reports: 01/29/2007	Last EDR Contact: 05/21/2007
Number of Days to Update: 17	Next Scheduled EDR Contact: 08/20/2007
	Data Release Frequency: Semi-Annually

INDIAN UST R1: Underground Storage Tanks on Indian Land

A listing of underground storage tank locations on Indian Land.

Date of Government Version: 12/01/2006	Source: EPA, Region 1
Date Data Arrived at EDR: 12/01/2006	Telephone: 617-918-1313
Date Made Active in Reports: 01/29/2007	Last EDR Contact: 05/21/2007
Number of Days to Update: 59	Next Scheduled EDR Contact: 08/20/2007
	Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

Date of Government Version: 12/02/2004	Source: EPA Region 5
Date Data Arrived at EDR: 12/29/2004	Telephone: 312-886-6136
Date Made Active in Reports: 02/04/2005	Last EDR Contact: 05/21/2007
Number of Days to Update: 37	Next Scheduled EDR Contact: 08/20/2007
	Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/19/2007
Date Data Arrived at EDR: 02/27/2007
Date Made Active in Reports: 04/04/2007
Number of Days to Update: 36

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 05/21/2007
Next Scheduled EDR Contact: 08/20/2007
Data Release Frequency: Quarterly

INDIAN UST R7: Underground Storage Tanks on Indian Land

Date of Government Version: 09/06/2006
Date Data Arrived at EDR: 10/04/2006
Date Made Active in Reports: 11/08/2006
Number of Days to Update: 35

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 05/21/2007
Next Scheduled EDR Contact: 08/20/2007
Data Release Frequency: Varies

EDR PROPRIETARY RECORDS

Manufactured Gas Plants: 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 (oil 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

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: 10/26/2006
Date Data Arrived at EDR: 11/29/2006
Date Made Active in Reports: 01/05/2007
Number of Days to Update: 37

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 06/01/2007
Next Scheduled EDR Contact: 08/27/2007
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data

Source: PennWell Corporation
Telephone: (800) 823-6277

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.

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, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetlands Inventory Data

Source: Department of Fish & Game

Telephone: 907-465-4100

STREET AND ADDRESS INFORMATION

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GEOCHECK[®] - PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

JOE WARD SLOUGH SITE
NW FORT YUKON
FORT YUKON, AK 99740

TARGET PROPERTY COORDINATES

Latitude (North):	66.56810 - 66° 34' 5.2"
Longitude (West):	145.2876 - 145° 17' 15.4"
Universal Transverse Mercator:	Zone 6
UTM X (Meters):	575982.7
UTM Y (Meters):	7384088.5
Elevation:	413 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).

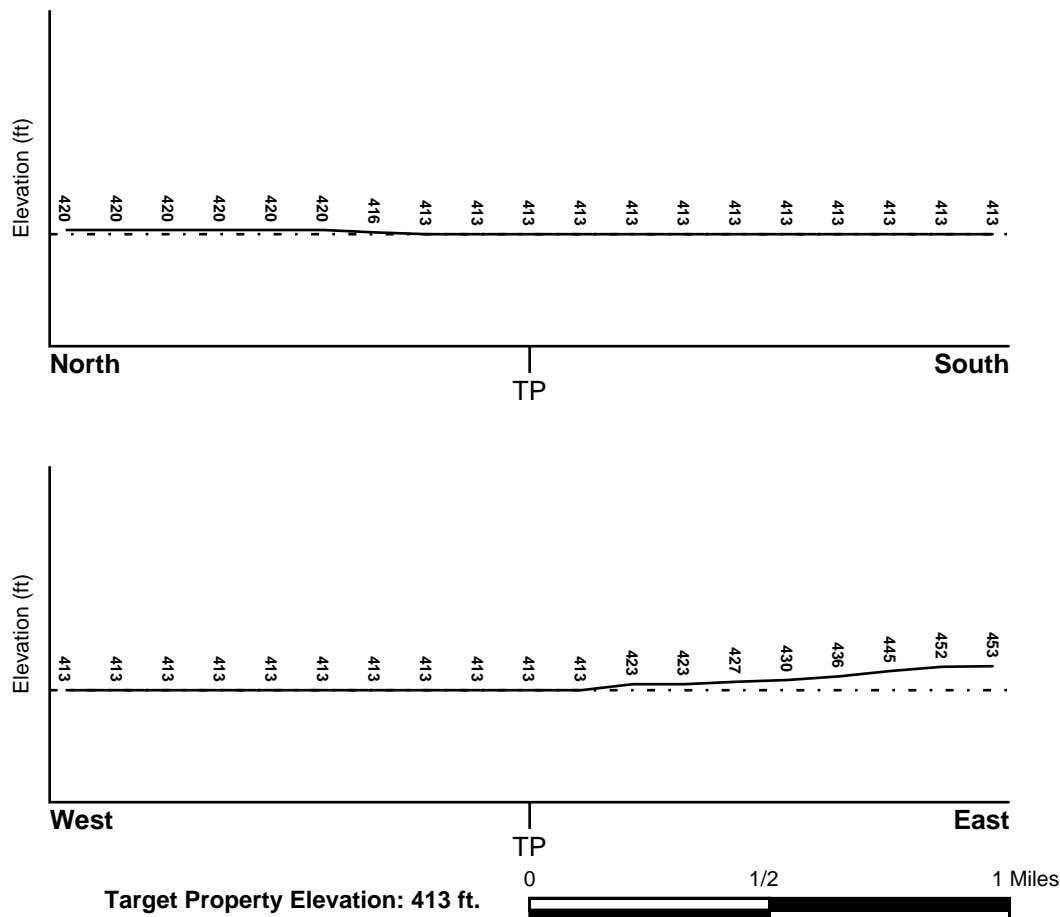
TOPOGRAPHIC INFORMATION

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 WSW

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

<u>Target Property County</u>	<u>FEMA Flood Electronic Data</u>
YUKON-KOYUKUK, AK	Not Available

Flood Plain Panel at Target Property: Not Reported

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
Not Reported	N

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

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

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

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

ROCK STRATIGRAPHIC UNIT

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

GEOLOGIC AGE IDENTIFICATION

Category: -

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

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

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

Soil Component Name: TYPIC CRYOFLUVENTS

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: 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							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	3 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 2.00 Min: 0.60	Max: 5.50 Min: 5.10
2	3 inches	28 inches	stratified	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: 0.60	Max: 7.30 Min: 6.60
3	28 inches	60 inches	stratified	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: 0.60	Max: 7.80 Min: 7.40

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

Surficial Soil Types: peat

Shallow Soil Types: No Other Soil Types

Deeper Soil Types: ice or frozen soil

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.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile

FEDERAL USGS WELL INFORMATION

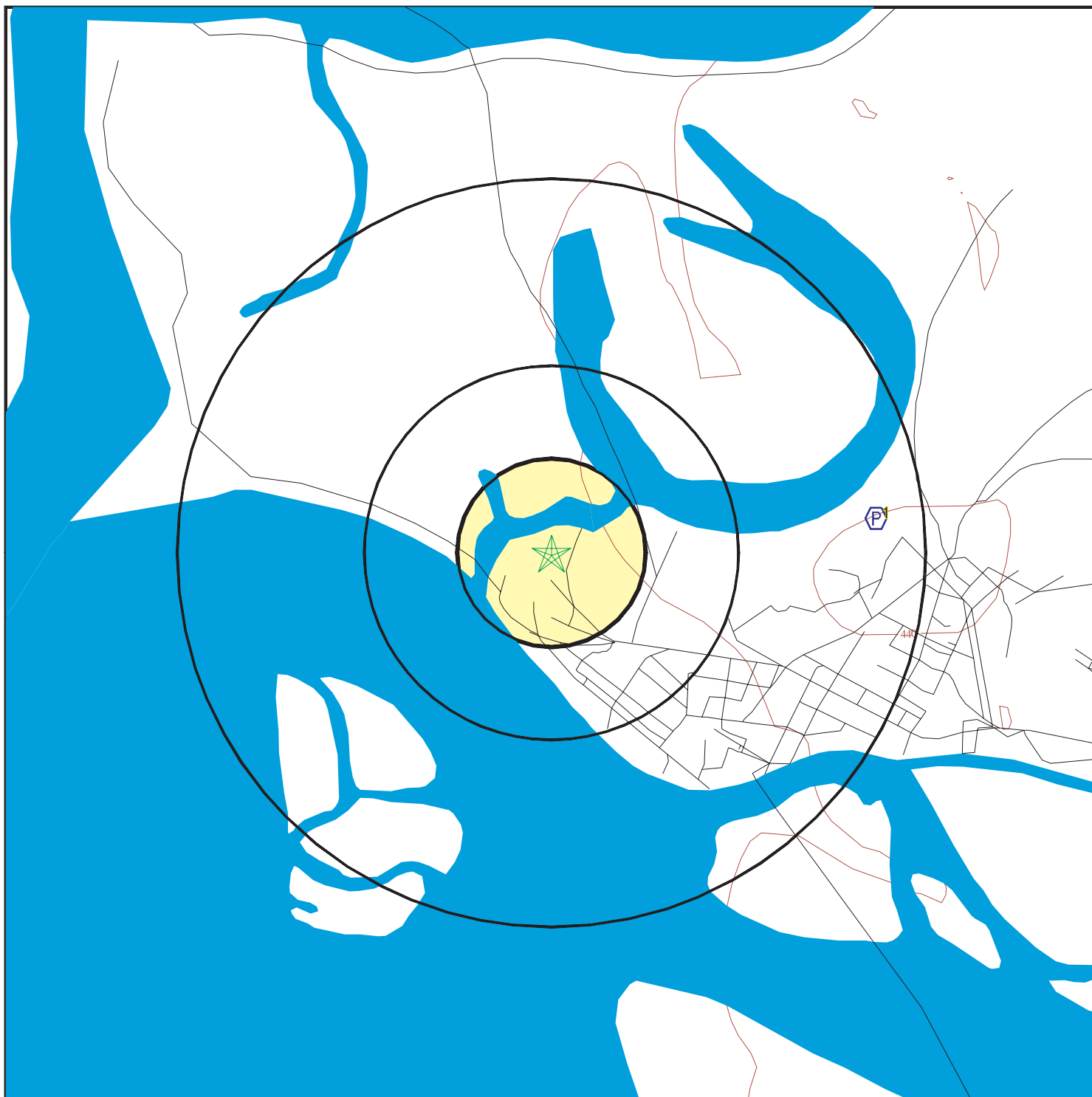
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
1	AK2300484	1/2 - 1 Mile East

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

PHYSICAL SETTING SOURCE MAP - 1959317.1s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

0 1/4 1/2 1 Miles

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location



SITE NAME: Joe Ward Slough Site
 ADDRESS: NW Fort Yukon
 Fort Yukon AK 99740
 LAT/LONG: 66.5681 / 145.2876

CLIENT: Oasis Environmental
 CONTACT: Karl Hill
 INQUIRY #: 1959317.1s
 DATE: June 20, 2007 2:08 pm

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

1
East
1/2 - 1 Mile
Higher

FRDS PWS AK2300484

PWS ID: AK2300484 PWS Status: Not Reported
Date Initiated: Not Reported Date Deactivated: Not Reported
PWS Name: MANLEY COMMUNITY WATER SYSTEM
MS. PAM REDINGTON
P.O. BOX 107
MANLEY HOT SPRINGS, AK 99756

Addressee / Facility: Not Reported

Facility Latitude: 66 34 00 Facility Longitude: 145 16 00
City Served: Not Reported
Treatment Class: Treated Population: 145

PWS currently has or had major violation(s) or enforcement: YES

VIOLATIONS INFORMATION:

Violation ID: 9332643 Source ID: 001 PWS Phone: 6723412
Vio. beginning Date: 03/01/93 Vio. end Date: 03/31/93 Vio. Period: 001 Months
Num required Samples: Not Reported Number of Samples Taken: Not Reported
Analysis Result: Not Reported Maximum Contaminant Level: Not Reported
Analysis Method: Not Reported
Violation Type: Monitoring, Routine Major (TCR)
Contaminant: COLIFORM (TCR)
Vio. Awareness Date: Not Reported

Violation ID: 9430907 Source ID: Not Reported PWS Phone: Not Reported
Vio. beginning Date: 07/01/93 Vio. end Date: 12/31/93 Vio. Period: 006 Months
Num required Samples: Not Reported Number of Samples Taken: Not Reported
Analysis Result: Not Reported Maximum Contaminant Level: Not Reported
Analysis Method: Not Reported
Violation Type: Initial Tap Sampling for Pb and Cu
Contaminant: LEAD & COPPER RULE
Vio. Awareness Date: Not Reported

Violation ID: 9430908 Source ID: Not Reported PWS Phone: Not Reported
Vio. beginning Date: 07/01/93 Vio. end Date: 12/31/93 Vio. Period: 006 Months
Num required Samples: Not Reported Number of Samples Taken: Not Reported
Analysis Result: Not Reported Maximum Contaminant Level: Not Reported
Analysis Method: Not Reported
Violation Type: Initial Tap Sampling for Pb and Cu
Contaminant: LEAD & COPPER RULE
Vio. Awareness Date: Not Reported

ENFORCEMENT INFORMATION:

Truedate: 09/30/2006 Pwsid: AK2300484
Pwsname: MANLEY COMMUNITY WATER SYSTEM
Retpopsvd: 145 Pwstypecod: C
VioId: 3116100 Contaminant: LEAD & COPPER RULE
Viol. Type: Follow-up and Routine Tap Sampling
Complperbe: 1/1/1997 0:00:00
Complperen: 10/26/2000 0:00:00 Enfdate: 10/26/2000 0:00:00
Enf action: State Compliance Achieved
Violmeasur: 0

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Truedate:	09/30/2006	Pwsid:	AK2300484
Pwsname:	MANLEY COMMUNITY WATER SYSTEM		
Retpopsrvd:	145	Pwstypecod:	C
Void:	3131997	Contaminant:	LEAD & COPPER RULE
Viol. Type:	Follow-up and Routine Tap Sampling		
Complperbe:	1/1/1996 0:00:00		
Complperen:	10/26/2000 0:00:00	Enfdate:	10/26/2000 0:00:00
Enf action:	State Compliance Achieved		
Violmeasur:	0		
Truedate:	09/30/2006	Pwsid:	AK2300484
Pwsname:	MANLEY COMMUNITY WATER SYSTEM		
Retpopsrvd:	145	Pwstypecod:	C
Void:	3131997	Contaminant:	LEAD & COPPER RULE
Viol. Type:	Follow-up and Routine Tap Sampling		
Complperbe:	1/1/1996 0:00:00		
Complperen:	10/26/2000 0:00:00	Enfdate:	1/28/1997 0:00:00
Enf action:	State Violation/Reminder Notice		
Violmeasur:	0		
Truedate:	09/30/2006	Pwsid:	AK2300484
Pwsname:	MANLEY COMMUNITY WATER SYSTEM		
Retpopsrvd:	145	Pwstypecod:	C
Void:	3131997	Contaminant:	LEAD & COPPER RULE
Viol. Type:	Follow-up and Routine Tap Sampling		
Complperbe:	1/1/1996 0:00:00		
Complperen:	10/26/2000 0:00:00	Enfdate:	2/7/1997 0:00:00
Enf action:	State Violation/Reminder Notice		
Violmeasur:	0		
Truedate:	09/30/2006	Pwsid:	AK2300484
Pwsname:	MANLEY COMMUNITY WATER SYSTEM		
Retpopsrvd:	145	Pwstypecod:	C
Void:	3207401	Contaminant:	COLIFORM (TCR)
Viol. Type:	Monitoring, Routine Major (TCR)		
Complperbe:	6/1/2001 0:00:00		
Complperen:	6/30/2001 0:00:00	Enfdate:	No Enf Action as of
Enf action:	1/18/2007 0:00:00		
Violmeasur:	0		
Truedate:	09/30/2006	Pwsid:	AK2300484
Pwsname:	MANLEY COMMUNITY WATER SYSTEM		
Retpopsrvd:	145	Pwstypecod:	C
Void:	3362204	Contaminant:	7000
Viol. Type:	CCR Inadequate Reporting		
Complperbe:	10/1/2003 0:00:00		
Complperen:	12/31/2025 0:00:00	Enfdate:	No Enf Action as of
Enf action:	1/18/2007 0:00:00		
Violmeasur:	Not Reported		
Truedate:	09/30/2006	Pwsid:	AK2300484
Pwsname:	MANLEY COMMUNITY WATER SYSTEM		
Retpopsrvd:	145	Pwstypecod:	C
Void:	3362506	Contaminant:	7000
Viol. Type:	CCR Complete Failure to Report		
Complperbe:	7/1/2005 0:00:00		
Complperen:	8/26/2005 0:00:00	Enfdate:	8/26/2005 0:00:00
Enf action:	State Compliance Achieved		
Violmeasur:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Truedate:	09/30/2006	Pwsid:	AK2300484
Pwsname:	MANLEY COMMUNITY WATER SYSTEM		
Retpopsrvd:	145	Pwstypecod:	C
Void:	3362606	Contaminant:	7000
Viol. Type:	CCR Complete Failure to Report		
Complperbe:	7/1/2006 0:00:00		
Complperen:	12/31/2025 0:00:00	Enfdate:	No Enf Action as of
Enf action:	1/18/2007 0:00:00		
Violmeasur:	Not Reported		

Truedate:	09/30/2006	Pwsid:	AK2300484
Pwsname:	MANLEY COMMUNITY WATER SYSTEM		
Retpopsrvd:	145	Pwstypecod:	C
Void:	9999900	Contaminant:	7000
Viol. Type:	CCR Complete Failure to Report		
Complperbe:	10/19/1999 0:00:00		
Complperen:	6/19/2000 0:00:00	Enfdate:	5/30/2000 0:00:00
Enf action:	Fed Violation/Reminder Notice		
Violmeasur:	0		

Truedate:	09/30/2006	Pwsid:	AK2300484
Pwsname:	MANLEY COMMUNITY WATER SYSTEM		
Retpopsrvd:	145	Pwstypecod:	C
Void:	9999900	Contaminant:	7000
Viol. Type:	CCR Complete Failure to Report		
Complperbe:	10/19/1999 0:00:00		
Complperen:	6/19/2000 0:00:00	Enfdate:	6/19/2000 0:00:00
Enf action:	Fed Compliance Achieved		
Violmeasur:	0		

System Name:	MANLEY COMMUNITY WATER SYS		
Violation Type:	Monitoring, Routine Major (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	1999-11-01 - 1999-11-30		
Violation ID:	0030486		
Enforcement Date:	Not Reported	Enf. Action:	Not Reported

System Name:	MANLEY COMMUNITY WATER SYS		
Violation Type:	Follow-up and Routine Tap Sampling		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1996-01-01 - 2000-10-26		
Violation ID:	0031161		
Enforcement Date:	2000-10-26	Enf. Action:	State Compliance Achieved

System Name:	MANLEY COMMUNITY WATER SYS		
Violation Type:	Follow-up and Routine Tap Sampling		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1997-01-01 - 2000-10-26		
Violation ID:	0031161		
Enforcement Date:	2000-10-26	Enf. Action:	State Compliance Achieved

System Name:	MANLEY COMMUNITY WATER SYS		
Violation Type:	Follow-up and Routine Tap Sampling		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1996-01-01 - 2000-10-26		
Violation ID:	0031161		
Enforcement Date:	1997-01-28	Enf. Action:	State Violation/Reminder Notice

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

ENFORCEMENT INFORMATION:

System Name:	MANLEY COMMUNITY WATER SYS		
Violation Type:	Follow-up and Routine Tap Sampling		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1996-01-01 - 2015-12-31		
Violation ID:	0031161		
Enforcement Date:	1997-01-28	Enf. Action:	State Violation/Reminder Notice
System Name:	MANLEY COMMUNITY WATER SYS		
Violation Type:	Follow-up and Routine Tap Sampling		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1997-01-01 - 1999-12-31		
Violation ID:	0031161		
Enforcement Date:	Not Reported	Enf. Action:	Not Reported
System Name:	MANLEY COMMUNITY WATER SYS		
Violation Type:	CCR Complete Failure to Report		
Contaminant:	7000		
Compliance Period:	1999-10-19 - 2000-06-19		
Violation ID:	0099999		
Enforcement Date:	2000-05-30	Enf. Action:	Fed Violation/Reminder Notice
System Name:	MANLEY COMMUNITY WATER SYS		
Violation Type:	CCR Complete Failure to Report		
Contaminant:	7000		
Compliance Period:	1999-10-19 - 2000-06-19		
Violation ID:	0099999		
Enforcement Date:	2000-06-19	Enf. Action:	Fed Compliance Achieved
System Name:	MANLEY COMMUNITY WATER SYS		
Violation Type:	CCR Complete Failure to Report		
Contaminant:	7000		
Compliance Period:	1999-10-19 - 2015-12-31		
Violation ID:	0099999		
Enforcement Date:	2000-05-30	Enf. Action:	Fed Violation/Reminder Notice
System Name:	MANLEY COMMUNITY WATER SYS		
Violation Type:	CCR Complete Failure to Report		
Contaminant:	7000		
Compliance Period:	1999-10-19 - 2015-12-31		
Violation ID:	0099999		
Enforcement Date:	Not Reported	Enf. Action:	Not Reported
System Name:	MANLEY COMMUNITY WATER SYST		
Violation Type:	Sanitary Survey (TCR)		
Contaminant:	Not Reported		
Compliance Period:	1997-01-01 - 2001-12-31		
Violation ID:	0232325		
Enforcement Date:	Not Reported	Enf. Action:	Not Reported
System Name:	MANLEY COMMUNITY WATER SYSTEM		
Violation Type:	Follow-up and Routine Tap Sampling		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1/1/1997 0:00:00 - 10/26/2000 0:00:00		
Violation ID:	3116100		
Enforcement Date:	10/26/2000 0:00:00	Enf. Action:	State Compliance Achieved
System Name:	MANLEY COMMUNITY WATER SYSTEM		
Violation Type:	Follow-up and Routine Tap Sampling		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	01/01/97 - 10/26/00		
Violation ID:	3116100		
Enforcement Date:	10/26/00	Enf. Action:	State Compliance Achieved

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

ENFORCEMENT INFORMATION:

System Name:	MANLEY COMMUNITY WATER SYSTEM		
Violation Type:	Follow-up and Routine Tap Sampling		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1/1/1996 0:00:00 - 10/26/2000 0:00:00		
Violation ID:	3131997		
Enforcement Date:	1/28/1997 0:00:00	Enf. Action:	State Violation/Reminder Notice
System Name:	MANLEY COMMUNITY WATER SYSTEM		
Violation Type:	Follow-up and Routine Tap Sampling		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	01/01/96 - 10/26/00		
Violation ID:	3131997		
Enforcement Date:	10/26/00	Enf. Action:	State Compliance Achieved
System Name:	MANLEY COMMUNITY WATER SYSTEM		
Violation Type:	Follow-up and Routine Tap Sampling		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	01/01/96 - 10/26/00		
Violation ID:	3131997		
Enforcement Date:	02/07/97	Enf. Action:	State Violation/Reminder Notice
System Name:	MANLEY COMMUNITY WATER SYSTEM		
Violation Type:	Follow-up and Routine Tap Sampling		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	01/01/96 - 10/26/00		
Violation ID:	3131997		
Enforcement Date:	01/28/97	Enf. Action:	State Violation/Reminder Notice
System Name:	MANLEY COMMUNITY WATER SYSTEM		
Violation Type:	Follow-up and Routine Tap Sampling		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1/1/1996 0:00:00 - 10/26/2000 0:00:00		
Violation ID:	3131997		
Enforcement Date:	10/26/2000 0:00:00	Enf. Action:	State Compliance Achieved
System Name:	MANLEY COMMUNITY WATER SYSTEM		
Violation Type:	Follow-up and Routine Tap Sampling		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1/1/1996 0:00:00 - 10/26/2000 0:00:00		
Violation ID:	3131997		
Enforcement Date:	2/7/1997 0:00:00	Enf. Action:	State Violation/Reminder Notice
System Name:	MANLEY COMMUNITY WATER SYSTEM		
Violation Type:	Monitoring, Routine Major (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	6/1/2001 0:00:00 - 6/30/2001 0:00:00		
Violation ID:	3207401		
Enforcement Date:	4/12/2007 0:00:00	Enf. Action:	Not Reported
System Name:	MANLEY COMMUNITY WATER SYSTEM		
Violation Type:	Monitoring, Routine Major (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	6/1/2001 0:00:00 - 6/30/2001 0:00:00		
Violation ID:	3207401		
Enforcement Date:	No Enf Action as of	Enf. Action:	10/17/2006 0:00:00
System Name:	MANLEY COMMUNITY WATER SYSTEM		
Violation Type:	CCR Inadequate Reporting		
Contaminant:	7000		
Compliance Period:	10/1/2003 0:00:00 - 12/31/2025 0:00:00		
Violation ID:	3362204		
Enforcement Date:	4/12/2007 0:00:00	Enf. Action:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

ENFORCEMENT INFORMATION:

System Name:	MANLEY COMMUNITY WATER SYSTEM		
Violation Type:	CCR Inadequate Reporting		
Contaminant:	7000		
Compliance Period:	10/1/2003 0:00:00 - 12/31/2025 0:00:00		
Violation ID:	3362204		
Enforcement Date:	No Enf Action as of	Enf. Action:	10/17/2006 0:00:00
System Name:	MANLEY COMMUNITY WATER SYSTEM		
Violation Type:	CCR Complete Failure to Report		
Contaminant:	7000		
Compliance Period:	07/01/05 - 08/26/05		
Violation ID:	3362506		
Enforcement Date:	08/26/05	Enf. Action:	State Compliance Achieved
System Name:	MANLEY COMMUNITY WATER SYSTEM		
Violation Type:	CCR Complete Failure to Report		
Contaminant:	7000		
Compliance Period:	7/1/2005 0:00:00 - 8/26/2005 0:00:00		
Violation ID:	3362506		
Enforcement Date:	8/26/2005 0:00:00	Enf. Action:	State Compliance Achieved
System Name:	MANLEY COMMUNITY WATER SYSTEM		
Violation Type:	CCR Complete Failure to Report		
Contaminant:	7000		
Compliance Period:	7/1/2006 0:00:00 - 12/31/2025 0:00:00		
Violation ID:	3362606		
Enforcement Date:	4/12/2007 0:00:00	Enf. Action:	Not Reported
System Name:	MANLEY COMMUNITY WATER SYS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31		
Violation ID:	9430908		
Enforcement Date:	1994-09-07	Enf. Action:	State Violation/Reminder Notice
System Name:	MANLEY COMMUNITY WATER SYS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1993-07-01 - 2015-12-31		
Violation ID:	9430908		
Enforcement Date:	1998-12-29	Enf. Action:	State Compliance Achieved
System Name:	MANLEY COMMUNITY WATER SYS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1994-01-01 - 1994-06-30		
Violation ID:	9433738		
Enforcement Date:	1994-09-07	Enf. Action:	State Other
System Name:	MANLEY COMMUNITY WATER SYS		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1995-01-01 - 1995-06-30		
Violation ID:	9533167		
Enforcement Date:	Not Reported	Enf. Action:	Not Reported
System Name:	MANLEY COMMUNITY WATER SYS		
Violation Type:	Monitoring, Repeat Minor (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	1995-08-01 - 1995-08-31		
Violation ID:	9533620		
Enforcement Date:	Not Reported	Enf. Action:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

ENFORCEMENT INFORMATION:

System Name:	MANLEY COMMUNITY WATER SYS		
Violation Type:	Monitoring, Routine Minor (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	1995-12-01 - 1995-12-31		
Violation ID:	9630642		
Enforcement Date:	Not Reported	Enf. Action:	Not Reported
System Name:	MANLEY COMMUNITY WATER SYS		
Violation Type:	Follow-up and Routine Tap Sampling		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1996-01-01 - 2000-10-26		
Violation ID:	9731319		
Enforcement Date:	1997-02-07	Enf. Action:	State Violation/Reminder Notice
System Name:	MANLEY COMMUNITY WATER SYS		
Violation Type:	Follow-up and Routine Tap Sampling		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1996-01-01 - 2015-12-31		
Violation ID:	9731319		
Enforcement Date:	1997-02-07	Enf. Action:	State Violation/Reminder Notice
System Name:	MANLEY COMMUNITY WATER SYSTEM		
Violation Type:	CCR Complete Failure to Report		
Contaminant:	7000		
Compliance Period:	10/19/99 - 06/19/00		
Violation ID:	9999900		
Enforcement Date:	06/19/00	Enf. Action:	Fed Compliance Achieved
System Name:	MANLEY COMMUNITY WATER SYSTEM		
Violation Type:	CCR Complete Failure to Report		
Contaminant:	7000		
Compliance Period:	10/19/1999 0:00:00 - 6/19/2000 0:00:00		
Violation ID:	9999900		
Enforcement Date:	6/19/2000 0:00:00	Enf. Action:	Fed Compliance Achieved
System Name:	MANLEY COMMUNITY WATER SYSTEM		
Violation Type:	CCR Complete Failure to Report		
Contaminant:	7000		
Compliance Period:	10/19/99 - 06/19/00		
Violation ID:	9999900		
Enforcement Date:	05/30/00	Enf. Action:	Fed Violation/Reminder Notice
System Name:	MANLEY COMMUNITY WATER SYSTEM		
Violation Type:	CCR Complete Failure to Report		
Contaminant:	7000		
Compliance Period:	10/19/1999 0:00:00 - 6/19/2000 0:00:00		
Violation ID:	9999900		
Enforcement Date:	5/30/2000 0:00:00	Enf. Action:	Fed Violation/Reminder Notice

CONTACT INFORMATION:

Name:	MANLEY COMMUNITY WATER SYSTEM		Population:	145
Contact:	REDINGTON, PAMELA	Phone:	907-672-3412	
Address:	P.O. BOX 107			
Address 2:	MILE 159 ELLIOT HWY			
	MANLEY HOT SPRINGS, AK 99756			

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for YUKON-KOYUKUK County: 3

Note: Zone 1 indoor average level > 4 pCi/L.

: Zone 2 indoor average level \geq 2 pCi/L and \leq 4 pCi/L.

: Zone 3 indoor average level < 2 pCi/L.

Not Reported

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.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetlands Inventory Data

Source: Department of Fish & Game

Telephone: 907-465-4100

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 Services

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 Services (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, 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

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

Epiceenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

STREET AND ADDRESS INFORMATION

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APPENDIX D

Laboratory Analytical Data

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White - Retained by Lath
Yellow - Returned with Report





CHAIN OF CUSTODY RECORD
SGS Environmental Services Inc.

1072473



1
wall
ryland
rth Carolina

070750

SGS Reference:

PAGE 1 OF 1

1 CLIENT: OASIS Environmental

CONTACT: Karl Hill PHONE NO: (917) 398-4880

PROJECT: Sanikiluaq Ferry Landfill SITE/PWSID#:

REPORTS TO: 825 W 9th Ave # 200 E-MAIL: K.Hill@OasisEnviro.com

Anchorage AK 99501 FAX NO: (907) 258-4033

INVOICE TO: QUOTE #

50me P.O. NUMBER 14-C94

2 LAB NO. SAMPLE IDENTIFICATION DATE TIME MATRIX

5 Collected/Relinquished By: (1) Date Time Received By: Date Time

Relinquished By: (2) Date Time Received By: Date Time

Relinquished By: (3) Date Time Received By: Date Time

Relinquished By: (4) Date Time Received By: Date Time

Shipping Carrier: Shipping Ticket No: Samples Received Cold? (Circle) YES NO

Special Deliverable Requirements: Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Special Instructions: Requested Turnaround Time: ☐ RUSH ☒ STD

Date Needed

White - Retained by Lab
Yellow - Returned with Report
Pink - Retained by Sampler



**SGS Environmental Services
Alaska Division
Level II Laboratory Data Report**

Project:	Fort Yukon Former Landfill
Client:	Oasis Environmental
SGS Work Order:	1072473

Released by:

Contents:

Cover Page
Case Narrative
Final Report Pages
Quality Control Summary Forms
Chain of Custody/Sample Receipt Forms

Note:

Unless otherwise noted, all quality assurance/quality control criteria is in compliance with the standards set forth by the proper regulatory authority, the SGS Quality Assurance Program Plan, and the National Environmental Accreditation Conference.

Case Narrative

Customer: OASISEN

Oasis Environmental

Project: 1072473

Fort Yukon Former Landfill

Refer to the sample receipt form for information on sample condition.

1072473001 PS

07JWS001SO

AK103 - Unknown hydrocarbon with several peaks is present.

8081 - Recovery of the surrogates are outside of controls due to sample dilution.

8081 - The closing CCV recovery for 4,4'-DDT and methoxychlor are outside QC goals (biased low) due to injector active site formation from sample analysis. These analytes are estimated in the associated sample.

8081 - The closing CCV recovery for 4,4'-DDD is outside QC goals (biased high) due to injector active site formation from sample analysis. The reported result may have a high bias.

1072473002 PS

07JWS002SO

8081 - The closing CCV recovery for 4,4'-DDT and methoxychlor are outside QC goals (biased low) due to injector active site formation from sample analysis. These analytes are estimated in the associated sample.

1072473003 PS

07JWS003SO

AK103 - Unknown hydrocarbon with several peaks is present.

8081 - The closing CCV recovery for 4,4'-DDT and methoxychlor are outside QC goals (biased low) due to injector active site formation from sample analysis. These analytes are estimated in the associated sample.

1072473004 PS

07JWS004SO

AK103 - Unknown hydrocarbon with several peaks is present.

8081 - The closing CCV recovery for 4,4'-DDT and methoxychlor are outside QC goals (biased low) due to injector active site formation from sample analysis. These analytes are estimated in the associated sample.

1072473005 PS

07JWS005SO

AK103 - Unknown hydrocarbon with several peaks is present.

AK102/103 - The sample was analyzed at a dilution due to the orange color of the extract.

8081 - The closing CCV recovery for 4,4'-DDT and methoxychlor are outside QC goals (biased low) due to injector active site formation from sample analysis. These analytes are estimated in the associated sample.

1072473006 PS

07JWS006SO

AK103 - Unknown hydrocarbon with several peaks is present.

8081 - The closing CCV recovery for 4,4'-DDT and methoxychlor are outside QC goals (biased low) due to injector active site formation from sample analysis. These analytes are estimated in the associated sample.

1072473007 PS

07JWS007SO

AK103 - Unknown hydrocarbon with several peaks is present.

AK102/103 - The sample was analyzed at a dilution due to the orange color of the extract.

8081 - The closing CCV recovery for 4,4'-DDT and methoxychlor are outside QC goals (biased low) due to injector active site formation from sample analysis. These analytes are estimated in the associated sample.

1072473009 PS

07JWS001SW

300.0 - LCS recovery for bromide does not meet QC goals (biased low). The reported result may have a low bias.

1072473010 PS

07JWS002SW

300.0 - LCS recovery for bromide does not meet QC goals (biased low). The reported result may have a low bias.

1072473011 PS

07JWS003SW

300.0 - LCS recovery for bromide does not meet QC goals (biased low). The reported result may have a low bias.

1072473012 PS

07JWS004SW

AK102/103 - Unknown hydrocarbon with several peaks is present.

300.0 - LCS recovery for bromide does not meet QC goals (biased low). The reported result may have a low bias.

1072473013 PS

07JWS005SW

300.0 - LCS recovery for bromide does not meet QC goals (biased low). The reported result may have a low bias.

Case Narrative

Customer: OASISEN

Oasis Environmental

Project: 1072473

Fort Yukon Former Landfill

767477 UDUP

767474UDUP

300.0 - The original production sample and its duplicate recovery for ortho-phosphate does not meet QC RPD goals.

767478 BN1

767474BN1

300.0 - Anions - The matrix spike recovered outside of acceptance criteria for fluoride. See Laboratory Control Sample for quality control requirements.

767973 MS

1072554002MS

8270 - MS recovery of the surrogate 2,4,6-tribromophenol does not meet QC goals (biased low). The surrogate recovery in the associated LCS meets QC criteria.

8270 - The MS/MSD recovery for several analytes are outside QC goals. These analytes met recovery goals in the associated LCS.

768713 MS

1072516006MS

6020 - MS recovery for chromium and lead were outside of acceptance criteria. Post-digestion spike was successful.

768971 MS

1072473003MS

8081 - MS/MSD recovery for several analytes does not meet QC goals. See the LCS for accuracy.

769830 MS_2

1072473007MS_2

300.0 - Anions - The matrix spike recovered outside of acceptance criteria for ortho-phosphate and sulfate. See Laboratory Control Sample for quality control requirements.

767974 MSD

1072554002MSD

8270 - The MS/MSD recovery for several analytes are outside QC goals. These analytes met recovery goals in the associated LCS.

8270 - MS/MSD recovery for several analytes does not meet QC RPD goals. These analytes met QC criteria in the associated LCS.

768714 MSD

1072516006MSD

6020 - MSD recovery for barium, chromium and lead were outside of acceptance criteria. Post-digestion spike was successful.

6020 - MS/MSD recovery for lead does not meet QC RPD goals. The original production sample and its duplicate RPD was within criteria.

768972 MSD

1072473003MSD

8081 - MS/MSD recovery for several analytes does not meet QC goals. See the LCS for accuracy.

8081 - MS/MSD recovery for 4,4'-DDT and endrin ketone does not meet QC RPD goals. The reported result in the associated samples is considered estimated.

769472 MB

XXX/18136]

AK103 - MB result for RRO is greater than one-half the PQL however less than the PQL.

767476 LCS

WXX/5895]

300.0 - LCS recovery for bromide does not meet QC goals (biased low). The reported result in the associated samples may have a low bias.

768438 LCSD

VXX/16780

AK101 - LCS/LCSD recovery for GRO does not meet QC RPD goals. This analyte was not detected above the PQL in the associated samples.

771475 CCV

XGC/5827

8081 - The closing CCV recovery for 4,4'-DDT and methoxychlor are outside QC goals (biased low) due to injector active site formation from sample analysis. These analytes are considered estimated in the associated samples.

8081 - The closing CCV recovery for 4,4'-DDD is outside QC goals (biased high) due to injector active site formation from sample analysis. This analyte was not detected above the PQL in the associated samples except as noted.

SGS Environmental Services Inc.

Case Narrative

Customer: OASISEN

Oasis Environmental

Project: 1072473

Fort Yukon Former Landfill

771476 CCV

XGC/5827

8081 - The closing CCV recovery for 4,4'-DDT and methoxychlor are outside QC goals (biased low) due to injector active site formation from sample analysis. These analytes are considered estimated in the associated samples.



Laboratory Analytical Report

Client: **Oasis Environmental**
825 W 8th Ave Suite 200
Anchorage, AK 99501

Attn: **Karl Hill**
T: (907)258-4880 F:(907)258-4033
k.hill@oasisenviro.com

Project: **Fort Yukon Former Landfill**

Workorder No.: **1072473**

Certification:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, other than the conditions noted on the sample data sheet(s) and/or the case narrative. This certification applies only to the tested parameters and the specific sample(s) received at the laboratory.

If you have any questions regarding this report, or if we can be of further assistance, please contact your SGS Project Manager.

Bryan Arnold
Bryan.Arnold@sgs.com
Project Manager



Print Date: 6/26/2007

Enclosed are the analytical results associated with this workorder.

As required by the state of Alaska and the USEPA, a formal Quality Assurance/Quality Control Program is maintained by SGS. A copy of our Quality Assurance Plan (QAP), which outlines this program is available at your request.

The laboratory certification numbers are AK971-05 (DW), UST-005 (CS) and AK00971 (Micro) for ADEC and 001582 for NELAP (RCRA methods: 1010/1020, 1311, 6000/7000, 9040/9045, 9056, 9060, 9065, 8015B, 8021B, 8081A/8082, 8260B, 8270C).

Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the SGS QAP, the National Environmental Laboratory Accreditation Program and, when applicable, other regulatory authorities.

If you have any questions regarding this report or if we can be of any assistance, please contact your SGS Project Manager at 907-562-2343.

The following descriptors may be found on your report which will serve to further qualify the data.

MDL	Method Detection Limit
PQL	Practical Quantitation Limit (reporting limit).
CL	Control Limit
U	Indicates the analyte was analyzed for but not detected.
F	Indicates value that is greater than or equal to the MDL.
J	The quantitation is an estimation.
ND	Indicates the analyte is not detected
B	Indicates the analyte is found in a blank associated with the sample.
*	The analyte has exceeded allowable regulatory or control limits.
GT	Greater Than
LT	Less Than
Q	QC parameter out of acceptance range.
M	A matrix effect was present.
E	The analyte result is above the calibrated range.
DF	Analytical Dilution Factor
JL	The analyte was positively identified, but the quantitation is a low estimation.
<Surr>	Surrogate QC spiked standard

Note: Soil samples are reported on a dry weight basis unless otherwise specified



SAMPLE SUMMARY

Print Date: 6/26/2007

Client Name: Oasis Environmental
Project Name: Fort Yukon Former Landfill
Workorder No.: 1072473

Analytical Methods

<u>Method Description</u>	<u>Analytical Method</u>
Diesel/Residual Range Organics	AK102
Diesel/Residual Range Organics	AK103
Diesel/Residual Range Organics Water	AK102
Diesel/Residual Range Organics Water	AK103
Gasoline Range Organics (S)	AK101
Gasoline Range Organics (W)	AK101
Hardness as CaCO ₃ by ICP-MS W	SM20 2340B
Ion Chromatographic Analysis	EPA 300.0
Ion Chromatographic Analysis (W)	EPA 300.0
Ion Chromatographic Analysis Soils/Solid	EPA 300.0
Mercury 7470	SW7470A/E245.1
Mercury 7471	SW7471A
Percent Solids SM2540G	SM20 2540G
RCRA Metals by ICP-MS	SW6020
SW8081 Pest QC	SW8081A
SW8082 PCB's	SW8082
SW8082 PCB's Pest.	SW8082
SW846 8270 Semi-Volatiles by GC/MS (S)	SW8270C
SW846-8270 SVOC by GC/MS (W) Liq/Liq ext	SW8270C
Volatile Organic Compounds (S) FIELD EXT	SW8260B
Volatile Organic Compounds (W)	SW8260B

Sample ID Cross Reference

Lab Sample ID	Client Sample ID
1072473001	07JWS001SO
1072473002	07JWS002SO
1072473003	07JWS003SO
1072473004	07JWS004SO
1072473005	07JWS005SO
1072473006	07JWS006SO
1072473007	07JWS007SO
1072473008	07JWS-Cooler-SO
1072473009	07JWS001SW
1072473010	07JWS002SW
1072473011	07JWS003SW
1072473012	07JWS004SW
1072473013	07JWS005SW
1072473014	07JWS-Cooler-SW



Oasis Environmental

Print Date: 6/26/2007

Client Sample ID: **07JWS001SO**
SGS Ref. #: 1072473001
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 89.0

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 10:25
Receipt Date/Time: 06/01/07 12:30

Metals Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Mercury	52.1	44.1	13.2	ug/Kg	1	MCV3636	MXX19000	

Batch Information

Analytical Batch: MCV3636	Prep Batch: MXX19000	Initial Prep Wt./Vol.: 0.6106 g
Analytical Method: SW7471A	Prep Method: METHOD	Prep Extract Vol.: 50 mL
Analysis Date/Time: 06/07/07 11:14	Prep Date/Time: 06/06/07 18:35	Container ID:1072473001-B
Dilution Factor: 1		Analyst: AFH

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS001SO**
SGS Ref. #: 1072473001
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 89.0

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 10:25
Receipt Date/Time: 06/01/07 12:30

RCRA Metals

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Arsenic	8.57	1.10	0.341	mg/Kg	10	MMS4894	MXX19011	
Barium	266	0.330	0.103	mg/Kg	10	MMS4894	MXX19011	
Cadmium	0.821	0.220	0.0682	mg/Kg	10	MMS4894	MXX19011	
Chromium	21.7	0.440	0.132	mg/Kg	10	MMS4894	MXX19011	
Lead	6.56	0.220	0.0682	mg/Kg	10	MMS4894	MXX19011	
Selenium	0.506 J	0.550	0.165	mg/Kg	10	MMS4894	MXX19011	
Silver	0.121	0.110	0.0341	mg/Kg	10	MMS4894	MXX19011	

Batch Information

Analytical Batch: MMS4894
Analytical Method: SW6020
Analysis Date/Time: 06/14/07 19:44
Dilution Factor: 10

Prep Batch: MXX19011
Prep Method: SW3050B
Prep Date/Time: 06/08/07 11:30

Initial Prep Wt./Vol.: 1.021 g
Prep Extract Vol.: 50 mL
Container ID: 1072473001-B
Analyst: TK

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS001SO**
SGS Ref. #: 1072473001
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 89.0

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 10:25
Receipt Date/Time: 06/01/07 12:30

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Nitrate-N	14.0	1.12	0.348	mg/Kg	1	WIC4054	WXX5921	
Bromide	ND	1.12	0.348	mg/Kg	1	WIC4053	WXX5918	
Chloride	58.1	1.12	0.348	mg/Kg	1	WIC4053	WXX5918	
Nitrite-N	ND	1.12	0.348	mg/Kg	1	WIC4053	WXX5918	
Ortho Phosphate-P	2.78 J	4.49	1.35	mg/Kg	1	WIC4053	WXX5918	
Sulfate	167	1.12	0.348	mg/Kg	1	WIC4053	WXX5918	

Batch Information

Analytical Batch: WIC4053
Analytical Method: EPA 300.0
Analysis Date/Time: 06/13/07 21:41
Dilution Factor: 1

Prep Batch: WXX5918
Prep Method: EP300EXTR
Prep Date/Time: 06/13/07 10:00

Initial Prep Wt./Vol.: 4.0057 g
Prep Extract Vol.: 40 mL
Container ID:1072473001-C
Analyst: JDS

Analytical Batch: WIC4054
Analytical Method: EPA 300.0
Analysis Date/Time: 06/14/07 13:58
Dilution Factor: 1

Prep Batch: WXX5921
Prep Method: EP300EXTR
Prep Date/Time: 06/14/07 12:00

Initial Prep Wt./Vol.: 4.0017 g
Prep Extract Vol.: 40 mL
Container ID:1072473001-C
Analyst: JDS

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS001SO**
SGS Ref. #: 1072473001
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 89.0

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 10:25
Receipt Date/Time: 06/01/07 12:30

Volatile Fuels Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Gasoline Range Organics	ND	3.28	0.656	mg/Kg	1	VFC8411	VXX16834	
4-Bromofluorobenzene <sur>	77.1	50-150		%	1	VFC8411	VXX16834	

Batch Information

Analytical Batch: VFC8411
Analytical Method: AK101
Analysis Date/Time: 06/18/07 22:48
Dilution Factor: 1

Prep Batch: VXX16834
Prep Method: AK101
Prep Date/Time: 05/30/07 10:25

Initial Prep Wt./Vol.: 42.78 g
Prep Extract Vol.: 25 mL
Container ID:1072473001-A
Analyst: HM

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS001SO**
SGS Ref. #: 1072473001
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 89.0

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 10:25
Receipt Date/Time: 06/01/07 12:30

Semivolatile Organic Fuels Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Diesel Range Organics	2.38 J	22.3	2.23	mg/Kg	1	XFC7419	XXX18122	
Residual Range Organics	23.6	22.3	2.23	mg/Kg	1	XFC7419	XXX18122	
n-Triacontane-d62 <sur>	64.4	50-150		%	1	XFC7419	XXX18122	
5a Androstane <sur>	57.2	50-150		%	1	XFC7419	XXX18122	

Batch Information

Analytical Batch: XFC7419	Prep Batch: XXX18122	Initial Prep Wt./Vol.: 30.24 g
Analytical Method: AK102	Prep Method: SW3550B	Prep Extract Vol.: 1 mL
Analysis Date/Time: 06/12/07 18:58	Prep Date/Time: 06/09/07 09:00	Container ID:1072473001-B
Dilution Factor: 1		Analyst: JE
Analytical Batch: XFC7419	Prep Batch: XXX18122	Initial Prep Wt./Vol.: 30.24 g
Analytical Method: AK103	Prep Method: SW3550B	Prep Extract Vol.: 1 mL
Analysis Date/Time: 06/12/07 18:58	Prep Date/Time: 06/09/07 09:00	Container ID:1072473001-B
Dilution Factor: 1		Analyst: JE



Oasis Environmental

Print Date: 6/26/2007

Client Sample ID: **07JWS001SO**
SGS Ref. #: 1072473001
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 89.0

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 10:25
Receipt Date/Time: 06/01/07 12:30

Semivolatile Organic Gas Chromatography

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
gamma-Chlordane	ND	832	261	ug/Kg	500	XGC5827	XXX18127	
alpha-Chlordane	ND	832	261	ug/Kg	500	XGC5827	XXX18127	
alpha-BHC	ND	832	261	ug/Kg	500	XGC5827	XXX18127	
beta-BHC	ND	832	261	ug/Kg	500	XGC5827	XXX18127	
gamma-BHC (Lindane)	ND	832	261	ug/Kg	500	XGC5827	XXX18127	
delta-BHC	ND	832	261	ug/Kg	500	XGC5827	XXX18127	
Heptachlor	ND	1110	344	ug/Kg	500	XGC5827	XXX18127	
Aldrin	ND	832	261	ug/Kg	500	XGC5827	XXX18127	
Heptachlor epoxide	ND	1110	344	ug/Kg	500	XGC5827	XXX18127	
Endosulfan I	ND	832	261	ug/Kg	500	XGC5827	XXX18127	
4,4'-DDE	495 J	1110	344	ug/Kg	500	XGC5827	XXX18127	
Dieldrin	ND	1110	344	ug/Kg	500	XGC5827	XXX18127	
Endrin	ND	1110	344	ug/Kg	500	XGC5827	XXX18127	
Endosulfan II	ND	1110	344	ug/Kg	500	XGC5827	XXX18127	
4,4'-DDD	3610	1110	344	ug/Kg	500	XGC5827	XXX18127	
Endrin aldehyde	ND	1110	344	ug/Kg	500	XGC5827	XXX18127	
4,4'-DDT	15500	5550	1720	ug/Kg	2500	XGC5827	XXX18127	
Endosulfan sulfate	ND	1110	344	ug/Kg	500	XGC5827	XXX18127	
Endrin ketone	ND	1110	344	ug/Kg	500	XGC5827	XXX18127	
Methoxychlor	ND	1110	344	ug/Kg	500	XGC5827	XXX18127	
Toxaphene	ND	27700	8320	ug/Kg	500	XGC5827	XXX18127	
Tetrachloro-m-xylene <sur>	0	* 35-124		%	500	XGC5827	XXX18127	
Decachlorobiphenyl <sur>	0	* 56-130		%	500	XGC5827	XXX18127	

Batch Information

Analytical Batch: XGC5827
Analytical Method: SW8081A
Analysis Date/Time: 06/20/07 14:37
Dilution Factor: 500

Prep Batch: XXX18127
Prep Method: SW3550B
Prep Date/Time: 06/11/07 12:30

Initial Prep Wt./Vol.: 22.78 g
Prep Extract Vol.: 1 mL
Container ID:1072473001-C
Analyst: WAA

Analytical Batch: XGC5827
Analytical Method: SW8081A
Analysis Date/Time: 06/20/07 20:59
Dilution Factor: 2500

Prep Batch: XXX18127
Prep Method: SW3550B
Prep Date/Time: 06/11/07 12:30

Initial Prep Wt./Vol.: 22.78 g
Prep Extract Vol.: 1 mL
Container ID:1072473001-C
Analyst: WAA

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS001SO**
SGS Ref. #: 1072473001
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 89.0

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 10:25
Receipt Date/Time: 06/01/07 12:30

Polychlorinated Biphenyls

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Aroclor-1016	ND	5.55	1.66	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1221	ND	5.55	1.66	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1232	ND	5.55	1.66	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1242	ND	5.55	1.66	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1248	ND	5.55	1.66	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1254	ND	5.55	1.66	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1260	ND	5.55	1.66	ug/Kg	1	XGC5828	XXX18127	
Decachlorobiphenyl <sur>	81.2	60-125		%	1	XGC5828	XXX18127	

Batch Information

Analytical Batch: XGC5828
Analytical Method: SW8082
Analysis Date/Time: 06/21/07 05:41
Dilution Factor: 1

Prep Batch: XXX18127
Prep Method: SW3550B
Prep Date/Time: 06/11/07 12:30

Initial Prep Wt./Vol.: 22.78 g
Prep Extract Vol.: 1 mL
Container ID: 1072473001-C
Analyst: SCL

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS001SO**
SGS Ref. #: 1072473001
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 89.0

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 10:25
Receipt Date/Time: 06/01/07 12:30

Volatile Gas Chromatography/Mass Spectroscopy

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Benzene	ND	17.1	5.13	ug/Kg	1	VMS9137	VXX16794	
Toluene	ND	65.7	19.7	ug/Kg	1	VMS9137	VXX16794	
Ethylbenzene	ND	32.9	10.3	ug/Kg	1	VMS9137	VXX16794	
P & M -Xylene	ND	65.7	19.7	ug/Kg	1	VMS9137	VXX16794	
o-Xylene	ND	32.9	10.3	ug/Kg	1	VMS9137	VXX16794	
1,2-Dichloroethane-D4 <surr>	99.4	85-115		%	1	VMS9137	VXX16794	
Toluene-d8 <surr>	104	87-115		%	1	VMS9137	VXX16794	
4-Bromofluorobenzene <surr>	91.8	50-154		%	1	VMS9137	VXX16794	
Dibromofluoromethane <surr>	102	83-119		%	1	VMS9137	VXX16794	

Batch Information

Analytical Batch: VMS9137
Analytical Method: SW8260B
Analysis Date/Time: 06/10/07 21:02
Dilution Factor: 1

Prep Batch: VXX16794
Prep Method: SW5035A
Prep Date/Time: 05/30/07 10:25

Initial Prep Wt./Vol.: 42.72 g
Prep Extract Vol.: 25 mL
Container ID: 1072473001-A
Analyst: KPW



Oasis Environmental

Print Date: 6/26/2007

Client Sample ID: **07JWS001SO**
SGS Ref. #: 1072473001
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 89.0

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 10:25
Receipt Date/Time: 06/01/07 12:30

Solids

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Total Solids	89.0			%	1	SPT7237		

Batch Information

Analytical Batch: SPT7237
Analytical Method: SM20 2540G
Analysis Date/Time: 06/07/07 10:40
Dilution Factor: 1

Initial Prep Wt./Vol.: 1 mL
Container ID:1072473001-B
Analyst: IWM

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS002SO**
SGS Ref. #: 1072473002
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 90.1

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 10:35
Receipt Date/Time: 06/01/07 12:30

Metals Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Mercury	22.9 J	44.2	13.3	ug/Kg	1	MCV3636	MXX19000	

Batch Information

Analytical Batch: MCV3636
Analytical Method: SW7471A
Analysis Date/Time: 06/07/07 11:17
Dilution Factor: 1

Prep Batch: MXX19000
Prep Method: METHOD
Prep Date/Time: 06/06/07 18:35

Initial Prep Wt./Vol.: 0.6028 g
Prep Extract Vol.: 50 mL
Container ID:1072473002-B
Analyst: AFH

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS002SO**
SGS Ref. #: 1072473002
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 90.1

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 10:35
Receipt Date/Time: 06/01/07 12:30

RCRA Metals

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Arsenic	7.09	1.08	0.334	mg/Kg	10	MMS4894	MXX19011	
Barium	218	0.323	0.101	mg/Kg	10	MMS4894	MXX19011	
Cadmium	0.640	0.215	0.0667	mg/Kg	10	MMS4894	MXX19011	
Chromium	18.9	0.431	0.129	mg/Kg	10	MMS4894	MXX19011	
Lead	5.69	0.215	0.0667	mg/Kg	10	MMS4894	MXX19011	
Selenium	ND	0.538	0.161	mg/Kg	10	MMS4894	MXX19011	
Silver	0.109	0.108	0.0334	mg/Kg	10	MMS4894	MXX19011	

Batch Information

Analytical Batch: MMS4894
Analytical Method: SW6020
Analysis Date/Time: 06/14/07 19:49
Dilution Factor: 10

Prep Batch: MXX19011
Prep Method: SW3050B
Prep Date/Time: 06/08/07 11:30

Initial Prep Wt./Vol.: 1.031 g
Prep Extract Vol.: 50 mL
Container ID: 1072473002-B
Analyst: TK

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS002SO**
SGS Ref. #: 1072473002
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 90.1

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 10:35
Receipt Date/Time: 06/01/07 12:30

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Nitrate-N	1.57	1.10	0.342	mg/Kg	1	WIC4054	WXX5921	
Bromide	ND	1.11	0.344	mg/Kg	1	WIC4053	WXX5918	
Chloride	2.98	1.11	0.344	mg/Kg	1	WIC4053	WXX5918	
Nitrite-N	ND	1.11	0.344	mg/Kg	1	WIC4053	WXX5918	
Ortho Phosphate-P	30.9	4.44	1.33	mg/Kg	1	WIC4053	WXX5918	
Sulfate	32.3	1.11	0.344	mg/Kg	1	WIC4053	WXX5918	

Batch Information

Analytical Batch: WIC4053
Analytical Method: EPA 300.0
Analysis Date/Time: 06/13/07 22:00
Dilution Factor: 1

Prep Batch: WXX5918
Prep Method: EP300EXTR
Prep Date/Time: 06/13/07 10:00

Initial Prep Wt./Vol.: 4.0038 g
Prep Extract Vol.: 40 mL
Container ID:1072473002-C
Analyst: JDS

Analytical Batch: WIC4054
Analytical Method: EPA 300.0
Analysis Date/Time: 06/14/07 14:17
Dilution Factor: 1

Prep Batch: WXX5921
Prep Method: EP300EXTR
Prep Date/Time: 06/14/07 12:00

Initial Prep Wt./Vol.: 4.0196 g
Prep Extract Vol.: 40 mL
Container ID:1072473002-C
Analyst: JDS

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS002SO**
SGS Ref. #: 1072473002
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 90.1

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 10:35
Receipt Date/Time: 06/01/07 12:30

Volatile Fuels Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Gasoline Range Organics	ND	3.79	0.759	mg/Kg	1	VFC8411	VXX16834	
4-Bromofluorobenzene <sur>	83.4	50-150		%	1	VFC8411	VXX16834	

Batch Information

Analytical Batch: VFC8411
Analytical Method: AK101
Analysis Date/Time: 06/18/07 23:13
Dilution Factor: 1

Prep Batch: VXX16834
Prep Method: AK101
Prep Date/Time: 05/30/07 10:35

Initial Prep Wt./Vol.: 36.56 g
Prep Extract Vol.: 25 mL
Container ID:1072473002-A
Analyst: HM

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS002SO**
SGS Ref. #: 1072473002
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 90.1

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 10:35
Receipt Date/Time: 06/01/07 12:30

Semivolatile Organic Fuels Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Diesel Range Organics	3.16 J	22.0	2.20	mg/Kg	1	XFC7419	XXX18122	
Residual Range Organics	20.7 J	22.0	2.20	mg/Kg	1	XFC7419	XXX18122	
n-Triacontane-d62 <sur>	84.2	50-150		%	1	XFC7419	XXX18122	
5a Androstane <sur>	69.9	50-150		%	1	XFC7419	XXX18122	

Batch Information

Analytical Batch: XFC7419
Analytical Method: AK102
Analysis Date/Time: 06/12/07 19:03
Dilution Factor: 1

Prep Batch: XXX18122
Prep Method: SW3550B
Prep Date/Time: 06/09/07 09:00

Initial Prep Wt./Vol.: 30.306 g
Prep Extract Vol.: 1 mL
Container ID:1072473002-B
Analyst: JE

Analytical Batch: XFC7419
Analytical Method: AK103
Analysis Date/Time: 06/12/07 19:03
Dilution Factor: 1

Prep Batch: XXX18122
Prep Method: SW3550B
Prep Date/Time: 06/09/07 09:00

Initial Prep Wt./Vol.: 30.306 g
Prep Extract Vol.: 1 mL
Container ID:1072473002-B
Analyst: JE

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS002SO**
SGS Ref. #: 1072473002
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 90.1

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 10:35
Receipt Date/Time: 06/01/07 12:30

Semivolatile Organic Gas Chromatography

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
gamma-Chlordane	ND	8.25	2.58	ug/Kg	5	XGC5827	XXX18127	
alpha-Chlordane	ND	8.25	2.58	ug/Kg	5	XGC5827	XXX18127	
alpha-BHC	ND	8.25	2.58	ug/Kg	5	XGC5827	XXX18127	
beta-BHC	ND	8.25	2.58	ug/Kg	5	XGC5827	XXX18127	
gamma-BHC (Lindane)	ND	8.25	2.58	ug/Kg	5	XGC5827	XXX18127	
delta-BHC	ND	8.25	2.58	ug/Kg	5	XGC5827	XXX18127	
Heptachlor	ND	11.0	3.41	ug/Kg	5	XGC5827	XXX18127	
Aldrin	ND	8.25	2.58	ug/Kg	5	XGC5827	XXX18127	
Heptachlor epoxide	ND	11.0	3.41	ug/Kg	5	XGC5827	XXX18127	
Endosulfan I	ND	8.25	2.58	ug/Kg	5	XGC5827	XXX18127	
4,4'-DDE	ND	11.0	3.41	ug/Kg	5	XGC5827	XXX18127	
Dieldrin	ND	11.0	3.41	ug/Kg	5	XGC5827	XXX18127	
Endrin	ND	11.0	3.41	ug/Kg	5	XGC5827	XXX18127	
Endosulfan II	ND	11.0	3.41	ug/Kg	5	XGC5827	XXX18127	
4,4'-DDD	ND	11.0	3.41	ug/Kg	5	XGC5827	XXX18127	
Endrin aldehyde	ND	11.0	3.41	ug/Kg	5	XGC5827	XXX18127	
4,4'-DDT	ND	11.0	3.41	ug/Kg	5	XGC5827	XXX18127	
Endosulfan sulfate	ND	11.0	3.41	ug/Kg	5	XGC5827	XXX18127	
Endrin ketone	ND	11.0	3.41	ug/Kg	5	XGC5827	XXX18127	
Methoxychlor	ND	11.0	3.41	ug/Kg	5	XGC5827	XXX18127	
Toxaphene	ND	275	82.5	ug/Kg	5	XGC5827	XXX18127	
Tetrachloro-m-xylene <sur>	87	35-124		%	5	XGC5827	XXX18127	
Decachlorobiphenyl <sur>	107	56-130		%	5	XGC5827	XXX18127	

Batch Information

Analytical Batch: XGC5827
Analytical Method: SW8081A
Analysis Date/Time: 06/20/07 15:11
Dilution Factor: 5

Prep Batch: XXX18127
Prep Method: SW3550B
Prep Date/Time: 06/11/07 12:30

Initial Prep Wt./Vol.: 22.711 g
Prep Extract Vol.: 1 mL
Container ID:1072473002-C
Analyst: WAA

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS002SO**
SGS Ref. #: 1072473002
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 90.1

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 10:35
Receipt Date/Time: 06/01/07 12:30

Polychlorinated Biphenyls

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Aroclor-1016	ND	5.50	1.65	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1221	ND	5.50	1.65	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1232	ND	5.50	1.65	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1242	ND	5.50	1.65	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1248	ND	5.50	1.65	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1254	ND	5.50	1.65	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1260	ND	5.50	1.65	ug/Kg	1	XGC5828	XXX18127	
Decachlorobiphenyl <sur>	85.1	60-125		%	1	XGC5828	XXX18127	

Batch Information

Analytical Batch: XGC5828
Analytical Method: SW8082
Analysis Date/Time: 06/21/07 06:09
Dilution Factor: 1

Prep Batch: XXX18127
Prep Method: SW3550B
Prep Date/Time: 06/11/07 12:30

Initial Prep Wt./Vol.: 22.711 g
Prep Extract Vol.: 1 mL
Container ID: 1072473002-C
Analyst: SCL

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS002SO**
SGS Ref. #: 1072473002
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 90.1

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 10:35
Receipt Date/Time: 06/01/07 12:30

Volatile Gas Chromatography/Mass Spectroscopy

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Benzene	ND	19.7	5.92	ug/Kg	1	VMS9137	VXX16794	
Toluene	ND	75.9	22.8	ug/Kg	1	VMS9137	VXX16794	
Ethylbenzene	ND	37.9	11.8	ug/Kg	1	VMS9137	VXX16794	
P & M -Xylene	ND	75.9	22.8	ug/Kg	1	VMS9137	VXX16794	
o-Xylene	ND	37.9	11.8	ug/Kg	1	VMS9137	VXX16794	
1,2-Dichloroethane-D4 <surr>	101	85-115		%	1	VMS9137	VXX16794	
Toluene-d8 <surr>	103	87-115		%	1	VMS9137	VXX16794	
4-Bromofluorobenzene <surr>	94.7	50-154		%	1	VMS9137	VXX16794	
Dibromofluoromethane <surr>	103	83-119		%	1	VMS9137	VXX16794	

Batch Information

Analytical Batch: VMS9137
Analytical Method: SW8260B
Analysis Date/Time: 06/10/07 21:35
Dilution Factor: 1

Prep Batch: VXX16794
Prep Method: SW5035A
Prep Date/Time: 05/30/07 10:35

Initial Prep Wt./Vol.: 36.56 g
Prep Extract Vol.: 25 mL
Container ID: 1072473002-A
Analyst: KPW



Oasis Environmental

Print Date: 6/26/2007

Client Sample ID: **07JWS002SO**
SGS Ref. #: 1072473002
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 90.1

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 10:35
Receipt Date/Time: 06/01/07 12:30

Solids

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Total Solids	90.1			%	1	SPT7237		

Batch Information

Analytical Batch: SPT7237
Analytical Method: SM20 2540G
Analysis Date/Time: 06/07/07 10:40
Dilution Factor: 1

Initial Prep Wt./Vol.: 1 mL
Container ID:1072473002-B
Analyst: IWM

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS003SO**
SGS Ref. #: 1072473003
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 87.7

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 10:50
Receipt Date/Time: 06/01/07 12:30

Metals Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Mercury	36.2 J	44.8	13.4	ug/Kg	1	MCV3636	MXX19000	

Batch Information

Analytical Batch: MCV3636
Analytical Method: SW7471A
Analysis Date/Time: 06/07/07 11:20
Dilution Factor: 1

Prep Batch: MXX19000
Prep Method: METHOD
Prep Date/Time: 06/06/07 18:35

Initial Prep Wt./Vol.: 0.6108 g
Prep Extract Vol.: 50 mL
Container ID:1072473003-B
Analyst: AFH

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS003SO**
SGS Ref. #: 1072473003
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 87.7

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 10:50
Receipt Date/Time: 06/01/07 12:30

RCRA Metals

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Arsenic	8.05	1.13	0.349	mg/Kg	10	MMS4894	MXX19011	
Barium	263	0.338	0.106	mg/Kg	10	MMS4894	MXX19011	
Cadmium	0.768	0.225	0.0699	mg/Kg	10	MMS4894	MXX19011	
Chromium	22.0	0.451	0.135	mg/Kg	10	MMS4894	MXX19011	
Lead	5.98	0.225	0.0699	mg/Kg	10	MMS4894	MXX19011	
Selenium	0.729	0.564	0.169	mg/Kg	10	MMS4894	MXX19011	
Silver	0.129	0.113	0.0349	mg/Kg	10	MMS4894	MXX19011	

Batch Information

Analytical Batch: MMS4894
Analytical Method: SW6020
Analysis Date/Time: 06/14/07 19:55
Dilution Factor: 10

Prep Batch: MXX19011
Prep Method: SW3050B
Prep Date/Time: 06/08/07 11:30

Initial Prep Wt./Vol.: 1.012 g
Prep Extract Vol.: 50 mL
Container ID: 1072473003-B
Analyst: TK

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS003SO**
SGS Ref. #: 1072473003
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 87.7

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 10:50
Receipt Date/Time: 06/01/07 12:30

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Nitrate-N	1.74	1.14	0.352	mg/Kg	1	WIC4054	WXX5921	
Bromide	ND	1.14	0.353	mg/Kg	1	WIC4053	WXX5918	
Chloride	86.4	1.14	0.353	mg/Kg	1	WIC4053	WXX5918	
Nitrite-N	ND	1.14	0.353	mg/Kg	1	WIC4053	WXX5918	
Ortho Phosphate-P	4.21 J	4.56	1.37	mg/Kg	1	WIC4053	WXX5918	
Sulfate	292	1.14	0.353	mg/Kg	1	WIC4053	WXX5918	

Batch Information

Analytical Batch: WIC4053
Analytical Method: EPA 300.0
Analysis Date/Time: 06/13/07 22:20
Dilution Factor: 1

Prep Batch: WXX5918
Prep Method: EP300EXTR
Prep Date/Time: 06/13/07 10:00

Initial Prep Wt./Vol.: 4.0032 g
Prep Extract Vol.: 40 mL
Container ID:1072473003-C
Analyst: JDS

Analytical Batch: WIC4054
Analytical Method: EPA 300.0
Analysis Date/Time: 06/14/07 14:36
Dilution Factor: 1

Prep Batch: WXX5921
Prep Method: EP300EXTR
Prep Date/Time: 06/14/07 12:00

Initial Prep Wt./Vol.: 4.0154 g
Prep Extract Vol.: 40 mL
Container ID:1072473003-C
Analyst: JDS



Oasis Environmental

Print Date: 6/26/2007

Client Sample ID: **07JWS003SO**
SGS Ref. #: 1072473003
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 87.7

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 10:50
Receipt Date/Time: 06/01/07 12:30

Volatile Fuels Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Gasoline Range Organics	ND	4.55	0.911	mg/Kg	1	VFC8411	VXX16834	
4-Bromofluorobenzene <sur>	83.2	50-150		%	1	VFC8411	VXX16834	

Batch Information

Analytical Batch: VFC8411
Analytical Method: AK101
Analysis Date/Time: 06/18/07 23:38
Dilution Factor: 1

Prep Batch: VXX16834
Prep Method: AK101
Prep Date/Time: 05/30/07 10:50

Initial Prep Wt./Vol.: 31.31 g
Prep Extract Vol.: 25 mL
Container ID:1072473003-A
Analyst: HM

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS003SO**
SGS Ref. #: 1072473003
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 87.7

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 10:50
Receipt Date/Time: 06/01/07 12:30

Semivolatile Organic Fuels Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Diesel Range Organics	7.75 J	22.8	2.28	mg/Kg	1	XFC7427	XXX18122	
Residual Range Organics	200	22.8	2.28	mg/Kg	1	XFC7427	XXX18122	
n-Triacontane-d62 <surr>	114	50-150		%	1	XFC7427	XXX18122	
5a Androstane <surr>	74.7	50-150		%	1	XFC7427	XXX18122	

Batch Information

Analytical Batch: XFC7427
Analytical Method: AK102
Analysis Date/Time: 06/14/07 14:31
Dilution Factor: 1

Prep Batch: XXX18122
Prep Method: SW3550B
Prep Date/Time: 06/09/07 09:00

Initial Prep Wt./Vol.: 30.082 g
Prep Extract Vol.: 1 mL
Container ID:1072473003-B
Analyst: JE

Analytical Batch: XFC7427
Analytical Method: AK103
Analysis Date/Time: 06/14/07 14:31
Dilution Factor: 1

Prep Batch: XXX18122
Prep Method: SW3550B
Prep Date/Time: 06/09/07 09:00

Initial Prep Wt./Vol.: 30.082 g
Prep Extract Vol.: 1 mL
Container ID:1072473003-B
Analyst: JE

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS003SO**
SGS Ref. #: 1072473003
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 87.7

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 10:50
Receipt Date/Time: 06/01/07 12:30

Semivolatile Organic Gas Chromatography

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
gamma-Chlordane	ND	8.51	2.67	ug/Kg	5	XGC5827	XXX18127	
alpha-Chlordane	ND	8.51	2.67	ug/Kg	5	XGC5827	XXX18127	
alpha-BHC	ND	8.51	2.67	ug/Kg	5	XGC5827	XXX18127	
beta-BHC	ND	8.51	2.67	ug/Kg	5	XGC5827	XXX18127	
gamma-BHC (Lindane)	ND	8.51	2.67	ug/Kg	5	XGC5827	XXX18127	
delta-BHC	ND	8.51	2.67	ug/Kg	5	XGC5827	XXX18127	
Heptachlor	ND	11.3	3.52	ug/Kg	5	XGC5827	XXX18127	
Aldrin	ND	8.51	2.67	ug/Kg	5	XGC5827	XXX18127	
Heptachlor epoxide	ND	11.3	3.52	ug/Kg	5	XGC5827	XXX18127	
Endosulfan I	ND	8.51	2.67	ug/Kg	5	XGC5827	XXX18127	
4,4'-DDE	ND	11.3	3.52	ug/Kg	5	XGC5827	XXX18127	
Dieldrin	ND	11.3	3.52	ug/Kg	5	XGC5827	XXX18127	
Endrin	ND	11.3	3.52	ug/Kg	5	XGC5827	XXX18127	
Endosulfan II	ND	11.3	3.52	ug/Kg	5	XGC5827	XXX18127	
4,4'-DDD	ND	11.3	3.52	ug/Kg	5	XGC5827	XXX18127	
Endrin aldehyde	ND	11.3	3.52	ug/Kg	5	XGC5827	XXX18127	
4,4'-DDT	ND	11.3	3.52	ug/Kg	5	XGC5827	XXX18127	
Endosulfan sulfate	ND	11.3	3.52	ug/Kg	5	XGC5827	XXX18127	
Endrin ketone	ND	11.3	3.52	ug/Kg	5	XGC5827	XXX18127	
Methoxychlor	ND	11.3	3.52	ug/Kg	5	XGC5827	XXX18127	
Toxaphene	ND	284	85.1	ug/Kg	5	XGC5827	XXX18127	
Tetrachloro-m-xylene <sur>	70.4	35-124		%	5	XGC5827	XXX18127	
Decachlorobiphenyl <sur>	82.3	56-130		%	5	XGC5827	XXX18127	

Batch Information

Analytical Batch: XGC5827
Analytical Method: SW8081A
Analysis Date/Time: 06/20/07 15:46
Dilution Factor: 5

Prep Batch: XXX18127
Prep Method: SW3550B
Prep Date/Time: 06/11/07 12:30

Initial Prep Wt./Vol.: 22.631 g
Prep Extract Vol.: 1 mL
Container ID: 1072473003-C
Analyst: WAA

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS003SO**
SGS Ref. #: 1072473003
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 87.7

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 10:50
Receipt Date/Time: 06/01/07 12:30

Polychlorinated Biphenyls

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Aroclor-1016	ND	5.67	1.70	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1221	ND	5.67	1.70	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1232	ND	5.67	1.70	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1242	ND	5.67	1.70	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1248	ND	5.67	1.70	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1254	ND	5.67	1.70	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1260	ND	5.67	1.70	ug/Kg	1	XGC5828	XXX18127	
Decachlorobiphenyl <sur>	66.1	60-125		%	1	XGC5828	XXX18127	

Batch Information

Analytical Batch: XGC5828
Analytical Method: SW8082
Analysis Date/Time: 06/21/07 06:36
Dilution Factor: 1

Prep Batch: XXX18127
Prep Method: SW3550B
Prep Date/Time: 06/11/07 12:30

Initial Prep Wt./Vol.: 22.631 g
Prep Extract Vol.: 1 mL
Container ID: 1072473003-C
Analyst: SCL

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS003SO**
SGS Ref. #: 1072473003
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 87.7

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 10:50
Receipt Date/Time: 06/01/07 12:30

Volatile Gas Chromatography/Mass Spectroscopy

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Benzene	ND	23.7	7.11	ug/Kg	1	VMS9137	VXX16794	
Toluene	ND	91.1	27.3	ug/Kg	1	VMS9137	VXX16794	
Ethylbenzene	ND	45.5	14.2	ug/Kg	1	VMS9137	VXX16794	
P & M -Xylene	ND	91.1	27.3	ug/Kg	1	VMS9137	VXX16794	
o-Xylene	ND	45.5	14.2	ug/Kg	1	VMS9137	VXX16794	
1,2-Dichloroethane-D4 <surr>	108	85-115		%	1	VMS9137	VXX16794	
Toluene-d8 <surr>	104	87-115		%	1	VMS9137	VXX16794	
4-Bromofluorobenzene <surr>	97.4	50-154		%	1	VMS9137	VXX16794	
Dibromofluoromethane <surr>	107	83-119		%	1	VMS9137	VXX16794	

Batch Information

Analytical Batch: VMS9137
Analytical Method: SW8260B
Analysis Date/Time: 06/10/07 22:08
Dilution Factor: 1

Prep Batch: VXX16794
Prep Method: SW5035A
Prep Date/Time: 05/30/07 10:50

Initial Prep Wt./Vol.: 31.31 g
Prep Extract Vol.: 25 mL
Container ID: 1072473003-A
Analyst: KPW

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS003SO**
SGS Ref. #: 1072473003
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 87.7

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 10:50
Receipt Date/Time: 06/01/07 12:30

Solids

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Total Solids	87.7			%	1	SPT7237		

Batch Information

Analytical Batch: SPT7237
Analytical Method: SM20 2540G
Analysis Date/Time: 06/07/07 10:40
Dilution Factor: 1

Initial Prep Wt./Vol.: 1 mL
Container ID:1072473003-B
Analyst: IWM



Oasis Environmental

Print Date: 6/26/2007

Client Sample ID: **07JWS004SO**
SGS Ref. #: 1072473004
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 90.6

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 11:40
Receipt Date/Time: 06/01/07 12:30

Metals Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Mercury	25.3 J	43.4	13.0	ug/Kg	1	MCV3636	MXX19000	

Batch Information

Analytical Batch: MCV3636
Analytical Method: SW7471A
Analysis Date/Time: 06/07/07 11:23
Dilution Factor: 1

Prep Batch: MXX19000
Prep Method: METHOD
Prep Date/Time: 06/06/07 18:35

Initial Prep Wt./Vol.: 0.6107 g
Prep Extract Vol.: 50 mL
Container ID:1072473004-B
Analyst: AFH

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS004SO**
SGS Ref. #: 1072473004
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 90.6

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 11:40
Receipt Date/Time: 06/01/07 12:30

RCRA Metals

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Arsenic	6.75	1.09	0.337	mg/Kg	10	MMS4894	MXX19011	
Barium	292	0.326	0.102	mg/Kg	10	MMS4894	MXX19011	
Cadmium	0.626	0.217	0.0674	mg/Kg	10	MMS4894	MXX19011	
Chromium	18.8	0.435	0.130	mg/Kg	10	MMS4894	MXX19011	
Lead	6.02	0.217	0.0674	mg/Kg	10	MMS4894	MXX19011	
Selenium	0.339 J	0.543	0.163	mg/Kg	10	MMS4894	MXX19011	
Silver	0.152	0.109	0.0337	mg/Kg	10	MMS4894	MXX19011	

Batch Information

Analytical Batch: MMS4894
Analytical Method: SW6020
Analysis Date/Time: 06/14/07 20:00
Dilution Factor: 10

Prep Batch: MXX19011
Prep Method: SW3050B
Prep Date/Time: 06/08/07 11:30

Initial Prep Wt./Vol.: 1.015 g
Prep Extract Vol.: 50 mL
Container ID: 1072473004-B
Analyst: TK

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS004SO**
SGS Ref. #: 1072473004
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 90.6

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 11:40
Receipt Date/Time: 06/01/07 12:30

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Nitrate-N	1.55	1.10	0.341	mg/Kg	1	WIC4054	WXX5921	
Bromide	ND	1.10	0.342	mg/Kg	1	WIC4053	WXX5918	
Chloride	2.15	1.10	0.342	mg/Kg	1	WIC4053	WXX5918	
Nitrite-N	ND	1.10	0.342	mg/Kg	1	WIC4053	WXX5918	
Ortho Phosphate-P	2.79 J	4.41	1.32	mg/Kg	1	WIC4053	WXX5918	
Sulfate	18.4	1.10	0.342	mg/Kg	1	WIC4053	WXX5918	

Batch Information

Analytical Batch: WIC4053
Analytical Method: EPA 300.0
Analysis Date/Time: 06/13/07 22:39
Dilution Factor: 1

Prep Batch: WXX5918
Prep Method: EP300EXTR
Prep Date/Time: 06/13/07 10:00

Initial Prep Wt./Vol.: 4.0045 g
Prep Extract Vol.: 40 mL
Container ID:
Analyst: JDS

Analytical Batch: WIC4053
Analytical Method: EPA 300.0
Analysis Date/Time: 06/13/07 22:39
Dilution Factor: 1

Prep Batch: WXX5918
Prep Method: EP300EXTR
Prep Date/Time: 06/13/07 10:00

Initial Prep Wt./Vol.: 4.0045 g
Prep Extract Vol.: 40 mL
Container ID:1072473004-C
Analyst: JDS

Analytical Batch: WIC4054
Analytical Method: EPA 300.0
Analysis Date/Time: 06/14/07 14:56
Dilution Factor: 1

Prep Batch: WXX5921
Prep Method: EP300EXTR
Prep Date/Time: 06/14/07 12:00

Initial Prep Wt./Vol.: 4.0134 g
Prep Extract Vol.: 40 mL
Container ID:1072473004-C
Analyst: JDS

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS004SO**
SGS Ref. #: 1072473004
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 90.6

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 11:40
Receipt Date/Time: 06/01/07 12:30

Volatile Fuels Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Gasoline Range Organics	ND	2.44	0.488	mg/Kg	1	VFC8411	VXX16834	
4-Bromofluorobenzene <sur>	76.5	50-150		%	1	VFC8411	VXX16834	

Batch Information

Analytical Batch: VFC8411
Analytical Method: AK101
Analysis Date/Time: 06/19/07 00:03
Dilution Factor: 1

Prep Batch: VXX16834
Prep Method: AK101
Prep Date/Time: 05/30/07 11:40

Initial Prep Wt./Vol.: 56.46 g
Prep Extract Vol.: 25 mL
Container ID:1072473004-A
Analyst: HM

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS004SO**
SGS Ref. #: 1072473004
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 90.6

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 11:40
Receipt Date/Time: 06/01/07 12:30

Semivolatile Organic Fuels Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Diesel Range Organics	3.53 J	21.8	2.18	mg/Kg	1	XFC7427	XXX18122	
Residual Range Organics	30.7	21.8	2.18	mg/Kg	1	XFC7427	XXX18122	
n-Triacontane-d62 <sur>	85.7	50-150		%	1	XFC7427	XXX18122	
5a Androstane <sur>	77.3	50-150		%	1	XFC7427	XXX18122	

Batch Information

Analytical Batch: XFC7427
Analytical Method: AK102
Analysis Date/Time: 06/14/07 14:36
Dilution Factor: 1

Prep Batch: XXX18122
Prep Method: SW3550B
Prep Date/Time: 06/09/07 09:00

Initial Prep Wt./Vol.: 30.306 g
Prep Extract Vol.: 1 mL
Container ID:1072473004-B
Analyst: JE

Analytical Batch: XFC7427
Analytical Method: AK103
Analysis Date/Time: 06/14/07 14:36
Dilution Factor: 1

Prep Batch: XXX18122
Prep Method: SW3550B
Prep Date/Time: 06/09/07 09:00

Initial Prep Wt./Vol.: 30.306 g
Prep Extract Vol.: 1 mL
Container ID:1072473004-B
Analyst: JE

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS004SO**
SGS Ref. #: 1072473004
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 90.6

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 11:40
Receipt Date/Time: 06/01/07 12:30

Semivolatile Organic Gas Chromatography

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
gamma-Chlordane	ND	8.27	2.59	ug/Kg	5	XGC5827	XXX18127	
alpha-Chlordane	ND	8.27	2.59	ug/Kg	5	XGC5827	XXX18127	
alpha-BHC	ND	8.27	2.59	ug/Kg	5	XGC5827	XXX18127	
beta-BHC	ND	8.27	2.59	ug/Kg	5	XGC5827	XXX18127	
gamma-BHC (Lindane)	ND	8.27	2.59	ug/Kg	5	XGC5827	XXX18127	
delta-BHC	ND	8.27	2.59	ug/Kg	5	XGC5827	XXX18127	
Heptachlor	ND	11.0	3.42	ug/Kg	5	XGC5827	XXX18127	
Aldrin	ND	8.27	2.59	ug/Kg	5	XGC5827	XXX18127	
Heptachlor epoxide	ND	11.0	3.42	ug/Kg	5	XGC5827	XXX18127	
Endosulfan I	ND	8.27	2.59	ug/Kg	5	XGC5827	XXX18127	
4,4'-DDE	ND	11.0	3.42	ug/Kg	5	XGC5827	XXX18127	
Dieldrin	ND	11.0	3.42	ug/Kg	5	XGC5827	XXX18127	
Endrin	ND	11.0	3.42	ug/Kg	5	XGC5827	XXX18127	
Endosulfan II	ND	11.0	3.42	ug/Kg	5	XGC5827	XXX18127	
4,4'-DDD	ND	11.0	3.42	ug/Kg	5	XGC5827	XXX18127	
Endrin aldehyde	ND	11.0	3.42	ug/Kg	5	XGC5827	XXX18127	
4,4'-DDT	ND	11.0	3.42	ug/Kg	5	XGC5827	XXX18127	
Endosulfan sulfate	ND	11.0	3.42	ug/Kg	5	XGC5827	XXX18127	
Endrin ketone	ND	11.0	3.42	ug/Kg	5	XGC5827	XXX18127	
Methoxychlor	ND	11.0	3.42	ug/Kg	5	XGC5827	XXX18127	
Toxaphene	ND	276	82.7	ug/Kg	5	XGC5827	XXX18127	
Tetrachloro-m-xylene <sur>	80.1	35-124		%	5	XGC5827	XXX18127	
Decachlorobiphenyl <sur>	99.8	56-130		%	5	XGC5827	XXX18127	

Batch Information

Analytical Batch: XGC5827
Analytical Method: SW8081A
Analysis Date/Time: 06/20/07 16:21
Dilution Factor: 5

Prep Batch: XXX18127
Prep Method: SW3550B
Prep Date/Time: 06/11/07 12:30

Initial Prep Wt./Vol.: 22.512 g
Prep Extract Vol.: 1 mL
Container ID: 1072473004-C
Analyst: WAA

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS004SO**
SGS Ref. #: 1072473004
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 90.6

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 11:40
Receipt Date/Time: 06/01/07 12:30

Polychlorinated Biphenyls

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Aroclor-1016	ND	5.51	1.65	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1221	ND	5.51	1.65	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1232	ND	5.51	1.65	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1242	ND	5.51	1.65	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1248	ND	5.51	1.65	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1254	ND	5.51	1.65	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1260	ND	5.51	1.65	ug/Kg	1	XGC5828	XXX18127	
Decachlorobiphenyl <sur>	79.8	60-125		%	1	XGC5828	XXX18127	

Batch Information

Analytical Batch: XGC5828
Analytical Method: SW8082
Analysis Date/Time: 06/21/07 07:04
Dilution Factor: 1

Prep Batch: XXX18127
Prep Method: SW3550B
Prep Date/Time: 06/11/07 12:30

Initial Prep Wt./Vol.: 22.512 g
Prep Extract Vol.: 1 mL
Container ID: 1072473004-C
Analyst: SCL

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS004SO**
SGS Ref. #: 1072473004
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 90.6

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 11:40
Receipt Date/Time: 06/01/07 12:30

Volatile Gas Chromatography/Mass Spectroscopy

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Benzene	ND	12.8	3.85	ug/Kg	1	VMS9137	VXX16794	
Toluene	ND	49.3	14.8	ug/Kg	1	VMS9137	VXX16794	
Ethylbenzene	ND	24.7	7.69	ug/Kg	1	VMS9137	VXX16794	
P & M -Xylene	ND	49.3	14.8	ug/Kg	1	VMS9137	VXX16794	
o-Xylene	ND	24.7	7.69	ug/Kg	1	VMS9137	VXX16794	
1,2-Dichloroethane-D4 <surr>	102	85-115		%	1	VMS9137	VXX16794	
Toluene-d8 <surr>	105	87-115		%	1	VMS9137	VXX16794	
4-Bromofluorobenzene <surr>	96.8	50-154		%	1	VMS9137	VXX16794	
Dibromofluoromethane <surr>	104	83-119		%	1	VMS9137	VXX16794	

Batch Information

Analytical Batch: VMS9137
Analytical Method: SW8260B
Analysis Date/Time: 06/10/07 22:42
Dilution Factor: 1

Prep Batch: VXX16794
Prep Method: SW5035A
Prep Date/Time: 05/30/07 11:40

Initial Prep Wt./Vol.: 55.92 g
Prep Extract Vol.: 25 mL
Container ID: 1072473004-A
Analyst: KPW



Oasis Environmental

Print Date: 6/26/2007

Client Sample ID: **07JWS004SO**
SGS Ref. #: 1072473004
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 90.6

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 11:40
Receipt Date/Time: 06/01/07 12:30

Solids

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Total Solids	90.6			%	1	SPT7237		

Batch Information

Analytical Batch: SPT7237
Analytical Method: SM20 2540G
Analysis Date/Time: 06/07/07 10:40
Dilution Factor: 1

Initial Prep Wt./Vol.: 1 mL
Container ID:1072473004-B
Analyst: IWM

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS005SO**
SGS Ref. #: 1072473005
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 78.3

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 11:50
Receipt Date/Time: 06/01/07 12:30

Metals Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Mercury	25.6 J	50.5	15.1	ug/Kg	1	MCV3636	MXX19000	

Batch Information

Analytical Batch: MCV3636
Analytical Method: SW7471A
Analysis Date/Time: 06/07/07 11:26
Dilution Factor: 1

Prep Batch: MXX19000
Prep Method: METHOD
Prep Date/Time: 06/06/07 18:35

Initial Prep Wt./Vol.: 0.6075 g
Prep Extract Vol.: 50 mL
Container ID:1072473005-B
Analyst: AFH

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS005SO**
SGS Ref. #: 1072473005
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 78.3

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 11:50
Receipt Date/Time: 06/01/07 12:30

RCRA Metals

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Arsenic	9.70	1.26	0.390	mg/Kg	10	MMS4894	MXX19011	
Barium	236	0.377	0.118	mg/Kg	10	MMS4894	MXX19011	
Cadmium	0.572	0.252	0.0780	mg/Kg	10	MMS4894	MXX19011	
Chromium	20.9	0.503	0.151	mg/Kg	10	MMS4894	MXX19011	
Lead	7.05	0.252	0.0780	mg/Kg	10	MMS4894	MXX19011	
Selenium	1.29	0.629	0.189	mg/Kg	10	MMS4894	MXX19011	
Silver	0.121 J	0.126	0.0390	mg/Kg	10	MMS4894	MXX19011	

Batch Information

Analytical Batch: MMS4894
Analytical Method: SW6020
Analysis Date/Time: 06/14/07 20:05
Dilution Factor: 10

Prep Batch: MXX19011
Prep Method: SW3050B
Prep Date/Time: 06/08/07 11:30

Initial Prep Wt./Vol.: 1.016 g
Prep Extract Vol.: 50 mL
Container ID: 1072473005-B
Analyst: TK

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS005SO**
SGS Ref. #: 1072473005
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 78.3

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 11:50
Receipt Date/Time: 06/01/07 12:30

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Nitrate-N	1.83	1.28	0.396	mg/Kg	1	WIC4054	WXX5921	
Bromide	ND	1.28	0.396	mg/Kg	1	WIC4053	WXX5918	
Chloride	136	1.28	0.396	mg/Kg	1	WIC4053	WXX5918	
Nitrite-N	ND	1.28	0.396	mg/Kg	1	WIC4053	WXX5918	
Ortho Phosphate-P	3.16 J	5.10	1.53	mg/Kg	1	WIC4053	WXX5918	
Sulfate	345	1.28	0.396	mg/Kg	1	WIC4053	WXX5918	

Batch Information

Analytical Batch: WIC4053
Analytical Method: EPA 300.0
Analysis Date/Time: 06/13/07 22:58
Dilution Factor: 1

Prep Batch: WXX5918
Prep Method: EP300EXTR
Prep Date/Time: 06/13/07 10:00

Initial Prep Wt./Vol.: 4.005 g
Prep Extract Vol.: 40 mL
Container ID:
Analyst: JDS

Analytical Batch: WIC4053
Analytical Method: EPA 300.0
Analysis Date/Time: 06/13/07 22:58
Dilution Factor: 1

Prep Batch: WXX5918
Prep Method: EP300EXTR
Prep Date/Time: 06/13/07 10:00

Initial Prep Wt./Vol.: 4.005 g
Prep Extract Vol.: 40 mL
Container ID:1072473005-C
Analyst: JDS

Analytical Batch: WIC4054
Analytical Method: EPA 300.0
Analysis Date/Time: 06/14/07 15:15
Dilution Factor: 1

Prep Batch: WXX5921
Prep Method: EP300EXTR
Prep Date/Time: 06/14/07 12:00

Initial Prep Wt./Vol.: 4.0003 g
Prep Extract Vol.: 40 mL
Container ID:1072473005-C
Analyst: JDS

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS005SO**
SGS Ref. #: 1072473005
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 78.3

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 11:50
Receipt Date/Time: 06/01/07 12:30

Volatile Fuels Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Gasoline Range Organics	4.91	4.23	0.845	mg/Kg	1	VFC8411	VXX16834	
4-Bromofluorobenzene <sur>	74.3	50-150		%	1	VFC8411	VXX16834	

Batch Information

Analytical Batch: VFC8411
Analytical Method: AK101
Analysis Date/Time: 06/19/07 00:28
Dilution Factor: 1

Prep Batch: VXX16834
Prep Method: AK101
Prep Date/Time: 05/30/07 11:50

Initial Prep Wt./Vol.: 37.8 g
Prep Extract Vol.: 25 mL
Container ID:1072473005-A
Analyst: HM

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS005SO**
SGS Ref. #: 1072473005
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 78.3

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 11:50
Receipt Date/Time: 06/01/07 12:30

Semivolatile Organic Fuels Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Diesel Range Organics	12.6 J	50.7	5.07	mg/Kg	2	XFC7427	XXX18122	
Residual Range Organics	157	50.7	5.07	mg/Kg	2	XFC7427	XXX18122	
n-Triacontane-d62 <sur>	74.7	50-150		%	2	XFC7427	XXX18122	
5a Androstane <sur>	68.3	50-150		%	2	XFC7427	XXX18122	

Batch Information

Analytical Batch: XFC7427
Analytical Method: AK102
Analysis Date/Time: 06/14/07 16:11
Dilution Factor: 2

Prep Batch: XXX18122
Prep Method: SW3550B
Prep Date/Time: 06/09/07 09:00

Initial Prep Wt./Vol.: 30.23 g
Prep Extract Vol.: 1 mL
Container ID:1072473005-B
Analyst: JE

Analytical Batch: XFC7427
Analytical Method: AK103
Analysis Date/Time: 06/14/07 16:11
Dilution Factor: 2

Prep Batch: XXX18122
Prep Method: SW3550B
Prep Date/Time: 06/09/07 09:00

Initial Prep Wt./Vol.: 30.23 g
Prep Extract Vol.: 1 mL
Container ID:1072473005-B
Analyst: JE

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS005SO**
SGS Ref. #: 1072473005
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 78.3

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 11:50
Receipt Date/Time: 06/01/07 12:30

Semivolatile Organic Gas Chromatography

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
gamma-Chlordane	ND	9.43	2.95	ug/Kg	5	XGC5827	XXX18127	
alpha-Chlordane	ND	9.43	2.95	ug/Kg	5	XGC5827	XXX18127	
alpha-BHC	ND	9.43	2.95	ug/Kg	5	XGC5827	XXX18127	
beta-BHC	ND	9.43	2.95	ug/Kg	5	XGC5827	XXX18127	
gamma-BHC (Lindane)	ND	9.43	2.95	ug/Kg	5	XGC5827	XXX18127	
delta-BHC	ND	9.43	2.95	ug/Kg	5	XGC5827	XXX18127	
Heptachlor	ND	12.6	3.90	ug/Kg	5	XGC5827	XXX18127	
Aldrin	ND	9.43	2.95	ug/Kg	5	XGC5827	XXX18127	
Heptachlor epoxide	ND	12.6	3.90	ug/Kg	5	XGC5827	XXX18127	
Endosulfan I	ND	9.43	2.95	ug/Kg	5	XGC5827	XXX18127	
4,4'-DDE	ND	12.6	3.90	ug/Kg	5	XGC5827	XXX18127	
Dieldrin	ND	12.6	3.90	ug/Kg	5	XGC5827	XXX18127	
Endrin	ND	12.6	3.90	ug/Kg	5	XGC5827	XXX18127	
Endosulfan II	ND	12.6	3.90	ug/Kg	5	XGC5827	XXX18127	
4,4'-DDD	ND	12.6	3.90	ug/Kg	5	XGC5827	XXX18127	
Endrin aldehyde	ND	12.6	3.90	ug/Kg	5	XGC5827	XXX18127	
4,4'-DDT	ND	12.6	3.90	ug/Kg	5	XGC5827	XXX18127	
Endosulfan sulfate	ND	12.6	3.90	ug/Kg	5	XGC5827	XXX18127	
Endrin ketone	ND	12.6	3.90	ug/Kg	5	XGC5827	XXX18127	
Methoxychlor	ND	12.6	3.90	ug/Kg	5	XGC5827	XXX18127	
Toxaphene	ND	314	94.3	ug/Kg	5	XGC5827	XXX18127	
Tetrachloro-m-xylene <sur>	76.9	35-124		%	5	XGC5827	XXX18127	
Decachlorobiphenyl <sur>	96.6	56-130		%	5	XGC5827	XXX18127	

Batch Information

Analytical Batch: XGC5827
Analytical Method: SW8081A
Analysis Date/Time: 06/20/07 16:56
Dilution Factor: 5

Prep Batch: XXX18127
Prep Method: SW3550B
Prep Date/Time: 06/11/07 12:30

Initial Prep Wt./Vol.: 22.866 g
Prep Extract Vol.: 1 mL
Container ID:1072473005-C
Analyst: WAA

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS005SO**
SGS Ref. #: 1072473005
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 78.3

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 11:50
Receipt Date/Time: 06/01/07 12:30

Polychlorinated Biphenyls

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Aroclor-1016	ND	6.29	1.89	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1221	ND	6.29	1.89	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1232	ND	6.29	1.89	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1242	ND	6.29	1.89	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1248	ND	6.29	1.89	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1254	ND	6.29	1.89	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1260	ND	6.29	1.89	ug/Kg	1	XGC5828	XXX18127	
Decachlorobiphenyl <sur>	67.4	60-125		%	1	XGC5828	XXX18127	

Batch Information

Analytical Batch: XGC5828
Analytical Method: SW8082
Analysis Date/Time: 06/21/07 07:32
Dilution Factor: 1

Prep Batch: XXX18127
Prep Method: SW3550B
Prep Date/Time: 06/11/07 12:30

Initial Prep Wt./Vol.: 22.866 g
Prep Extract Vol.: 1 mL
Container ID: 1072473005-C
Analyst: SCL

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS005SO**
SGS Ref. #: 1072473005
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 78.3

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 11:50
Receipt Date/Time: 06/01/07 12:30

Volatile Gas Chromatography/Mass Spectroscopy

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Benzene	ND	22.0	6.59	ug/Kg	1	VMS9139	VXX16797	
Toluene	ND	84.5	25.4	ug/Kg	1	VMS9139	VXX16797	
Ethylbenzene	ND	42.3	13.2	ug/Kg	1	VMS9139	VXX16797	
P & M -Xylene	ND	84.5	25.4	ug/Kg	1	VMS9139	VXX16797	
o-Xylene	ND	42.3	13.2	ug/Kg	1	VMS9139	VXX16797	
1,2-Dichloroethane-D4 <surr>	102	85-115		%	1	VMS9139	VXX16797	
Toluene-d8 <surr>	99.9	87-115		%	1	VMS9139	VXX16797	
4-Bromofluorobenzene <surr>	88.1	50-154		%	1	VMS9139	VXX16797	
Dibromofluoromethane <surr>	103	83-119		%	1	VMS9139	VXX16797	

Batch Information

Analytical Batch: VMS9139
Analytical Method: SW8260B
Analysis Date/Time: 06/11/07 15:32
Dilution Factor: 1

Prep Batch: VXX16797
Prep Method: SW5035A
Prep Date/Time: 05/30/07 11:50

Initial Prep Wt./Vol.: 37.8 g
Prep Extract Vol.: 25 mL
Container ID: 1072473005-A
Analyst: KPW

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS005SO**
SGS Ref. #: 1072473005
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 78.3

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 11:50
Receipt Date/Time: 06/01/07 12:30

Semivolatile Organic GC/MS

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
N-Nitrosodimethylamine	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
Aniline	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
Phenol	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
Bis(2-Chloroethyl)ether	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
2-Chlorophenol	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
1,3-Dichlorobenzene	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
1,4-Dichlorobenzene	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
Benzyl alcohol	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
1,2-Dichlorobenzene	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
2-Methylphenol (o-Cresol)	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
Bis(2chloro1methylethyl)Ether	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
3&4-Methylphenol (p&m-Cresol)	ND	1.26	0.392	mg/Kg	1	XMS4040	XXX18100	
N-Nitroso-di-n-propylamine	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
Hexachloroethane	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
Nitrobenzene	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
Isophorone	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
2-Nitrophenol	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
2,4-Dimethylphenol	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
Benzoic acid	ND	1.90	0.948	mg/Kg	1	XMS4040	XXX18100	
Bis(2-Chloroethoxy)methane	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
1,2,4-Trichlorobenzene	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
Naphthalene	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
4-Chloroaniline	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
Hexachlorobutadiene	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
4-Chloro-3-methylphenol	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
2,4-Dichlorophenol	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
2-Methylnaphthalene	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
Hexachlorocyclopentadiene	ND	0.885	0.253	mg/Kg	1	XMS4040	XXX18100	
2,4,6-Trichlorophenol	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
2,4,5-Trichlorophenol	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
2-Chloronaphthalene	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
2-Nitroaniline	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
Dimethylphthalate	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
Acenaphthylene	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
2,6-Dinitrotoluene	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
3-Nitroaniline	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	



Oasis Environmental

Print Date: 6/26/2007

Client Sample ID: **07JWS005SO**
SGS Ref. #: 1072473005
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 78.3

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 11:50
Receipt Date/Time: 06/01/07 12:30

Semivolatile Organic GC/MS

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Acenaphthene	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
2,4-Dinitrophenol	ND	2.53	0.783	mg/Kg	1	XMS4040	XXX18100	
4-Nitrophenol	ND	1.26	0.392	mg/Kg	1	XMS4040	XXX18100	
Dibenzofuran	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
2,4-Dinitrotoluene	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
Diethylphthalate	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
4-Chlorophenyl-phenylether	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
Fluorene	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
4-Nitroaniline	ND	0.632	0.190	mg/Kg	1	XMS4040	XXX18100	
2-Methyl-4,6-dinitrophenol	ND	2.53	0.783	mg/Kg	1	XMS4040	XXX18100	
N-Nitrosodiphenylamine	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
4-Bromophenyl-phenylether	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
Hexachlorobenzene	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
Pentachlorophenol	ND	1.26	0.392	mg/Kg	1	XMS4040	XXX18100	
Phenanthrene	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
Anthracene	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
Di-n-butylphthalate	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
Fluoranthene	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
Pyrene	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
Azobenzene	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
Butylbenzylphthalate	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
3,3-Dichlorobenzidine	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
Benzo(a)Anthracene	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
Chrysene	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
bis(2-Ethylhexyl)phthalate	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
di-n-Octylphthalate	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
Benzo[b]Fluoranthene	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
Benzo[k]fluoranthene	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
Benzo[a]pyrene	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
Indeno[1,2,3-c,d] pyrene	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
Dibenzo[a,h]anthracene	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
Benzo[g,h,i]perylene	ND	0.316	0.0986	mg/Kg	1	XMS4040	XXX18100	
2-Fluorophenol <sur>	52.1	38-82		%	1	XMS4040	XXX18100	
Phenol-d6 <sur>	59.7	44-89		%	1	XMS4040	XXX18100	
Nitrobenzene-d5 <sur>	46.4	37-99		%	1	XMS4040	XXX18100	
2-Fluorobiphenyl <sur>	57.7	47-94		%	1	XMS4040	XXX18100	
2,4,6-Tribromophenol <sur>	75.4	55-109		%	1	XMS4040	XXX18100	

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS005SO**
SGS Ref. #: 1072473005
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 78.3

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 11:50
Receipt Date/Time: 06/01/07 12:30

Semivolatile Organic GC/MS

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Terphenyl-d14 <sur>	78.8	42-120		%	1	XMS4040	XXX18100	

Batch Information

Analytical Batch: XMS4040
Analytical Method: SW8270C
Analysis Date/Time: 06/13/07 21:16
Dilution Factor: 1

Prep Batch: XXX18100
Prep Method: SW3550B
Prep Date/Time: 06/06/07 14:00

Initial Prep Wt./Vol.: 22.75 g
Prep Extract Vol.: 1 mL
Container ID:1072473005-C
Analyst: WAA



Oasis Environmental

Print Date: 6/26/2007

Client Sample ID: **07JWS005SO**
SGS Ref. #: 1072473005
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 78.3

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 11:50
Receipt Date/Time: 06/01/07 12:30

Solids

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Total Solids	78.3			%	1	SPT7237		

Batch Information

Analytical Batch: SPT7237
Analytical Method: SM20 2540G
Analysis Date/Time: 06/07/07 10:40
Dilution Factor: 1

Initial Prep Wt./Vol.: 1 mL
Container ID:1072473005-B
Analyst: IWM



Oasis Environmental

Print Date: 6/26/2007

Client Sample ID: **07JWS006SO**
SGS Ref. #: 1072473006
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 93.4

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 12:05
Receipt Date/Time: 06/01/07 12:30

Metals Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Mercury	16.2 J	42.6	12.8	ug/Kg	1	MCV3636	MXX19000	

Batch Information

Analytical Batch: MCV3636	Prep Batch: MXX19000	Initial Prep Wt./Vol.: 0.6037 g
Analytical Method: SW7471A	Prep Method: METHOD	Prep Extract Vol.: 50 mL
Analysis Date/Time: 06/07/07 11:35	Prep Date/Time: 06/06/07 18:35	Container ID:1072473006-B
Dilution Factor: 1		Analyst: AFH

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS006SO**
SGS Ref. #: 1072473006
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 93.4

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 12:05
Receipt Date/Time: 06/01/07 12:30

RCRA Metals

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Arsenic	6.39	1.06	0.328	mg/Kg	10	MMS4894	MXX19011	
Barium	245	0.318	0.0995	mg/Kg	10	MMS4894	MXX19011	
Cadmium	0.652	0.212	0.0657	mg/Kg	10	MMS4894	MXX19011	
Chromium	16.7	0.424	0.127	mg/Kg	10	MMS4894	MXX19011	
Lead	4.84	0.212	0.0657	mg/Kg	10	MMS4894	MXX19011	
Selenium	0.325 J	0.530	0.159	mg/Kg	10	MMS4894	MXX19011	
Silver	0.0981 J	0.106	0.0328	mg/Kg	10	MMS4894	MXX19011	

Batch Information

Analytical Batch: MMS4894
Analytical Method: SW6020
Analysis Date/Time: 06/14/07 20:10
Dilution Factor: 10

Prep Batch: MXX19011
Prep Method: SW3050B
Prep Date/Time: 06/08/07 11:30

Initial Prep Wt./Vol.: 1.011 g
Prep Extract Vol.: 50 mL
Container ID: 1072473006-B
Analyst: TK

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS006SO**
SGS Ref. #: 1072473006
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 93.4

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 12:05
Receipt Date/Time: 06/01/07 12:30

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Nitrate-N	1.52	1.07	0.332	mg/Kg	1	WIC4054	WXX5921	
Bromide	ND	1.07	0.331	mg/Kg	1	WIC4053	WXX5918	
Chloride	5.46	1.07	0.331	mg/Kg	1	WIC4053	WXX5918	
Nitrite-N	ND	1.07	0.331	mg/Kg	1	WIC4053	WXX5918	
Ortho Phosphate-P	2.64 J	4.28	1.28	mg/Kg	1	WIC4053	WXX5918	
Sulfate	32.6	1.07	0.331	mg/Kg	1	WIC4053	WXX5918	

Batch Information

Analytical Batch: WIC4053
Analytical Method: EPA 300.0
Analysis Date/Time: 06/13/07 23:18
Dilution Factor: 1

Prep Batch: WXX5918
Prep Method: EP300EXTR
Prep Date/Time: 06/13/07 10:00

Initial Prep Wt./Vol.: 4.006 g
Prep Extract Vol.: 40 mL
Container ID:
Analyst: JDS

Analytical Batch: WIC4053
Analytical Method: EPA 300.0
Analysis Date/Time: 06/13/07 23:18
Dilution Factor: 1

Prep Batch: WXX5918
Prep Method: EP300EXTR
Prep Date/Time: 06/13/07 10:00

Initial Prep Wt./Vol.: 4.006 g
Prep Extract Vol.: 40 mL
Container ID:1072473006-C
Analyst: JDS

Analytical Batch: WIC4054
Analytical Method: EPA 300.0
Analysis Date/Time: 06/14/07 15:34
Dilution Factor: 1

Prep Batch: WXX5921
Prep Method: EP300EXTR
Prep Date/Time: 06/14/07 12:00

Initial Prep Wt./Vol.: 4.0043 g
Prep Extract Vol.: 40 mL
Container ID:1072473006-C
Analyst: JDS

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS006SO**
SGS Ref. #: 1072473006
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 93.4

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 12:05
Receipt Date/Time: 06/01/07 12:30

Volatile Fuels Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Gasoline Range Organics	ND	1.91	0.382	mg/Kg	1	VFC8411	VXX16834	
4-Bromofluorobenzene <sur>	76.9	50-150		%	1	VFC8411	VXX16834	

Batch Information

Analytical Batch: VFC8411
Analytical Method: AK101
Analysis Date/Time: 06/19/07 00:52
Dilution Factor: 1

Prep Batch: VXX16834
Prep Method: AK101
Prep Date/Time: 05/30/07 12:05

Initial Prep Wt./Vol.: 70.15 g
Prep Extract Vol.: 25 mL
Container ID:1072473006-A
Analyst: HM

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS006SO**
SGS Ref. #: 1072473006
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 93.4

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 12:05
Receipt Date/Time: 06/01/07 12:30

Semivolatile Organic Fuels Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Diesel Range Organics	2.67 J	21.1	2.11	mg/Kg	1	XFC7427	XXX18122	
Residual Range Organics	25.9	21.1	2.11	mg/Kg	1	XFC7427	XXX18122	
n-Triacontane-d62 <surr>	85.9	50-150		%	1	XFC7427	XXX18122	
5a Androstane <surr>	79.4	50-150		%	1	XFC7427	XXX18122	

Batch Information

Analytical Batch: XFC7427
Analytical Method: AK102
Analysis Date/Time: 06/14/07 14:41
Dilution Factor: 1

Prep Batch: XXX18122
Prep Method: SW3550B
Prep Date/Time: 06/09/07 09:00

Initial Prep Wt./Vol.: 30.401 g
Prep Extract Vol.: 1 mL
Container ID:1072473006-B
Analyst: JE

Analytical Batch: XFC7427
Analytical Method: AK103
Analysis Date/Time: 06/14/07 14:41
Dilution Factor: 1

Prep Batch: XXX18122
Prep Method: SW3550B
Prep Date/Time: 06/09/07 09:00

Initial Prep Wt./Vol.: 30.401 g
Prep Extract Vol.: 1 mL
Container ID:1072473006-B
Analyst: JE

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS006SO**
SGS Ref. #: 1072473006
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 93.4

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 12:05
Receipt Date/Time: 06/01/07 12:30

Semivolatile Organic Gas Chromatography

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
gamma-Chlordane	ND	8.02	2.51	ug/Kg	5	XGC5827	XXX18127	
alpha-Chlordane	ND	8.02	2.51	ug/Kg	5	XGC5827	XXX18127	
alpha-BHC	ND	8.02	2.51	ug/Kg	5	XGC5827	XXX18127	
beta-BHC	ND	8.02	2.51	ug/Kg	5	XGC5827	XXX18127	
gamma-BHC (Lindane)	ND	8.02	2.51	ug/Kg	5	XGC5827	XXX18127	
delta-BHC	ND	8.02	2.51	ug/Kg	5	XGC5827	XXX18127	
Heptachlor	ND	10.7	3.32	ug/Kg	5	XGC5827	XXX18127	
Aldrin	ND	8.02	2.51	ug/Kg	5	XGC5827	XXX18127	
Heptachlor epoxide	ND	10.7	3.32	ug/Kg	5	XGC5827	XXX18127	
Endosulfan I	ND	8.02	2.51	ug/Kg	5	XGC5827	XXX18127	
4,4'-DDE	ND	10.7	3.32	ug/Kg	5	XGC5827	XXX18127	
Dieldrin	ND	10.7	3.32	ug/Kg	5	XGC5827	XXX18127	
Endrin	ND	10.7	3.32	ug/Kg	5	XGC5827	XXX18127	
Endosulfan II	ND	10.7	3.32	ug/Kg	5	XGC5827	XXX18127	
4,4'-DDD	ND	10.7	3.32	ug/Kg	5	XGC5827	XXX18127	
Endrin aldehyde	ND	10.7	3.32	ug/Kg	5	XGC5827	XXX18127	
4,4'-DDT	ND	10.7	3.32	ug/Kg	5	XGC5827	XXX18127	
Endosulfan sulfate	ND	10.7	3.32	ug/Kg	5	XGC5827	XXX18127	
Endrin ketone	ND	10.7	3.32	ug/Kg	5	XGC5827	XXX18127	
Methoxychlor	ND	10.7	3.32	ug/Kg	5	XGC5827	XXX18127	
Toxaphene	ND	267	80.2	ug/Kg	5	XGC5827	XXX18127	
Tetrachloro-m-xylene <sur>	85.2	35-124		%	5	XGC5827	XXX18127	
Decachlorobiphenyl <sur>	107	56-130		%	5	XGC5827	XXX18127	

Batch Information

Analytical Batch: XGC5827
Analytical Method: SW8081A
Analysis Date/Time: 06/20/07 17:30
Dilution Factor: 5

Prep Batch: XXX18127
Prep Method: SW3550B
Prep Date/Time: 06/11/07 12:30

Initial Prep Wt./Vol.: 22.526 g
Prep Extract Vol.: 1 mL
Container ID: 1072473006-C
Analyst: WAA

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS006SO**
SGS Ref. #: 1072473006
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 93.4

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 12:05
Receipt Date/Time: 06/01/07 12:30

Polychlorinated Biphenyls

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Aroclor-1016	ND	5.35	1.60	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1221	ND	5.35	1.60	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1232	ND	5.35	1.60	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1242	ND	5.35	1.60	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1248	ND	5.35	1.60	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1254	ND	5.35	1.60	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1260	ND	5.35	1.60	ug/Kg	1	XGC5828	XXX18127	
Decachlorobiphenyl <sur>	80.8	60-125		%	1	XGC5828	XXX18127	

Batch Information

Analytical Batch: XGC5828
Analytical Method: SW8082
Analysis Date/Time: 06/21/07 07:59
Dilution Factor: 1

Prep Batch: XXX18127
Prep Method: SW3550B
Prep Date/Time: 06/11/07 12:30

Initial Prep Wt./Vol.: 22.526 g
Prep Extract Vol.: 1 mL
Container ID: 1072473006-C
Analyst: SCL

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS006SO**
SGS Ref. #: 1072473006
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 93.4

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 12:05
Receipt Date/Time: 06/01/07 12:30

Volatile Gas Chromatography/Mass Spectroscopy

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Benzene	ND	9.98	3.00	ug/Kg	1	VMS9139	VXX16797	
Toluene	ND	38.4	11.5	ug/Kg	1	VMS9139	VXX16797	
Ethylbenzene	ND	19.2	5.99	ug/Kg	1	VMS9139	VXX16797	
P & M -Xylene	ND	38.4	11.5	ug/Kg	1	VMS9139	VXX16797	
o-Xylene	ND	19.2	5.99	ug/Kg	1	VMS9139	VXX16797	
1,2-Dichloroethane-D4 <surr>	101	85-115		%	1	VMS9139	VXX16797	
Toluene-d8 <surr>	104	87-115		%	1	VMS9139	VXX16797	
4-Bromofluorobenzene <surr>	96.3	50-154		%	1	VMS9139	VXX16797	
Dibromofluoromethane <surr>	102	83-119		%	1	VMS9139	VXX16797	

Batch Information

Analytical Batch: VMS9139
Analytical Method: SW8260B
Analysis Date/Time: 06/11/07 16:05
Dilution Factor: 1

Prep Batch: VXX16797
Prep Method: SW5035A
Prep Date/Time: 05/30/07 12:05

Initial Prep Wt./Vol.: 69.7 g
Prep Extract Vol.: 25 mL
Container ID: 1072473006-A
Analyst: KPW



Oasis Environmental

Print Date: 6/26/2007

Client Sample ID: **07JWS006SO**
SGS Ref. #: 1072473006
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 93.4

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 12:05
Receipt Date/Time: 06/01/07 12:30

Solids

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Total Solids	93.4			%	1	SPT7237		

Batch Information

Analytical Batch: SPT7237
Analytical Method: SM20 2540G
Analysis Date/Time: 06/07/07 10:40
Dilution Factor: 1

Initial Prep Wt./Vol.: 1 mL
Container ID:1072473006-B
Analyst: IWM

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS007SO**
SGS Ref. #: 1072473007
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 80.4

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 12:15
Receipt Date/Time: 06/01/07 12:30

Metals Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Mercury	16.5 J	48.5	14.6	ug/Kg	1	MCV3636	MXX19000	

Batch Information

Analytical Batch: MCV3636
Analytical Method: SW7471A
Analysis Date/Time: 06/07/07 11:38
Dilution Factor: 1

Prep Batch: MXX19000
Prep Method: METHOD
Prep Date/Time: 06/06/07 18:35

Initial Prep Wt./Vol.: 0.615 g
Prep Extract Vol.: 50 mL
Container ID:1072473007-B
Analyst: AFH

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS007SO**
SGS Ref. #: 1072473007
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 80.4

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 12:15
Receipt Date/Time: 06/01/07 12:30

RCRA Metals

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Arsenic	8.80	1.22	0.379	mg/Kg	10	MMS4894	MXX19011	
Barium	213	0.367	0.115	mg/Kg	10	MMS4894	MXX19011	
Cadmium	0.515	0.245	0.0758	mg/Kg	10	MMS4894	MXX19011	
Chromium	19.3	0.489	0.147	mg/Kg	10	MMS4894	MXX19011	
Lead	6.55	0.245	0.0758	mg/Kg	10	MMS4894	MXX19011	
Selenium	0.958	0.611	0.183	mg/Kg	10	MMS4894	MXX19011	
Silver	0.112 J	0.122	0.0379	mg/Kg	10	MMS4894	MXX19011	

Batch Information

Analytical Batch: MMS4894
Analytical Method: SW6020
Analysis Date/Time: 06/14/07 20:28
Dilution Factor: 10

Prep Batch: MXX19011
Prep Method: SW3050B
Prep Date/Time: 06/08/07 11:30

Initial Prep Wt./Vol.: 1.017 g
Prep Extract Vol.: 50 mL
Container ID: 1072473007-B
Analyst: TK

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS007SO**
SGS Ref. #: 1072473007
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 80.4

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 12:15
Receipt Date/Time: 06/01/07 12:30

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Nitrate-N	1.75	1.24	0.385	mg/Kg	1	WIC4054	WXX5921	
Bromide	ND	1.24	0.385	mg/Kg	1	WIC4053	WXX5918	
Chloride	133	1.24	0.385	mg/Kg	1	WIC4053	WXX5918	
Nitrite-N	ND	1.24	0.385	mg/Kg	1	WIC4053	WXX5918	
Ortho Phosphate-P	3.12 J	4.97	1.49	mg/Kg	1	WIC4053	WXX5918	
Sulfate	354	1.24	0.385	mg/Kg	1	WIC4053	WXX5918	

Batch Information

Analytical Batch: WIC4053	Prep Batch: WXX5918	Initial Prep Wt./Vol.: 4.0036 g
Analytical Method: EPA 300.0	Prep Method: EP300EXTR	Prep Extract Vol.: 40 mL
Analysis Date/Time: 06/14/07 00:15	Prep Date/Time: 06/13/07 10:00	Container ID:
Dilution Factor: 1		Analyst: JDS
Analytical Batch: WIC4053	Prep Batch: WXX5918	Initial Prep Wt./Vol.: 4.0036 g
Analytical Method: EPA 300.0	Prep Method: EP300EXTR	Prep Extract Vol.: 40 mL
Analysis Date/Time: 06/14/07 00:15	Prep Date/Time: 06/13/07 10:00	Container ID:1072473007-C
Dilution Factor: 1		Analyst: JDS
Analytical Batch: WIC4054	Prep Batch: WXX5921	Initial Prep Wt./Vol.: 4.008 g
Analytical Method: EPA 300.0	Prep Method: EP300EXTR	Prep Extract Vol.: 40 mL
Analysis Date/Time: 06/14/07 16:51	Prep Date/Time: 06/14/07 12:00	Container ID:1072473007-C
Dilution Factor: 1		Analyst: JDS

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS007SO**
SGS Ref. #: 1072473007
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 80.4

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 12:15
Receipt Date/Time: 06/01/07 12:30

Volatile Fuels Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Gasoline Range Organics	1.03J	3.16	0.632	mg/Kg	1	VFC8411	VXX16834	
4-Bromofluorobenzene <sur>	60.5	50-150		%	1	VFC8411	VXX16834	

Batch Information

Analytical Batch: VFC8411
Analytical Method: AK101
Analysis Date/Time: 06/19/07 01:17
Dilution Factor: 1

Prep Batch: VXX16834
Prep Method: AK101
Prep Date/Time: 05/30/07 12:15

Initial Prep Wt./Vol.: 49.21 g
Prep Extract Vol.: 25 mL
Container ID:1072473007-A
Analyst: HM

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS007SO**
SGS Ref. #: 1072473007
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 80.4

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 12:15
Receipt Date/Time: 06/01/07 12:30

Semivolatile Organic Fuels Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Diesel Range Organics	11.4 J	49.0	4.90	mg/Kg	2	XFC7427	XXX18122	
Residual Range Organics	106	49.0	4.90	mg/Kg	2	XFC7427	XXX18122	
n-Triacontane-d62 <sur>	95.6	50-150		%	2	XFC7427	XXX18122	
5a Androstane <sur>	72.7	50-150		%	2	XFC7427	XXX18122	

Batch Information

Analytical Batch: XFC7427
Analytical Method: AK102
Analysis Date/Time: 06/14/07 16:16
Dilution Factor: 2

Prep Batch: XXX18122
Prep Method: SW3550B
Prep Date/Time: 06/09/07 09:00

Initial Prep Wt./Vol.: 30.44 g
Prep Extract Vol.: 1 mL
Container ID:1072473007-B
Analyst: JE

Analytical Batch: XFC7427
Analytical Method: AK103
Analysis Date/Time: 06/14/07 16:16
Dilution Factor: 2

Prep Batch: XXX18122
Prep Method: SW3550B
Prep Date/Time: 06/09/07 09:00

Initial Prep Wt./Vol.: 30.44 g
Prep Extract Vol.: 1 mL
Container ID:1072473007-B
Analyst: JE

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS007SO**
SGS Ref. #: 1072473007
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 80.4

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 12:15
Receipt Date/Time: 06/01/07 12:30

Semivolatile Organic Gas Chromatography

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
gamma-Chlordane	ND	9.28	2.91	ug/Kg	5	XGC5827	XXX18127	
alpha-Chlordane	ND	9.28	2.91	ug/Kg	5	XGC5827	XXX18127	
alpha-BHC	ND	9.28	2.91	ug/Kg	5	XGC5827	XXX18127	
beta-BHC	ND	9.28	2.91	ug/Kg	5	XGC5827	XXX18127	
gamma-BHC (Lindane)	ND	9.28	2.91	ug/Kg	5	XGC5827	XXX18127	
delta-BHC	ND	9.28	2.91	ug/Kg	5	XGC5827	XXX18127	
Heptachlor	ND	12.4	3.84	ug/Kg	5	XGC5827	XXX18127	
Aldrin	ND	9.28	2.91	ug/Kg	5	XGC5827	XXX18127	
Heptachlor epoxide	ND	12.4	3.84	ug/Kg	5	XGC5827	XXX18127	
Endosulfan I	ND	9.28	2.91	ug/Kg	5	XGC5827	XXX18127	
4,4'-DDE	ND	12.4	3.84	ug/Kg	5	XGC5827	XXX18127	
Dieldrin	ND	12.4	3.84	ug/Kg	5	XGC5827	XXX18127	
Endrin	ND	12.4	3.84	ug/Kg	5	XGC5827	XXX18127	
Endosulfan II	ND	12.4	3.84	ug/Kg	5	XGC5827	XXX18127	
4,4'-DDD	ND	12.4	3.84	ug/Kg	5	XGC5827	XXX18127	
Endrin aldehyde	ND	12.4	3.84	ug/Kg	5	XGC5827	XXX18127	
4,4'-DDT	ND	12.4	3.84	ug/Kg	5	XGC5827	XXX18127	
Endosulfan sulfate	ND	12.4	3.84	ug/Kg	5	XGC5827	XXX18127	
Endrin ketone	ND	12.4	3.84	ug/Kg	5	XGC5827	XXX18127	
Methoxychlor	ND	12.4	3.84	ug/Kg	5	XGC5827	XXX18127	
Toxaphene	ND	309	92.8	ug/Kg	5	XGC5827	XXX18127	
Tetrachloro-m-xylene <sur>	83.5	35-124		%	5	XGC5827	XXX18127	
Decachlorobiphenyl <sur>	100	56-130		%	5	XGC5827	XXX18127	

Batch Information

Analytical Batch: XGC5827
Analytical Method: SW8081A
Analysis Date/Time: 06/20/07 18:05
Dilution Factor: 5

Prep Batch: XXX18127
Prep Method: SW3550B
Prep Date/Time: 06/11/07 12:30

Initial Prep Wt./Vol.: 22.6 g
Prep Extract Vol.: 1 mL
Container ID:1072473007-C
Analyst: WAA

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS007SO**
SGS Ref. #: 1072473007
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 80.4

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 12:15
Receipt Date/Time: 06/01/07 12:30

Polychlorinated Biphenyls

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Aroclor-1016	ND	6.19	1.86	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1221	ND	6.19	1.86	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1232	ND	6.19	1.86	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1242	ND	6.19	1.86	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1248	ND	6.19	1.86	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1254	ND	6.19	1.86	ug/Kg	1	XGC5828	XXX18127	
Aroclor-1260	ND	6.19	1.86	ug/Kg	1	XGC5828	XXX18127	
Decachlorobiphenyl <sur>	71.1	60-125		%	1	XGC5828	XXX18127	

Batch Information

Analytical Batch: XGC5828
Analytical Method: SW8082
Analysis Date/Time: 06/21/07 08:27
Dilution Factor: 1

Prep Batch: XXX18127
Prep Method: SW3550B
Prep Date/Time: 06/11/07 12:30

Initial Prep Wt./Vol.: 22.6 g
Prep Extract Vol.: 1 mL
Container ID: 1072473007-C
Analyst: SCL

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS007SO**
SGS Ref. #: 1072473007
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 80.4

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 12:15
Receipt Date/Time: 06/01/07 12:30

Volatile Gas Chromatography/Mass Spectroscopy

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Benzene	ND	16.4	4.93	ug/Kg	1	VMS9139	VXX16797	
Toluene	ND	63.2	18.9	ug/Kg	1	VMS9139	VXX16797	
Ethylbenzene	ND	31.6	9.85	ug/Kg	1	VMS9139	VXX16797	
P & M -Xylene	ND	63.2	18.9	ug/Kg	1	VMS9139	VXX16797	
o-Xylene	ND	31.6	9.85	ug/Kg	1	VMS9139	VXX16797	
1,2-Dichloroethane-D4 <surr>	104	85-115		%	1	VMS9139	VXX16797	
Toluene-d8 <surr>	105	87-115		%	1	VMS9139	VXX16797	
4-Bromofluorobenzene <surr>	87.3	50-154		%	1	VMS9139	VXX16797	
Dibromofluoromethane <surr>	103	83-119		%	1	VMS9139	VXX16797	

Batch Information

Analytical Batch: VMS9139
Analytical Method: SW8260B
Analysis Date/Time: 06/11/07 16:38
Dilution Factor: 1

Prep Batch: VXX16797
Prep Method: SW5035A
Prep Date/Time: 05/30/07 12:15

Initial Prep Wt./Vol.: 49.21 g
Prep Extract Vol.: 25 mL
Container ID: 1072473007-A
Analyst: KPW

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS007SO**
SGS Ref. #: 1072473007
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 80.4

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 12:15
Receipt Date/Time: 06/01/07 12:30

Semivolatile Organic GC/MS

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
N-Nitrosodimethylamine	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
Aniline	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
Phenol	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
Bis(2-Chloroethyl)ether	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
2-Chlorophenol	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
1,3-Dichlorobenzene	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
1,4-Dichlorobenzene	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
Benzyl alcohol	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
1,2-Dichlorobenzene	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
2-Methylphenol (o-Cresol)	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
Bis(2chloro1methylethyl)Ether	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
3&4-Methylphenol (p&m-Cresol)	ND	1.23	0.381	mg/Kg	1	XMS4040	XXX18100	
N-Nitroso-di-n-propylamine	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
Hexachloroethane	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
Nitrobenzene	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
Isophorone	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
2-Nitrophenol	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
2,4-Dimethylphenol	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
Benzoic acid	ND	1.84	0.922	mg/Kg	1	XMS4040	XXX18100	
Bis(2-Chloroethoxy)methane	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
1,2,4-Trichlorobenzene	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
Naphthalene	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
4-Chloroaniline	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
Hexachlorobutadiene	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
4-Chloro-3-methylphenol	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
2,4-Dichlorophenol	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
2-Methylnaphthalene	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
Hexachlorocyclopentadiene	ND	0.861	0.246	mg/Kg	1	XMS4040	XXX18100	
2,4,6-Trichlorophenol	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
2,4,5-Trichlorophenol	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
2-Chloronaphthalene	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
2-Nitroaniline	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
Dimethylphthalate	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
Acenaphthylene	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
2,6-Dinitrotoluene	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
3-Nitroaniline	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS007SO**
SGS Ref. #: 1072473007
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 80.4

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 12:15
Receipt Date/Time: 06/01/07 12:30

Semivolatile Organic GC/MS

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Acenaphthene	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
2,4-Dinitrophenol	ND	2.46	0.762	mg/Kg	1	XMS4040	XXX18100	
4-Nitrophenol	ND	1.23	0.381	mg/Kg	1	XMS4040	XXX18100	
Dibenzofuran	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
2,4-Dinitrotoluene	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
Diethylphthalate	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
4-Chlorophenyl-phenylether	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
Fluorene	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
4-Nitroaniline	ND	0.615	0.184	mg/Kg	1	XMS4040	XXX18100	
2-Methyl-4,6-dinitrophenol	ND	2.46	0.762	mg/Kg	1	XMS4040	XXX18100	
N-Nitrosodiphenylamine	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
4-Bromophenyl-phenylether	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
Hexachlorobenzene	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
Pentachlorophenol	ND	1.23	0.381	mg/Kg	1	XMS4040	XXX18100	
Phenanthrene	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
Anthracene	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
Di-n-butylphthalate	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
Fluoranthene	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
Pyrene	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
Azobenzene	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
Butylbenzylphthalate	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
3,3-Dichlorobenzidine	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
Benzo(a)Anthracene	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
Chrysene	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
bis(2-Ethylhexyl)phthalate	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
di-n-Octylphthalate	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
Benzo[b]Fluoranthene	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
Benzo[k]fluoranthene	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
Benzo[a]pyrene	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
Indeno[1,2,3-c,d] pyrene	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
Dibenzo[a,h]anthracene	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
Benzo[g,h,i]perylene	ND	0.307	0.0959	mg/Kg	1	XMS4040	XXX18100	
2-Fluorophenol <sur>	62.2	38-82		%	1	XMS4040	XXX18100	
Phenol-d6 <sur>	72	44-89		%	1	XMS4040	XXX18100	
Nitrobenzene-d5 <sur>	59.3	37-99		%	1	XMS4040	XXX18100	
2-Fluorobiphenyl <sur>	73.3	47-94		%	1	XMS4040	XXX18100	
2,4,6-Tribromophenol <sur>	80.4	55-109		%	1	XMS4040	XXX18100	



Oasis Environmental

Print Date: 6/26/2007

Client Sample ID: **07JWS007SO**
SGS Ref. #: 1072473007
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 80.4

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 12:15
Receipt Date/Time: 06/01/07 12:30

Semivolatile Organic GC/MS

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Terphenyl-d14 <surr>	89.9	42-120		%	1	XMS4040	XXX18100	

Batch Information

Analytical Batch: XMS4040	Prep Batch: XXX18100	Initial Prep Wt./Vol.: 22.75 g
Analytical Method: SW8270C	Prep Method: SW3550B	Prep Extract Vol.: 1 mL
Analysis Date/Time: 06/13/07 21:48	Prep Date/Time: 06/06/07 14:00	Container ID:1072473007-C
Dilution Factor: 1		Analyst: WAA



Oasis Environmental

Print Date: 6/26/2007

Client Sample ID: **07JWS007SO**
SGS Ref. #: 1072473007
Project ID: Fort Yukon Former Landfill
Matrix: Soil/Solid
Percent Solids: 80.4

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/30/07 12:15
Receipt Date/Time: 06/01/07 12:30

Solids

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Total Solids	80.4			%	1	SPT7237		

Batch Information

Analytical Batch: SPT7237
Analytical Method: SM20 2540G
Analysis Date/Time: 06/07/07 10:40
Dilution Factor: 1

Initial Prep Wt./Vol.: 1 mL
Container ID:1072473007-B
Analyst: IWM

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS-Cooler-SO**

SGS Ref. #: 1072473008

Project ID: Fort Yukon Former Landfill

Matrix: Soil/Solid

Percent Solids: 100

All Dates/Times are Alaska Local Time

Collection Date/Time: 05/30/07 10:00

Receipt Date/Time: 06/01/07 12:30

Volatile Fuels Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Gasoline Range Organics	ND	2.53	0.507	mg/Kg	1	VFC8411	VXX16834	
4-Bromofluorobenzene <sur>	87.4	50-150		%	1	VFC8411	VXX16834	

Batch Information

Analytical Batch: VFC8411

Analytical Method: AK101

Analysis Date/Time: 06/19/07 01:42

Dilution Factor: 1

Prep Batch: VXX16834

Prep Method: AK101

Prep Date/Time: 05/30/07 10:00

Initial Prep Wt./Vol.: 49.34 g

Prep Extract Vol.: 25 mL

Container ID:1072473008-A

Analyst: HM

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS-Cooler-SO**

SGS Ref. #: 1072473008

Project ID: Fort Yukon Former Landfill

Matrix: Soil/Solid

Percent Solids: 100

All Dates/Times are Alaska Local Time

Collection Date/Time: 05/30/07 10:00

Receipt Date/Time: 06/01/07 12:30

Volatile Gas Chromatography/Mass Spectroscopy

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Benzene	ND	13.2	3.95	ug/Kg	1	VMS9139	VXX16797	
Toluene	ND	50.7	15.2	ug/Kg	1	VMS9139	VXX16797	
Ethylbenzene	ND	25.3	7.90	ug/Kg	1	VMS9139	VXX16797	
P & M -Xylene	17.0 J	50.7	15.2	ug/Kg	1	VMS9139	VXX16797	
o-Xylene	ND	25.3	7.90	ug/Kg	1	VMS9139	VXX16797	
1,2-Dichloroethane-D4 <surr>	102	85-115		%	1	VMS9139	VXX16797	
Toluene-d8 <surr>	102	87-115		%	1	VMS9139	VXX16797	
4-Bromofluorobenzene <surr>	106	50-154		%	1	VMS9139	VXX16797	
Dibromofluoromethane <surr>	106	83-119		%	1	VMS9139	VXX16797	

Batch Information

Analytical Batch: VMS9139

Analytical Method: SW8260B

Analysis Date/Time: 06/11/07 17:11

Dilution Factor: 1

Prep Batch: VXX16797

Prep Method: SW5035A

Prep Date/Time: 05/30/07 10:00

Initial Prep Wt./Vol.: 49.34 g

Prep Extract Vol.: 25 mL

Container ID: 1072473008-A

Analyst: KPW

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS-Cooler-SO**

SGS Ref. #: 1072473008

Project ID: Fort Yukon Former Landfill

Matrix: Soil/Solid

Percent Solids: 100

All Dates/Times are Alaska Local Time

Collection Date/Time: 05/30/07 10:00

Receipt Date/Time: 06/01/07 12:30

Solids

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Total Solids	100			%	1	SPT7235		

Batch Information

Analytical Batch: SPT7235

Analytical Method: SM20 2540G

Analysis Date/Time: 06/07/07 11:15

Dilution Factor: 1

Initial Prep Wt./Vol.: 1 mL

Container ID:1072473008-A

Analyst: IWM



Oasis Environmental

Print Date: 6/26/2007

Client Sample ID: **07JWS001SW**
SGS Ref. #: 1072473009
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 12:00
Receipt Date/Time: 06/01/07 12:30

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Hardness as CaCO3	341	50.0	50.0	mg/L	5	MMS4892	MX19047	

Batch Information

Analytical Batch:
Analytical Method:
Analysis Date/Time:

Container ID:
Analyst:

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS001SW**
SGS Ref. #: 1072473009
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 12:00
Receipt Date/Time: 06/01/07 12:30

Metals Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Mercury	ND	0.200	0.0620	ug/L	1	MCV3643	MXX19036	

Batch Information

Analytical Batch: MCV3643
Analytical Method: SW7470A/E245.1
Analysis Date/Time: 06/13/07 17:12
Dilution Factor: 1

Prep Batch: MXX19036
Prep Method: METHOD
Prep Date/Time: 06/13/07 13:35

Initial Prep Wt./Vol.: 25 mL
Prep Extract Vol.: 50 mL
Container ID:1072473009-H
Analyst: AFH

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS001SW**
SGS Ref. #: 1072473009
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 12:00
Receipt Date/Time: 06/01/07 12:30

RCRA Metals

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Arsenic	ND	10.0	5.00	ug/L	5	MMS4892	MXX18996	
Barium	83.2	3.00	0.940	ug/L	5	MMS4892	MXX18996	
Cadmium	ND	2.00	1.00	ug/L	5	MMS4892	MXX18996	
Chromium	3.53 J	4.00	1.20	ug/L	5	MMS4893	MXX18996	
Lead	ND	1.00	0.310	ug/L	5	MMS4892	MXX18996	
Selenium	4.37 J	10.0	3.10	ug/L	5	MMS4892	MXX18996	
Silver	ND	2.00	0.620	ug/L	5	MMS4892	MXX18996	

Batch Information

Analytical Batch: MMS4892
Analytical Method: SW6020
Analysis Date/Time: 06/13/07 17:58
Dilution Factor: 5

Prep Batch: MXX18996
Prep Method: SW3010A
Prep Date/Time: 06/06/07 17:00

Initial Prep Wt./Vol.: 50 mL
Prep Extract Vol.: 50 mL
Container ID:1072473009-H
Analyst: TK

Analytical Batch: MMS4893
Analytical Method: SW6020
Analysis Date/Time: 06/14/07 12:45
Dilution Factor: 5

Prep Batch: MXX18996
Prep Method: SW3010A
Prep Date/Time: 06/06/07 17:00

Initial Prep Wt./Vol.: 50 mL
Prep Extract Vol.: 50 mL
Container ID:1072473009-H
Analyst: TK

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS001SW**
SGS Ref. #: 1072473009
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 12:00
Receipt Date/Time: 06/01/07 12:30

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Sulfate	22.4	0.100	0.0310	mg/L	1	WIC4047	WXX5895	
Bromide	ND	0.100	0.0310	mg/L	1	WIC4047	WXX5895	
Chloride	2.35	0.100	0.0310	mg/L	1	WIC4047	WXX5895	
Ortho Phosphate-P	0.124 J	0.400	0.120	mg/L	1	WIC4047	WXX5895	
Nitrate-N	0.375	0.100	0.0310	mg/L	1	WIC4047	WXX5895	
Nitrite-N	ND	0.100	0.0310	mg/L	1	WIC4047	WXX5895	

Batch Information

Analytical Batch: WIC4047
Analytical Method: EPA 300.0
Analysis Date/Time: 06/01/07 15:02
Dilution Factor: 1

Prep Batch: WXX5895
Prep Method: H2O/EP300
Prep Date/Time: 06/01/07 11:20

Initial Prep Wt./Vol.: 10 mL
Prep Extract Vol.: 10 mL
Container ID: 1072473009-G
Analyst: JDS

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS001SW**
SGS Ref. #: 1072473009
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 12:00
Receipt Date/Time: 06/01/07 12:30

Volatile Fuels Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Gasoline Range Organics	0.0129J	0.100	0.0100	mg/L	1	VFC8394	VXX16780	
4-Bromofluorobenzene <sur>	108	50-150		%	1	VFC8394	VXX16780	

Batch Information

Analytical Batch: VFC8394
Analytical Method: AK101
Analysis Date/Time: 06/08/07 03:38
Dilution Factor: 1

Prep Batch: VXX16780
Prep Method: SW5030B
Prep Date/Time: 06/07/07 10:00

Initial Prep Wt./Vol.: 5 mL
Prep Extract Vol.: 5 mL
Container ID:1072473009-A
Analyst: KAR

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS001SW**
SGS Ref. #: 1072473009
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 12:00
Receipt Date/Time: 06/01/07 12:30

Semivolatile Organic Fuels Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Diesel Range Organics	0.190 J	0.600	0.120	mg/L	1	XFC7424	XXX18135	
Residual Range Organics	0.895 J	1.00	0.200	mg/L	1	XFC7424	XXX18135	
n-Triacontane-d62 <surr>	120	50-150		%	1	XFC7424	XXX18135	
5a Androstane <surr>	85.9	50-150		%	1	XFC7424	XXX18135	

Batch Information

Analytical Batch: XFC7424
Analytical Method: AK102
Analysis Date/Time: 06/13/07 13:28
Dilution Factor: 1

Prep Batch: XXX18135
Prep Method: SW3520C
Prep Date/Time: 06/12/07 09:30

Initial Prep Wt./Vol.: 500 mL
Prep Extract Vol.: 1 mL
Container ID:1072473009-I
Analyst: JE

Analytical Batch: XFC7424
Analytical Method: AK103
Analysis Date/Time: 06/13/07 13:28
Dilution Factor: 1

Prep Batch: XXX18135
Prep Method: SW3520C
Prep Date/Time: 06/12/07 09:30

Initial Prep Wt./Vol.: 500 mL
Prep Extract Vol.: 1 mL
Container ID:1072473009-I
Analyst: JE



Oasis Environmental

Print Date: 6/26/2007

Client Sample ID: **07JWS001SW**
SGS Ref. #: 1072473009
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 12:00
Receipt Date/Time: 06/01/07 12:30

Semivolatile Organic Gas Chromatography

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
gamma-Chlordane	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
alpha-Chlordane	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
alpha-BHC	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
beta-BHC	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
gamma-BHC (Lindane)	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
delta-BHC	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Heptachlor	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Aldrin	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Heptachlor epoxide	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Endosulfan I	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
4,4'-DDE	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Dieldrin	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Endrin	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Endosulfan II	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
4,4'-DDD	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Endrin aldehyde	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
4,4'-DDT	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Endosulfan sulfate	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Endrin ketone	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Methoxychlor	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Toxaphene	ND	2.00	0.620	ug/L	1	XGC5824	XXX18103	
Tetrachloro-m-xylene <sur>	67	33-97		%	1	XGC5824	XXX18103	
Decachlorobiphenyl <sur>	86.4	32-135		%	1	XGC5824	XXX18103	

Batch Information

Analytical Batch: XGC5824
Analytical Method: SW8081A
Analysis Date/Time: 06/16/07 16:08
Dilution Factor: 1

Prep Batch: XXX18103
Prep Method: SW3510C
Prep Date/Time: 06/06/07 17:00

Initial Prep Wt./Vol.: 500 mL
Prep Extract Vol.: 1 mL
Container ID: 1072473009-K
Analyst: WAA

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS001SW**
SGS Ref. #: 1072473009
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 12:00
Receipt Date/Time: 06/01/07 12:30

Polychlorinated Biphenyls

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Aroclor-1016	ND	0.200	0.0620	ug/L	1	XGC5828	XXX18103	
Aroclor-1221	ND	0.200	0.0620	ug/L	1	XGC5828	XXX18103	
Aroclor-1232	ND	0.200	0.0620	ug/L	1	XGC5828	XXX18103	
Aroclor-1242	ND	0.200	0.0620	ug/L	1	XGC5828	XXX18103	
Aroclor-1248	ND	0.200	0.0620	ug/L	1	XGC5828	XXX18103	
Aroclor-1254	ND	0.200	0.0620	ug/L	1	XGC5828	XXX18103	
Aroclor-1260	ND	0.200	0.0620	ug/L	1	XGC5828	XXX18103	
Decachlorobiphenyl <sur>	87.2	42-120		%	1	XGC5828	XXX18103	

Batch Information

Analytical Batch: XGC5828
Analytical Method: SW8082
Analysis Date/Time: 06/21/07 01:32
Dilution Factor: 1

Prep Batch: XXX18103
Prep Method: SW3510C
Prep Date/Time: 06/06/07 17:00

Initial Prep Wt./Vol.: 500 mL
Prep Extract Vol.: 1 mL
Container ID: 1072473009-K
Analyst: SCL

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS001SW**
SGS Ref. #: 1072473009
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 12:00
Receipt Date/Time: 06/01/07 12:30

BTEX/Mass Spectroscopy

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Benzene	ND	0.400	0.120	ug/L	1	VMS9132	VXX16785	
Toluene	ND	1.00	0.310	ug/L	1	VMS9132	VXX16785	
Ethylbenzene	ND	1.00	0.310	ug/L	1	VMS9132	VXX16785	
P & M -Xylene	ND	2.00	0.620	ug/L	1	VMS9132	VXX16785	
o-Xylene	ND	1.00	0.310	ug/L	1	VMS9132	VXX16785	
4-Bromofluorobenzene <surr>	101	76-119		%	1	VMS9132	VXX16785	
Dibromofluoromethane <surr>	92.6	85-115		%	1	VMS9132	VXX16785	
1,2-Dichloroethane-D4 <surr>	94.5	72-119		%	1	VMS9132	VXX16785	
Toluene-d8 <surr>	108	85-120		%	1	VMS9132	VXX16785	

Batch Information

Analytical Batch: VMS9132
Analytical Method: SW8260B
Analysis Date/Time: 06/09/07 04:24
Dilution Factor: 1

Prep Batch: VXX16785
Prep Method: SW5030B
Prep Date/Time: 06/08/07 09:49

Initial Prep Wt./Vol.: 5 mL
Prep Extract Vol.: 5 mL
Container ID: 1072473009-B
Analyst: JDB



Oasis Environmental

Print Date: 6/26/2007

Client Sample ID: **07JWS002SW**
SGS Ref. #: 1072473010
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 12:40
Receipt Date/Time: 06/01/07 12:30

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Hardness as CaCO3	83.8	50.0	50.0	mg/L	5	MMS4892	MX19047	

Batch Information

Analytical Batch:
Analytical Method:
Analysis Date/Time:

Container ID:
Analyst:

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS002SW**
SGS Ref. #: 1072473010
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 12:40
Receipt Date/Time: 06/01/07 12:30

Metals Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Mercury	ND	0.200	0.0620	ug/L	1	MCV3643	MXX19036	

Batch Information

Analytical Batch: MCV3643
Analytical Method: SW7470A/E245.1
Analysis Date/Time: 06/13/07 17:15
Dilution Factor: 1

Prep Batch: MXX19036
Prep Method: METHOD
Prep Date/Time: 06/13/07 13:35

Initial Prep Wt./Vol.: 25 mL
Prep Extract Vol.: 50 mL
Container ID:1072473010-H
Analyst: AFH

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS002SW**
SGS Ref. #: 1072473010
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 12:40
Receipt Date/Time: 06/01/07 12:30

RCRA Metals

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Arsenic	ND	10.0	5.00	ug/L	5	MMS4892	MXX18996	
Barium	43.8	3.00	0.940	ug/L	5	MMS4892	MXX18996	
Cadmium	ND	2.00	1.00	ug/L	5	MMS4892	MXX18996	
Chromium	3.62 J	4.00	1.20	ug/L	5	MMS4893	MXX18996	
Lead	ND	1.00	0.310	ug/L	5	MMS4892	MXX18996	
Selenium	4.15 J	10.0	3.10	ug/L	5	MMS4892	MXX18996	
Silver	ND	2.00	0.620	ug/L	5	MMS4892	MXX18996	

Batch Information

Analytical Batch: MMS4892
Analytical Method: SW6020
Analysis Date/Time: 06/13/07 18:03
Dilution Factor: 5

Prep Batch: MXX18996
Prep Method: SW3010A
Prep Date/Time: 06/06/07 17:00

Initial Prep Wt./Vol.: 50 mL
Prep Extract Vol.: 50 mL
Container ID:1072473010-H
Analyst: TK

Analytical Batch: MMS4893
Analytical Method: SW6020
Analysis Date/Time: 06/14/07 12:50
Dilution Factor: 5

Prep Batch: MXX18996
Prep Method: SW3010A
Prep Date/Time: 06/06/07 17:00

Initial Prep Wt./Vol.: 50 mL
Prep Extract Vol.: 50 mL
Container ID:1072473010-H
Analyst: TK

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS002SW**
SGS Ref. #: 1072473010
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 12:40
Receipt Date/Time: 06/01/07 12:30

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Sulfate	27.4	0.100	0.0310	mg/L	1	WIC4047	WXX5895	
Bromide	ND	0.100	0.0310	mg/L	1	WIC4047	WXX5895	
Chloride	0.626	0.100	0.0310	mg/L	1	WIC4047	WXX5895	
Ortho Phosphate-P	ND	0.400	0.120	mg/L	1	WIC4047	WXX5895	
Nitrate-N	0.376	0.100	0.0310	mg/L	1	WIC4047	WXX5895	
Nitrite-N	ND	0.100	0.0310	mg/L	1	WIC4047	WXX5895	

Batch Information

Analytical Batch: WIC4047
Analytical Method: EPA 300.0
Analysis Date/Time: 06/01/07 15:22
Dilution Factor: 1

Prep Batch: WXX5895
Prep Method: H2O/EP300
Prep Date/Time: 06/01/07 11:20

Initial Prep Wt./Vol.: 10 mL
Prep Extract Vol.: 10 mL
Container ID: 1072473010-G
Analyst: JDS

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS002SW**
SGS Ref. #: 1072473010
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 12:40
Receipt Date/Time: 06/01/07 12:30

Volatile Fuels Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Gasoline Range Organics	0.0226J	0.100	0.0100	mg/L	1	VFC8394	VXX16780	
4-Bromofluorobenzene <sur>	102	50-150		%	1	VFC8394	VXX16780	

Batch Information

Analytical Batch: VFC8394
Analytical Method: AK101
Analysis Date/Time: 06/08/07 07:56
Dilution Factor: 1

Prep Batch: VXX16780
Prep Method: SW5030B
Prep Date/Time: 06/07/07 10:00

Initial Prep Wt./Vol.: 5 mL
Prep Extract Vol.: 5 mL
Container ID:1072473010-A
Analyst: KAR

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS002SW**
SGS Ref. #: 1072473010
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 12:40
Receipt Date/Time: 06/01/07 12:30

Semivolatile Organic Fuels Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Diesel Range Organics	0.209 J	0.600	0.120	mg/L	1	XFC7424	XXX18135	
Residual Range Organics	0.853 J	1.00	0.200	mg/L	1	XFC7424	XXX18135	
n-Triacontane-d62 <sur>	117	50-150		%	1	XFC7424	XXX18135	
5a Androstane <sur>	92	50-150		%	1	XFC7424	XXX18135	

Batch Information

Analytical Batch: XFC7424
Analytical Method: AK102
Analysis Date/Time: 06/13/07 14:32
Dilution Factor: 1

Prep Batch: XXX18135
Prep Method: SW3520C
Prep Date/Time: 06/12/07 09:30

Initial Prep Wt./Vol.: 500 mL
Prep Extract Vol.: 1 mL
Container ID:1072473010-I
Analyst: JE

Analytical Batch: XFC7424
Analytical Method: AK103
Analysis Date/Time: 06/13/07 14:32
Dilution Factor: 1

Prep Batch: XXX18135
Prep Method: SW3520C
Prep Date/Time: 06/12/07 09:30

Initial Prep Wt./Vol.: 500 mL
Prep Extract Vol.: 1 mL
Container ID:1072473010-I
Analyst: JE

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS002SW**
SGS Ref. #: 1072473010
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 12:40
Receipt Date/Time: 06/01/07 12:30

Semivolatile Organic Gas Chromatography

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
gamma-Chlordane	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
alpha-Chlordane	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
alpha-BHC	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
beta-BHC	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
gamma-BHC (Lindane)	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
delta-BHC	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Heptachlor	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Aldrin	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Heptachlor epoxide	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Endosulfan I	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
4,4'-DDE	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Dieldrin	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Endrin	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Endosulfan II	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
4,4'-DDD	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Endrin aldehyde	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
4,4'-DDT	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Endosulfan sulfate	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Endrin ketone	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Methoxychlor	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Toxaphene	ND	2.00	0.620	ug/L	1	XGC5824	XXX18103	
Tetrachloro-m-xylene <sur>	70.4	33-97		%	1	XGC5824	XXX18103	
Decachlorobiphenyl <sur>	89	32-135		%	1	XGC5824	XXX18103	

Batch Information

Analytical Batch: XGC5824
Analytical Method: SW8081A
Analysis Date/Time: 06/16/07 16:43
Dilution Factor: 1

Prep Batch: XXX18103
Prep Method: SW3510C
Prep Date/Time: 06/06/07 17:00

Initial Prep Wt./Vol.: 500 mL
Prep Extract Vol.: 1 mL
Container ID: 1072473010-K
Analyst: WAA

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS002SW**
SGS Ref. #: 1072473010
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 12:40
Receipt Date/Time: 06/01/07 12:30

Polychlorinated Biphenyls

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Aroclor-1016	ND	0.200	0.0620	ug/L	1	XGC5828	XXX18103	
Aroclor-1221	ND	0.200	0.0620	ug/L	1	XGC5828	XXX18103	
Aroclor-1232	ND	0.200	0.0620	ug/L	1	XGC5828	XXX18103	
Aroclor-1242	ND	0.200	0.0620	ug/L	1	XGC5828	XXX18103	
Aroclor-1248	ND	0.200	0.0620	ug/L	1	XGC5828	XXX18103	
Aroclor-1254	ND	0.200	0.0620	ug/L	1	XGC5828	XXX18103	
Aroclor-1260	ND	0.200	0.0620	ug/L	1	XGC5828	XXX18103	
Decachlorobiphenyl <sur>	91.6	42-120		%	1	XGC5828	XXX18103	

Batch Information

Analytical Batch: XGC5828
Analytical Method: SW8082
Analysis Date/Time: 06/21/07 02:00
Dilution Factor: 1

Prep Batch: XXX18103
Prep Method: SW3510C
Prep Date/Time: 06/06/07 17:00

Initial Prep Wt./Vol.: 500 mL
Prep Extract Vol.: 1 mL
Container ID: 1072473010-K
Analyst: SCL

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS002SW**
SGS Ref. #: 1072473010
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 12:40
Receipt Date/Time: 06/01/07 12:30

BTEX/Mass Spectroscopy

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Benzene	ND	0.400	0.120	ug/L	1	VMS9132	VXX16785	
Toluene	ND	1.00	0.310	ug/L	1	VMS9132	VXX16785	
Ethylbenzene	ND	1.00	0.310	ug/L	1	VMS9132	VXX16785	
P & M -Xylene	ND	2.00	0.620	ug/L	1	VMS9132	VXX16785	
o-Xylene	ND	1.00	0.310	ug/L	1	VMS9132	VXX16785	
4-Bromofluorobenzene <surr>	105	76-119		%	1	VMS9132	VXX16785	
Dibromofluoromethane <surr>	99.9	85-115		%	1	VMS9132	VXX16785	
1,2-Dichloroethane-D4 <surr>	99.7	72-119		%	1	VMS9132	VXX16785	
Toluene-d8 <surr>	108	85-120		%	1	VMS9132	VXX16785	

Batch Information

Analytical Batch: VMS9132
Analytical Method: SW8260B
Analysis Date/Time: 06/09/07 04:58
Dilution Factor: 1

Prep Batch: VXX16785
Prep Method: SW5030B
Prep Date/Time: 06/08/07 09:49

Initial Prep Wt./Vol.: 5 mL
Prep Extract Vol.: 5 mL
Container ID: 1072473010-B
Analyst: JDB



Oasis Environmental

Print Date: 6/26/2007

Client Sample ID: **07JWS003SW**
SGS Ref. #: 1072473011
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 13:30
Receipt Date/Time: 06/01/07 12:30

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Hardness as CaCO3	130	50.0	50.0	mg/L	5	MMS4892	MX19047	

Batch Information

Analytical Batch:
Analytical Method:
Analysis Date/Time:

Container ID:
Analyst:

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS003SW**
SGS Ref. #: 1072473011
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 13:30
Receipt Date/Time: 06/01/07 12:30

Metals Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Mercury	ND	0.200	0.0620	ug/L	1	MCV3643	MXX19036	

Batch Information

Analytical Batch: MCV3643
Analytical Method: SW7470A/E245.1
Analysis Date/Time: 06/13/07 17:18
Dilution Factor: 1

Prep Batch: MXX19036
Prep Method: METHOD
Prep Date/Time: 06/13/07 13:35

Initial Prep Wt./Vol.: 25 mL
Prep Extract Vol.: 50 mL
Container ID:1072473011-H
Analyst: AFH

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS003SW**
SGS Ref. #: 1072473011
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 13:30
Receipt Date/Time: 06/01/07 12:30

RCRA Metals

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Arsenic	ND	10.0	5.00	ug/L	5	MMS4892	MXX18996	
Barium	99.1	3.00	0.940	ug/L	5	MMS4892	MXX18996	
Cadmium	ND	2.00	1.00	ug/L	5	MMS4892	MXX18996	
Chromium	3.67 J	4.00	1.20	ug/L	5	MMS4893	MXX18996	
Lead	ND	1.00	0.310	ug/L	5	MMS4892	MXX18996	
Selenium	4.13 J	10.0	3.10	ug/L	5	MMS4892	MXX18996	
Silver	ND	2.00	0.620	ug/L	5	MMS4892	MXX18996	

Batch Information

Analytical Batch: MMS4892
Analytical Method: SW6020
Analysis Date/Time: 06/13/07 18:09
Dilution Factor: 5

Prep Batch: MXX18996
Prep Method: SW3010A
Prep Date/Time: 06/06/07 17:00

Initial Prep Wt./Vol.: 50 mL
Prep Extract Vol.: 50 mL
Container ID:1072473011-H
Analyst: TK

Analytical Batch: MMS4893
Analytical Method: SW6020
Analysis Date/Time: 06/14/07 12:56
Dilution Factor: 5

Prep Batch: MXX18996
Prep Method: SW3010A
Prep Date/Time: 06/06/07 17:00

Initial Prep Wt./Vol.: 50 mL
Prep Extract Vol.: 50 mL
Container ID:1072473011-H
Analyst: TK

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS003SW**
SGS Ref. #: 1072473011
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 13:30
Receipt Date/Time: 06/01/07 12:30

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Sulfate	26.8	0.100	0.0310	mg/L	1	WIC4047	WXX5895	
Bromide	ND	0.100	0.0310	mg/L	1	WIC4047	WXX5895	
Chloride	0.831	0.100	0.0310	mg/L	1	WIC4047	WXX5895	
Nitrate-N	0.370	0.100	0.0310	mg/L	1	WIC4047	WXX5895	
Ortho Phosphate-P	ND	0.400	0.120	mg/L	1	WIC4047	WXX5895	
Nitrite-N	ND	0.100	0.0310	mg/L	1	WIC4047	WXX5895	

Batch Information

Analytical Batch: WIC4047
Analytical Method: EPA 300.0
Analysis Date/Time: 06/01/07 15:43
Dilution Factor: 1

Prep Batch: WXX5895
Prep Method: H2O/EP300
Prep Date/Time: 06/01/07 11:20

Initial Prep Wt./Vol.: 10 mL
Prep Extract Vol.: 10 mL
Container ID: 1072473011-G
Analyst: JDS

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS003SW**
SGS Ref. #: 1072473011
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 13:30
Receipt Date/Time: 06/01/07 12:30

Volatile Fuels Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Gasoline Range Organics	0.0172J	0.100	0.0100	mg/L	1	VFC8394	VXX16780	
4-Bromofluorobenzene <sur>	103	50-150		%	1	VFC8394	VXX16780	

Batch Information

Analytical Batch: VFC8394
Analytical Method: AK101
Analysis Date/Time: 06/08/07 08:25
Dilution Factor: 1

Prep Batch: VXX16780
Prep Method: SW5030B
Prep Date/Time: 06/07/07 10:00

Initial Prep Wt./Vol.: 5 mL
Prep Extract Vol.: 5 mL
Container ID:1072473011-A
Analyst: KAR

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS003SW**
SGS Ref. #: 1072473011
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 13:30
Receipt Date/Time: 06/01/07 12:30

Semivolatile Organic Fuels Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Diesel Range Organics	0.212 J	0.600	0.120	mg/L	1	XFC7424	XXX18135	
Residual Range Organics	1.09	1.00	0.200	mg/L	1	XFC7424	XXX18135	
n-Triacontane-d62 <surr>	88.6	50-150		%	1	XFC7424	XXX18135	
5a Androstane <surr>	89.1	50-150		%	1	XFC7424	XXX18135	

Batch Information

Analytical Batch: XFC7424
Analytical Method: AK102
Analysis Date/Time: 06/13/07 14:37
Dilution Factor: 1

Prep Batch: XXX18135
Prep Method: SW3520C
Prep Date/Time: 06/12/07 09:30

Initial Prep Wt./Vol.: 500 mL
Prep Extract Vol.: 1 mL
Container ID:1072473011-I
Analyst: JE

Analytical Batch: XFC7424
Analytical Method: AK103
Analysis Date/Time: 06/13/07 14:37
Dilution Factor: 1

Prep Batch: XXX18135
Prep Method: SW3520C
Prep Date/Time: 06/12/07 09:30

Initial Prep Wt./Vol.: 500 mL
Prep Extract Vol.: 1 mL
Container ID:1072473011-I
Analyst: JE

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS003SW**
SGS Ref. #: 1072473011
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 13:30
Receipt Date/Time: 06/01/07 12:30

Semivolatile Organic Gas Chromatography

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
gamma-Chlordane	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
alpha-Chlordane	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
alpha-BHC	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
beta-BHC	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
gamma-BHC (Lindane)	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
delta-BHC	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Heptachlor	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Aldrin	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Heptachlor epoxide	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Endosulfan I	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
4,4'-DDE	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Dieldrin	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Endrin	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Endosulfan II	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
4,4'-DDD	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Endrin aldehyde	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
4,4'-DDT	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Endosulfan sulfate	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Endrin ketone	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Methoxychlor	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Toxaphene	ND	2.00	0.620	ug/L	1	XGC5824	XXX18103	
Tetrachloro-m-xylene <sur>	65.6	33-97		%	1	XGC5824	XXX18103	
Decachlorobiphenyl <sur>	85.9	32-135		%	1	XGC5824	XXX18103	

Batch Information

Analytical Batch: XGC5824
Analytical Method: SW8081A
Analysis Date/Time: 06/16/07 17:18
Dilution Factor: 1

Prep Batch: XXX18103
Prep Method: SW3510C
Prep Date/Time: 06/06/07 17:00

Initial Prep Wt./Vol.: 500 mL
Prep Extract Vol.: 1 mL
Container ID:1072473011-K
Analyst: WAA

**Oasis Environmental**

Print Date: 6/26/2007

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Polychlorinated Biphenyls

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Aroclor-1016	ND	0.200	0.0620	ug/L	1	XGC5828	XXX18103	
Aroclor-1221	ND	0.200	0.0620	ug/L	1	XGC5828	XXX18103	
Aroclor-1232	ND	0.200	0.0620	ug/L	1	XGC5828	XXX18103	
Aroclor-1242	ND	0.200	0.0620	ug/L	1	XGC5828	XXX18103	
Aroclor-1248	ND	0.200	0.0620	ug/L	1	XGC5828	XXX18103	
Aroclor-1254	ND	0.200	0.0620	ug/L	1	XGC5828	XXX18103	
Aroclor-1260	ND	0.200	0.0620	ug/L	1	XGC5828	XXX18103	
Decachlorobiphenyl <sur>	87.2	42-120		%	1	XGC5828	XXX18103	

Batch Information

Analytical Batch: XGC5828
Analytical Method: SW8082
Analysis Date/Time: 06/21/07 02:28
Dilution Factor: 1

Prep Batch: XXX18103
Prep Method: SW3510C
Prep Date/Time: 06/06/07 17:00

Initial Prep Wt./Vol.: 500 mL
Prep Extract Vol.: 1 mL
Container ID: 1072473011-K
Analyst: SCL

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS003SW**
SGS Ref. #: 1072473011
Project ID: Fort Yukon Former Landfill
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BTEX/Mass Spectroscopy

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Benzene	ND	0.400	0.120	ug/L	1	VMS9132	VXX16785	
Toluene	0.440 J	1.00	0.310	ug/L	1	VMS9132	VXX16785	
Ethylbenzene	ND	1.00	0.310	ug/L	1	VMS9132	VXX16785	
P & M -Xylene	ND	2.00	0.620	ug/L	1	VMS9132	VXX16785	
o-Xylene	ND	1.00	0.310	ug/L	1	VMS9132	VXX16785	
4-Bromofluorobenzene <surr>	104	76-119		%	1	VMS9132	VXX16785	
Dibromofluoromethane <surr>	102	85-115		%	1	VMS9132	VXX16785	
1,2-Dichloroethane-D4 <surr>	98	72-119		%	1	VMS9132	VXX16785	
Toluene-d8 <surr>	106	85-120		%	1	VMS9132	VXX16785	

Batch Information

Analytical Batch: VMS9132
Analytical Method: SW8260B
Analysis Date/Time: 06/09/07 05:32
Dilution Factor: 1

Prep Batch: VXX16785
Prep Method: SW5030B
Prep Date/Time: 06/08/07 09:49

Initial Prep Wt./Vol.: 5 mL
Prep Extract Vol.: 5 mL
Container ID: 1072473011-F
Analyst: JDB

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS003SW**
SGS Ref. #: 1072473011
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 13:30
Receipt Date/Time: 06/01/07 12:30

Semivolatile Organic GC/MS

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
2-Methylphenol (o-Cresol)	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
3&4-Methylphenol (p&m-Cresol)	ND	0.0200	0.00620	mg/L	1	XMS4029	XXX18114	
Hexachlorobutadiene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
2,4-Dinitrotoluene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Hexachlorobenzene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Hexachloroethane	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Nitrobenzene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Pentachlorophenol	ND	0.0500	0.0150	mg/L	1	XMS4029	XXX18114	
2,4,5-Trichlorophenol	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
2,4,6-Trichlorophenol	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
N-Nitrosodimethylamine	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
N-Nitroso-di-n-propylamine	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Phenol	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Aniline	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Bis(2-Chloroethyl)ether	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Isophorone	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
2-Chlorophenol	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
1,3-Dichlorobenzene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
2-Nitrophenol	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
2,4-Dimethylphenol	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
1,4-Dichlorobenzene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Benzoic acid	ND	0.0500	0.0150	mg/L	1	XMS4029	XXX18114	
1,2-Dichlorobenzene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Bis(2chloro1methylethyl)Ether	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Bis(2-Chloroethoxy)methane	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Benzyl alcohol	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
2,4-Dichlorophenol	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
1,2,4-Trichlorobenzene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Naphthalene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
4-Chloroaniline	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
4-Chloro-3-methylphenol	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
2-Methylnaphthalene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Hexachlorocyclopentadiene	ND	0.0300	0.00940	mg/L	1	XMS4029	XXX18114	
2-Chloronaphthalene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
2-Nitroaniline	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Dimethylphthalate	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	

**Oasis Environmental**

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Semivolatile Organic GC/MS

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2,6-Dinitrotoluene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Acenaphthylene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
3-Nitroaniline	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Acenaphthene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
2,4-Dinitrophenol	ND	0.0500	0.0150	mg/L	1	XMS4029	XXX18114	
4-Nitrophenol	ND	0.0500	0.0150	mg/L	1	XMS4029	XXX18114	
Dibenzofuran	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Diethylphthalate	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Fluorene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
4-Chlorophenyl-phenylether	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
4-Nitroaniline	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
2-Methyl-4,6-dinitrophenol	ND	0.0500	0.0150	mg/L	1	XMS4029	XXX18114	
N-Nitrosodiphenylamine	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Azobenzene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
4-Bromophenyl-phenylether	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Phenanthrene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Anthracene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Di-n-butylphthalate	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Fluoranthene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Pyrene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Butylbenzylphthalate	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
3,3-Dichlorobenzidine	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Benzo(a)Anthracene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Chrysene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
bis(2-Ethylhexyl)phthalate	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
di-n-Octylphthalate	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Benzo[b]Fluoranthene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Benzo[k]fluoranthene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Benzo[a]pyrene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Indeno[1,2,3-c,d] pyrene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Dibenzo[a,h]anthracene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Benzo[g,h,i]perylene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
2-Fluorophenol <sur>	47.9	20-82		%	1	XMS4029	XXX18114	
Phenol-d6 <sur>	66.4	45-75		%	1	XMS4029	XXX18114	
Nitrobenzene-d5 <sur>	68.2	49-94		%	1	XMS4029	XXX18114	
2-Fluorobiphenyl <sur>	75.8	59-98		%	1	XMS4029	XXX18114	
2,4,6-Tribromophenol <sur>	95.6	68-114		%	1	XMS4029	XXX18114	

**Oasis Environmental**

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Semivolatile Organic GC/MS

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Terphenyl-d14 <sur>	95.6	69-118		%	1	XMS4029	XXX18114	

Batch Information

Analytical Batch: XMS4029
Analytical Method: SW8270C
Analysis Date/Time: 06/12/07 00:39
Dilution Factor: 1

Prep Batch: XXX18114
Prep Method: SW3510C
Prep Date/Time: 06/07/07 17:00

Initial Prep Wt./Vol.: 1000 mL
Prep Extract Vol.: 1 mL
Container ID:1072473011-L
Analyst: WAA



Oasis Environmental

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Client Sample ID: **07JWS004SW**
SGS Ref. #: 1072473012
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Collection Date/Time: 05/31/07 10:35
Receipt Date/Time: 06/01/07 12:30

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Hardness as CaCO3	157	50.0	50.0	mg/L	5	MMS4892	MXX19047	

Batch Information

Analytical Batch:
Analytical Method:
Analysis Date/Time:

Container ID:
Analyst:

**Oasis Environmental**

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Metals Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Mercury	ND	0.200	0.0620	ug/L	1	MCV3643	MXX19036	

Batch Information

Analytical Batch: MCV3643
Analytical Method: SW7470A/E245.1
Analysis Date/Time: 06/13/07 17:21
Dilution Factor: 1

Prep Batch: MXX19036
Prep Method: METHOD
Prep Date/Time: 06/13/07 13:35

Initial Prep Wt./Vol.: 25 mL
Prep Extract Vol.: 50 mL
Container ID:1072473012-H
Analyst: AFH

**Oasis Environmental**

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RCRA Metals

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Arsenic	ND	10.0	5.00	ug/L	5	MMS4892	MXX18996	
Barium	77.8	3.00	0.940	ug/L	5	MMS4892	MXX18996	
Cadmium	ND	2.00	1.00	ug/L	5	MMS4892	MXX18996	
Chromium	3.26 J	4.00	1.20	ug/L	5	MMS4893	MXX18996	
Lead	ND	1.00	0.310	ug/L	5	MMS4892	MXX18996	
Selenium	ND	10.0	3.10	ug/L	5	MMS4892	MXX18996	
Silver	ND	2.00	0.620	ug/L	5	MMS4892	MXX18996	

Batch Information

Analytical Batch: MMS4892
Analytical Method: SW6020
Analysis Date/Time: 06/13/07 18:14
Dilution Factor: 5

Prep Batch: MXX18996
Prep Method: SW3010A
Prep Date/Time: 06/06/07 17:00

Initial Prep Wt./Vol.: 50 mL
Prep Extract Vol.: 50 mL
Container ID:1072473012-H
Analyst: TK

Analytical Batch: MMS4893
Analytical Method: SW6020
Analysis Date/Time: 06/14/07 13:01
Dilution Factor: 5

Prep Batch: MXX18996
Prep Method: SW3010A
Prep Date/Time: 06/06/07 17:00

Initial Prep Wt./Vol.: 50 mL
Prep Extract Vol.: 50 mL
Container ID:1072473012-H
Analyst: TK

**Oasis Environmental**

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Waters Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Sulfate	2.53	0.100	0.0310	mg/L	1	WIC4047	WXX5895	
Bromide	ND	0.100	0.0310	mg/L	1	WIC4047	WXX5895	
Chloride	4.16	0.100	0.0310	mg/L	1	WIC4047	WXX5895	
Ortho Phosphate-P	ND	0.400	0.120	mg/L	1	WIC4047	WXX5895	
Nitrate-N	0.372	0.100	0.0310	mg/L	1	WIC4047	WXX5895	
Nitrite-N	ND	0.100	0.0310	mg/L	1	WIC4047	WXX5895	

Batch Information

Analytical Batch: WIC4047
Analytical Method: EPA 300.0
Analysis Date/Time: 06/01/07 16:03
Dilution Factor: 1

Prep Batch: WXX5895
Prep Method: H2O/EP300
Prep Date/Time: 06/01/07 11:20

Initial Prep Wt./Vol.: 10 mL
Prep Extract Vol.: 10 mL
Container ID: 1072473012-G
Analyst: JDS

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS004SW**
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Volatile Fuels Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Gasoline Range Organics	0.0150J	0.100	0.0100	mg/L	1	VFC8394	VXX16780	
4-Bromofluorobenzene <sur>	104	50-150		%	1	VFC8394	VXX16780	

Batch Information

Analytical Batch: VFC8394
Analytical Method: AK101
Analysis Date/Time: 06/08/07 08:54
Dilution Factor: 1

Prep Batch: VXX16780
Prep Method: SW5030B
Prep Date/Time: 06/07/07 10:00

Initial Prep Wt./Vol.: 5 mL
Prep Extract Vol.: 5 mL
Container ID:1072473012-A
Analyst: KAR

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS004SW**
SGS Ref. #: 1072473012
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 10:35
Receipt Date/Time: 06/01/07 12:30

Semivolatile Organic Fuels Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Diesel Range Organics	0.722	0.600	0.120	mg/L	1	XFC7429	XXX18136	
Residual Range Organics	1.16	1.00	0.200	mg/L	1	XFC7429	XXX18136	
n-Triacontane-d62 <sur>	120	50-150		%	1	XFC7429	XXX18136	
5a Androstane <sur>	99.2	50-150		%	1	XFC7429	XXX18136	

Batch Information

Analytical Batch: XFC7429
Analytical Method: AK102
Analysis Date/Time: 06/16/07 17:09
Dilution Factor: 1

Prep Batch: XXX18136
Prep Method: SW3520C
Prep Date/Time: 06/12/07 16:45

Initial Prep Wt./Vol.: 500 mL
Prep Extract Vol.: 1 mL
Container ID:1072473012-I
Analyst: JE

Analytical Batch: XFC7429
Analytical Method: AK103
Analysis Date/Time: 06/16/07 17:09
Dilution Factor: 1

Prep Batch: XXX18136
Prep Method: SW3520C
Prep Date/Time: 06/12/07 16:45

Initial Prep Wt./Vol.: 500 mL
Prep Extract Vol.: 1 mL
Container ID:1072473012-I
Analyst: JE

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS004SW**
SGS Ref. #: 1072473012
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 10:35
Receipt Date/Time: 06/01/07 12:30

Semivolatile Organic Gas Chromatography

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
gamma-Chlordane	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
alpha-Chlordane	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
alpha-BHC	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
beta-BHC	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
gamma-BHC (Lindane)	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
delta-BHC	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Heptachlor	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Aldrin	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Heptachlor epoxide	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Endosulfan I	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
4,4'-DDE	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Dieldrin	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Endrin	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Endosulfan II	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
4,4'-DDD	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Endrin aldehyde	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
4,4'-DDT	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Endosulfan sulfate	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Endrin ketone	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Methoxychlor	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Toxaphene	ND	2.00	0.620	ug/L	1	XGC5824	XXX18103	
Tetrachloro-m-xylene <sur>	61.3	33-97		%	1	XGC5824	XXX18103	
Decachlorobiphenyl <sur>	84	32-135		%	1	XGC5824	XXX18103	

Batch Information

Analytical Batch: XGC5824
Analytical Method: SW8081A
Analysis Date/Time: 06/16/07 18:27
Dilution Factor: 1

Prep Batch: XXX18103
Prep Method: SW3510C
Prep Date/Time: 06/06/07 17:00

Initial Prep Wt./Vol.: 500 mL
Prep Extract Vol.: 1 mL
Container ID: 1072473012-K
Analyst: WAA

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS004SW**
SGS Ref. #: 1072473012
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 10:35
Receipt Date/Time: 06/01/07 12:30

Polychlorinated Biphenyls

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Aroclor-1016	ND	0.200	0.0620	ug/L	1	XGC5828	XXX18103	
Aroclor-1221	ND	0.200	0.0620	ug/L	1	XGC5828	XXX18103	
Aroclor-1232	ND	0.200	0.0620	ug/L	1	XGC5828	XXX18103	
Aroclor-1242	ND	0.200	0.0620	ug/L	1	XGC5828	XXX18103	
Aroclor-1248	ND	0.200	0.0620	ug/L	1	XGC5828	XXX18103	
Aroclor-1254	ND	0.200	0.0620	ug/L	1	XGC5828	XXX18103	
Aroclor-1260	ND	0.200	0.0620	ug/L	1	XGC5828	XXX18103	
Decachlorobiphenyl <sur>	82.4	42-120		%	1	XGC5828	XXX18103	

Batch Information

Analytical Batch: XGC5828
Analytical Method: SW8082
Analysis Date/Time: 06/21/07 02:55
Dilution Factor: 1

Prep Batch: XXX18103
Prep Method: SW3510C
Prep Date/Time: 06/06/07 17:00

Initial Prep Wt./Vol.: 500 mL
Prep Extract Vol.: 1 mL
Container ID: 1072473012-K
Analyst: SCL

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS004SW**
SGS Ref. #: 1072473012
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 10:35
Receipt Date/Time: 06/01/07 12:30

BTEX/Mass Spectroscopy

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Benzene	ND	0.400	0.120	ug/L	1	VMS9132	VXX16785	
Toluene	0.310 J	1.00	0.310	ug/L	1	VMS9132	VXX16785	
Ethylbenzene	ND	1.00	0.310	ug/L	1	VMS9132	VXX16785	
P & M -Xylene	ND	2.00	0.620	ug/L	1	VMS9132	VXX16785	
o-Xylene	ND	1.00	0.310	ug/L	1	VMS9132	VXX16785	
4-Bromofluorobenzene <surr>	104	76-119		%	1	VMS9132	VXX16785	
Dibromofluoromethane <surr>	109	85-115		%	1	VMS9132	VXX16785	
1,2-Dichloroethane-D4 <surr>	107	72-119		%	1	VMS9132	VXX16785	
Toluene-d8 <surr>	107	85-120		%	1	VMS9132	VXX16785	

Batch Information

Analytical Batch: VMS9132
Analytical Method: SW8260B
Analysis Date/Time: 06/09/07 01:37
Dilution Factor: 1

Prep Batch: VXX16785
Prep Method: SW5030B
Prep Date/Time: 06/08/07 09:49

Initial Prep Wt./Vol.: 5 mL
Prep Extract Vol.: 5 mL
Container ID: 1072473012-B
Analyst: JDB



Oasis Environmental

Print Date: 6/26/2007

Client Sample ID: **07JWS005SW**
SGS Ref. #: 1072473013
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 14:00
Receipt Date/Time: 06/01/07 12:30

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Hardness as CaCO3	118	50.0	50.0	mg/L	5	MMS4892	MX19047	

Batch Information

Analytical Batch:
Analytical Method:
Analysis Date/Time:

Container ID:
Analyst:

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS005SW**
SGS Ref. #: 1072473013
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 14:00
Receipt Date/Time: 06/01/07 12:30

Metals Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Mercury	ND	0.200	0.0620	ug/L	1	MCV3643	MXX19036	

Batch Information

Analytical Batch: MCV3643
Analytical Method: SW7470A/E245.1
Analysis Date/Time: 06/13/07 17:24
Dilution Factor: 1

Prep Batch: MXX19036
Prep Method: METHOD
Prep Date/Time: 06/13/07 13:35

Initial Prep Wt./Vol.: 25 mL
Prep Extract Vol.: 50 mL
Container ID:1072473013-H
Analyst: AFH

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS005SW**
SGS Ref. #: 1072473013
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 14:00
Receipt Date/Time: 06/01/07 12:30

RCRA Metals

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Arsenic	ND	10.0	5.00	ug/L	5	MMS4892	MXX18996	
Barium	92.5	3.00	0.940	ug/L	5	MMS4892	MXX18996	
Cadmium	ND	2.00	1.00	ug/L	5	MMS4892	MXX18996	
Chromium	3.67 J	4.00	1.20	ug/L	5	MMS4893	MXX18996	
Lead	ND	1.00	0.310	ug/L	5	MMS4892	MXX18996	
Selenium	4.45 J	10.0	3.10	ug/L	5	MMS4892	MXX18996	
Silver	ND	2.00	0.620	ug/L	5	MMS4892	MXX18996	

Batch Information

Analytical Batch: MMS4892
Analytical Method: SW6020
Analysis Date/Time: 06/13/07 18:19
Dilution Factor: 5

Prep Batch: MXX18996
Prep Method: SW3010A
Prep Date/Time: 06/06/07 17:00

Initial Prep Wt./Vol.: 50 mL
Prep Extract Vol.: 50 mL
Container ID:1072473013-H
Analyst: TK

Analytical Batch: MMS4893
Analytical Method: SW6020
Analysis Date/Time: 06/14/07 13:06
Dilution Factor: 5

Prep Batch: MXX18996
Prep Method: SW3010A
Prep Date/Time: 06/06/07 17:00

Initial Prep Wt./Vol.: 50 mL
Prep Extract Vol.: 50 mL
Container ID:1072473013-H
Analyst: TK

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS005SW**
SGS Ref. #: 1072473013
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 14:00
Receipt Date/Time: 06/01/07 12:30

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Sulfate	26.8	0.100	0.0310	mg/L	1	WIC4047	WXX5895	
Bromide	ND	0.100	0.0310	mg/L	1	WIC4047	WXX5895	
Chloride	0.838	0.100	0.0310	mg/L	1	WIC4047	WXX5895	
Nitrate-N	0.370	0.100	0.0310	mg/L	1	WIC4047	WXX5895	
Ortho Phosphate-P	ND	0.400	0.120	mg/L	1	WIC4047	WXX5895	
Nitrite-N	ND	0.100	0.0310	mg/L	1	WIC4047	WXX5895	

Batch Information

Analytical Batch: WIC4047
Analytical Method: EPA 300.0
Analysis Date/Time: 06/01/07 16:23
Dilution Factor: 1

Prep Batch: WXX5895
Prep Method: H2O/EP300
Prep Date/Time: 06/01/07 11:20

Initial Prep Wt./Vol.: 10 mL
Prep Extract Vol.: 10 mL
Container ID:1072473013-G
Analyst: JDS

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS005SW**
SGS Ref. #: 1072473013
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 14:00
Receipt Date/Time: 06/01/07 12:30

Volatile Fuels Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Gasoline Range Organics	0.0154J	0.100	0.0100	mg/L	1	VFC8394	VXX16780	
4-Bromofluorobenzene <sur>	102	50-150		%	1	VFC8394	VXX16780	

Batch Information

Analytical Batch: VFC8394
Analytical Method: AK101
Analysis Date/Time: 06/08/07 09:23
Dilution Factor: 1

Prep Batch: VXX16780
Prep Method: SW5030B
Prep Date/Time: 06/07/07 10:00

Initial Prep Wt./Vol.: 5 mL
Prep Extract Vol.: 5 mL
Container ID:1072473013-A
Analyst: KAR

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS005SW**
SGS Ref. #: 1072473013
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 14:00
Receipt Date/Time: 06/01/07 12:30

Semivolatile Organic Fuels Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Diesel Range Organics	0.211 J	0.600	0.120	mg/L	1	XFC7429	XXX18136	
Residual Range Organics	0.496 J	1.00	0.200	mg/L	1	XFC7429	XXX18136	
n-Triacontane-d62 <surr>	100	50-150		%	1	XFC7429	XXX18136	
5a Androstane <surr>	94.3	50-150		%	1	XFC7429	XXX18136	

Batch Information

Analytical Batch: XFC7429
Analytical Method: AK102
Analysis Date/Time: 06/16/07 17:19
Dilution Factor: 1

Prep Batch: XXX18136
Prep Method: SW3520C
Prep Date/Time: 06/12/07 16:45

Initial Prep Wt./Vol.: 500 mL
Prep Extract Vol.: 1 mL
Container ID:1072473013-I
Analyst: JE

Analytical Batch: XFC7429
Analytical Method: AK103
Analysis Date/Time: 06/16/07 17:19
Dilution Factor: 1

Prep Batch: XXX18136
Prep Method: SW3520C
Prep Date/Time: 06/12/07 16:45

Initial Prep Wt./Vol.: 500 mL
Prep Extract Vol.: 1 mL
Container ID:1072473013-I
Analyst: JE

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS005SW**
SGS Ref. #: 1072473013
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 14:00
Receipt Date/Time: 06/01/07 12:30

Semivolatile Organic Gas Chromatography

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
gamma-Chlordane	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
alpha-Chlordane	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
alpha-BHC	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
beta-BHC	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
gamma-BHC (Lindane)	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
delta-BHC	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Heptachlor	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Aldrin	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Heptachlor epoxide	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Endosulfan I	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
4,4'-DDE	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Dieldrin	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Endrin	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Endosulfan II	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
4,4'-DDD	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Endrin aldehyde	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
4,4'-DDT	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Endosulfan sulfate	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Endrin ketone	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Methoxychlor	ND	0.0600	0.0188	ug/L	1	XGC5824	XXX18103	
Toxaphene	ND	2.00	0.620	ug/L	1	XGC5824	XXX18103	
Tetrachloro-m-xylene <sur>	64	33-97		%	1	XGC5824	XXX18103	
Decachlorobiphenyl <sur>	86.6	32-135		%	1	XGC5824	XXX18103	

Batch Information

Analytical Batch: XGC5824
Analytical Method: SW8081A
Analysis Date/Time: 06/16/07 19:37
Dilution Factor: 1

Prep Batch: XXX18103
Prep Method: SW3510C
Prep Date/Time: 06/06/07 17:00

Initial Prep Wt./Vol.: 500 mL
Prep Extract Vol.: 1 mL
Container ID: 1072473013-K
Analyst: WAA

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS005SW**
SGS Ref. #: 1072473013
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 14:00
Receipt Date/Time: 06/01/07 12:30

Polychlorinated Biphenyls

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Aroclor-1016	ND	0.200	0.0620	ug/L	1	XGC5828	XXX18103	
Aroclor-1221	ND	0.200	0.0620	ug/L	1	XGC5828	XXX18103	
Aroclor-1232	ND	0.200	0.0620	ug/L	1	XGC5828	XXX18103	
Aroclor-1242	ND	0.200	0.0620	ug/L	1	XGC5828	XXX18103	
Aroclor-1248	ND	0.200	0.0620	ug/L	1	XGC5828	XXX18103	
Aroclor-1254	ND	0.200	0.0620	ug/L	1	XGC5828	XXX18103	
Aroclor-1260	ND	0.200	0.0620	ug/L	1	XGC5828	XXX18103	
Decachlorobiphenyl <sur>	87.5	42-120		%	1	XGC5828	XXX18103	

Batch Information

Analytical Batch: XGC5828
Analytical Method: SW8082
Analysis Date/Time: 06/21/07 03:23
Dilution Factor: 1

Prep Batch: XXX18103
Prep Method: SW3510C
Prep Date/Time: 06/06/07 17:00

Initial Prep Wt./Vol.: 500 mL
Prep Extract Vol.: 1 mL
Container ID: 1072473013-K
Analyst: SCL

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS005SW**
SGS Ref. #: 1072473013
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 14:00
Receipt Date/Time: 06/01/07 12:30

BTEX/Mass Spectroscopy

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Benzene	ND	0.400	0.120	ug/L	1	VMS9132	VXX16785	
Toluene	0.550 J	1.00	0.310	ug/L	1	VMS9132	VXX16785	
Ethylbenzene	ND	1.00	0.310	ug/L	1	VMS9132	VXX16785	
P & M -Xylene	ND	2.00	0.620	ug/L	1	VMS9132	VXX16785	
o-Xylene	ND	1.00	0.310	ug/L	1	VMS9132	VXX16785	
4-Bromofluorobenzene <surr>	99.4	76-119		%	1	VMS9132	VXX16785	
Dibromofluoromethane <surr>	109	85-115		%	1	VMS9132	VXX16785	
1,2-Dichloroethane-D4 <surr>	105	72-119		%	1	VMS9132	VXX16785	
Toluene-d8 <surr>	104	85-120		%	1	VMS9132	VXX16785	

Batch Information

Analytical Batch: VMS9132
Analytical Method: SW8260B
Analysis Date/Time: 06/09/07 02:10
Dilution Factor: 1

Prep Batch: VXX16785
Prep Method: SW5030B
Prep Date/Time: 06/08/07 09:49

Initial Prep Wt./Vol.: 5 mL
Prep Extract Vol.: 5 mL
Container ID: 1072473013-B
Analyst: JDB

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS005SW**
SGS Ref. #: 1072473013
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 14:00
Receipt Date/Time: 06/01/07 12:30

Semivolatile Organic GC/MS

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
2-Methylphenol (o-Cresol)	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
3&4-Methylphenol (p&m-Cresol)	ND	0.0200	0.00620	mg/L	1	XMS4029	XXX18114	
Hexachlorobutadiene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
2,4-Dinitrotoluene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Hexachlorobenzene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Hexachloroethane	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Nitrobenzene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Pentachlorophenol	ND	0.0500	0.0150	mg/L	1	XMS4029	XXX18114	
2,4,5-Trichlorophenol	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
2,4,6-Trichlorophenol	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
N-Nitrosodimethylamine	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
N-Nitroso-di-n-propylamine	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Phenol	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Aniline	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Bis(2-Chloroethyl)ether	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Isophorone	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
2-Chlorophenol	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
1,3-Dichlorobenzene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
2-Nitrophenol	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
2,4-Dimethylphenol	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
1,4-Dichlorobenzene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Benzoic acid	ND	0.0500	0.0150	mg/L	1	XMS4029	XXX18114	
1,2-Dichlorobenzene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Bis(2chloro1methylethyl)Ether	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Bis(2-Chloroethoxy)methane	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Benzyl alcohol	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
2,4-Dichlorophenol	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
1,2,4-Trichlorobenzene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Naphthalene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
4-Chloroaniline	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
4-Chloro-3-methylphenol	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
2-Methylnaphthalene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Hexachlorocyclopentadiene	ND	0.0300	0.00940	mg/L	1	XMS4029	XXX18114	
2-Chloronaphthalene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
2-Nitroaniline	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Dimethylphthalate	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS005SW**
SGS Ref. #: 1072473013
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 14:00
Receipt Date/Time: 06/01/07 12:30

Semivolatile Organic GC/MS

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
2,6-Dinitrotoluene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Acenaphthylene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
3-Nitroaniline	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Acenaphthene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
2,4-Dinitrophenol	ND	0.0500	0.0150	mg/L	1	XMS4029	XXX18114	
4-Nitrophenol	ND	0.0500	0.0150	mg/L	1	XMS4029	XXX18114	
Dibenzofuran	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Diethylphthalate	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Fluorene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
4-Chlorophenyl-phenylether	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
4-Nitroaniline	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
2-Methyl-4,6-dinitrophenol	ND	0.0500	0.0150	mg/L	1	XMS4029	XXX18114	
N-Nitrosodiphenylamine	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Azobenzene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
4-Bromophenyl-phenylether	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Phenanthrene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Anthracene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Di-n-butylphthalate	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Fluoranthene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Pyrene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Butylbenzylphthalate	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
3,3-Dichlorobenzidine	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Benzo(a)Anthracene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Chrysene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
bis(2-Ethylhexyl)phthalate	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
di-n-Octylphthalate	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Benzo[b]Fluoranthene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Benzo[k]fluoranthene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Benzo[a]pyrene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Indeno[1,2,3-c,d] pyrene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Dibenzo[a,h]anthracene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
Benzo[g,h,i]perylene	ND	0.0100	0.00310	mg/L	1	XMS4029	XXX18114	
2-Fluorophenol <sur>	39.2	20-82		%	1	XMS4029	XXX18114	
Phenol-d6 <sur>	50.4	45-75		%	1	XMS4029	XXX18114	
Nitrobenzene-d5 <sur>	65.2	49-94		%	1	XMS4029	XXX18114	
2-Fluorobiphenyl <sur>	72.4	59-98		%	1	XMS4029	XXX18114	
2,4,6-Tribromophenol <sur>	77.1	68-114		%	1	XMS4029	XXX18114	

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS005SW**
SGS Ref. #: 1072473013
Project ID: Fort Yukon Former Landfill
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 05/31/07 14:00
Receipt Date/Time: 06/01/07 12:30

Semivolatile Organic GC/MS

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Terphenyl-d14 <sur>	94.6	69-118		%	1	XMS4029	XXX18114	

Batch Information

Analytical Batch: XMS4029
Analytical Method: SW8270C
Analysis Date/Time: 06/12/07 01:11
Dilution Factor: 1

Prep Batch: XXX18114
Prep Method: SW3510C
Prep Date/Time: 06/07/07 17:00

Initial Prep Wt./Vol.: 1000 mL
Prep Extract Vol.: 1 mL
Container ID:1072473013-L
Analyst: WAA

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS-Cooler-SW**

SGS Ref. #: 1072473014

Project ID: Fort Yukon Former Landfill

Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time

Collection Date/Time: 05/31/07 10:30

Receipt Date/Time: 06/01/07 12:30

Volatile Fuels Department

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Gasoline Range Organics	0.0168J	0.100	0.0100	mg/L	1	VFC8398	VXX16802	
4-Bromofluorobenzene <sur>	104	60-120		%	1	VFC8398	VXX16802	

Batch Information

Analytical Batch: VFC8398

Analytical Method: AK101

Analysis Date/Time: 06/12/07 04:00

Dilution Factor: 1

Prep Batch: VXX16802

Prep Method: SW5030B

Prep Date/Time: 06/11/07 10:00

Initial Prep Wt./Vol.: 5 mL

Prep Extract Vol.: 5 mL

Container ID:1072473014-A

Analyst: HM

**Oasis Environmental**

Print Date: 6/26/2007

Client Sample ID: **07JWS-Cooler-SW**

SGS Ref. #: 1072473014

Project ID: Fort Yukon Former Landfill

Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time

Collection Date/Time: 05/31/07 10:30

Receipt Date/Time: 06/01/07 12:30

BTEX/Mass Spectroscopy

<u>Parameter</u>	<u>Result</u>	<u>PQL/CL</u>	<u>MDL</u>	<u>Units</u>	<u>DF</u>	<u>Analytical</u> <u>Batch</u>	<u>Prep</u> <u>Batch</u>	<u>Qualifiers</u>
Benzene	ND	0.400	0.120	ug/L	1	VMS9132	VXX16785	
Toluene	ND	1.00	0.310	ug/L	1	VMS9132	VXX16785	
Ethylbenzene	ND	1.00	0.310	ug/L	1	VMS9132	VXX16785	
P & M -Xylene	ND	2.00	0.620	ug/L	1	VMS9132	VXX16785	
o-Xylene	ND	1.00	0.310	ug/L	1	VMS9132	VXX16785	
4-Bromofluorobenzene <surr>	103	76-119		%	1	VMS9132	VXX16785	
Dibromofluoromethane <surr>	105	85-115		%	1	VMS9132	VXX16785	
1,2-Dichloroethane-D4 <surr>	108	72-119		%	1	VMS9132	VXX16785	
Toluene-d8 <surr>	106	85-120		%	1	VMS9132	VXX16785	

Batch Information

Analytical Batch: VMS9132

Analytical Method: SW8260B

Analysis Date/Time: 06/09/07 01:03

Dilution Factor: 1

Prep Batch: VXX16785

Prep Method: SW5030B

Prep Date/Time: 06/08/07 09:49

Initial Prep Wt./Vol.: 5 mL

Prep Extract Vol.: 5 mL

Container ID: 1072473014-B

Analyst: JDB



SGS Ref.# 767475 Method Blank
Client Name Oasis Environmental
Project Name/# Fort Yukon Former Landfill
Matrix Water (Surface, Eff., Ground)

Printed Date/Time 06/26/2007 14:11
Prep Batch WXX5895
Method H2O/EP300
Date 06/01/2007

QC results affect the following production samples:

1072473009, 1072473010, 1072473011, 1072473012, 1072473013

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
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Waters Department

Sulfate	ND	0.100	0.0310	mg/L	06/01/07
Bromide	ND	0.100	0.0310	mg/L	06/01/07
Chloride	ND	0.100	0.0310	mg/L	06/01/07
Nitrite-N	ND	0.100	0.0310	mg/L	06/01/07
Nitrate-N	ND	0.100	0.0310	mg/L	06/01/07
Ortho Phosphate-P	ND	0.400	0.120	mg/L	06/01/07
Batch	WIC4047				
Method	EPA 300.0				
Instrument	Metrohm 733 DX2				



SGS Ref.#	767971	Method Blank	Printed Date/Time	06/26/2007 14:11
Client Name	Oasis Environmental		Prep	Batch XXX18100
Project Name/#	Fort Yukon Former Landfill			Method SW3550B
Matrix	Soil/Solid			Date 06/06/2007

QC results affect the following production samples:
1072473005, 1072473007

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
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Semivolatile Organic GC/MS



SGS Ref.# 767971 Method Blank
Client Name Oasis Environmental
Project Name/# Fort Yukon Former Landfill
Matrix Soil/Solid

Printed Date/Time 06/26/2007 14:11
Prep Batch XXX18100
Method SW3550B
Date 06/06/2007

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
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Semivolatile Organic GC/MS

N-Nitrosodimethylamine	ND	0.250	0.0779	mg/Kg	06/15/07
Aniline	ND	0.250	0.0779	mg/Kg	06/15/07
Phenol	ND	0.250	0.0779	mg/Kg	06/15/07
Bis(2-Chloroethyl)ether	ND	0.250	0.0779	mg/Kg	06/15/07
2-Chlorophenol	ND	0.250	0.0779	mg/Kg	06/15/07
1,3-Dichlorobenzene	ND	0.250	0.0779	mg/Kg	06/15/07
1,4-Dichlorobenzene	ND	0.250	0.0779	mg/Kg	06/15/07
Benzyl alcohol	ND	0.250	0.0779	mg/Kg	06/15/07
1,2-Dichlorobenzene	ND	0.250	0.0779	mg/Kg	06/15/07
2-Methylphenol (o-Cresol)	ND	0.250	0.0779	mg/Kg	06/15/07
Bis(2chloro 1methylethyl)Ether	ND	0.250	0.0779	mg/Kg	06/15/07
3&4-Methylphenol (p&m-Cresol)	ND	0.999	0.310	mg/Kg	06/15/07
N-Nitroso-di-n-propylamine	ND	0.250	0.0779	mg/Kg	06/15/07
Hexachloroethane	ND	0.250	0.0779	mg/Kg	06/15/07
Nitrobenzene	ND	0.250	0.0779	mg/Kg	06/15/07
Isophorone	ND	0.250	0.0779	mg/Kg	06/15/07
2-Nitrophenol	ND	0.250	0.0779	mg/Kg	06/15/07
2,4-Dimethylphenol	ND	0.250	0.0779	mg/Kg	06/15/07
Benzoic acid	ND	1.50	0.749	mg/Kg	06/15/07
Bis(2-Chloroethoxy)methane	ND	0.250	0.0779	mg/Kg	06/15/07
1,2,4-Trichlorobenzene	ND	0.250	0.0779	mg/Kg	06/15/07
Naphthalene	ND	0.250	0.0779	mg/Kg	06/15/07
4-Chloroaniline	ND	0.250	0.0779	mg/Kg	06/15/07
Hexachlorobutadiene	ND	0.250	0.0779	mg/Kg	06/15/07
4-Chloro-3-methylphenol	ND	0.250	0.0779	mg/Kg	06/15/07
2,4-Dichlorophenol	ND	0.250	0.0779	mg/Kg	06/15/07
2-Methylnaphthalene	ND	0.250	0.0779	mg/Kg	06/15/07
Hexachlorocyclopentadiene	ND	0.699	0.200	mg/Kg	06/15/07
2,4,6-Trichlorophenol	ND	0.250	0.0779	mg/Kg	06/15/07
2,4,5-Trichlorophenol	ND	0.250	0.0779	mg/Kg	06/15/07
2-Chloronaphthalene	ND	0.250	0.0779	mg/Kg	06/15/07
2-Nitroaniline	ND	0.250	0.0779	mg/Kg	06/15/07
Dimethylphthalate	ND	0.250	0.0779	mg/Kg	06/15/07
Acenaphthylene	ND	0.250	0.0779	mg/Kg	06/15/07
2,6-Dinitrotoluene	ND	0.250	0.0779	mg/Kg	06/15/07
3-Nitroaniline	ND	0.250	0.0779	mg/Kg	06/15/07
Acenaphthene	ND	0.250	0.0779	mg/Kg	06/15/07
2,4-Dinitrophenol	ND	2.00	0.619	mg/Kg	06/15/07
4-Nitrophenol	ND	0.999	0.310	mg/Kg	06/15/07



SGS Ref.# 767971 Method Blank
Client Name Oasis Environmental
Project Name/# Fort Yukon Former Landfill
Matrix Soil/Solid

Printed Date/Time 06/26/2007 14:11
Prep Batch XXX18100
Method SW3550B
Date 06/06/2007

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
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Semivolatile Organic GC/MS

Dibenzofuran	ND	0.250	0.0779	mg/Kg	06/15/07
2,4-Dinitrotoluene	ND	0.250	0.0779	mg/Kg	06/15/07
Diethylphthalate	ND	0.250	0.0779	mg/Kg	06/15/07
4-Chlorophenyl-phenylether	ND	0.250	0.0779	mg/Kg	06/15/07
Fluorene	ND	0.250	0.0779	mg/Kg	06/15/07
4-Nitroaniline	ND	0.499	0.150	mg/Kg	06/15/07
2-Methyl-4,6-dinitrophenol	ND	2.00	0.619	mg/Kg	06/15/07
N-Nitrosodiphenylamine	ND	0.250	0.0779	mg/Kg	06/15/07
4-Bromophenyl-phenylether	ND	0.250	0.0779	mg/Kg	06/15/07
Hexachlorobenzene	ND	0.250	0.0779	mg/Kg	06/15/07
Pentachlorophenol	ND	0.999	0.310	mg/Kg	06/15/07
Phenanthrene	ND	0.250	0.0779	mg/Kg	06/15/07
Anthracene	ND	0.250	0.0779	mg/Kg	06/15/07
Di-n-butylphthalate	ND	0.250	0.0779	mg/Kg	06/15/07
Fluoranthene	ND	0.250	0.0779	mg/Kg	06/15/07
Pyrene	ND	0.250	0.0779	mg/Kg	06/15/07
Azobenzene	ND	0.250	0.0779	mg/Kg	06/15/07
Butylbenzylphthalate	ND	0.250	0.0779	mg/Kg	06/15/07
3,3-Dichlorobenzidine	ND	0.250	0.0779	mg/Kg	06/15/07
Benzo(a)Anthracene	ND	0.250	0.0779	mg/Kg	06/15/07
Chrysene	ND	0.250	0.0779	mg/Kg	06/15/07
bis(2-Ethylhexyl)phthalate	ND	0.250	0.0779	mg/Kg	06/15/07
di-n-Octylphthalate	ND	0.250	0.0779	mg/Kg	06/15/07
Benzo[b]Fluoranthene	ND	0.250	0.0779	mg/Kg	06/15/07
Benzo[k]fluoranthene	ND	0.250	0.0779	mg/Kg	06/15/07
Benzo[a]pyrene	ND	0.250	0.0779	mg/Kg	06/15/07
Indeno[1,2,3-c,d] pyrene	ND	0.250	0.0779	mg/Kg	06/15/07
Dibenzo[a,h]anthracene	ND	0.250	0.0779	mg/Kg	06/15/07
Benzo[g,h,i]perylene	ND	0.250	0.0779	mg/Kg	06/15/07

Surrogates

2-Fluorophenol <surr>	65	38-82	%	06/15/07
Phenol-d6 <surr>	74.5	44-89	%	06/15/07
Nitrobenzene-d5 <surr>	61.6	37-99	%	06/15/07
2-Fluorobiphenyl <surr>	68.7	47-94	%	06/15/07
2,4,6-Tribromophenol <surr>	61.7	55-109	%	06/15/07
Terphenyl-d14 <surr>	98.3	42-120	%	06/15/07



SGS Ref.#	767971	Method Blank	Printed Date/Time	06/26/2007 14:11
Client Name	Oasis Environmental		Prep	Batch
Project Name/#	Fort Yukon Former Landfill			Method
Matrix	Soil/Solid			Date

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
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Semivolatile Organic GC/MS

Batch	XMS4045
Method	SW8270C
Instrument	HP 5890 Series II MS4 SVPA



SGS Ref.# 768028 Method Blank
Client Name Oasis Environmental
Project Name/# Fort Yukon Former Landfill
Matrix Water (Surface, Eff., Ground)

Printed Date/Time 06/26/2007 14:11
Prep Batch XXX18103
Method SW3510C
Date 06/06/2007

QC results affect the following production samples:

1072473009, 1072473010, 1072473011, 1072473012, 1072473013

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
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Semivolatile Organic Gas Chromatography

gamma-Chlordane	ND	0.0300	0.00940	ug/L	06/15/07
alpha-Chlordane	ND	0.0300	0.00940	ug/L	06/15/07
alpha-BHC	ND	0.0300	0.00940	ug/L	06/15/07
beta-BHC	ND	0.0300	0.00940	ug/L	06/15/07
gamma-BHC (Lindane)	ND	0.0300	0.00940	ug/L	06/15/07
delta-BHC	ND	0.0300	0.00940	ug/L	06/15/07
Heptachlor	ND	0.0300	0.00940	ug/L	06/15/07
Aldrin	ND	0.0300	0.00940	ug/L	06/15/07
Heptachlor epoxide	ND	0.0300	0.00940	ug/L	06/15/07
Endosulfan I	ND	0.0300	0.00940	ug/L	06/15/07
4,4'-DDE	ND	0.0300	0.00940	ug/L	06/15/07
Dieldrin	ND	0.0300	0.00940	ug/L	06/15/07
Endrin	ND	0.0300	0.00940	ug/L	06/15/07
Endosulfan II	ND	0.0300	0.00940	ug/L	06/15/07
4,4'-DDD	ND	0.0300	0.00940	ug/L	06/15/07
Endrin aldehyde	ND	0.0300	0.00940	ug/L	06/15/07
4,4'-DDT	ND	0.0300	0.00940	ug/L	06/15/07
Endosulfan sulfate	ND	0.0300	0.00940	ug/L	06/15/07
Endrin ketone	ND	0.0300	0.00940	ug/L	06/15/07
Methoxychlor	ND	0.0300	0.00940	ug/L	06/15/07
Toxaphene	ND	1.00	0.310	ug/L	06/15/07

Surrogates

Tetrachloro-m-xylene <surr>	82.1	33-97	%	06/15/07
Decachlorobiphenyl <surr>	96.1	32-135	%	06/15/07

Batch XGC5823
Method SW8081A
Instrument HP 5890 Series II ECD SV J F

Polychlorinated Biphenyls



SGS Ref.# 768028 Method Blank
Client Name Oasis Environmental
Project Name/# Fort Yukon Former Landfill
Matrix Water (Surface, Eff., Ground)

Printed Date/Time 06/26/2007 14:11
Prep Batch XXX18103
Method SW3510C
Date 06/06/2007

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
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Polychlorinated Biphenyls

Aroclor-1016	ND	0.100	0.0310	ug/L	06/21/07
Aroclor-1221	ND	0.100	0.0310	ug/L	06/21/07
Aroclor-1232	ND	0.100	0.0310	ug/L	06/21/07
Aroclor-1242	ND	0.100	0.0310	ug/L	06/21/07
Aroclor-1248	ND	0.100	0.0310	ug/L	06/21/07
Aroclor-1254	ND	0.100	0.0310	ug/L	06/21/07
Aroclor-1260	ND	0.100	0.0310	ug/L	06/21/07

Surrogates

Decachlorobiphenyl <surr>	109	42-120		%	06/21/07
Batch	XGC5828				
Method	SW8082				
Instrument	HP 5890 Series II ECD SV I F				



SGS Ref.# 768068 Method Blank
Client Name Oasis Environmental
Project Name/# Fort Yukon Former Landfill
Matrix Water (Surface, Eff., Ground)

Printed Date/Time 06/26/2007 14:11
Prep Batch MXX18996
Method SW3010A
Date 06/06/2007

QC results affect the following production samples:

1072473009, 1072473010, 1072473011, 1072473012, 1072473013

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
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Metals by ICP/MS

Arsenic	ND	10.0	5.00	ug/L	06/13/07
Barium	1.46 J	3.00	0.940	ug/L	06/13/07
Cadmium	ND	2.00	1.00	ug/L	06/13/07
Chromium	1.26 J	4.00	1.20	ug/L	06/13/07
Lead	ND	1.00	0.310	ug/L	06/13/07
Selenium	3.42 J	10.0	3.10	ug/L	06/13/07
Silver	ND	2.00	0.620	ug/L	06/13/07

Batch MMS4892
Method SW6020
Instrument Perkin Elmer Sciex ICP-MS P3



SGS Ref.#	768176	Method Blank	Printed Date/Time	06/26/2007 14:11
Client Name	Oasis Environmental		Prep	Batch
Project Name/#	Fort Yukon Former Landfill			Method
Matrix	Soil/Solid		Date	06/06/2007

QC results affect the following production samples:
1072473001, 1072473002, 1072473003, 1072473004, 1072473005, 1072473006, 1072473007

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
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Metals Department

Mercury	ND	40.0	12.0	ug/Kg	06/07/07
Batch	MCV3636				
Method	SW7471A				
Instrument	PSA Millennium mercury AA				



SGS Ref.#	768302	Method Blank	Printed Date/Time	06/26/2007 14:11
Client Name	Oasis Environmental		Prep	Batch
Project Name/#	Fort Yukon Former Landfill			Method
Matrix	Water (Surface, Eff., Ground)			Date

QC results affect the following production samples:
1072473011, 1072473013

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
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Semivolatile Organic GC/MS



SGS Ref.# 768302 Method Blank
Client Name Oasis Environmental
Project Name/# Fort Yukon Former Landfill
Matrix Water (Surface, Eff., Ground)

Printed Date/Time 06/26/2007 14:11
Prep Batch XXX18114
Method SW3510C
Date 06/07/2007

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
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Semivolatile Organic GC/MS

2-Methylphenol (o-Cresol)	ND	0.0100	0.00310	mg/L	06/11/07
3&4-Methylphenol (p&m-Cresol)	ND	0.0200	0.00620	mg/L	06/11/07
Hexachlorobutadiene	ND	0.0100	0.00310	mg/L	06/11/07
2,4-Dinitrotoluene	ND	0.0100	0.00310	mg/L	06/11/07
Hexachlorobenzene	ND	0.0100	0.00310	mg/L	06/11/07
Hexachloroethane	ND	0.0100	0.00310	mg/L	06/11/07
Nitrobenzene	ND	0.0100	0.00310	mg/L	06/11/07
Pentachlorophenol	ND	0.0500	0.0150	mg/L	06/11/07
2,4,5-Trichlorophenol	ND	0.0100	0.00310	mg/L	06/11/07
2,4,6-Trichlorophenol	ND	0.0100	0.00310	mg/L	06/11/07
N-Nitrosodimethylamine	ND	0.0100	0.00310	mg/L	06/11/07
N-Nitroso-di-n-propylamine	ND	0.0100	0.00310	mg/L	06/11/07
Phenol	ND	0.0100	0.00310	mg/L	06/11/07
Aniline	ND	0.0100	0.00310	mg/L	06/11/07
Bis(2-Chloroethyl)ether	ND	0.0100	0.00310	mg/L	06/11/07
Isophorone	ND	0.0100	0.00310	mg/L	06/11/07
2-Chlorophenol	ND	0.0100	0.00310	mg/L	06/11/07
1,3-Dichlorobenzene	ND	0.0100	0.00310	mg/L	06/11/07
2-Nitrophenol	ND	0.0100	0.00310	mg/L	06/11/07
2,4-Dimethylphenol	ND	0.0100	0.00310	mg/L	06/11/07
1,4-Dichlorobenzene	ND	0.0100	0.00310	mg/L	06/11/07
Benzoic acid	ND	0.0500	0.0150	mg/L	06/11/07
1,2-Dichlorobenzene	ND	0.0100	0.00310	mg/L	06/11/07
Bis(2chloro 1methylethyl)Ether	ND	0.0100	0.00310	mg/L	06/11/07
Bis(2-Chloroethoxy)methane	ND	0.0100	0.00310	mg/L	06/11/07
Benzyl alcohol	ND	0.0100	0.00310	mg/L	06/11/07
2,4-Dichlorophenol	ND	0.0100	0.00310	mg/L	06/11/07
1,2,4-Trichlorobenzene	ND	0.0100	0.00310	mg/L	06/11/07
Naphthalene	ND	0.0100	0.00310	mg/L	06/11/07
4-Chloroaniline	ND	0.0100	0.00310	mg/L	06/11/07
4-Chloro-3-methylphenol	ND	0.0100	0.00310	mg/L	06/11/07
2-Methylnaphthalene	ND	0.0100	0.00310	mg/L	06/11/07
Hexachlorocyclopentadiene	ND	0.0300	0.00940	mg/L	06/11/07
2-Chloronaphthalene	ND	0.0100	0.00310	mg/L	06/11/07
2-Nitroaniline	ND	0.0100	0.00310	mg/L	06/11/07
Dimethylphthalate	ND	0.0100	0.00310	mg/L	06/11/07
2,6-Dinitrotoluene	ND	0.0100	0.00310	mg/L	06/11/07
Acenaphthylene	ND	0.0100	0.00310	mg/L	06/11/07
3-Nitroaniline	ND	0.0100	0.00310	mg/L	06/11/07



SGS Ref.# 768302 Method Blank
Client Name Oasis Environmental
Project Name/# Fort Yukon Former Landfill
Matrix Water (Surface, Eff., Ground)

Printed Date/Time 06/26/2007 14:11
Prep Batch XXX18114
Method SW3510C
Date 06/07/2007

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
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Semivolatile Organic GC/MS

Acenaphthene	ND	0.0100	0.00310	mg/L	06/11/07
2,4-Dinitrophenol	ND	0.0500	0.0150	mg/L	06/11/07
4-Nitrophenol	ND	0.0500	0.0150	mg/L	06/11/07
Dibenzofuran	ND	0.0100	0.00310	mg/L	06/11/07
Diethylphthalate	ND	0.0100	0.00310	mg/L	06/11/07
Fluorene	ND	0.0100	0.00310	mg/L	06/11/07
4-Chlorophenyl-phenylether	ND	0.0100	0.00310	mg/L	06/11/07
4-Nitroaniline	ND	0.0100	0.00310	mg/L	06/11/07
2-Methyl-4,6-dinitrophenol	ND	0.0500	0.0150	mg/L	06/11/07
N-Nitrosodiphenylamine	ND	0.0100	0.00310	mg/L	06/11/07
Azobenzene	ND	0.0100	0.00310	mg/L	06/11/07
4-Bromophenyl-phenylether	ND	0.0100	0.00310	mg/L	06/11/07
Phenanthrene	ND	0.0100	0.00310	mg/L	06/11/07
Anthracene	ND	0.0100	0.00310	mg/L	06/11/07
Di-n-butylphthalate	ND	0.0100	0.00310	mg/L	06/11/07
Fluoranthene	ND	0.0100	0.00310	mg/L	06/11/07
Pyrene	ND	0.0100	0.00310	mg/L	06/11/07
Butylbenzylphthalate	ND	0.0100	0.00310	mg/L	06/11/07
3,3-Dichlorobenzidine	ND	0.0100	0.00310	mg/L	06/11/07
Benzo(a)Anthracene	ND	0.0100	0.00310	mg/L	06/11/07
Chrysene	ND	0.0100	0.00310	mg/L	06/11/07
bis(2-Ethylhexyl)phthalate	ND	0.0100	0.00310	mg/L	06/11/07
di-n-Octylphthalate	ND	0.0100	0.00310	mg/L	06/11/07
Benzo[b]Fluoranthene	ND	0.0100	0.00310	mg/L	06/11/07
Benzo[k]fluoranthene	ND	0.0100	0.00310	mg/L	06/11/07
Benzo[a]pyrene	ND	0.0100	0.00310	mg/L	06/11/07
Indeno[1,2,3-c,d] pyrene	ND	0.0100	0.00310	mg/L	06/11/07
Dibenzo[a,h]anthracene	ND	0.0100	0.00310	mg/L	06/11/07
Benzo[g,h,i]perylene	ND	0.0100	0.00310	mg/L	06/11/07

Surrogates

2-Fluorophenol <surr>	51.3	20-82	%	06/11/07
Phenol-d6 <surr>	63.3	45-75	%	06/11/07
Nitrobenzene-d5 <surr>	75.5	49-94	%	06/11/07
2-Fluorobiphenyl <surr>	79.1	59-98	%	06/11/07
2,4,6-Tribromophenol <surr>	84.4	68-114	%	06/11/07
Terphenyl-d14 <surr>	94.5	69-118	%	06/11/07



SGS Ref.#	768302	Method Blank	Printed Date/Time	06/26/2007 14:11
Client Name	Oasis Environmental		Prep	Batch
Project Name/#	Fort Yukon Former Landfill			Method
Matrix	Water (Surface, Eff., Ground)			Date

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
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Semivolatile Organic GC/MS

Batch	XMS4029
Method	SW8270C
Instrument	HP 5890 Series II MS4 SVPA



SGS Ref.#	768340	Method Blank	Printed Date/Time	06/26/2007 14:11
Client Name	Oasis Environmental		Prep	Batch
Project Name/#	Fort Yukon Former Landfill			Method
Matrix	Soil/Solid			Date

QC results affect the following production samples:
1072473008

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
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Solids

Total Solids	100			%	06/07/07
Batch	SPT7235				
Method	SM20 2540G				
Instrument					



SGS Ref.#	768358	Method Blank	Printed Date/Time	06/26/2007 14:11
Client Name	Oasis Environmental		Prep	Batch
Project Name/#	Fort Yukon Former Landfill			Method
Matrix	Soil/Solid			Date

QC results affect the following production samples:
1072473001, 1072473002, 1072473003, 1072473004, 1072473005, 1072473006, 1072473007

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
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Solids

Total Solids	100			%	06/07/07
Batch	SPT7237				
Method	SM20 2540G				
Instrument					



SGS Ref.#	768436	Method Blank	Printed Date/Time	06/26/2007 14:11
Client Name	Oasis Environmental		Prep	Batch
Project Name/#	Fort Yukon Former Landfill			VXX16780
Matrix	Water (Surface, Eff., Ground)		Method	SW5030B
			Date	06/07/2007

QC results affect the following production samples:
1072473009, 1072473010, 1072473011, 1072473012, 1072473013

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
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Volatile Fuels Department

Gasoline Range Organics	0.0175J	0.100	0.0100	mg/L	06/07/07
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Surrogates

4-Bromofluorobenzene <surr>	104	50-150		%	06/07/07
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Batch	VFC8394
Method	AK101
Instrument	HP 5890 Series II PID+HECD VBA



SGS Ref.#	768643	Method Blank	Printed Date/Time	06/26/2007 14:11
Client Name	Oasis Environmental		Prep	Batch XXX18122
Project Name/#	Fort Yukon Former Landfill		Method	SW3550B
Matrix	Soil/Solid		Date	06/09/2007

QC results affect the following production samples:
1072473001, 1072473002, 1072473003, 1072473004, 1072473005, 1072473006, 1072473007

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
<u>Semivolatile Organic Fuels Department</u>					
Diesel Range Organics	ND	19.8	1.98	mg/Kg	06/12/07
Surrogates					
5a Androstane <surr>	77.7	60-120		%	06/12/07
Batch	XFC7419				
Method	AK102				
Instrument	HP 5890 Series II FID SV D F				
Residual Range Organics	3.10 J	19.8	1.98	mg/Kg	06/12/07
Surrogates					
n-Triacontane-d62 <surr>	82	60-120		%	06/12/07
Batch	XFC7419				
Method	AK103				
Instrument	HP 5890 Series II FID SV D F				



SGS Ref.# 768654 Method Blank
Client Name Oasis Environmental
Project Name/# Fort Yukon Former Landfill
Matrix Water (Surface, Eff., Ground)

Printed Date/Time 06/26/2007 14:11
Prep Batch VXX16785
Method SW5030B
Date 06/08/2007

QC results affect the following production samples:

1072473009, 1072473010, 1072473011, 1072473012, 1072473013, 1072473014

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
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Volatile Gas Chromatography/Mass Spectroscopy

Benzene	ND	0.400	0.120	ug/L	06/08/07
Toluene	ND	1.00	0.310	ug/L	06/08/07
Ethylbenzene	ND	1.00	0.310	ug/L	06/08/07
P & M -Xylene	ND	2.00	0.620	ug/L	06/08/07
o-Xylene	ND	1.00	0.310	ug/L	06/08/07

Surrogates

Dibromofluoromethane <surr>	101	85-115		%	06/08/07
1,2-Dichloroethane-D4 <surr>	100	72-119		%	06/08/07
Toluene-d8 <surr>	98.8	85-120		%	06/08/07
4-Bromofluorobenzene <surr>	102	76-119		%	06/08/07

Batch VMS9132
Method SW8260B
Instrument HP 5890 Series II MS3 VNA



SGS Ref.#	768711	Method Blank	Printed Date/Time	06/26/2007 14:11
Client Name	Oasis Environmental		Prep	Batch
Project Name/#	Fort Yukon Former Landfill		Method	MXX19011
Matrix	Soil/Solid		Date	SW3050B
				06/08/2007

QC results affect the following production samples:
1072473001, 1072473002, 1072473003, 1072473004, 1072473005, 1072473006, 1072473007

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
Metals by ICP/MS					
Arsenic	ND	1.00	0.310	mg/Kg	06/14/07
Barium	ND	0.300	0.0940	mg/Kg	06/14/07
Cadmium	ND	0.200	0.0620	mg/Kg	06/14/07
Chromium	ND	0.400	0.120	mg/Kg	06/14/07
Lead	ND	0.200	0.0620	mg/Kg	06/14/07
Selenium	ND	0.500	0.150	mg/Kg	06/14/07
Silver	ND	0.100	0.0310	mg/Kg	06/14/07
Batch	MMS4894				
Method	SW6020				
Instrument	Perkin Elmer Sciex ICP-MS P3				



SGS Ref.# 768968 Method Blank
Client Name Oasis Environmental
Project Name/# Fort Yukon Former Landfill
Matrix Soil/Solid

Printed Date/Time 06/26/2007 14:11
Prep Batch XXX18127
Method SW3550B
Date 06/11/2007

QC results affect the following production samples:

1072473001, 1072473002, 1072473003, 1072473004, 1072473005, 1072473006, 1072473007

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
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Semivolatile Organic Gas Chromatography

gamma-Chlordane	ND	1.49	0.466	ug/Kg	06/20/07
alpha-Chlordane	ND	1.49	0.466	ug/Kg	06/20/07
alpha-BHC	ND	1.49	0.466	ug/Kg	06/20/07
beta-BHC	ND	1.49	0.466	ug/Kg	06/20/07
gamma-BHC (Lindane)	ND	1.49	0.466	ug/Kg	06/20/07
delta-BHC	ND	1.49	0.466	ug/Kg	06/20/07
Heptachlor	ND	1.98	0.615	ug/Kg	06/20/07
Aldrin	ND	1.49	0.466	ug/Kg	06/20/07
Heptachlor epoxide	ND	1.98	0.615	ug/Kg	06/20/07
Endosulfan I	ND	1.49	0.466	ug/Kg	06/20/07
4,4'-DDE	ND	1.98	0.615	ug/Kg	06/20/07
Dieldrin	ND	1.98	0.615	ug/Kg	06/20/07
Endrin	ND	1.98	0.615	ug/Kg	06/20/07
Endosulfan II	ND	1.98	0.615	ug/Kg	06/20/07
4,4'-DDD	ND	1.98	0.615	ug/Kg	06/20/07
Endrin aldehyde	ND	1.98	0.615	ug/Kg	06/20/07
4,4'-DDT	ND	1.98	0.615	ug/Kg	06/20/07
Endosulfan sulfate	ND	1.98	0.615	ug/Kg	06/20/07
Endrin ketone	ND	1.98	0.615	ug/Kg	06/20/07
Methoxychlor	ND	1.98	0.615	ug/Kg	06/20/07
Toxaphene	ND	49.6	14.9	ug/Kg	06/20/07

Surrogates

Tetrachloro-m-xylene <surr>	80	35-124	%	06/20/07
Decachlorobiphenyl <surr>	94	56-130	%	06/20/07

Batch XGC5827
Method SW8081A
Instrument HP 5890 Series II ECD SV J F



SGS Ref.# 769087 Method Blank
Client Name Oasis Environmental
Project Name/# Fort Yukon Former Landfill
Matrix Soil/Solid

Printed Date/Time 06/26/2007 14:11
Prep Batch VXX16794
Method SW5035A
Date 06/10/2007

QC results affect the following production samples:

1072473001, 1072473002, 1072473003, 1072473004

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
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Volatile Gas Chromatography/Mass Spectroscopy

Benzene	ND	13.0	3.90	ug/Kg	06/10/07
Toluene	ND	50.0	15.0	ug/Kg	06/10/07
Ethylbenzene	ND	25.0	7.80	ug/Kg	06/10/07
P & M -Xylene	ND	50.0	15.0	ug/Kg	06/10/07
o-Xylene	ND	50.0	15.0	ug/Kg	06/10/07

Surrogates

Dibromofluoromethane <surr>	101	83-119	%	06/10/07
1,2-Dichloroethane-D4 <surr>	102	85-115	%	06/10/07
Toluene-d8 <surr>	106	87-115	%	06/10/07
4-Bromofluorobenzene <surr>	102	50-154	%	06/10/07

Batch VMS9137
Method SW8260B
Instrument HP 5890 Series II MS1 VMA



SGS Ref.#	769332	Method Blank	Printed Date/Time	06/26/2007 14:11
Client Name	Oasis Environmental		Prep	Batch XXX18135
Project Name/#	Fort Yukon Former Landfill		Method	SW3520C
Matrix	Water (Surface, Eff., Ground)		Date	06/12/2007

QC results affect the following production samples:
1072473009, 1072473010, 1072473011

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
<u>Semivolatile Organic Fuels Department</u>					
Diesel Range Organics	ND	0.300	0.0600	mg/L	06/13/07
Surrogates					
5a Androstane <surr>	85.4	60-120		%	06/13/07
Batch	XFC7424				
Method	AK102				
Instrument	HP 5890 Series II FID SV D R				
Residual Range Organics	0.167 J	0.500	0.100	mg/L	06/13/07
Surrogates					
n-Triacontane-d62 <surr>	102	60-120		%	06/13/07
Batch	XFC7424				
Method	AK103				
Instrument	HP 5890 Series II FID SV D R				



SGS Ref.# 769428 Method Blank
Client Name Oasis Environmental
Project Name/# Fort Yukon Former Landfill
Matrix Soil/Solid

Printed Date/Time 06/26/2007 14:11
Prep Batch VXX16797
Method SW5035A
Date 06/11/2007

QC results affect the following production samples:

1072473005, 1072473006, 1072473007, 1072473008

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
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Volatile Gas Chromatography/Mass Spectroscopy

Benzene	ND	13.0	3.90	ug/Kg	06/11/07
Toluene	ND	50.0	15.0	ug/Kg	06/11/07
Ethylbenzene	ND	25.0	7.80	ug/Kg	06/11/07
P & M -Xylene	ND	50.0	15.0	ug/Kg	06/11/07
o-Xylene	ND	50.0	15.0	ug/Kg	06/11/07

Surrogates

Dibromofluoromethane <surr>	101	83-119	%	06/11/07
1,2-Dichloroethane-D4 <surr>	98.4	85-115	%	06/11/07
Toluene-d8 <surr>	100	87-115	%	06/11/07
4-Bromofluorobenzene <surr>	101	50-154	%	06/11/07

Batch VMS9139
Method SW8260B
Instrument HP 5890 Series II MS1 VMA



SGS Ref.#	769472	Method Blank	Printed Date/Time	06/26/2007 14:11
Client Name	Oasis Environmental		Prep	Batch
Project Name/#	Fort Yukon Former Landfill			Method
Matrix	Water (Surface, Eff., Ground)		Date	06/12/2007

QC results affect the following production samples:
1072473012, 1072473013

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
<u>Semivolatile Organic Fuels Department</u>					
Diesel Range Organics	ND	0.300	0.0600	mg/L	06/17/07
Surrogates					
5a Androstane <surr>	84.4	60-120		%	06/17/07
Batch	XFC7430				
Method	AK102				
Instrument	HP 5890 Series II FID SV D F				
Residual Range Organics	0.251 J	0.500	0.100	mg/L	06/17/07
Surrogates					
n-Triacontane-d62 <surr>	100	60-120		%	06/17/07
Batch	XFC7430				
Method	AK103				
Instrument	HP 5890 Series II FID SV D F				



SGS Ref.#	769620	Method Blank	Printed Date/Time	06/26/2007 14:11
Client Name	Oasis Environmental		Prep	Batch
Project Name/#	Fort Yukon Former Landfill			VXX16802
Matrix	Water (Surface, Eff., Ground)		Method	SW5030B
			Date	06/11/2007

QC results affect the following production samples:
1072473014

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
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Volatile Fuels Department

Gasoline Range Organics	0.0341J	0.100	0.0100	mg/L	06/11/07
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Surrogates

4-Bromofluorobenzene <surr>	108	50-150		%	06/11/07
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Batch	VFC8398
Method	AK101
Instrument	HP 5890 Series II PID+HECD VBA



SGS Ref.#	769756	Method Blank	Printed Date/Time	06/26/2007 14:11
Client Name	Oasis Environmental		Prep	Batch
Project Name/#	Fort Yukon Former Landfill			Method
Matrix	Water (Surface, Eff., Ground)			Date
				06/13/2007

QC results affect the following production samples:
1072473009, 1072473010, 1072473011, 1072473012, 1072473013

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
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Metals Department

Mercury	ND	0.200	0.0620	ug/L	06/13/07
Batch	MCV3643				
Method	SW7470A/E245.1				
Instrument	PSA Millennium mercury AA				



SGS Ref.#	769827	Method Blank	Printed Date/Time	06/26/2007 14:11
Client Name	Oasis Environmental		Prep	Batch
Project Name/#	Fort Yukon Former Landfill			Method
Matrix	Soil/Solid		Date	06/13/2007

QC results affect the following production samples:
1072473001, 1072473002, 1072473003, 1072473004, 1072473005, 1072473006, 1072473007

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
<u>Waters Department</u>					
Bromide	ND	1.00	0.310	mg/Kg	06/13/07
Chloride	ND	1.00	0.310	mg/Kg	06/13/07
Nitrite-N	ND	1.00	0.310	mg/Kg	06/13/07
Ortho Phosphate-P	ND	4.00	1.20	mg/Kg	06/13/07
Sulfate	ND	1.00	0.310	mg/Kg	06/13/07
Batch	WIC4053				
Method	EPA 300.0				
Instrument	Metrohm 733 IC3				



SGS Ref.#	770205	Method Blank	Printed Date/Time	06/26/2007 14:11
Client Name	Oasis Environmental		Prep	Batch
Project Name/#	Fort Yukon Former Landfill			Method
Matrix	Soil/Solid			Date
				06/14/2007

QC results affect the following production samples:
1072473001, 1072473002, 1072473003, 1072473004, 1072473005, 1072473006, 1072473007

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
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Waters Department

Nitrate-N	ND	0.996	0.309	mg/Kg	06/14/07
Batch	WIC4054				
Method	EPA 300.0				
Instrument	Metrohm 733 IC3				



SGS Ref.#	770912	Method Blank	Printed Date/Time	06/26/2007 14:11
Client Name	Oasis Environmental		Prep	Batch
Project Name/#	Fort Yukon Former Landfill			VXX16834
Matrix	Soil/Solid		Method	AK101
			Date	06/18/2007

QC results affect the following production samples:
1072473001, 1072473002, 1072473003, 1072473004, 1072473005, 1072473006, 1072473007, 1072473008

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
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Volatile Fuels Department

Gasoline Range Organics	ND	2.50	0.500	mg/Kg	06/18/07
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Surrogates

4-Bromofluorobenzene <surr>	87.7	50-150		%	06/18/07
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Batch	VFC8411
Method	AK101
Instrument	HP 5890 Series II PID+FID VDA



SGS Ref.#

Client Name

Project Name/#

Original

Matrix

767477

Oasis Environmental

Fort Yukon Former Landfill

767474

Water (Surface, Eff., Ground)

Undigested Duplicate

Printed Date/Time

06/26/2007 14:11

Prep

Batch

Method

Date

WXX5895

H2O/EP300

6/1/2007 11:20:24AM

QC results affect the following production samples:
1072473009, 1072473010, 1072473011, 1072473012, 1072473013

Parameter	Original Result	QC Result	Units	RPD	RPD Limits	Analysis Date
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Waters Department

Chloride	0.984	0.994	mg/L	1	(< 20)	06/01/2007
Nitrite-N	ND	0.00	mg/L	0	(< 20)	06/01/2007
Nitrate-N	0.412	0.412	mg/L	0	(< 20)	06/01/2007
Ortho Phosphate-P	ND	0.0750 *	mg/L	42	(< 20)	06/01/2007
Batch	WIC4047					
Method	EPA 300.0					
Instrument	Metrohm 733 DX2					



SGS Ref.# 768343 Duplicate
Client Name Oasis Environmental
Project Name/# Fort Yukon Former Landfill
Original 1072464001
Matrix Soil/Solid

Printed Date/Time 06/26/2007 14:11
Prep Batch
Method
Date

QC results affect the following production samples:
1072473008

Parameter	Original Result	QC Result	Units	RPD	RPD Limits	Analysis Date
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Solids

Total Solids	85.6	86.1	%	1	(< 5)	06/07/2007
Batch	SPT7235					
Method	SM20 2540G					
Instrument						



SGS Ref.# 768359 Duplicate
Client Name Oasis Environmental
Project Name/# Fort Yukon Former Landfill
Original 1072578011
Matrix Soil/Solid

Printed Date/Time 06/26/2007 14:11
Prep Batch
Method
Date

QC results affect the following production samples:
1072473001, 1072473002, 1072473003, 1072473004, 1072473005, 1072473006, 1072473007

Parameter	Original Result	QC Result	Units	RPD	RPD Limits	Analysis Date
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Solids

Total Solids	92.5	92.3	%	0	(< 5)	06/07/2007
Batch	SPT7237					
Method	SM20 2540G					
Instrument						



SGS Ref.#	768716	Duplicate	Printed Date/Time	06/26/2007 14:11	
Client Name	Oasis Environmental		Prep	Batch	MXX19011
Project Name/#	Fort Yukon Former Landfill			Method	SW3050B
Original	1072516006			Date	6/8/2007 11:30:00AM
Matrix	Soil/Solid				

QC results affect the following production samples:
1072473001, 1072473002, 1072473003, 1072473004, 1072473005, 1072473006, 1072473007

Parameter	Original Result	QC Result	Units	RPD	RPD Limits	Analysis Date
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Metals by ICP/MS

Lead	145	122	mg/Kg	17	(< 20)	06/14/2007
Batch	MMS4894					
Method	SW6020					
Instrument	Perkin Elmer Sciex ICP-MS P3					



SGS Ref.# 769825 Undigested Duplicate
Client Name Oasis Environmental
Project Name/# Fort Yukon Former Landfill
Original 1072651010
Matrix Drinking Water

Printed Date/Time 06/26/2007 14:11
Prep Batch
Method
Date

QC results affect the following production samples:
1072473001, 1072473002, 1072473003, 1072473004, 1072473005, 1072473006, 1072473007

Parameter	Original Result	QC Result	Units	RPD	RPD Limits	Analysis Date
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Waters Department

Sulfate	33.6	33.6	mg/L	0	(< 20)	06/13/2007
Chloride	2.76	2.72	mg/L	1	(< 20)	06/13/2007
Batch	WIC4053					
Method	EPA 300.0					
Instrument	Metrohm 733 IC3					



SGS Ref.#

Client Name

Project Name/#

Original

Matrix

769829

Oasis Environmental

Fort Yukon Former Landfill

1072473007

Soil/Solid

Duplicate

Printed Date/Time

06/26/2007 14:11

Prep

Batch

Method

Date

WXX5918

EP300EXTR

6/13/2007 10:00:00AM

QC results affect the following production samples:
1072473001, 1072473002, 1072473003, 1072473004, 1072473005, 1072473006, 1072473007

Parameter	Original Result	QC Result	Units	RPD	RPD Limits	Analysis Date
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Waters Department

Bromide	ND	0.00	mg/Kg	0	(< 30)	06/14/2007
Chloride	133	132	mg/Kg	1	(< 30)	06/14/2007
Nitrite-N	ND	0.00	mg/Kg	0	(< 30)	06/14/2007
Ortho Phosphate-P	3.12 J	3.02	mg/Kg	3	(< 30)	06/14/2007
Sulfate	354	349	mg/Kg	2	(< 30)	06/14/2007
Batch	WIC4053					
Method	EPA 300.0					
Instrument	Metrohm 733 IC3					



SGS Ref.#	770208	Duplicate	Printed Date/Time	06/26/2007 14:11	
Client Name	Oasis Environmental		Prep	Batch	WXX5921
Project Name/#	Fort Yukon Former Landfill			Method	EP300EXTR
Original	1072473007			Date	6/14/2007 12:00:00PM
Matrix	Soil/Solid				

QC results affect the following production samples:
1072473001, 1072473002, 1072473003, 1072473004, 1072473005, 1072473006, 1072473007

Parameter	Original Result	QC Result	Units	RPD	RPD Limits	Analysis Date
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Waters Department

Nitrate-N	1.75	1.75	mg/Kg	0	(< 30)	06/14/2007
Batch	WIC4054					
Method	EPA 300.0					
Instrument	Metrohm 733 IC3					



SGS Ref.# 767476 Lab Control Sample

Printed Date/Time 06/26/2007 14:11
Prep Batch WXX5895

Client Name Oasis Environmental
Project Name/# Fort Yukon Former Landfill
Matrix Water (Surface, Eff., Ground)

Method H2O/EP300
Date 06/01/2007

QC results affect the following production samples:

1072473009, 1072473010, 1072473011, 1072473012, 1072473013

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Waters Department

Sulfate	LCS	8.95	90 *	(90-110)		10 mg/L	06/01/2007
Bromide	LCS	8.69	87 *	(90-110)		10 mg/L	06/01/2007
Chloride	LCS	9.24	92	(90-110)		10 mg/L	06/01/2007
Nitrite-N	LCS	9.74	97	(90-110)		10 mg/L	06/01/2007
Nitrate-N	LCS	9.44	94	(90-110)		10 mg/L	06/01/2007
Ortho Phosphate-P	LCS	9.35	94	(90-110)		10 mg/L	06/01/2007

Batch WIC4047
Method EPA 300.0
Instrument Metrohm 733 DX2



SGS Ref.# 767972 Lab Control Sample

Printed Date/Time 06/26/2007 14:11
Prep Batch XXX18100
Method SW3550B
Date 06/06/2007

Client Name Oasis Environmental
Project Name/# Fort Yukon Former Landfill
Matrix Soil/Solid

QC results affect the following production samples:
1072473005, 1072473007

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Semivolatile Organic GC/MS



SGS Ref.# 767972 Lab Control Sample

Printed Date/Time 06/26/2007 14:11

Prep Batch XXX18100

Client Name Oasis Environmental
Project Name/# Fort Yukon Former Landfill

Method SW3550B

Matrix Soil/Solid

Date 06/06/2007

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
<u>Semivolatile Organic GC/MS</u>								
N-Nitrosodimethylamine	LCS	3.20	73	(49-102)			4.42 mg/Kg	06/15/2007
Aniline	LCS	2.81	64	(38-102)			4.42 mg/Kg	06/15/2007
Phenol	LCS	3.46	78	(50-100)			4.42 mg/Kg	06/15/2007
Bis(2-Chloroethyl)ether	LCS	3.21	73	(46-105)			4.42 mg/Kg	06/15/2007
2-Chlorophenol	LCS	3.12	71	(47-105)			4.42 mg/Kg	06/15/2007
1,3-Dichlorobenzene	LCS	3.05	69	(41-100)			4.42 mg/Kg	06/15/2007
1,4-Dichlorobenzene	LCS	2.98	68	(38-105)			4.42 mg/Kg	06/15/2007
Benzyl alcohol	LCS	3.37	76	(52-125)			4.42 mg/Kg	06/15/2007
1,2-Dichlorobenzene	LCS	3.13	71	(45-105)			4.42 mg/Kg	06/15/2007
2-Methylphenol (o-Cresol)	LCS	3.37	76	(49-105)			4.42 mg/Kg	06/15/2007
Bis(2chloro 1methylethyl)Ether	LCS	3.78	86	(51-111)			4.42 mg/Kg	06/15/2007
3&4-Methylphenol (p&m-Cresol)	LCS	4.86	79	(55-105)			6.18 mg/Kg	06/15/2007
N-Nitroso-di-n-propylamine	LCS	3.30	75	(55-113)			4.42 mg/Kg	06/15/2007
Hexachloroethane	LCS	2.75	62	(38-110)			4.42 mg/Kg	06/15/2007
Nitrobenzene	LCS	3.15	71	(46-115)			4.42 mg/Kg	06/15/2007
Isophorone	LCS	3.63	82	(52-125)			4.42 mg/Kg	06/15/2007
2-Nitrophenol	LCS	3.16	72	(42-110)			4.42 mg/Kg	06/15/2007
2,4-Dimethylphenol	LCS	2.81	64	(48-115)			4.42 mg/Kg	06/15/2007
Benzoic acid	LCS	2.51	41	(25-69)			6.18 mg/Kg	06/15/2007
Bis(2-Chloroethoxy)methane	LCS	3.55	80	(55-110)			4.42 mg/Kg	06/15/2007
1,2,4-Trichlorobenzene	LCS	3.11	71	(45-110)			4.42 mg/Kg	06/15/2007



SGS Ref.# 767972 Lab Control Sample

Printed Date/Time 06/26/2007 14:11

Prep XXX18100

Client Name Oasis Environmental
Project Name/# Fort Yukon Former Landfill

Batch Method SW3550B

Matrix Soil/Solid

Date 06/06/2007

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Semivolatile Organic GC/MS

Naphthalene	LCS	3.09	70	(50-105)		4.42 mg/Kg	06/15/2007
4-Chloroaniline	LCS	3.26	74	(54-95)		4.42 mg/Kg	06/15/2007
Hexachlorobutadiene	LCS	3.00	68	(41-150)		4.42 mg/Kg	06/15/2007
4-Chloro-3-methylphenol	LCS	3.61	82	(59-115)		4.42 mg/Kg	06/15/2007
2,4-Dichlorophenol	LCS	3.37	76	(53-110)		4.42 mg/Kg	06/15/2007
2-Methylnaphthalene	LCS	3.40	77	(50-125)		4.42 mg/Kg	06/15/2007
Hexachlorocyclopentadiene	LCS	2.61	59	(34-128)		4.42 mg/Kg	06/15/2007
2,4,6-Trichlorophenol	LCS	3.54	80	(53-110)		4.42 mg/Kg	06/15/2007
2,4,5-Trichlorophenol	LCS	3.67	83	(57-110)		4.42 mg/Kg	06/15/2007
2-Chloronaphthalene	LCS	2.96	67	(45-115)		4.42 mg/Kg	06/15/2007
2-Nitroaniline	LCS	4.35	98	(53-120)		4.42 mg/Kg	06/15/2007
Dimethylphthalate	LCS	3.69	84	(58-110)		4.42 mg/Kg	06/15/2007
Acenaphthylene	LCS	3.48	79	(53-105)		4.42 mg/Kg	06/15/2007
2,6-Dinitrotoluene	LCS	4.18	95	(52-125)		4.42 mg/Kg	06/15/2007
3-Nitroaniline	LCS	4.07	92	(50-110)		4.42 mg/Kg	06/15/2007
Acenaphthene	LCS	3.65	83	(53-110)		4.42 mg/Kg	06/15/2007
2,4-Dinitrophenol	LCS	7.39	93	(40-130)		7.95 mg/Kg	06/15/2007
4-Nitrophenol	LCS	4.82	78	(46-130)		6.18 mg/Kg	06/15/2007
Dibenzofuran	LCS	3.60	81	(51-145)		4.42 mg/Kg	06/15/2007
2,4-Dinitrotoluene	LCS	4.03	91	(51-125)		4.42 mg/Kg	06/15/2007



SGS Ref.# 767972 Lab Control Sample

Printed Date/Time 06/26/2007 14:11

Prep Batch XXX18100

Client Name Oasis Environmental
Project Name/# Fort Yukon Former Landfill

Method SW3550B

Matrix Soil/Solid

Date 06/06/2007

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
<u>Semivolatile Organic GC/MS</u>								
Diethylphthalate	LCS	3.49	79	(58-125)			4.42 mg/Kg	06/15/2007
4-Chlorophenyl-phenylether	LCS	3.60	82	(55-120)			4.42 mg/Kg	06/15/2007
Fluorene	LCS	3.90	88	(54-115)			4.42 mg/Kg	06/15/2007
4-Nitroaniline	LCS	3.76	85	(46-105)			4.42 mg/Kg	06/15/2007
2-Methyl-4,6-dinitrophenol	LCS	7.66	96	(43-134)			7.95 mg/Kg	06/15/2007
N-Nitrosodiphenylamine	LCS	3.82	86	(57-115)			4.42 mg/Kg	06/15/2007
4-Bromophenyl-phenylether	LCS	3.13	71	(55-96)			4.42 mg/Kg	06/15/2007
Hexachlorobenzene	LCS	3.62	82	(47-150)			4.42 mg/Kg	06/15/2007
Pentachlorophenol	LCS	4.61	75	(49-115)			6.18 mg/Kg	06/15/2007
Phenanthrene	LCS	3.87	88	(54-110)			4.42 mg/Kg	06/15/2007
Anthracene	LCS	3.75	85	(55-115)			4.42 mg/Kg	06/15/2007
Di-n-butylphthalate	LCS	2.86	65	(56-120)			4.42 mg/Kg	06/15/2007
Fluoranthene	LCS	3.68	83	(55-125)			4.42 mg/Kg	06/15/2007
Pyrene	LCS	5.11	116	(58-125)			4.42 mg/Kg	06/15/2007
Azobenzene	LCS	3.90	88	(49-125)			4.42 mg/Kg	06/15/2007
Butylbenzylphthalate	LCS	5.30	120	(61-125)			4.42 mg/Kg	06/15/2007
3,3-Dichlorobenzidine	LCS	3.47	79	(35-126)			4.42 mg/Kg	06/15/2007
Benzo(a)Anthracene	LCS	4.37	99	(58-120)			4.42 mg/Kg	06/15/2007
Chrysene	LCS	4.26	97	(55-120)			4.42 mg/Kg	06/15/2007
bis(2-Ethylhexyl)phthalate	LCS	4.33	98	(58-140)			4.42 mg/Kg	06/15/2007
di-n-Octylphthalate	LCS	3.70	84	(49-130)			4.42 mg/Kg	06/15/2007



SGS Ref.# 767972 Lab Control Sample

Printed Date/Time 06/26/2007 14:11
Prep Batch XXX18100

Client Name Oasis Environmental
Project Name/# Fort Yukon Former Landfill
Matrix Soil/Solid

Method SW3550B
Date 06/06/2007

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Semivolatile Organic GC/MS

Benzo[b]Fluoranthene	LCS	4.58	104	(59-115)		4.42 mg/Kg	06/15/2007
Benzo[k]fluoranthene	LCS	4.62	105	(52-125)		4.42 mg/Kg	06/15/2007
Benzo[a]pyrene	LCS	4.29	97	(56-110)		4.42 mg/Kg	06/15/2007
Indeno[1,2,3-c,d] pyrene	LCS	4.08	92	(40-120)		4.42 mg/Kg	06/15/2007
Dibenzo[a,h]anthracene	LCS	3.76	85	(41-125)		4.42 mg/Kg	06/15/2007
Benzo[g,h,i]perylene	LCS	3.89	88	(40-125)		4.42 mg/Kg	06/15/2007

Surrogates

2-Fluorophenol <surr>	LCS		63	(38-82)			06/15/2007
Phenol-d6 <surr>	LCS		73	(44-89)			06/15/2007
Nitrobenzene-d5 <surr>	LCS		66	(37-99)			06/15/2007
2-Fluorobiphenyl <surr>	LCS		68	(47-94)			06/15/2007
2,4,6-Tribromophenol <surr>	LCS		74	(55-109)			06/15/2007
Terphenyl-d14 <surr>	LCS		101	(42-120)			06/15/2007

Batch XMS4045
Method SW8270C
Instrument HP 5890 Series II MS4 SVPA



SGS Ref.#	768029	Lab Control Sample	Printed Date/Time	06/26/2007	14:11
	768030	Lab Control Sample Duplicate	Prep	Batch	XXX18103
Client Name		Oasis Environmental		Method	SW3510C
Project Name/#		Fort Yukon Former Landfill		Date	06/06/2007
Matrix		Water (Surface, Eff., Ground)			

QC results affect the following production samples:
1072473009, 1072473010, 1072473011, 1072473012, 1072473013

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Semivolatile Organic Gas Chromatography



SGS Ref.#	768029	Lab Control Sample	Printed Date/Time	06/26/2007	14:11
	768030	Lab Control Sample Duplicate	Prep	Batch	XXX18103
Client Name	Oasis Environmental		Method	SW3510C	
Project Name/#	Fort Yukon Former Landfill		Date	06/06/2007	
Matrix	Water (Surface, Eff., Ground)				

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
<u>Semivolatile Organic Gas Chromatography</u>							
gamma-Chlordane	LCS	0.0740	74	(60-120)		0.1 ug/L	06/16/2007
	LCSD	0.0920	92		22 (< 25)	0.1 ug/L	06/16/2007
alpha-Chlordane	LCS	0.0750	75	(65-122)		0.1 ug/L	06/16/2007
	LCSD	0.0930	93		21 (< 25)	0.1 ug/L	06/16/2007
alpha-BHC	LCS	0.0700	70	(60-128)		0.1 ug/L	06/16/2007
	LCSD	0.0880	88		23 (< 25)	0.1 ug/L	06/16/2007
beta-BHC	LCS	0.0760	76	(66-124)		0.1 ug/L	06/16/2007
	LCSD	0.0950	95		22 (< 25)	0.1 ug/L	06/16/2007
gamma-BHC (Lindane)	LCS	0.0700	70	(42-114)		0.1 ug/L	06/16/2007
	LCSD	0.0850	85		19 (< 25)	0.1 ug/L	06/16/2007
delta-BHC	LCS	0.0860	86	(46-128)		0.1 ug/L	06/16/2007
	LCSD	0.107	107		22 (< 25)	0.1 ug/L	06/16/2007
Heptachlor	LCS	0.0690	69	(51-128)		0.1 ug/L	06/16/2007
	LCSD	0.0840	84		20 (< 25)	0.1 ug/L	06/16/2007
Aldrin	LCS	0.0790	79	(47-117)		0.1 ug/L	06/16/2007
	LCSD	0.100	100		24 (< 25)	0.1 ug/L	06/16/2007
Heptachlor epoxide	LCS	0.0740	74	(62-123)		0.1 ug/L	06/16/2007
	LCSD	0.0920	92		22 (< 25)	0.1 ug/L	06/16/2007
Endosulfan I	LCS	0.0750	75	(50-110)		0.1 ug/L	06/16/2007
	LCSD	0.0940	94		23 (< 25)	0.1 ug/L	06/16/2007
4,4'-DDE	LCS	0.0760	76	(53-123)		0.1 ug/L	06/16/2007
	LCSD	0.0940	94		21 (< 25)	0.1 ug/L	06/16/2007
Dieldrin	LCS	0.0750	75	(62-127)		0.1 ug/L	06/16/2007
	LCSD	0.0920	92		20 (< 25)	0.1 ug/L	06/16/2007
Endrin	LCS	0.0770	77	(56-132)		0.1 ug/L	06/16/2007
	LCSD	0.0960	96		22 (< 25)	0.1 ug/L	06/16/2007
Endosulfan II	LCS	0.0790	79	(50-129)		0.1 ug/L	06/16/2007
	LCSD	0.0970	97		21 (< 25)	0.1 ug/L	06/16/2007



SGS Ref.# 768029 Lab Control Sample
768030 Lab Control Sample Duplicate
Client Name Oasis Environmental
Project Name/# Fort Yukon Former Landfill
Matrix Water (Surface, Eff., Ground)

Printed Date/Time 06/26/2007 14:11
Prep Batch XXX18103
Method SW3510C
Date 06/06/2007

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Semivolatile Organic Gas Chromatography

4,4'-DDD	LCS	0.0750	75	(57-135)			0.1 ug/L	06/16/2007
	LCSD	0.0910	91		19	(< 25)	0.1 ug/L	06/16/2007
Endrin aldehyde	LCS	0.0900	90	(56-133)			0.1 ug/L	06/16/2007
	LCSD	0.113	113		23	(< 25)	0.1 ug/L	06/16/2007
4,4'-DDT	LCS	0.0770	77	(52-134)			0.1 ug/L	06/16/2007
	LCSD	0.0950	95		21	(< 25)	0.1 ug/L	06/16/2007
Endosulfan sulfate	LCS	0.0800	80	(55-135)			0.1 ug/L	06/16/2007
	LCSD	0.0990	99		21	(< 25)	0.1 ug/L	06/16/2007
Endrin ketone	LCS	0.0740	74	(55-125)			0.1 ug/L	06/16/2007
	LCSD	0.0920	92		22	(< 25)	0.1 ug/L	06/16/2007
Methoxychlor	LCS	0.0810	81	(56-150)			0.1 ug/L	06/16/2007
	LCSD	0.100	100		21	(< 25)	0.1 ug/L	06/16/2007

Surrogates

Tetrachloro-m-xylene <surr>	LCS		58	(33-97)				06/16/2007
	LCSD		73		23			06/16/2007
Decachlorobiphenyl <surr>	LCS		74	(32-135)				06/16/2007
	LCSD		91		20			06/16/2007

Batch XGC5824
Method SW8081A
Instrument HP 5890 Series II ECD SV J F



SGS Ref.# 768031 Lab Control Sample
768032 Lab Control Sample Duplicate
Client Name Oasis Environmental
Project Name/# Fort Yukon Former Landfill
Matrix Water (Surface, Eff., Ground)

Printed Date/Time 06/26/2007 14:11
Prep Batch XXX18103
Method SW3510C
Date 06/06/2007

QC results affect the following production samples:

1072473009, 1072473010, 1072473011, 1072473012, 1072473013

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Polychlorinated Biphenyls

Aroclor-1016	LCS	0.808	81	(62-116)		1 ug/L	06/21/2007
	LCSD	0.929	93		14	(< 25)	1 ug/L 06/21/2007
Aroclor-1260	LCS	0.817	82	(60-113)		1 ug/L	06/21/2007
	LCSD	0.922	92		12	(< 25)	1 ug/L 06/21/2007

Surrogates

Decachlorobiphenyl <surr>	LCS		91	(42-120)			06/21/2007
	LCSD		100		10		06/21/2007

Batch XGC5829
Method SW8082
Instrument HP 5890 Series II ECD SV I F



SGS Ref.# 768069 Lab Control Sample

Printed Date/Time 06/26/2007 14:11

Client Name Oasis Environmental
Project Name/# Fort Yukon Former Landfill
Matrix Water (Surface, Eff., Ground)

Prep Batch MXX18996
Method SW3010A
Date 06/06/2007

QC results affect the following production samples:

1072473009, 1072473010, 1072473011, 1072473012, 1072473013

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Metals by ICP/MS

Arsenic	LCS	973	97	(80-120)		1000 ug/L	06/14/2007
Barium	LCS	924	92	(80-120)		1000 ug/L	06/14/2007
Cadmium	LCS	972	97	(80-120)		1000 ug/L	06/14/2007
Chromium	LCS	941	94	(80-120)		1000 ug/L	06/14/2007
Lead	LCS	967	97	(80-120)		1000 ug/L	06/14/2007
Selenium	LCS	1010	101	(80-120)		1000 ug/L	06/14/2007
Silver	LCS	97.1	97	(80-120)		100 ug/L	06/14/2007

Batch MMS4893
Method SW6020
Instrument Perkin Elmer Sciex ICP-MS P3



SGS Ref.# 768177 Lab Control Sample

Printed Date/Time 06/26/2007 14:11

Client Name Oasis Environmental

Prep	Batch	MXX19000
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Project Name/# Fort Yukon Former Landfill

Method METHOD

Matrix	Soil/Solid
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Date 06/06/2007

QC results affect the following production samples:

1072473001, 1072473002, 1072473003, 1072473004, 1072473005, 1072473006, 1072473007

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Metals Department

Mercury	LCS	171	103	(83-118)	167 ug/Kg	06/07/2007
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Batch MCV3636

Method SW7471A

Instrument	PSA Millennium mercury AA
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SGS Ref.#	768303	Lab Control Sample	Printed Date/Time	06/26/2007	14:11
	768304	Lab Control Sample Duplicate	Prep	Batch	XXX18114
Client Name		Oasis Environmental		Method	SW3510C
Project Name/#		Fort Yukon Former Landfill		Date	06/07/2007
Matrix		Water (Surface, Eff., Ground)			

QC results affect the following production samples:

1072473011, 1072473013

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Semivolatile Organic GC/MS



SGS Ref.#	768303	Lab Control Sample	Printed Date/Time	06/26/2007	14:11
	768304	Lab Control Sample Duplicate	Prep	Batch	XXX18114
Client Name	Oasis Environmental		Method	SW3510C	
Project Name/#	Fort Yukon Former Landfill		Date	06/07/2007	
Matrix	Water (Surface, Eff., Ground)				

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
<u>Semivolatile Organic GC/MS</u>								
2-Methylphenol (o-Cresol)	LCS	0.0749	75	(42-102)			0.1 mg/L	06/11/2007
	LCSD	0.0654	65		14	(< 20)	0.1 mg/L	06/12/2007
3&4-Methylphenol (p&m-Cresol)	LCS	0.110	78	(47-107)			0.14 mg/L	06/11/2007
	LCSD	0.0954	68		14	(< 20)	0.14 mg/L	06/12/2007
Hexachlorobutadiene	LCS	0.0830	83	(47-105)			0.1 mg/L	06/11/2007
	LCSD	0.0682	68		20	(< 20)	0.1 mg/L	06/12/2007
2,4-Dinitrotoluene	LCS	0.101	101	(68-120)			0.1 mg/L	06/11/2007
	LCSD	0.101	101		0	(< 20)	0.1 mg/L	06/12/2007
Hexachlorobenzene	LCS	0.0999	100	(58-120)			0.1 mg/L	06/11/2007
	LCSD	0.103	103		3	(< 20)	0.1 mg/L	06/12/2007
Hexachloroethane	LCS	0.0651	65	(33-91)			0.1 mg/L	06/11/2007
	LCSD	0.0545	55		18	(< 20)	0.1 mg/L	06/12/2007
Nitrobenzene	LCS	0.0846	85	(51-106)			0.1 mg/L	06/11/2007
	LCSD	0.0705	71		18	(< 20)	0.1 mg/L	06/12/2007
Pentachlorophenol	LCS	0.133	95	(61-115)			0.14 mg/L	06/11/2007
	LCSD	0.137	98		3	(< 20)	0.14 mg/L	06/12/2007
2,4,5-Trichlorophenol	LCS	0.0941	94	(57-110)			0.1 mg/L	06/11/2007
	LCSD	0.0874	87		8	(< 20)	0.1 mg/L	06/12/2007
2,4,6-Trichlorophenol	LCS	0.0902	90	(58-115)			0.1 mg/L	06/11/2007
	LCSD	0.0807	81		11	(< 20)	0.1 mg/L	06/12/2007
N-Nitrosodimethylamine	LCS	0.0728	73	(31-95)			0.1 mg/L	06/11/2007
	LCSD	0.0617	62		17	(< 20)	0.1 mg/L	06/12/2007
N-Nitroso-di-n-propylamine	LCS	0.0841	84	(51-120)			0.1 mg/L	06/11/2007
	LCSD	0.0774	77		8	(< 20)	0.1 mg/L	06/12/2007
Phenol	LCS	0.0642	64	(37-94)			0.1 mg/L	06/11/2007
	LCSD	0.0532	53		19	(< 20)	0.1 mg/L	06/12/2007
Aniline	LCS	0.0810	81	(10-130)			0.1 mg/L	06/11/2007
	LCSD	0.0714	71		13	(< 20)	0.1 mg/L	06/12/2007



SGS Ref.#	768303	Lab Control Sample	Printed Date/Time	06/26/2007	14:11
	768304	Lab Control Sample Duplicate	Prep	Batch	XXX18114
Client Name	Oasis Environmental		Method	SW3510C	
Project Name/#	Fort Yukon Former Landfill		Date	06/07/2007	
Matrix	Water (Surface, Eff., Ground)				

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Semivolatile Organic GC/MS

Bis(2-Chloroethyl)ether	LCS	0.0800	80	(41-108)		0.1 mg/L	06/11/2007
	LCSD	0.0692	69		15	(< 20)	0.1 mg/L 06/12/2007
Isophorone	LCS	0.0936	94	(52-110)		0.1 mg/L	06/11/2007
	LCSD	0.0858	86		9	(< 20)	0.1 mg/L 06/12/2007
2-Chlorophenol	LCS	0.0675	68	(37-96)		0.1 mg/L	06/11/2007
	LCSD	0.0576	58		16	(< 20)	0.1 mg/L 06/12/2007
1,3-Dichlorobenzene	LCS	0.0644	64	(33-91)		0.1 mg/L	06/11/2007
	LCSD	0.0535	54		19	(< 20)	0.1 mg/L 06/12/2007
2-Nitrophenol	LCS	0.0747	75	(46-110)		0.1 mg/L	06/11/2007
	LCSD	0.0643	64		15	(< 20)	0.1 mg/L 06/12/2007
2,4-Dimethylphenol	LCS	0.0618	62	(32-93)		0.1 mg/L	06/11/2007
	LCSD	0.0563	56		9	(< 20)	0.1 mg/L 06/12/2007
1,4-Dichlorobenzene	LCS	0.0643	64	(34-93)		0.1 mg/L	06/11/2007
	LCSD	0.0554	55		15	(< 20)	0.1 mg/L 06/12/2007
Benzoic acid	LCS	0.0960	69	(41-97)		0.14 mg/L	06/11/2007
	LCSD	0.0852	61		12	(< 20)	0.14 mg/L 06/12/2007
1,2-Dichlorobenzene	LCS	0.0676	68	(36-95)		0.1 mg/L	06/11/2007
	LCSD	0.0583	58		15	(< 20)	0.1 mg/L 06/12/2007
Bis(2chloro1methylethyl)Ether	LCS	0.0822	82	(47-105)		0.1 mg/L	06/11/2007
	LCSD	0.0698	70		16	(< 20)	0.1 mg/L 06/12/2007
Bis(2-Chloroethoxy)methane	LCS	0.0878	88	(59-105)		0.1 mg/L	06/11/2007
	LCSD	0.0772	77		13	(< 20)	0.1 mg/L 06/12/2007
Benzyl alcohol	LCS	0.0898	90	(44-110)		0.1 mg/L	06/11/2007
	LCSD	0.0779	78		14	(< 20)	0.1 mg/L 06/12/2007
2,4-Dichlorophenol	LCS	0.0796	80	(52-105)		0.1 mg/L	06/11/2007
	LCSD	0.0704	70		12	(< 20)	0.1 mg/L 06/12/2007
1,2,4-Trichlorobenzene	LCS	0.0749	75	(46-105)		0.1 mg/L	06/11/2007



SGS Ref.#	768303	Lab Control Sample	Printed Date/Time	06/26/2007	14:11
	768304	Lab Control Sample Duplicate	Prep	Batch	XXX18114
Client Name	Oasis Environmental		Method	SW3510C	
Project Name/#	Fort Yukon Former Landfill		Date	06/07/2007	
Matrix	Water (Surface, Eff., Ground)				

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
<u>Semivolatile Organic GC/MS</u>								
	LCSD	0.0638	64		16	(< 20)	0.1 mg/L	06/12/2007
Naphthalene	LCS	0.0872	87	(46-100)			0.1 mg/L	06/11/2007
	LCSD	0.0758	76		14	(< 20)	0.1 mg/L	06/12/2007
4-Chloroaniline	LCS	0.0849	85	(20-110)			0.1 mg/L	06/11/2007
	LCSD	0.0802	80		6	(< 20)	0.1 mg/L	06/12/2007
4-Chloro-3-methylphenol	LCS	0.0908	91	(61-110)			0.1 mg/L	06/11/2007
	LCSD	0.0842	84		8	(< 20)	0.1 mg/L	06/12/2007
2-Methylnaphthalene	LCS	0.0903	90	(54-105)			0.1 mg/L	06/11/2007
	LCSD	0.0819	82		10	(< 20)	0.1 mg/L	06/12/2007
Hexachlorocyclopentadiene	LCS	0.0418	42	(10-86)			0.1 mg/L	06/11/2007
	LCSD	0.0403	40		4	(< 20)	0.1 mg/L	06/12/2007
2-Chloronaphthalene	LCS	0.0813	81	(50-105)			0.1 mg/L	06/11/2007
	LCSD	0.0761	76		7	(< 20)	0.1 mg/L	06/12/2007
2-Nitroaniline	LCS	0.106	106	(50-115)			0.1 mg/L	06/11/2007
	LCSD	0.103	103		3	(< 20)	0.1 mg/L	06/12/2007
Dimethylphthalate	LCS	0.0950	95	(54-125)			0.1 mg/L	06/11/2007
	LCSD	0.0908	91		5	(< 20)	0.1 mg/L	06/12/2007
2,6-Dinitrotoluene	LCS	0.101	101	(59-115)			0.1 mg/L	06/11/2007
	LCSD	0.0988	99		3	(< 20)	0.1 mg/L	06/12/2007
Acenaphthylene	LCS	0.0975	98	(50-105)			0.1 mg/L	06/11/2007
	LCSD	0.0924	92		5	(< 20)	0.1 mg/L	06/12/2007
3-Nitroaniline	LCS	0.0991	99	(42-110)			0.1 mg/L	06/11/2007
	LCSD	0.0965	97		3	(< 20)	0.1 mg/L	06/12/2007
Acenaphthene	LCS	0.101	101	(47-110)			0.1 mg/L	06/11/2007
	LCSD	0.0922	92		9	(< 20)	0.1 mg/L	06/12/2007
2,4-Dinitrophenol	LCS	0.190	106	(54-130)			0.18 mg/L	06/11/2007
	LCSD	0.189	105		1	(< 20)	0.18 mg/L	06/12/2007



SGS Ref.#	768303	Lab Control Sample	Printed Date/Time	06/26/2007	14:11
	768304	Lab Control Sample Duplicate	Prep	Batch	XXX18114
Client Name	Oasis Environmental		Method	SW3510C	
Project Name/#	Fort Yukon Former Landfill		Date	06/07/2007	
Matrix	Water (Surface, Eff., Ground)				

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
<u>Semivolatile Organic GC/MS</u>								
4-Nitrophenol	LCS	0.126	90	(48-120)			0.14 mg/L	06/11/2007
	LCSD	0.117	84		8	(< 20)	0.14 mg/L	06/12/2007
Dibenzofuran	LCS	0.101	101	(55-115)			0.1 mg/L	06/11/2007
	LCSD	0.0953	95		6	(< 20)	0.1 mg/L	06/12/2007
Diethylphthalate	LCS	0.102	102	(58-120)			0.1 mg/L	06/11/2007
	LCSD	0.0972	97		5	(< 20)	0.1 mg/L	06/12/2007
Fluorene	LCS	0.105	105	(58-110)			0.1 mg/L	06/11/2007
	LCSD	0.102	102		3	(< 20)	0.1 mg/L	06/12/2007
4-Chlorophenyl-phenylether	LCS	0.0971	97	(59-120)			0.1 mg/L	06/11/2007
	LCSD	0.0938	94		4	(< 20)	0.1 mg/L	06/12/2007
4-Nitroaniline	LCS	0.0942	94	(40-120)			0.1 mg/L	06/11/2007
	LCSD	0.0950	95		1	(< 20)	0.1 mg/L	06/12/2007
2-Methyl-4,6-dinitrophenol	LCS	0.188	105	(69-130)			0.18 mg/L	06/11/2007
	LCSD	0.199	110		5	(< 20)	0.18 mg/L	06/12/2007
N-Nitrosodiphenylamine	LCS	0.0944	94	(50-120)			0.1 mg/L	06/11/2007
	LCSD	0.0949	95		1	(< 20)	0.1 mg/L	06/12/2007
Azobenzene	LCS	0.101	101	(55-123)			0.1 mg/L	06/11/2007
	LCSD	0.0979	98		3	(< 20)	0.1 mg/L	06/12/2007
4-Bromophenyl-phenylether	LCS	0.0838	84	(54-115)			0.1 mg/L	06/11/2007
	LCSD	0.0890	89		6	(< 20)	0.1 mg/L	06/12/2007
Phenanthrene	LCS	0.107	107	(51-120)			0.1 mg/L	06/11/2007
	LCSD	0.113	113		5	(< 20)	0.1 mg/L	06/12/2007
Anthracene	LCS	0.107	107	(55-120)			0.1 mg/L	06/11/2007
	LCSD	0.111	111		3	(< 20)	0.1 mg/L	06/12/2007
Di-n-butylphthalate	LCS	0.0979	98	(55-115)			0.1 mg/L	06/11/2007
	LCSD	0.0939	94		4	(< 20)	0.1 mg/L	06/12/2007
Fluoranthene	LCS	0.105	105	(61-120)			0.1 mg/L	06/11/2007
	LCSD	0.107	107		2	(< 20)	0.1 mg/L	06/12/2007



SGS Ref.#	768303	Lab Control Sample	Printed Date/Time	06/26/2007	14:11
	768304	Lab Control Sample Duplicate	Prep	Batch	XXX18114
Client Name	Oasis Environmental		Method	SW3510C	
Project Name/#	Fort Yukon Former Landfill		Date	06/07/2007	
Matrix	Water (Surface, Eff., Ground)				

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Semivolatile Organic GC/MS

Pyrene	LCS	0.112	112	(63-128)			0.1 mg/L	06/11/2007
	LCSD	0.111	111		2	(< 20)	0.1 mg/L	06/12/2007
Butylbenzylphthalate	LCS	0.111	111	(61-120)			0.1 mg/L	06/11/2007
	LCSD	0.113	113		2	(< 20)	0.1 mg/L	06/12/2007
3,3-Dichlorobenzidine	LCS	0.0870	87	(34-110)			0.1 mg/L	06/11/2007
	LCSD	0.0876	88		1	(< 20)	0.1 mg/L	06/12/2007
Benzo(a)Anthracene	LCS	0.108	108	(58-120)			0.1 mg/L	06/11/2007
	LCSD	0.105	105		2	(< 20)	0.1 mg/L	06/12/2007
Chrysene	LCS	0.107	107	(59-120)			0.1 mg/L	06/11/2007
	LCSD	0.104	104		3	(< 20)	0.1 mg/L	06/12/2007
bis(2-Ethylhexyl)phthalate	LCS	0.118	118	(83-125)			0.1 mg/L	06/11/2007
	LCSD	0.112	112		5	(< 20)	0.1 mg/L	06/12/2007
di-n-Octylphthalate	LCS	0.105	105	(63-135)			0.1 mg/L	06/11/2007
	LCSD	0.0971	97		8	(< 20)	0.1 mg/L	06/12/2007
Benzo[b]Fluoranthene	LCS	0.112	112	(61-120)			0.1 mg/L	06/11/2007
	LCSD	0.112	112		0	(< 20)	0.1 mg/L	06/12/2007
Benzo[k]fluoranthene	LCS	0.105	105	(56-124)			0.1 mg/L	06/11/2007
	LCSD	0.106	106		1	(< 20)	0.1 mg/L	06/12/2007
Benzo[a]pyrene	LCS	0.105	105	(65-120)			0.1 mg/L	06/11/2007
	LCSD	0.108	108		3	(< 20)	0.1 mg/L	06/12/2007
Indeno[1,2,3-c,d] pyrene	LCS	0.113	113	(45-125)			0.1 mg/L	06/11/2007
	LCSD	0.114	114		1	(< 20)	0.1 mg/L	06/12/2007
Dibenzo[a,h]anthracene	LCS	0.102	102	(42-125)			0.1 mg/L	06/11/2007
	LCSD	0.103	103		1	(< 20)	0.1 mg/L	06/12/2007
Benzo[g,h,i]perylene	LCS	0.109	109	(40-123)			0.1 mg/L	06/11/2007
	LCSD	0.113	113		4	(< 20)	0.1 mg/L	06/12/2007

Surrogates



SGS Ref.# 768303 Lab Control Sample
768304 Lab Control Sample Duplicate
Client Name Oasis Environmental
Project Name/# Fort Yukon Former Landfill
Matrix Water (Surface, Eff., Ground)

Printed Date/Time 06/26/2007 14:11
Prep Batch XXX18114
Method SW3510C
Date 06/07/2007

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
<u>Semivolatile Organic GC/MS</u>							
2-Fluorophenol <surr>	LCS	40	(20-82)				06/11/2007
	LCSD	35		14			06/12/2007
Phenol-d6 <surr>	LCS	66	(45-75)				06/11/2007
	LCSD	54		20			06/12/2007
Nitrobenzene-d5 <surr>	LCS	80	(49-94)				06/11/2007
	LCSD	71		13			06/12/2007
2-Fluorobiphenyl <surr>	LCS	86	(59-98)				06/11/2007
	LCSD	79		10			06/12/2007
2,4,6-Tribromophenol <surr>	LCS	99	(68-114)				06/11/2007
	LCSD	101		1			06/12/2007
Terphenyl-d14 <surr>	LCS	98	(69-118)				06/11/2007
	LCSD	99		1			06/12/2007

Batch XMS4029
Method SW8270C
Instrument HP 5890 Series II MS4 SVPA



SGS Ref.#	768437	Lab Control Sample	Printed Date/Time	06/26/2007	14:11
	768438	Lab Control Sample Duplicate	Prep	Batch	VXX16780
Client Name		Oasis Environmental	Method		SW5030B
Project Name/#		Fort Yukon Former Landfill	Date		06/07/2007
Matrix		Water (Surface, Eff., Ground)			

QC results affect the following production samples:

1072473009, 1072473010, 1072473011, 1072473012, 1072473013

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Volatile Fuels Department

Gasoline Range Organics	LCS	0.175	78	(60-120)			0.225 mg/L	06/08/2007
	LCSD	0.215	96		21 *	(< 20)	0.225 mg/L	06/08/2007

Surrogates

4-Bromofluorobenzene <surr>	LCS		105	(50-150)				06/08/2007
	LCSD		107		2			06/08/2007

Batch	VFC8394
Method	AK101
Instrument	HP 5890 Series II PID+HECD VBA



SGS Ref.# 768644 Lab Control Sample
764684 Lab Control Sample Duplicate
Client Name Oasis Environmental
Project Name/# Fort Yukon Former Landfill
Matrix Soil/Solid

Printed Date/Time 06/26/2007 14:11
Prep Batch XXX18122
Method SW3550B
Date 06/09/2007

QC results affect the following production samples:

1072473001, 1072473002, 1072473003, 1072473004, 1072473005, 1072473006, 1072473007

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Semivolatile Organic Fuels Department

Diesel Range Organics	LCS	29.5	89	(75-125)		33 mg/Kg	06/12/2007
	LCSD	28.2	85		4	(< 20)	33.2 mg/Kg 06/12/2007

Surrogates

5a Androstane <surr>	LCS		84	(60-120)			06/12/2007
	LCSD		78		7		06/12/2007

Batch XFC7419
Method AK102
Instrument HP 5890 Series II FID SV D F

Residual Range Organics	LCS	28.5	86	(60-120)		33 mg/Kg	06/12/2007
	LCSD	26.5	80		7	(< 20)	33.2 mg/Kg 06/12/2007

Surrogates

n-Triacontane-d62 <surr>	LCS		86	(60-120)			06/12/2007
	LCSD		96		11		06/12/2007

Batch XFC7419
Method AK103
Instrument HP 5890 Series II FID SV D F



SGS Ref.# 768655 Lab Control Sample

Printed Date/Time 06/26/2007 14:11

Client Name Oasis Environmental
Project Name/# Fort Yukon Former Landfill
Matrix Water (Surface, Eff., Ground)

Prep Batch VXX16785
Method SW5030B
Date 06/08/2007

QC results affect the following production samples:

1072473009, 1072473010, 1072473011, 1072473012, 1072473013, 1072473014

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Volatile Gas Chromatography/Mass Spectroscopy

Benzene	LCS	32.2	107	(84-115)		30 ug/L	06/08/2007
Toluene	LCS	31.7	106	(81-115)		30 ug/L	06/08/2007
Ethylbenzene	LCS	34.6	115	(85-120)		30 ug/L	06/08/2007
P & M -Xylene	LCS	65.0	108	(80-120)		60 ug/L	06/08/2007
o-Xylene	LCS	34.4	115	(80-120)		30 ug/L	06/08/2007

Surrogates

Dibromofluoromethane <surr>	LCS		93	(85-115)			06/08/2007
1,2-Dichloroethane-D4 <surr>	LCS		94	(72-119)			06/08/2007
Toluene-d8 <surr>	LCS		99	(85-120)			06/08/2007
4-Bromofluorobenzene <surr>	LCS		95	(76-119)			06/08/2007

Batch VMS9132
Method SW8260B
Instrument HP 5890 Series II MS3 VNA



SGS Ref.#	768712	Lab Control Sample	Printed Date/Time	06/26/2007	14:11
Client Name	Oasis Environmental		Prep	Batch	MXX19011
Project Name/#	Fort Yukon Former Landfill			Method	SW3050B
Matrix	Soil/Solid			Date	06/08/2007

QC results affect the following production samples:

1072473001, 1072473002, 1072473003, 1072473004, 1072473005, 1072473006, 1072473007

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Metals by ICP/MS

Arsenic	LCS	48.5	97	(80-120)		50 mg/Kg	06/14/2007
Barium	LCS	46.3	93	(80-120)		50 mg/Kg	06/14/2007
Cadmium	LCS	49.1	98	(80-120)		50 mg/Kg	06/14/2007
Chromium	LCS	46.1	92	(80-120)		50 mg/Kg	06/14/2007
Lead	LCS	44.7	89	(80-120)		50 mg/Kg	06/14/2007
Selenium	LCS	49.4	99	(80-120)		50 mg/Kg	06/14/2007
Silver	LCS	4.82	97	(80-120)		5 mg/Kg	06/14/2007

Batch MMS4894
Method SW6020
Instrument Perkin Elmer Sciex ICP-MS P3



SGS Ref.#	768969	Lab Control Sample	Printed Date/Time	06/26/2007	14:11
			Prep	Batch	XXX18127
Client Name	Oasis Environmental			Method	SW3550B
Project Name/#	Fort Yukon Former Landfill			Date	06/11/2007
Matrix	Soil/Solid				

QC results affect the following production samples:
1072473001, 1072473002, 1072473003, 1072473004, 1072473005, 1072473006, 1072473007

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Semivolatile Organic Gas Chromatography



SGS Ref.# 768969 Lab Control Sample

Printed Date/Time 06/26/2007 14:11

Prep XXX18127

Client Name Oasis Environmental
Project Name/# Fort Yukon Former Landfill

Batch Method SW3550B

Matrix Soil/Solid

Date 06/11/2007

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Semivolatile Organic Gas Chromatography

gamma-Chlordane	LCS	4.09	93	(65-122)		4.4 ug/Kg	06/20/2007
alpha-Chlordane	LCS	4.31	98	(65-120)		4.4 ug/Kg	06/20/2007
alpha-BHC	LCS	4.53	103	(56-125)		4.4 ug/Kg	06/20/2007
beta-BHC	LCS	4.40	100	(62-119)		4.4 ug/Kg	06/20/2007
gamma-BHC (Lindane)	LCS	4.05	92	(60-118)		4.4 ug/Kg	06/20/2007
delta-BHC	LCS	4.22	96	(57-123)		4.4 ug/Kg	06/20/2007
Heptachlor	LCS	3.92	89	(51-126)		4.4 ug/Kg	06/20/2007
Aldrin	LCS	4.22	96	(47-120)		4.4 ug/Kg	06/20/2007
Heptachlor epoxide	LCS	4.49	102	(66-120)		4.4 ug/Kg	06/20/2007
Endosulfan I	LCS	4.40	100	(48-130)		4.4 ug/Kg	06/20/2007
4,4'-DDE	LCS	4.44	101	(70-125)		4.4 ug/Kg	06/20/2007
Dieldrin	LCS	4.27	97	(67-125)		4.4 ug/Kg	06/20/2007
Endrin	LCS	4.31	98	(61-128)		4.4 ug/Kg	06/20/2007
Endosulfan II	LCS	4.49	102	(56-122)		4.4 ug/Kg	06/20/2007
4,4'-DDD	LCS	4.27	97	(53-130)		4.4 ug/Kg	06/20/2007
Endrin aldehyde	LCS	4.40	100	(40-132)		4.4 ug/Kg	06/20/2007
4,4'-DDT	LCS	3.87	88	(50-133)		4.4 ug/Kg	06/20/2007
Endosulfan sulfate	LCS	4.09	93	(62-133)		4.4 ug/Kg	06/20/2007
Endrin ketone	LCS	5.94	135	(65-135)		4.4 ug/Kg	06/20/2007
Methoxychlor	LCS	4.09	93	(57-142)		4.4 ug/Kg	06/20/2007

Surrogates



SGS Ref.# 768969 Lab Control Sample

Printed Date/Time 06/26/2007 14:11

Prep Batch XXX18127

Client Name Oasis Environmental

Method SW3550B

Project Name/# Fort Yukon Former Landfill

Date 06/11/2007

Matrix Soil/Solid

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Semivolatile Organic Gas Chromatography

Tetrachloro-m-xylene <sur>	LCS	83	(35-124)				06/20/2007
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Decachlorobiphenyl <sur>	LCS	104	(56-130)				06/20/2007
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Batch XGC5827

Method SW8081A

Instrument HP 5890 Series II ECD SV J F



SGS Ref.# 768970 Lab Control Sample

Printed Date/Time 06/26/2007 14:11

Prep Batch XXX18127

Client Name Oasis Environmental

Method SW3550B

Project Name/# Fort Yukon Former Landfill

Date 06/11/2007

Matrix Soil/Solid

QC results affect the following production samples:

1072473001, 1072473002, 1072473003, 1072473004, 1072473005, 1072473006, 1072473007

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Aroclor-1260	LCS	37.2	84	(60-130)			44.2 ug/Kg	06/21/2007
Aroclor-1016	LCS	36.9	83	(47-120)			44.2 ug/Kg	06/21/2007
Surrogates								
Decachlorobiphenyl <surr>	LCS		102	(60-125)				06/21/2007

Batch XGC5828

Method SW8082

Instrument HP 5890 Series II ECD SV I F



SGS Ref.# 769088 Lab Control Sample

Printed Date/Time 06/26/2007 14:11

Client Name Oasis Environmental
Project Name/# Fort Yukon Former Landfill
Matrix Soil/Solid

Prep Batch VXX16794
Method SW5035A
Date 06/10/2007

QC results affect the following production samples:

1072473001, 1072473002, 1072473003, 1072473004

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Volatile Gas Chromatography/Mass Spectroscopy

Benzene	LCS	839	112	(85-121)		750 ug/Kg	06/10/2007
Toluene	LCS	746	99	(86-116)		750 ug/Kg	06/10/2007
Ethylbenzene	LCS	807	108	(85-115)		750 ug/Kg	06/10/2007
P & M -Xylene	LCS	1580	105	(85-115)		1500 ug/Kg	06/10/2007
o-Xylene	LCS	759	101	(85-115)		750 ug/Kg	06/10/2007

Surrogates

Dibromofluoromethane <surr>	LCS		109	(83-119)			06/10/2007
1,2-Dichloroethane-D4 <surr>	LCS		104	(85-115)			06/10/2007
Toluene-d8 <surr>	LCS		104	(87-115)			06/10/2007
4-Bromofluorobenzene <surr>	LCS		102	(50-154)			06/10/2007

Batch VMS9137
Method SW8260B
Instrument HP 5890 Series II MS1 VMA



SGS Ref.# 769333 Lab Control Sample
769334 Lab Control Sample Duplicate
Client Name Oasis Environmental
Project Name/# Fort Yukon Former Landfill
Matrix Water (Surface, Eff., Ground)

Printed Date/Time 06/26/2007 14:11
Prep Batch XXX18135
Method SW3520C
Date 06/12/2007

QC results affect the following production samples:
1072473009, 1072473010, 1072473011

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Semivolatile Organic Fuels Department

Diesel Range Organics	LCS	0.841	84	(75-125)			1 mg/L	06/13/2007
	LCSD	0.846	85		1	(< 20)	1 mg/L	06/13/2007

Surrogates

5a Androstane <surr>	LCS		84	(60-120)				06/13/2007
	LCSD		85		1			06/13/2007

Batch XFC7424
Method AK102
Instrument HP 5890 Series II FID SV D R

Residual Range Organics	LCS	0.892	89	(60-120)			1 mg/L	06/13/2007
	LCSD	0.911	91		2	(< 20)	1 mg/L	06/13/2007

Surrogates

n-Triacontane-d62 <surr>	LCS		89	(60-120)				06/13/2007
	LCSD		91		2			06/13/2007

Batch XFC7424
Method AK103
Instrument HP 5890 Series II FID SV D R



SGS Ref.# 769429 Lab Control Sample

Printed Date/Time 06/26/2007 14:11

Client Name Oasis Environmental
Project Name/# Fort Yukon Former Landfill
Matrix Soil/Solid

Prep Batch VXX16797
Method SW5035A
Date 06/11/2007

QC results affect the following production samples:

1072473005, 1072473006, 1072473007, 1072473008

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Volatile Gas Chromatography/Mass Spectroscopy

Benzene	LCS	809	108	(85-121)		750 ug/Kg	06/11/2007
Toluene	LCS	759	101	(86-116)		750 ug/Kg	06/11/2007
Ethylbenzene	LCS	795	106	(85-115)		750 ug/Kg	06/11/2007
P & M -Xylene	LCS	1550	103	(85-115)		1500 ug/Kg	06/11/2007
o-Xylene	LCS	741	99	(85-115)		750 ug/Kg	06/11/2007

Surrogates

Dibromofluoromethane <surr>	LCS		111	(83-119)			06/11/2007
1,2-Dichloroethane-D4 <surr>	LCS		107	(85-115)			06/11/2007
Toluene-d8 <surr>	LCS		107	(87-115)			06/11/2007
4-Bromofluorobenzene <surr>	LCS		105	(50-154)			06/11/2007

Batch VMS9139
Method SW8260B
Instrument HP 5890 Series II MS1 VMA



SGS Ref.# 769473 Lab Control Sample
769474 Lab Control Sample Duplicate
Client Name Oasis Environmental
Project Name/# Fort Yukon Former Landfill
Matrix Water (Surface, Eff., Ground)

Printed Date/Time 06/26/2007 14:11
Prep Batch XXX18136
Method SW3520C
Date 06/12/2007

QC results affect the following production samples:
1072473012, 1072473013

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Semivolatile Organic Fuels Department

Diesel Range Organics	LCS	0.965	97	(75-125)		1 mg/L	06/17/2007
	LCSD	0.941	94		3	(< 20)	1 mg/L 06/17/2007

Surrogates

5a Androstane <surr>	LCS		93	(60-120)			06/17/2007
	LCSD		91		2		06/17/2007

Batch XFC7430
Method AK102
Instrument HP 5890 Series II FID SV D F

Residual Range Organics	LCS	1.11	111	(60-120)		1 mg/L	06/17/2007
	LCSD	1.10	110		1	(< 20)	1 mg/L 06/17/2007

Surrogates

n-Triacontane-d62 <surr>	LCS		95	(60-120)			06/17/2007
	LCSD		95		1		06/17/2007

Batch XFC7430
Method AK103
Instrument HP 5890 Series II FID SV D F



SGS Ref.#	769623	Lab Control Sample	Printed Date/Time	06/26/2007	14:11
	769624	Lab Control Sample Duplicate	Prep	Batch	VXX16802
Client Name		Oasis Environmental	Method		SW5030B
Project Name/#		Fort Yukon Former Landfill	Date		06/11/2007
Matrix		Water (Surface, Eff., Ground)			

QC results affect the following production samples:
1072473014

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Volatile Fuels Department

Gasoline Range Organics	LCS	0.238	106	(60-120)		0.225 mg/L	06/11/2007
	LCSD	0.238	106		0	(< 20)	0.225 mg/L

Batch	VFC8398
Method	AK101
Instrument	HP 5890 Series II PID+HECD VBA



SGS Ref.# 769757 **Lab Control Sample**

Printed Date/Time 06/26/2007 14:11

Client Name Oasis Environmental

Prep **Batch** MXX19036

Project Name/# Fort Yukon Former Landfill

Method METHOD

Matrix	Water (Surface, Eff., Ground)
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Date 06/13/2007

QC results affect the following production samples:

1072473009, 1072473010, 1072473011, 1072473012, 1072473013

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Metals Department

Mercury	LCS	4.05	101	(85-115)	4 ug/L	06/13/2007
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Batch MCV3643

Method SW7470A/E245.1

Instrument PSA Millennium mercury AA



SGS Ref.#	769828	Lab Control Sample	Printed Date/Time	06/26/2007	14:11
Client Name	Oasis Environmental		Prep	Batch	WXX5918
Project Name/#	Fort Yukon Former Landfill			Method	EP300EXTR
Matrix	Soil/Solid			Date	06/13/2007

QC results affect the following production samples:

1072473001, 1072473002, 1072473003, 1072473004, 1072473005, 1072473006, 1072473007

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Waters Department

Bromide	LCS	104	104	(70-130)		99.9 mg/Kg	06/13/2007
Chloride	LCS	107	107	(70-130)		99.9 mg/Kg	06/13/2007
Nitrite-N	LCS	111	111	(70-130)		99.9 mg/Kg	06/13/2007
Ortho Phosphate-P	LCS	108	108	(70-130)		99.9 mg/Kg	06/13/2007
Sulfate	LCS	110	110	(70-130)		99.9 mg/Kg	06/13/2007

Batch WIC4053
Method EPA 300.0
Instrument Metrohm 733 IC3



SGS Ref.#	770206	Lab Control Sample	Printed Date/Time	06/26/2007	14:11
			Prep	Batch	WXX5921
Client Name	Oasis Environmental		Method	EP300EXTR	
Project Name/#	Fort Yukon Former Landfill		Date	06/14/2007	
Matrix	Soil/Solid				

QC results affect the following production samples:
1072473001, 1072473002, 1072473003, 1072473004, 1072473005, 1072473006, 1072473007

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Waters Department

Nitrate-N	LCS	106	106	(70-130)		99.5 mg/Kg	06/14/2007
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Batch	WIC4054
Method	EPA 300.0
Instrument	Metrohm 733 IC3



SGS Ref.#	770913	Lab Control Sample	Printed Date/Time	06/26/2007	14:11
	770919	Lab Control Sample Duplicate	Prep	Batch	VXX16834
Client Name		Oasis Environmental	Method		AK101
Project Name/#		Fort Yukon Former Landfill	Date		06/18/2007
Matrix		Soil/Solid			

QC results affect the following production samples:

1072473001, 1072473002, 1072473003, 1072473004, 1072473005, 1072473006, 1072473007, 1072473008

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Volatile Fuels Department

Gasoline Range Organics	LCS	8.38	75	(60-120)		11.3 mg/Kg	06/18/2007
	LCSD	7.87	70		6	(< 20)	11.3 mg/Kg 06/18/2007

Surrogates

4-Bromofluorobenzene <surr>	LCS		95	(50-150)			06/18/2007
	LCSD		92		4		06/18/2007

Batch	VFC8411
Method	AK101
Instrument	HP 5890 Series II PID+FID VDA



SGS Ref.#	767478	Bench Spike Liquid	Printed Date/Time	06/26/2007 14:11
			Prep	Batch
				WXX5895
			Method	EPA 300.0 Extraction Waters/L
			Date	06/01/2007
Original	767474			
Matrix	Water (Surface, Eff., Ground)			

QC results affect the following production samples:
1072473009, 1072473010, 1072473011, 1072473012, 1072473013

Parameter	Qualifiers	Original Result	QC Result	Pet Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Waters Department

Chloride	BN1	0.984	10.3	93	(85-115)			10	mg/L 06/01/2007
Nitrite-N	BN1	ND	9.7	97	(85-115)			10	mg/L 06/01/2007
Nitrate-N	BN1	0.412	9.51	91	(85-115)			10	mg/L 06/01/2007
Ortho Phosphate-P	BN1	ND	9.34	93	(85-115)			10	mg/L 06/01/2007
Batch	WIC4047								
Method	EPA 300.0								
Instrument	Metrohm 733 DX2								



SGS Ref.#	767973	Matrix Spike	Printed Date/Time		06/26/2007 14:11
	767974	Matrix Spike Duplicate	Prep	Batch	XXX18100
				Method	Sonication Extraction Soil SW8
				Date	06/06/2007
Original	1072554002				
Matrix	Soil/Solid				

QC results affect the following production samples:
1072473005, 1072473007

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Semivolatile Organic GC/MS



SGS Ref.# 767973 Matrix Spike
767974 Matrix Spike Duplicate

Printed Date/Time 06/26/2007 14:11
Prep Batch XXX18100
Method Sonication Extraction Soil SW8
Date 06/06/2007

Original 1072554002
Matrix Soil/Solid

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
<u>Semivolatile Organic GC/MS</u>									
N-Nitrosodimethylamine	MS	ND	2.38	46* (49-102)				5.13 mg/Kg	06/13/2007
	MSD		2.71	53		13	(< 30)	5.12 mg/Kg	06/13/2007
Aniline	MS	ND	2.37	46 (38-102)				5.13 mg/Kg	06/13/2007
	MSD		2.65	52		11	(< 30)	5.12 mg/Kg	06/13/2007
Phenol	MS	ND	2.56	50* (50-100)				5.13 mg/Kg	06/13/2007
	MSD		3.1	61		20	(< 30)	5.12 mg/Kg	06/13/2007
Bis(2-Chloroethyl)ether	MS	ND	2.42	47 (46-105)				5.13 mg/Kg	06/13/2007
	MSD		2.71	53		11	(< 30)	5.12 mg/Kg	06/13/2007
2-Chlorophenol	MS	ND	2.44	48 (47-105)				5.13 mg/Kg	06/13/2007
	MSD		2.97	58		20	(< 30)	5.12 mg/Kg	06/13/2007
1,3-Dichlorobenzene	MS	ND	2.4	47 (41-100)				5.13 mg/Kg	06/13/2007
	MSD		2.8	55		16	(< 30)	5.12 mg/Kg	06/13/2007
1,4-Dichlorobenzene	MS	ND	2.4	47 (38-105)				5.13 mg/Kg	06/13/2007
	MSD		2.73	54		13	(< 30)	5.12 mg/Kg	06/13/2007
Benzyl alcohol	MS	ND	2.67	52 (52-125)				5.13 mg/Kg	06/13/2007
	MSD		3.31	65		21	(< 30)	5.12 mg/Kg	06/13/2007
1,2-Dichlorobenzene	MS	ND	2.52	49 (45-105)				5.13 mg/Kg	06/13/2007
	MSD		2.94	58		15	(< 30)	5.12 mg/Kg	06/13/2007
2-Methylphenol (o-Cresol)	MS	ND	2.64	51 (49-105)				5.13 mg/Kg	06/13/2007
	MSD		3.19	63		19	(< 30)	5.12 mg/Kg	06/13/2007
Bis(2chloro1methylethyl)Ether	MS	ND	2.51	49* (51-111)				5.13 mg/Kg	06/13/2007
	MSD		2.91	57		15	(< 30)	5.12 mg/Kg	06/13/2007
3&4-Methylphenol (p&m-Cres	MS	ND	3.83	53* (55-105)				7.19 mg/Kg	06/13/2007
	MSD		4.69	66		20	(< 30)	7.15 mg/Kg	06/13/2007
N-Nitroso-di-n-propylamine	MS	ND	2.79	54* (55-113)				5.13 mg/Kg	06/13/2007
	MSD		3.4	67		20	(< 30)	5.12 mg/Kg	06/13/2007
Hexachloroethane	MS	ND	1.85	36* (38-110)				5.13 mg/Kg	06/13/2007
	MSD		2.22	44		19	(< 30)	5.12 mg/Kg	06/13/2007
Nitrobenzene	MS	ND	2.5	49 (46-115)				5.13 mg/Kg	06/13/2007
	MSD		2.93	57		16	(< 30)	5.12 mg/Kg	06/13/2007
Isophorone	MS	ND	2.79	54 (52-125)				5.13 mg/Kg	06/13/2007
	MSD		3.44	67		21	(< 30)	5.12 mg/Kg	06/13/2007
2-Nitrophenol	MS	ND	1.82	36* (42-110)				5.13 mg/Kg	06/13/2007
	MSD		2.26	44		21	(< 30)	5.12 mg/Kg	06/13/2007
2,4-Dimethylphenol	MS	ND	2.48	48 (48-115)				5.13 mg/Kg	06/13/2007
	MSD		2.94	58		17	(< 30)	5.12 mg/Kg	06/13/2007
Benzoic acid	MS	ND	2.58	36 (25-69)				7.19 mg/Kg	06/13/2007
	MSD		3.9	55*		41 *	(< 30)	7.15 mg/Kg	06/13/2007
Bis(2-Chloroethoxy)methane	MS	ND	2.53	49* (55-110)				5.13 mg/Kg	06/13/2007
	MSD		3.25	64		25	(< 30)	5.12 mg/Kg	06/13/2007



SGS Ref.#	767973	Matrix Spike	Printed Date/Time	06/26/2007 14:11
	767974	Matrix Spike Duplicate	Prep Batch	XXX18100
			Method	Sonication Extraction Soil SW8
			Date	06/06/2007

Original	1072554002
Matrix	Soil/Solid

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
<u>Semivolatile Organic GC/MS</u>									
1,2,4-Trichlorobenzene	MS	ND	2.44	48	(45-110)			5.13	mg/Kg 06/13/2007
	MSD		2.89	57		17	(< 30)	5.12	mg/Kg 06/13/2007
Naphthalene	MS	ND	2.81	55	(50-105)			5.13	mg/Kg 06/13/2007
	MSD		3.32	65		17	(< 30)	5.12	mg/Kg 06/13/2007
4-Chloroaniline	MS	ND	2.63	51*	(54-95)			5.13	mg/Kg 06/13/2007
	MSD		3.23	63		21	(< 30)	5.12	mg/Kg 06/13/2007
Hexachlorobutadiene	MS	ND	2.49	49	(41-150)			5.13	mg/Kg 06/13/2007
	MSD		2.81	55		12	(< 30)	5.12	mg/Kg 06/13/2007
4-Chloro-3-methylphenol	MS	ND	2.63	51*	(59-115)			5.13	mg/Kg 06/13/2007
	MSD		3.45	67		27	(< 30)	5.12	mg/Kg 06/13/2007
2,4-Dichlorophenol	MS	ND	2.58	50*	(53-110)			5.13	mg/Kg 06/13/2007
	MSD		3.32	65		25	(< 30)	5.12	mg/Kg 06/13/2007
2-Methylnaphthalene	MS	ND	2.78	54	(50-125)			5.13	mg/Kg 06/13/2007
	MSD		3.41	67		20	(< 30)	5.12	mg/Kg 06/13/2007
Hexachlorocyclopentadiene	MS	ND	0.742	15*	(34-128)			5.13	mg/Kg 06/13/2007
	MSD		0.979	19*		28	(< 30)	5.12	mg/Kg 06/13/2007
2,4,6-Trichlorophenol	MS	ND	2.47	48*	(53-110)			5.13	mg/Kg 06/13/2007
	MSD		3.33	65		30	(< 30)	5.12	mg/Kg 06/13/2007
2,4,5-Trichlorophenol	MS	ND	2.63	51*	(57-110)			5.13	mg/Kg 06/13/2007
	MSD		3.45	68		27	(< 30)	5.12	mg/Kg 06/13/2007
2-Chloronaphthalene	MS	ND	2.29	45*	(45-115)			5.13	mg/Kg 06/13/2007
	MSD		2.94	58		25	(< 30)	5.12	mg/Kg 06/13/2007
2-Nitroaniline	MS	ND	2.81	55	(53-120)			5.13	mg/Kg 06/13/2007
	MSD		3.63	71		25	(< 30)	5.12	mg/Kg 06/13/2007
Dimethylphthalate	MS	ND	2.36	46*	(58-110)			5.13	mg/Kg 06/13/2007
	MSD		3.15	62		29	(< 30)	5.12	mg/Kg 06/13/2007
Acenaphthylene	MS	ND	2.75	54	(53-105)			5.13	mg/Kg 06/13/2007
	MSD		3.52	69		24	(< 30)	5.12	mg/Kg 06/13/2007
2,6-Dinitrotoluene	MS	ND	2.34	46*	(52-125)			5.13	mg/Kg 06/13/2007
	MSD		3.13	61		29	(< 30)	5.12	mg/Kg 06/13/2007
3-Nitroaniline	MS	ND	2.55	50*	(50-110)			5.13	mg/Kg 06/13/2007
	MSD		3.3	65		26	(< 30)	5.12	mg/Kg 06/13/2007
Acenaphthene	MS	ND	2.72	53	(53-110)			5.13	mg/Kg 06/13/2007
	MSD		3.53	69		26	(< 30)	5.12	mg/Kg 06/13/2007
2,4-Dinitrophenol	MS	ND	1.32	14*	(40-130)			9.24	mg/Kg 06/13/2007
	MSD		1.48	16*		12	(< 30)	9.2	mg/Kg 06/13/2007
4-Nitrophenol	MS	ND	3.11	43*	(46-130)			7.19	mg/Kg 06/13/2007
	MSD		4.19	59		30	(< 30)	7.15	mg/Kg 06/13/2007
Dibenzofuran	MS	ND	2.66	52	(51-145)			5.13	mg/Kg 06/13/2007
	MSD		3.47	68		26	(< 30)	5.12	mg/Kg 06/13/2007



SGS Ref.#	767973	Matrix Spike	Printed Date/Time	06/26/2007 14:11
	767974	Matrix Spike Duplicate	Prep Batch	XXX18100
			Method	Sonication Extraction Soil SW8
			Date	06/06/2007

Original	1072554002
Matrix	Soil/Solid

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Semivolatile Organic GC/MS									
2,4-Dinitrotoluene	MS	ND	2.31	45* (51-125)				5.13 mg/Kg	06/13/2007
	MSD		3.06	60		28 (< 30)		5.12 mg/Kg	06/13/2007
Diethylphthalate	MS	ND	2.35	46* (58-125)				5.13 mg/Kg	06/13/2007
	MSD		3.26	64*		33 * (< 30)		5.12 mg/Kg	06/13/2007
4-Chlorophenyl-phenylether	MS	ND	2.33	45* (55-120)				5.13 mg/Kg	06/13/2007
	MSD		3.33	65*		35 * (< 30)		5.12 mg/Kg	06/13/2007
Fluorene	MS	ND	2.62	51* (54-115)				5.13 mg/Kg	06/13/2007
	MSD		3.54	69*		30 * (< 30)		5.12 mg/Kg	06/13/2007
4-Nitroaniline	MS	ND	2.71	53 (46-105)				5.13 mg/Kg	06/13/2007
	MSD		3.47	68		25 (< 30)		5.12 mg/Kg	06/13/2007
2-Methyl-4,6-dinitrophenol	MS	ND	1.23	13* (43-134)				9.24 mg/Kg	06/13/2007
	MSD		1.57	17*		25 (< 30)		9.2 mg/Kg	06/13/2007
N-Nitrosodiphenylamine	MS	ND	2.56	50* (57-115)				5.13 mg/Kg	06/13/2007
	MSD		3.58	70*		33 * (< 30)		5.12 mg/Kg	06/13/2007
4-Bromophenyl-phenylether	MS	ND	2.19	43* (55-96)				5.13 mg/Kg	06/13/2007
	MSD		2.85	56		26 (< 30)		5.12 mg/Kg	06/13/2007
Hexachlorobenzene	MS	ND	2.52	49 (47-150)				5.13 mg/Kg	06/13/2007
	MSD		3.4	67		30 (< 30)		5.12 mg/Kg	06/13/2007
Pentachlorophenol	MS	ND	3.21	45* (49-115)				7.19 mg/Kg	06/13/2007
	MSD		4.27	60		29 (< 30)		7.15 mg/Kg	06/13/2007
Phenanthrene	MS	ND	2.92	57 (54-110)				5.13 mg/Kg	06/13/2007
	MSD		3.8	74		26 (< 30)		5.12 mg/Kg	06/13/2007
Anthracene	MS	ND	2.74	54* (55-115)				5.13 mg/Kg	06/13/2007
	MSD		3.63	71		28 (< 30)		5.12 mg/Kg	06/13/2007
Di-n-butylphthalate	MS	ND	2.58	50* (56-120)				5.13 mg/Kg	06/13/2007
	MSD		3.22	63		22 (< 30)		5.12 mg/Kg	06/13/2007
Fluoranthene	MS	ND	2.47	48* (55-125)				5.13 mg/Kg	06/13/2007
	MSD		3.28	64		28 (< 30)		5.12 mg/Kg	06/13/2007
Pyrene	MS	ND	3.11	61 (58-125)				5.13 mg/Kg	06/13/2007
	MSD		4	78		25 (< 30)		5.12 mg/Kg	06/13/2007
Azobenzene	MS	ND	2.85	56 (49-125)				5.13 mg/Kg	06/13/2007
	MSD		3.81	75		29 (< 30)		5.12 mg/Kg	06/13/2007
Butylbenzylphthalate	MS	ND	3.04	59* (61-125)				5.13 mg/Kg	06/13/2007
	MSD		3.95	77		26 (< 30)		5.12 mg/Kg	06/13/2007
3,3-Dichlorobenzidine	MS	ND	1.63	32* (35-126)				5.13 mg/Kg	06/13/2007
	MSD		1.94	38		18 (< 30)		5.12 mg/Kg	06/13/2007
Benzo(a)Anthracene	MS	ND	2.72	53* (58-120)				5.13 mg/Kg	06/13/2007
	MSD		3.51	69		25 (< 30)		5.12 mg/Kg	06/13/2007
Chrysene	MS	ND	2.84	55 (55-120)				5.13 mg/Kg	06/13/2007
	MSD		3.46	68		20 (< 30)		5.12 mg/Kg	06/13/2007



SGS Ref.# 767973 Matrix Spike
767974 Matrix Spike Duplicate

Printed Date/Time 06/26/2007 14:11
Prep Batch XXX18100
Method Sonication Extraction Soil SW8
Date 06/06/2007

Original 1072554002
Matrix Soil/Solid

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Semivolatile Organic GC/MS

bis(2-Ethylhexyl)phthalate	MS	ND	2.93	57* (58-140)				5.13	mg/Kg 06/13/2007
	MSD		4.04	79*		32 * (< 30)		5.12	mg/Kg 06/13/2007
di-n-Octylphthalate	MS	ND	2.99	58 (49-130)				5.13	mg/Kg 06/13/2007
	MSD		3.62	71		19 (< 30)		5.12	mg/Kg 06/13/2007
Benzo[b]Fluoranthene	MS	ND	2.95	58* (59-115)				5.13	mg/Kg 06/13/2007
	MSD		4	78*		30 * (< 30)		5.12	mg/Kg 06/13/2007
Benzo[k]fluoranthene	MS	ND	3.01	59 (52-125)				5.13	mg/Kg 06/13/2007
	MSD		4.04	79		29 (< 30)		5.12	mg/Kg 06/13/2007
Benzo[a]pyrene	MS	ND	2.63	51* (56-110)				5.13	mg/Kg 06/13/2007
	MSD		3.52	69		29 (< 30)		5.12	mg/Kg 06/13/2007
Indeno[1,2,3-c,d] pyrene	MS	ND	1.75	34* (40-120)				5.13	mg/Kg 06/13/2007
	MSD		2.27	44		26 (< 30)		5.12	mg/Kg 06/13/2007
Dibenzo[a,h]anthracene	MS	ND	1.76	34* (41-125)				5.13	mg/Kg 06/13/2007
	MSD		2.25	44		24 (< 30)		5.12	mg/Kg 06/13/2007
Benzo[g,h,i]perylene	MS	ND	1.48	29* (40-125)				5.13	mg/Kg 06/13/2007
	MSD		1.89	37*		24 (< 30)		5.12	mg/Kg 06/13/2007

Surrogates

2-Fluorophenol <surr>	MS		4.34	42 (38-82)					06/13/2007
	MSD		5.23	51		19			06/13/2007
Phenol-d6 <surr>	MS		4.91	48 (44-89)					06/13/2007
	MSD		6.08	59		21			06/13/2007
Nitrobenzene-d5 <surr>	MS		2.33	45 (37-99)					06/13/2007
	MSD		2.73	53		16			06/13/2007
2-Fluorobiphenyl <surr>	MS		2.42	47 (47-94)					06/13/2007
	MSD		3.08	60		24			06/13/2007
2,4,6-Tribromophenol <surr>	MS		5.27	51* (55-109)					06/13/2007
	MSD		7.01	69		29			06/13/2007
Terphenyl-d14 <surr>	MS		2.66	52 (42-120)					06/13/2007
	MSD		3.3	65		21			06/13/2007

Batch XMS4040
Method SW8270C
Instrument HP 5890 Series II MS4 SVPA



SGS Ref.# 768033 Matrix Spike
768034 Matrix Spike Duplicate

Printed Date/Time 06/26/2007 14:11
Prep Batch XXX18103
Method Liq/H2O Extraction 8081 w/PCI
Date 06/06/2007

Original 1071952005
Matrix Water (Surface, Eff., Ground)

QC results affect the following production samples:

1072473009, 1072473010, 1072473011, 1072473012, 1072473013

Parameter	Qualifiers	Original Result	QC Result	Pet Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Semivolatile Organic Gas Chromatography

4,4'-DDE	MS	ND	.088	88	(53-123)			0.1	ug/L 06/15/2007
	MSD		0.094	94		7	(< 25)	0.1	ug/L 06/15/2007
4,4'-DDD	MS	ND	.092	92	(57-135)			0.1	ug/L 06/15/2007
	MSD		0.094	94		2	(< 25)	0.1	ug/L 06/15/2007
4,4'-DDT	MS	ND	.091	91	(52-134)			0.1	ug/L 06/15/2007
	MSD		0.092	92		1	(< 25)	0.1	ug/L 06/15/2007

Surrogates

Tetrachloro-m-xylene <surr>	MS		.609	61	(33-97)				06/15/2007
	MSD		0.6	60		1			06/15/2007
Decachlorobiphenyl <surr>	MS		.873	87	(32-135)				06/15/2007
	MSD		0.891	89		2			06/15/2007

Batch XGC5823
Method SW8081A
Instrument HP 5890 Series II ECD SV J F

Polychlorinated Biphenyls

Aroclor-1016	MS	ND	.742	74	(62-116)			1	ug/L 06/21/2007
	MSD		0.66	66		12	(< 25)	1	ug/L 06/21/2007
Aroclor-1260	MS	ND	.76	76	(60-113)			1	ug/L 06/21/2007
	MSD		0.637	64		18	(< 25)	1	ug/L 06/21/2007

Surrogates

Decachlorobiphenyl <surr>	MS		0.883	88	(42-120)				06/21/2007
	MSD		0.742	74		17			06/21/2007

Batch XGC5829
Method SW8082
Instrument HP 5890 Series II ECD SV I F



Printed Date/Time	06/26/2007 14:11
Prep Batch	MX18996
Method	3010 H2O Digest for Metals ICF
Date	06/06/2007

Original	1071952005
Matrix	Water (Surface, Eff., Ground)

QC results affect the following production samples:

1072473009, 1072473010, 1072473011, 1072473012, 1072473013

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Metals by ICP/MS

Arsenic	MS	15.7	1050	104	(80-120)		1000	ug/L 06/13/2007
	MSD		1050	103		0 (< 15)	1000	ug/L 06/13/2007
Lead	MS	ND	921	92	(80-120)		1000	ug/L 06/13/2007
	MSD		932	93		1 (< 15)	1000	ug/L 06/13/2007

Batch	MMS4892
Method	SW6020
Instrument	Perkin Elmer Sciex ICP-MS P3



Printed Date/Time	06/26/2007 14:11
Prep Batch	MXX19000
Method	Digestion Mercury (S)
Date	06/06/2007

QC results affect the following production samples:
1072473001, 1072473002, 1072473003, 1072473004, 1072473005, 1072473006, 1072473007

Metals Department

Batch	MCV3636
Method	SW7471A
Instrument	PSA Millennium mercury AA



SGS Ref.# 768658 Matrix Spike
768659 Matrix Spike Duplicate

Printed Date/Time 06/26/2007 14:11
Prep Batch VXX16785
Method Volatiles Extraction 8240/8260
Date 06/08/2007

Original 1072390001
Matrix Water (Surface, Eff., Ground)

QC results affect the following production samples:

1072473009, 1072473010, 1072473011, 1072473012, 1072473013, 1072473014

Parameter	Qualifiers	Original Result	QC Result	Pet Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
<u>Volatile Gas Chromatography/Mass Spectroscopy</u>									
Benzene	MS	ND	57.3	96	(84-115)			60	ug/L 06/08/2007
	MSD		57.3	96		0	(< 20)	60	ug/L 06/08/2007
Toluene	MS	ND	49.8	83	(81-115)			60	ug/L 06/08/2007
	MSD		50.8	85		2	(< 20)	60	ug/L 06/08/2007
Ethylbenzene	MS	ND	55	92	(85-120)			60	ug/L 06/08/2007
	MSD		53.9	90		2	(< 20)	60	ug/L 06/08/2007
P & M -Xylene	MS	ND	103	86	(80-120)			120	ug/L 06/08/2007
	MSD		103	86		1	(< 20)	120	ug/L 06/08/2007
o-Xylene	MS	ND	55.7	93	(80-120)			60	ug/L 06/08/2007
	MSD		56.6	94		2	(< 20)	60	ug/L 06/08/2007
Surrogates									
Dibromofluoromethane <surr>	MS		31	103	(85-115)				06/08/2007
	MSD		29.4	98		5			06/08/2007
1,2-Dichloroethane-D4 <surr>	MS		30.4	101	(72-119)				06/08/2007
	MSD		29.2	97		4			06/08/2007
Toluene-d8 <surr>	MS		28.8	96	(85-120)				06/08/2007
	MSD		27.7	92		4			06/08/2007
4-Bromofluorobenzene <surr>	MS		28	94	(76-119)				06/08/2007
	MSD		27.7	92		1			06/08/2007

Batch VMS9132
Method SW8260B
Instrument HP 5890 Series II MS3 VNA



SGS Ref.# 768713 Matrix Spike
768714 Matrix Spike Duplicate

Printed Date/Time 06/26/2007 14:11
Prep Batch MXX19011
Method Soils/Solids Digest for Metals b
Date 06/08/2007

Original 1072516006
Matrix Soil/Solid

QC results affect the following production samples:

1072473001, 1072473002, 1072473003, 1072473004, 1072473005, 1072473006, 1072473007

Parameter	Qualifiers	Original Result	QC Result	Pet Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Metals by ICP/MS									
Arsenic	MS	5.04	62.6	102	(80-120)			56.7 mg/Kg	06/14/2007
	MSD		60.8	96		3	(< 20)	58 mg/Kg	06/14/2007
Barium	MS	147	209	109	(80-120)			56.7 mg/Kg	06/14/2007
	MSD		186	68*		11	(< 20)	58 mg/Kg	06/14/2007
Cadmium	MS	4.79	59.8	97	(80-120)			56.7 mg/Kg	06/14/2007
	MSD		59.6	95		0	(< 20)	58 mg/Kg	06/14/2007
Chromium	MS	23.5	64	72*	(80-120)			56.7 mg/Kg	06/14/2007
	MSD		65.1	72*		2	(< 20)	58 mg/Kg	06/14/2007
Lead	MS	145	223	138*	(80-120)			56.7 mg/Kg	06/14/2007
	MSD		292	254*		27 *	(< 20)	58 mg/Kg	06/14/2007
Selenium	MS	2.10	58.7	100	(80-120)			56.7 mg/Kg	06/14/2007
	MSD		58	96		1	(< 20)	58 mg/Kg	06/14/2007
Silver	MS	0.209	5.75	98	(80-120)			5.67 mg/Kg	06/14/2007
	MSD		5.81	97		1	(< 20)	5.8 mg/Kg	06/14/2007

Batch MMS4894
Method SW6020
Instrument Perkin Elmer Sciex ICP-MS P3



SGS Ref.#	768715	Bench Spike DIGESTED	Printed Date/Time	06/26/2007 14:11
			Prep	Batch
				Method
				Date
Original	1072516006			
Matrix	Soil/Solid			

QC results affect the following production samples:
1072473001, 1072473002, 1072473003, 1072473004, 1072473005, 1072473006, 1072473007

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Metals by ICP/MS

Barium	BND	147	754	107	(75-125)			567 mg/Kg	06/14/2007
Chromium	BND	23.5	570	96	(75-125)			567 mg/Kg	06/14/2007
Lead	BND	145	645	88	(75-125)			567 mg/Kg	06/14/2007
Batch	MMS4894								
Method	SW6020								
Instrument	Perkin Elmer Sciex ICP-MS P3								



SGS Ref.#	768971	Matrix Spike	Printed Date/Time		06/26/2007 14:11
	768972	Matrix Spike Duplicate	Prep	Batch	XXX18127
				Method	Soil/Sol Extraction 8082 w/Pest
				Date	06/11/2007
Original	1072473003				
Matrix	Soil/Solid				

QC results affect the following production samples:
1072473001, 1072473002, 1072473003, 1072473004, 1072473005, 1072473006, 1072473007

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Aroclor-1260	MS	ND	31.4	63	(60-130)			49.8 ug/Kg	06/21/2007
	MSD		32.8	65		5	(< 30)	50.3 ug/Kg	06/21/2007
Aroclor-1016	MS	ND	34	68	(47-120)			49.8 ug/Kg	06/21/2007
	MSD		37.2	74		9	(< 30)	50.3 ug/Kg	06/21/2007
Surrogates									
Decachlorobiphenyl <surr>	MS		31.4	63	(60-125)				06/21/2007
	MSD		30.6	61		3			06/21/2007
Batch	XGC5828								
Method	SW8082								
Instrument	HP 5890 Series II ECD SV I F								

Semivolatile Organic Gas Chromatography



SGS Ref.#	768971	Matrix Spike	Printed Date/Time	06/26/2007 14:11
	768972	Matrix Spike Duplicate	Prep	Batch
			Method	Soil/Sol Extraction 8081 w/PCE
			Date	06/11/2007

Original	1072473003
Matrix	Soil/Solid

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Semivolatile Organic Gas Chromatography									
gamma-Chlordane	MS	ND	3.92	78	(65-122)			5.03	ug/Kg 06/20/2007
	MSD		4.26	85		8	(< 30)	5.02	ug/Kg 06/20/2007
alpha-Chlordane	MS	ND	4.88	97	(65-120)			5.03	ug/Kg 06/20/2007
	MSD		5.06	101		4	(< 30)	5.02	ug/Kg 06/20/2007
alpha-BHC	MS	ND	5.13	102	(56-125)			5.03	ug/Kg 06/20/2007
	MSD		5.21	104		2	(< 30)	5.02	ug/Kg 06/20/2007
beta-BHC	MS	ND	5.63	112	(62-119)			5.03	ug/Kg 06/20/2007
	MSD		5.56	111		1	(< 30)	5.02	ug/Kg 06/20/2007
gamma-BHC (Lindane)	MS	ND	6.69	133*	(60-118)			5.03	ug/Kg 06/20/2007
	MSD		6.62	132*		1	(< 30)	5.02	ug/Kg 06/20/2007
delta-BHC	MS	ND	4.78	95	(57-123)			5.03	ug/Kg 06/20/2007
	MSD		4.91	98		3	(< 30)	5.02	ug/Kg 06/20/2007
Heptachlor	MS	ND	5.13	102	(51-126)			5.03	ug/Kg 06/20/2007
	MSD		5.27	105		3	(< 30)	5.02	ug/Kg 06/20/2007
Aldrin	MS	ND	6.89	137*	(47-120)			5.03	ug/Kg 06/20/2007
	MSD		5.92	118		15	(< 30)	5.02	ug/Kg 06/20/2007
Heptachlor epoxide	MS	ND	6.94	138*	(66-120)			5.03	ug/Kg 06/20/2007
	MSD		6.97	139*		0	(< 30)	5.02	ug/Kg 06/20/2007
Endosulfan I	MS	ND	5.48	109	(48-130)			5.03	ug/Kg 06/20/2007
	MSD		5.71	114		4	(< 30)	5.02	ug/Kg 06/20/2007
4,4'-DDE	MS	ND	6.03	120	(70-125)			5.03	ug/Kg 06/20/2007
	MSD		6.07	121		1	(< 30)	5.02	ug/Kg 06/20/2007
Dieldrin	MS	ND	6.55	130*	(67-125)			5.03	ug/Kg 06/20/2007
	MSD		6.92	138*		6	(< 30)	5.02	ug/Kg 06/20/2007
Endrin	MS	ND	5.84	116	(61-128)			5.03	ug/Kg 06/20/2007
	MSD		5.67	113		3	(< 30)	5.02	ug/Kg 06/20/2007
Endosulfan II	MS	ND	5.23	104	(56-122)			5.03	ug/Kg 06/20/2007
	MSD		5.62	112		7	(< 30)	5.02	ug/Kg 06/20/2007
4,4'-DDD	MS	ND	6.34	126	(53-130)			5.03	ug/Kg 06/20/2007
	MSD		6.92	138*		9	(< 30)	5.02	ug/Kg 06/20/2007
Endrin aldehyde	MS	ND	5.09	101	(40-132)			5.03	ug/Kg 06/20/2007
	MSD		5.67	113		11	(< 30)	5.02	ug/Kg 06/20/2007
4,4'-DDT	MS	ND	4.88	97	(50-133)			5.03	ug/Kg 06/20/2007
	MSD		9.37	187*		63 *	(< 30)	5.02	ug/Kg 06/20/2007
Endosulfan sulfate	MS	ND	5.13	102	(62-133)			5.03	ug/Kg 06/20/2007
	MSD		4.91	98		4	(< 30)	5.02	ug/Kg 06/20/2007
Endrin ketone	MS	ND	5.28	105	(65-135)			5.03	ug/Kg 06/20/2007
	MSD		7.47	149*		34 *	(< 30)	5.02	ug/Kg 06/20/2007
Methoxychlor	MS	ND	4.48	89	(57-142)			5.03	ug/Kg 06/20/2007
	MSD		4.26	85		5	(< 30)	5.02	ug/Kg 06/20/2007



Printed Date/Time	06/26/2007 14:11
Prep Batch	XXX18127
Method	Soil/Sol Extraction 8081 w/PCE
Date	06/11/2007

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Surrogates

Batch	XGC5827
Method	SW8081A
Instrument	HP 5890 Series II ECD SV J F



SGS Ref.#	769758	Matrix Spike	Printed Date/Time	06/26/2007 14:11
			Prep	Batch
				MXX19036
				Method
				Digestion Mercury (W)
				Date
				06/13/2007
Original	1072497001			
Matrix	Water (Surface, Eff., Ground)			

QC results affect the following production samples:
1072473009, 1072473010, 1072473011, 1072473012, 1072473013

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Metals Department

Mercury	MS	ND	7.76	97	(85-115)			8 ug/L	06/13/2007
Batch	MCV3643								
Method	SW7470A/E245.1								
Instrument	PSA Millennium mercury AA								



SGS Ref.#	769759	Matrix Spike	Printed Date/Time		06/26/2007 14:11
	769760	Matrix Spike Duplicate	Prep	Batch	MXX19036
				Method	Digestion Mercury (W)
				Date	06/13/2007
Original	1072517025				
Matrix	Water (Surface, Eff., Ground)				

QC results affect the following production samples:
1072473009, 1072473010, 1072473011, 1072473012, 1072473013

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Metals Department

Mercury	MS	ND	8.38	105	(85-115)			8	ug/L 06/13/2007
	MSD		8.19	102				8	ug/L 06/13/2007
Batch	MCV3643								
Method	SW7470A/E245.1								
Instrument	PSA Millennium mercury AA								



SGS Ref.#	769830	Matrix Spike (S)	Printed Date/Time	06/26/2007 14:11
			Prep	Batch
				WXX5918
			Method	EPA 300.0 Extraction Soils/Soli
			Date	06/13/2007
Original	1072473007			
Matrix	Soil/Solid			

QC results affect the following production samples:
1072473001, 1072473002, 1072473003, 1072473004, 1072473005, 1072473006, 1072473007

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Waters Department									
Bromide	MS_2	ND	127	102	(70-130)			124 mg/Kg	06/14/2007
Chloride	MS_2	133	262	104	(70-130)			124 mg/Kg	06/14/2007
Nitrite-N	MS_2	ND	134	109	(70-130)			124 mg/Kg	06/14/2007
Ortho Phosphate-P	MS_2	3.12 J	58.7	45*	(70-130)			124 mg/Kg	06/14/2007
Sulfate	MS_2	354	439	68*	(70-130)			124 mg/Kg	06/14/2007
Batch	WIC4053								
Method	EPA 300.0								
Instrument	Metrohm 733 IC3								



SGS Ref.#	770209	Matrix Spike (S)	Printed Date/Time	06/26/2007 14:11
			Prep	Batch
				WXX5921
				Method
				EPA 300.0 Extraction Soils/Sol
				Date
				06/14/2007
Original	1072473007			
Matrix	Soil/Solid			

QC results affect the following production samples:
1072473001, 1072473002, 1072473003, 1072473004, 1072473005, 1072473006, 1072473007

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
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Waters Department

Nitrate-N	MS_2	1.75	129	102	(70-130)			124 mg/Kg	06/14/2007
Batch	WIC4054								
Method	EPA 300.0								
Instrument	Metrohm 733 IC3								

Arnold, Bryan (Anchorage)

From: Karl Hill [k.hill@oasisenviro.com]
Sent: Tuesday, June 05, 2007 3:21 PM
To: Arnold, Bryan (Anchorage)
Subject: RE: SGS# 1072473 OASIS/Ft Yukon receipt issue

Bryan,

Go ahead and run total RCRA metals on the samples for metals.

Thanks,
 Karl

-----Original Message-----

From: Arnold, Bryan (Anchorage) [mailto:Bryan.Arnold@sgs.com]
Sent: Tuesday, June 05, 2007 2:56 PM
To: karl@oasisenviro.com
Subject: SGS# 1072473 OASIS/Ft Yukon receipt issue

Please define the list of metals requested; the quote that was provided for this project lists two different sets of metals and the COC does not define either. Please let me know ASAP so that these samples can be logged in appropriately.

Thanks,
 Bryan

Bryan J. Arnold
 SGS Environmental Services Inc.
 Alaska Division Project Manager
 200 West Potter Drive
 Anchorage, Alaska 99518
 Phone: (907) 562-2343 Direct: (907) 550-3205 Fax: (907) 561-5301

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CHAIN OF CUSTODY RECORD
SGS Environmental Services Inc.

1072473



id
Carolina

070746

Cooler 1

1 CLIENT: OASIS Environmental					SGS Reference:					PAGE 1 OF 2	
CONTACT: Karl Hill					PHONE NO: (907) 258-4880						
PROJECT: Fort Yukon Former Landfill					SITE/PWSID#:						
REPORTS TO: 605 W. 8th Ave. # 200 Anchorage AK 99501					E-MAIL: K. hill@oasisenviro.com						
INVOICE TO: Same					QUOTE #						
					P.O. NUMBER 14-094						
2											
LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No CONTAINERS	SAMPLE TYPE	Preservatives Used	Analysis Required	C= COMP	G= GRAB	REMARKS
① A-C	Ø7JWSØØ150	5/30/07	1025	SO	3	G	MOOH	ØØ1/ØØ8			
②	Ø7JWSØØ250		1035					AK101/8260B			
③	Ø7JWSØØ350		1050					ØØ1/ØØ8			
④	Ø7JWSØØ450		1140					AK102/ØØ103			
⑤	Ø7JWSØØ550		1150					Metals/ØØ103			
⑥	Ø7JWSØØ650		1205					ØØ20/ØØ103			
⑦	Ø7JWSØØ750		1215					Pesticides/ØØ103			
⑧ A-T13	Ø7JWS - Cooler-50		1000		1			Anions/ØØ103			
⑨ A-T13	Ø7JWSØØ15W	5/31/07	1200	W	7			ØØ1/ØØ8			
⑩	Ø7JWSØØ25W		1240					ØØ1/ØØ8			
4											
Collected/Relinquished By: (1)		Date	Time	Received By:		Date	Time	Shipping Carrier:		Samples Received Cold? (Circle) YES NO	
Julie Clark		4/1/07	1230							Temperature (C): TB=2.6 C=4.0	
Relinquished By: (2)		Date	Time	Received By:		Date	Time	Shipping Ticket No:		Chain of Custody Seal: (Circle)	
										INTACT BROKEN ABSENT	
Relinquished By: (3)		Date	Time	Received By:		Date	Time	Special Deliverable Requirements:		Special Instructions:	
Relinquished By: (4)		Date	Time	Received By:		Date	Time	Requested Turnaround Time:			
						6/1/07	1230	□ RUSH		X STD	



CHAIN OF CUSTODY RECORD
SGS Environmental Services Inc.

1072473



na

'07 49

Cooler 1

1 CLIENT: OASIS Environmental					SGS Reference:										PAGE 2 OF 2			
CONTACT: Karl Hill					PHONE NO: (907) 258-4880													
PROJECT: Fort Yukon Former Landfill					SITE/PWSID#:													
REPORTS TO: 805 W. 8th Ave. #200					E-MAIL: K.hill@oasisenviro.com													
Anchorage AK 99501					FAX NO: (907) 258-4033													
INVOICE TO: same					QUOTE #													
					P.O. NUMBER 14-094													
2					3													
LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No CONTAINERS	SAMPLE TYPE	Preservatives Used	Analysis Required	He1	He1								REMARKS
11	A-G Ø7JWS ØØ36W	5/31/07	1330	W	7	G		Ø3	X	X	X							
12	Ø7JWS ØØ46W	I	1035	I	I	I			X	X	X							
13	Ø7JWS ØØ56W	I	1400	I	I	I			X	X	X							
14	A-C Ø7JWS-Cooler-SW	I	1030	I	3	I			X	X								Limited Volume
5					4													
Collected/Relinquished By: (1)		Date	Time	Received By:		Date	Time	Shipping Carrier:		Samples Received Cold? (Circle) YES NO								
Julie Clark		6/1/07	1220							Temperature (C): TD=2.6°C G=4.0°C								
Relinquished By: (2)		Date	Time	Received By:		Date	Time	Shipping Ticket No:		Chain of Custody Seal: (Circle)								
										INTACT BROKEN ABSENT								
Relinquished By: (3)		Date	Time	Received By:		Date	Time	Special Deliverable Requirements:		Special Instructions:								
Relinquished By: (4)		Date	Time	Received By:		Date	Time	Requested Turnaround Time:		Requested Turnaround Time:								
						6/1/07	1230	□ RUSH		Date Needed								

CHAIN OF CUSTODY RECORD
SGS Environmental Services Inc.

1072473



na

07 50

Cooler 2

[illegible]

SGS

1072473



SAMPLE RECEIPT FORM

SGS WO#:

Yes ☒ No ☐ NA ☐

- Are samples **RUSH**, priority, or w/n 72 hrs. of hold time? ☒
- If yes have you done e-mail notification? ☒
- Are samples **within 24 hrs. of hold time or due date**? ☒
- If yes, have you *spoken with Supervisor*? ☒
- Archiving bottles – if req., are they properly marked? ☒
- Are there any **problems**? PM Notified? ☒
- Were samples preserved correctly and pH verified? ☒

- If this is for PWS, provide **PWSID**. ☒
- Will courier charges apply? ☒
- Method of payment? ☒
- Data package required? (Level: 1 / 2 / 3 / 4) ☒
- Notes: ☒
- Is this a DoD project? (USACE, Navy, AFCEE) ☒

Due Date: 6/15/07

Received Date: 6/11/07

Received Time: 1230

Is **date/time conversion** necessary? ☐

of hours to AK Local Time: ☐

Thermometer ID: 69D, 70D

Cooler ID	Temp Blank	Cooler Temp
1	2.6 °C	4.0 °C
2	5.9 °C	4.0 °C
	°C	°C
	°C	°C
	°C	°C

*Temperature readings include thermometer correction factors

Delivery method (circle all that apply) Client /

Alert Courier / UPS / FedEx / USPS /

AA Goldstreak / NAC / ERA / PenAir / Carlile

Lynden / SGS / Other: ☐

Airbill #

Additional Sample Remarks: (✓ if applicable)

- ☒ Extra Sample Volume?
- ☒ Limited Sample Volume?
- ☐ Field preserved for volatiles?
- ☐ Field-filtered for dissolved?
- ☐ Lab-filtered for dissolved?
- ☐ Ref Lab required?
- ☐ Foreign Soil?

This section must be filled out for DoD projects (USACE, Navy, AFCEE)Yes ☐ No ☐

Is received temperature $4 \pm 2^\circ\text{C}$? ☐

Exceptions: ☐ Samples/Analyses Affected: ☐

Rad Screen performed? Result: ☐

Was there an airbill? (Note # above in the right hand column) ☐

Was cooler sealed with custody seals? ☐

/ where: ☐

Were seal(s) intact upon arrival? ☐

Was there a COC with cooler? ☐

Was COC sealed in plastic bag & taped inside lid of cooler? ☐

Was the COC filled out properly? ☐

Did the COC indicate COE / AFCEE / Navy project? ☐

Did the COC and samples correspond? ☐

Were all sample packed to prevent breakage? ☐

Packing material: ☐

Were all samples unbroken and clearly labeled? ☐

Were all samples sealed in separate plastic bags? ☐

Were all VOCs free of headspace and/or MeOH preserved? ☐

Were correct container / sample sizes submitted? ☐

Is sample condition good? ☐

Was copy of CoC, SRF, and custody seals given to PM to fax? ☐

This section must be filled if problems are found.Yes ☐ No ☐Was client notified of problems? ☐

Individual contacted: ☐

Via: Phone / Fax / Email (circle one) ☐

Date/Time: ☐

Reason for contact: ☐

Change Order Required? ☐

SGS Contact: ☐

Notes: ☐

Completed by (sign):

(print): Briana N. Edgington

Login proof (check one): waived ☒ required ☐ performed by: ☐

SGS**SAMPLE RECEIPT FORM (page 2)**


SGS WO#:

1072473



#	Container ID	Matrix	Test	QC	TB	Container Volume								Other	Container Type								Preservative							Other					
						1 L	500 mL	250 mL	125 mL	60 mL	40 mL	8oz (250 mL)	4oz (125 mL)		AG	CG	HDPE	Nalgene	Cubie	Coli	Septa	Other	None	HCl	HNO ₃	H ₂ SO ₄	MeOH	Na ₂ S ₂ O ₃	NaOH						
1-4/6	A	Z	GRO/BTEX ⁸²⁶⁰									5			✓																				
	B	↓	DRO/ERO, metals									5			✓																				
	C	↓	Pest/PCB, SVOC 8/26/87									5			✓																				
5,7	A	Z	GRO/BTEX ⁸²⁶⁰									2			✓																				
	B	↓	DRO/ERO, metals									2			✓																				
	C	↓	Pest/PCB, SVOC									2			✓																				
8	A	Z	GRO/BTEX ⁸²⁶⁰									1			✓																				
9	A-C	↓	GRO									3			✓																				
	D-F	↓	8260 BTEX									3			✓																				
	G	↓	NO ₂ , NO ₃ , Cl, F, P, Pb, Hg, hardness, metals Amion 5, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 8																																

Bottle Totals	11	3	3	18	22
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Completed by:  Date: 6/1/07

Form # F004r14 : 05/17/06

SGS**SAMPLE RECEIPT FORM (page 2)**

SGS WO#:

1072473

[illegible]

Bottle Totals	8	2	2	18		
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Completed by:

Date:

6/1/07

Form # F004r14 : 05/17/04

1072473

SGS

Environmental

CUSTODY SEAL

Signature:

Julie Clark

Date/Time:

6/1/07 @ 1220

Cooler #1

~~TB = 2.6°C~~ ~~6/1/07~~

TB = 2.6°C
C = 4.0°C

SGS

Environmental

CUSTODY SEAL

Signature:

Julie Clark

Date/Time:

6/1/07 @ 1220

SGS

Environmental

CUSTODY SEAL

Signature:

Julie Clark

Date/Time:

6/1/07 @ 1220

Cooler #2

TB = 5.9°C
C = 4.0°C

SGS

Environmental

CUSTODY SEAL

Signature:

Julie Clark

Date/Time:

6/1/07 @ 1220

APPENDIX E

Alaska DEC Conceptual Site Model

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Human Health Conceptual Site Model Scoping Form

Site Name: Joe Ward Slough Former Dumpsite, Fort Yukon

File Number: _____

Completed by: Julie Clark

Introduction

The form should be used to reach agreement with the Alaska Department of Environmental Conservation (DEC) about which exposure pathways should be further investigated during site characterization. From this information, a CSM graphic and text must be submitted with the site characterization work plan.

General Instructions: *Follow the italicized instructions in each section below.*

1. General Information:

Sources (*check potential sources at the site*)

- | | |
|---|---|
| <input checked="" type="checkbox"/> USTs | <input checked="" type="checkbox"/> Vehicles |
| <input checked="" type="checkbox"/> ASTs | <input checked="" type="checkbox"/> Landfills |
| <input checked="" type="checkbox"/> Dispensers/fuel loading racks | <input checked="" type="checkbox"/> Transformers |
| <input checked="" type="checkbox"/> Drums | <input checked="" type="checkbox"/> Other: Misc. medical and household debris |

Release Mechanisms (*check potential release mechanisms at the site*)

- | | |
|--|--|
| <input checked="" type="checkbox"/> Spills | <input checked="" type="checkbox"/> Direct discharge |
| <input checked="" type="checkbox"/> Leaks | <input type="checkbox"/> Burning |
| | <input type="checkbox"/> Other: _____ |

Impacted Media (*check potentially-impacted media at the site*)

- | | |
|---|--|
| <input checked="" type="checkbox"/> Surface soil (0-2 feet bgs*) | <input type="checkbox"/> Groundwater |
| <input checked="" type="checkbox"/> Subsurface Soil (>2 feet bgs) | <input checked="" type="checkbox"/> Surface water |
| <input type="checkbox"/> Air | <input checked="" type="checkbox"/> Other: Sediment, biota |

Receptors (*check receptors that could be affected by contamination at the site*)

- | | |
|--|---|
| <input type="checkbox"/> Residents (adult or child) | <input checked="" type="checkbox"/> Site visitor |
| <input checked="" type="checkbox"/> Commercial or industrial worker | <input checked="" type="checkbox"/> Trespasser |
| <input checked="" type="checkbox"/> Construction worker | <input checked="" type="checkbox"/> Recreational user |
| <input checked="" type="checkbox"/> Subsistence harvester (i.e., gathers wild foods) | <input type="checkbox"/> Farmer |
| <input checked="" type="checkbox"/> Subsistence consumer (i.e., eats wild foods) | <input type="checkbox"/> Other: _____ |

* bgs – below ground surface

2. Exposure Pathways: *(The answers to the following questions will identify complete exposure pathways at the site. Check each box where the answer to the question is “yes”.)*

a) Direct Contact –

1 Incidental Soil Ingestion

Is soil contaminated anywhere between 0 and 15 feet bgs? ☒

Do people use the site or is there a chance they will use the site in the future? ☒

If both boxes are checked, label this pathway complete: COMPLETE

2 Dermal Absorption of Contaminants from Soil

Is soil contaminated anywhere between 0 and 15 feet bgs? ☒

Do people use the site or is there a chance they will use the site in the future? ☒

Can the soil contaminants permeate the skin? (Contaminants listed below, or within the groups listed below, should be evaluated for dermal absorption). ☒

Arsenic	Lindane
Cadmium	PAHs
Chlordane	Pentachlorophenol
2,4-dichlorophenoxyacetic acid	PCBs
Dioxins	SVOCs
DDT	

If all of the boxes are checked, label this pathway complete: COMPLETE

b) Ingestion –

1 Ingestion of Groundwater

Have contaminants been detected or are they expected to be detected in the groundwater, OR are contaminants expected to migrate to groundwater in the future? ☒

Could the potentially affected groundwater be used as a current or future drinking water source? *Please note, only leave the box unchecked if ADEC has determined the groundwater is not a currently or reasonably expected future source of drinking water according to 18 AAC 75.350.* ☒

If both the boxes are checked, label this pathway complete: COMPLETE

2 Ingestion of Surface Water

Have contaminants been detected or are they expected to be detected in surface water OR are contaminants expected to migrate to surface water in the future? ☒

Could potentially affected surface water bodies be used, currently or in the future, as a drinking water source? *Consider both public water systems and private use (i.e., during residential, recreational or subsistence activities).* ☒

If both boxes are checked, label this pathway complete: COMPLETE

3 Ingestion of Wild Foods

Is the site in an area that is used or reasonably could be used for hunting, fishing, or harvesting of wild food? ☒

Do the site contaminants have the potential to bioaccumulate (*see Appendix A*)? ☒

Are site contaminants located where they would have the potential to be taken up into biota? (i.e. the top 6 feet of soil, in groundwater that **could** be connected to surface water, etc.) ☒

If all of the boxes are checked, label this pathway complete: COMPLETE

c) Inhalation

1 Inhalation of Outdoor Air

Is soil contaminated anywhere between 0 and 15 feet bgs? ☒

Do people use the site or is there a chance they will use the site in the future? ☒

Are the contaminants in soil volatile (*See Appendix B*)? ☐

If all of the boxes are checked, label this pathway complete: _____

2 Inhalation of Indoor Air

Are occupied buildings on the site or reasonably expected to be placed on the site in an area that could be affected by contaminant vapors? (i.e., within 100 feet, horizontally or vertically, of the contaminated soil or groundwater, or subject to “preferential pathways” that promote easy airflow, like utility conduits or rock fractures) ☐

Are volatile compounds present in soil or groundwater (*See Appendix C*)? ☐

If both boxes are checked, label this pathway complete: _____

3. Additional Exposure Pathways: *(Although there are no definitive questions provided in this section, these exposure pathways should also be considered at each site. Use the guidelines provided below to determine if further evaluation of each pathway is warranted.)*

Dermal Exposure to Contaminants in Groundwater and Surface Water

Exposure from this pathway may need to be assessed only in cases where DEC water-quality or drinking-water standards are not being applied as cleanup levels. Examples of conditions that may warrant further investigation include:

- Climate permits recreational use of waters for swimming,
- Climate permits exposure to groundwater during activities, such as construction, without protective clothing, or
- Groundwater or surface water is used for household purposes.

Check the box if further evaluation of this pathway is needed:

☒

Comments:

A nearby slough is used for recreational swimming during the summer

Inhalation of Volatile Compounds in Household Water

Exposure from this pathway may need to be assessed only in cases where DEC water-quality or drinking-water standards are not being applied as cleanup levels. Examples of conditions that may warrant further investigation include:

- The contaminated water is used for household purposes such as showering, laundering, and dish washing, and
- The contaminants of concern are volatile (common volatile contaminants are listed in Appendix B)

Check the box if further evaluation of this pathway is needed:

☐

Comments:

Inhalation of Fugitive Dust

Generally DEC soil ingestion cleanup levels in Table B1 of 18 AAC 75 are protective of this pathway, although this is not true in the case of chromium. Examples of conditions that may warrant further investigation include:

- Nonvolatile compounds are found in the top 2 centimeters of soil. The top 2 centimeters of soil are likely to be dispersed in the wind as dust particles.
- Dust particles are less than 10 micrometers. This size can be inhaled and would be of concern for determining if this pathway is complete.

Check the box if further evaluation of this pathway is needed:

☒

Comments:

Metals and DDT contamination

Direct Contact with Sediment

This pathway involves people's hands being exposed to sediment, such as during recreational or some types of subsistence activities. People then incidentally **ingest** sediment from normal hand-to-mouth activities. In addition, **dermal absorption of contaminants** may be of concern if people come in contact with sediment and the contaminants are able to permeate the skin (see dermal exposure to soil section). This type of exposure is rare but it should be investigated if:

- Climate permits recreational activities around sediment, and/or
- Community has identified subsistence or recreational activities that would result in exposure to the sediment, such as clam digging.

ADEC soil ingestion cleanup levels are protective of direct contact with sediment. If they are determined to be over-protective for sediment exposure at a particular site, other screening levels could be adopted or developed.

Check the box if further evaluation of this pathway is needed:



Comments:

Exposure to sediment may occur during subsistence and/or recreational activities

4. Other Comments *(Provide other comments as necessary to support the information provided in this form.)*

APPENDIX A

BIOACCUMULATIVE COMPOUNDS

Table A-1: List of Compounds of Potential Concern for Bioaccumulation

Organic compounds are identified as bioaccumulative if they have a BCF equal to or greater than 1,000 or a log K_{ow} greater than 3.5. Inorganic compounds are identified as bioaccumulative if they are listed as such by EPA (2000). Those compounds in Table X of 18 AAC 75.345 that are bioaccumulative, based on the definition above, are listed below.

Aldrin	DDT	Lead
Arsenic	Dibenzo(a,h)anthracene	Mercury
Benzo(a)anthracene	Dieldrin	Methoxychlor
Benzo(a)pyrene	Dioxin	Nickel
Benzo(b)fluoranthene	Endrin	PCBs
Benzo(k)fluoranthene	Fluoranthene	
Cadmium	Heptachlor	Pyrene
Chlordane	Heptachlor epoxide	Selenium
Chrysene	Hexachlorobenzene	Silver
Copper	Hexachlorocyclopentadiene	Toxaphene
DDD	Indeno(1,2,3-c,d)pyrene	Zinc
DDE		

Because BCF values can relatively easily be measured or estimated, the BCF is frequently used to determine the potential for a chemical to bioaccumulate. A compound with a BCF greater than 1,000 is considered to bioaccumulate in tissue (EPA 2004b).

For inorganic compounds, the BCF approach has not been shown to be effective in estimating the compound's ability to bioaccumulate. Information available, either through scientific literature or site-specific data, regarding the bioaccumulative potential of an inorganic site contaminant should be used to determine if the pathway is complete.

The list was developed by including organic compounds that either have a BCF equal to or greater than 1,000 or a log K_{ow} greater than 3.5 and inorganic compounds that are listed by the United States Environmental Protection Agency (EPA) as being bioaccumulative (EPA 2000). The BCF can also be estimated from a chemical's physical and chemical properties. A chemical's octanol-water partitioning coefficient (K_{ow}) along with defined regression equations can be used to estimate the BCF. EPA's Persistent, Bioaccumulative, and Toxic (PBT) Profiler (EPA 2004) can be used to estimate the BCF using the K_{ow} and linear regressions presented by Meylan et al. (1996). The PBT Profiler is located at <http://www.pbtprofiler.net/>. For compounds not found in the PBT Profiler, DEC recommends using a log K_{ow} greater than 3.5 to determine if a compound is bioaccumulative.

APPENDIX B

VOLATILE COMPOUNDS

Table B-1: List of Volatile Compounds of Potential Concern

Common volatile contaminants of concern at contaminated sites. A chemical is defined as volatile if the Henry's Law constant is 1×10^{-5} atm-m³/mol or greater and the molecular weight less than 200 g/mole (g/mole; EPA 2004a). Those compounds in Table X of 18 AAC 75.345 that are volatile, based on the definition above, are listed below.

Acenaphthene	1,4-dichlorobenzene	Pyrene
Acetone	1,1-dichloroethane	Styrene
Anthracene	1,2-dichloroethane	1,1,2,2-tetrachloroethane
Benzene	1,1-dichloroethylene	Tetrachloroethylene
Bis(2-chlorethyl)ether	Cis-1,2-dichloroethylene	Toluene
Bromodichloromethane	Trans-1,2-dichloroethylene	1,2,4-trichlorobenzene
Carbon disulfide	1,2-dichloropropane	1,1,1-trichloroethane
Carbon tetrachloride	1,3-dichloropropane	1,1,2-trichloroethane
Chlorobenzene	Ethylbenzene	Trichloroethylene
Chlorodibromomethane	Fluorene	Vinyl acetate
Chloroform	Methyl bromide	Vinyl chloride
2-chlorophenol	Methylene chloride	Xylenes
Cyanide	Naphthalene	GRO
1,2-dichlorobenzene	Nitrobenzene	DRO

APPENDIX C

COMPOUNDS OF CONCERN FOR VAPOR MIGRATION

Table C-1: List of Compounds of Potential Concern for the Vapor Migration

A chemical is considered sufficiently toxic if the vapor concentration of the pure component poses an incremental lifetime cancer risk greater than 10^{-6} or a non-cancer hazard index greater than 1. A chemical is considered sufficiently volatile if it's Henry's Law constant is 1×10^{-5} atm-m³/mol or greater.

Acenaphthene	Dibenzofuran	Hexachlorobenzene
Acetaldehyde	1,2-Dibromo-3-chloropropane	Hexachlorocyclopentadiene
Acetone	1,2-Dibromoethane (EDB)	Hexachloroethane
Acetonitrile	1,3-Dichlorobenzene	Hexane
Acetophenone	1,2-Dichlorobenzene	Hydrogen cyanide
Acrolein	1,4-Dichlorobenzene	Isobutanol
Acrylonitrile	2-Nitropropane	Mercury (elemental)
Aldrin	N-Nitroso-di-n-butylamine	Methacrylonitrile
alpha-HCH (alpha-BHC)	n-Propylbenzene	Methoxychlor
Benzaldehyde	o-Nitrotoluene	Methyl acetate
Benzene	o-Xylene	Methyl acrylate
Benzo(b)fluoranthene	p-Xylene	Methyl bromide
Benzylchloride	Pyrene	Methyl chloride chloromethane)
beta-Chloronaphthalene	sec-Butylbenzene	Methylcyclohexane
Biphenyl	Styrene	Methylene bromide
Bis(2-chloroethyl)ether	tert-Butylbenzene	Methylene chloride
Bis(2-chloroisopropyl)ether	1,1,1,2-Tetrachloroethane	Methylethylketone (2-butanone)
Bis(chloromethyl)ether	1,1,2,2-Tetrachloroethane	Methylisobutylketone
Bromodichloromethane	Tetrachloroethylene	Methylmethacrylate
Bromoform	Dichlorodifluoromethane	2-Methylnaphthalene
1,3-Butadiene	1,1-Dichloroethane	MTBE
Carbon disulfide	1,2-Dichloroethane	m-Xylene
Carbon tetrachloride	1,1-Dichloroethylene	Naphthalene
Chlordane	1,2-Dichloropropane	n-Butylbenzene
2-Chloro-1,3-butadiene (chloroprene)	1,3-Dichloropropene	Nitrobenzene
Chlorobenzene	Dieldrin	Toluene
1-Chlorobutane	Endosulfan	trans-1,2-Dichloroethylene
Chlorodibromomethane	Epichlorohydrin	1,1,2-Trichloro-1,2,2-trifluoroethane
Chlorodifluoromethane	Ethyl ether	1,2,4-Trichlorobenzene
Chloroethane (ethyl chloride)	Ethylacetate	1,1,2-Trichloroethane
Chloroform	Ethylbenzene	1,1,1-Trichloroethane
2-Chlorophenol	Ethylene oxide	Trichloroethylene
2-Chloropropane	Ethylmethacrylate	Trichlorofluoromethane
Chrysene	Fluorene	1,2,3-Trichloropropane
cis-1,2-Dichloroethylene	Furan	1,2,4-Trimethylbenzene
Crotonaldehyde (2-butenal)	Gamma-HCH (Lindane)	1,3,5-Trimethylbenzene
Cumene	Heptachlor	Vinyl acetate
DDE	Hexachloro-1,3-butadiene	Vinyl chloride (chloroethene)

Source: EPA 2002.

Guidance on Developing Conceptual Site Models
January 31, 2005

HUMAN HEALTH CONCEPTUAL SITE MODEL

Site: Joe Ward Slough Former Dumpsite
Fort Yukon, Alaska

Completed By: Julie Clark
 Date Completed: June 28, 2007

Follow the directions below. Do not consider engineering or land use controls when describing pathways.

(1)

Check the media that could be directly affected by the release.

(2)

For each medium identified in (1), follow the top arrow and check possible transport mechanisms. Briefly list other mechanisms or reference the report for details.

(3)

Check exposure media identified in (2).

(4)

Check exposure pathways that are complete or need further evaluation. The pathways identified must agree with Sections 2 and 3 of the CSM Scoping Form.

(5)

Identify the receptors potentially affected by each exposure pathway: Enter "C" for current receptors, "F" for future receptors, or "C/F" for both current and future receptors.

Media		Transport Mechanisms		Exposure Media	Exposure Pathways	Current & Future Receptors						
						Residents (adults or children)	Commercial or Industrial workers	Site visitors, trespassers, or recreational users	Construction workers	Farmers or subsistence harvesters	Subsistence consumers	Other
<input checked="" type="checkbox"/> Surface Soil (0-2 ft bgs)	<input checked="" type="checkbox"/> Direct release to surface soil	<input checked="" type="checkbox"/> Migration or leaching to subsurface	<input checked="" type="checkbox"/> Migration or leaching to groundwater	<input checked="" type="checkbox"/> soil	<input checked="" type="checkbox"/> Incidental Soil Ingestion		F	C/F	F	C/F	C/F	
	<input type="checkbox"/> Volatilization	<input type="checkbox"/> Runoff or erosion	<input type="checkbox"/> Uptake by plants or animals		<input checked="" type="checkbox"/> Dermal Absorption of Contaminants from Soil		F	C/F	F	C/F	C/F	
	<input type="checkbox"/> Other (list): Joe Ward Slough Former Dumpsite, Fort Yukon											
<input checked="" type="checkbox"/> Subsurface Soil (2-15 ft bgs)	<input checked="" type="checkbox"/> Direct release to subsurface soil	<input type="checkbox"/> Migration to groundwater	<input type="checkbox"/> Volatilization	<input type="checkbox"/> groundwater	<input type="checkbox"/> Ingestion of Groundwater							
	<input type="checkbox"/> Other (list):				<input type="checkbox"/> Dermal Absorption of Contaminants in Groundwater							
					<input checked="" type="checkbox"/> Inhalation of Volatile Compounds in Tap Water							
<input checked="" type="checkbox"/> Ground-water	<input checked="" type="checkbox"/> Direct release to groundwater	<input checked="" type="checkbox"/> Volatilization	<input checked="" type="checkbox"/> Flow to surface water body	<input type="checkbox"/> air	<input checked="" type="checkbox"/> Inhalation of Outdoor Air							
	<input checked="" type="checkbox"/> Flow to sediment	<input checked="" type="checkbox"/> Uptake by plants or animals	<input checked="" type="checkbox"/> Other (list): Julie Clark		<input checked="" type="checkbox"/> Inhalation of Indoor Air							
					<input checked="" type="checkbox"/> Inhalation of Fugitive Dust							
<input checked="" type="checkbox"/> Surface Water	<input checked="" type="checkbox"/> Direct release to surface water	<input type="checkbox"/> Volatilization	<input type="checkbox"/> Sedimentation	<input checked="" type="checkbox"/> surface water	<input checked="" type="checkbox"/> Ingestion of Surface Water		F	C/F	F	C/F	C/F	
	<input type="checkbox"/> Uptake by plants or animals	<input type="checkbox"/> Other (list): Misc. medical and household debris	<input checked="" type="checkbox"/> Dermal Absorption of Contaminants in Surface Water			F	C/F	F	C/F	C/F		
			<input checked="" type="checkbox"/> Inhalation of Volatile Compounds in Tap Water									
<input type="checkbox"/> Sediment	<input checked="" type="checkbox"/> Direct release to sediment	<input checked="" type="checkbox"/> Resuspension, runoff, or erosion	<input checked="" type="checkbox"/> Uptake by plants or animals	<input checked="" type="checkbox"/> sediment	<input checked="" type="checkbox"/> Direct Contact with Sediment		F	C/F	F	C/F	C/F	
	<input checked="" type="checkbox"/> Other (list):				<input checked="" type="checkbox"/> Ingestion of Wild Foods		F	C/F	F	C/F	C/F	

APPENDIX F

Alaska DEC Data Checklist

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Laboratory Data Review Checklist

1. Laboratory

- a. Did an ADEC CS approved laboratory receive and perform all of the submitted sample analyses?

☒ Yes

☐ No

Comments:

- 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

Comments:

Not Applicable

2. Chain of Custody (COC)

- a. COC information completed, signed, and dated (including released/received by)?

☒ Yes

☐ No

Comments:

- b. Correct analyses requested?

☒ Yes

☐ No

Comments:

3. Laboratory Sample Receipt Documentation

- a. Sample/cooler temperature documented and within range at receipt ($4^{\circ} \pm 2^{\circ} \text{C}$)?

☒ Yes

☐ No

Comments:

- b. Sample preservation acceptable – acidified waters, Methanol preserved VOC soil (GRO, BTEX, Volatile Chlorinated Solvents, etc.)?

☒ Yes

☐ No

Comments:

- c. Sample condition documented – broken, leaking (Methanol), zero headspace (VOC vials)?

☒ Yes

☐ No

Comments:

- d. If there were any discrepancies, were they documented? For example, incorrect sample containers/preservation, sample temperature outside of acceptable range, insufficient or missing samples, etc.?

☒ Yes ☐ No

Comments:

No discrepancies

- e. Data quality or usability affected? Explain.

Comments:

Not Applicable

4. Case Narrative

- a. Present and understandable?

☒ Yes ☐ No

Comments:

- b. Discrepancies, errors or QC failures identified by the lab?

☒ Yes ☐ No

Comments:

See comments below

- c. Were all corrective actions documented?

☐ Yes ☒ No

Comments:

Soil samples for 8081 (pesticides) were analyzed and reported with a failing closing CCV. The samples were not rerun. Only one sample had positive results for DDD, DDE and DDT.

- d. What is the effect on data quality/usability according to the case narrative?

Comments:

According to the narrative all of the results for DDT and methoxychlor are estimates whether positive or ND.

5. Samples Results

- a. Correct analyses performed/reported as requested on COC?

☒ Yes ☐ No

Comments:

- b. All applicable holding times met?

☒ Yes ☐ No

Comments:

c. All soils reported on a dry weight basis?

☒ Yes

☐ No

Comments:

d. Are the reported PQLs less than the Cleanup Level or the minimum required detection level for the project?

☒ Yes

☐ No

Comments:

e. Data quality or usability affected? Explain.

Comments:

Not Applicable

6. QC Samples

a. Method Blank

i. One method blank reported per matrix, analysis and 20 samples?

☒ Yes

☐ No

Comments:

ii. All method blank results less than PQL?

☒ Yes

☐ No

Comments:

iii. If above PQL, what samples are affected?

Comments:

Not Applicable

iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

☐ Yes

☐ No

Comments:

Not Applicable

v. Data quality or usability affected? Explain.

Comments:

Not Applicable

b. Laboratory Control Sample/Duplicate (LCS/LCSD)

i. Organics – One LCS/LCSD reported per matrix, analysis and 20 samples?

☒ Yes ☐ No

Comments:

ii. Metals/Inorganics – one LCS and one sample duplicate reported per matrix, analysis and 20 samples?

☒ Yes ☐ No

Comments:

iii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits? And project specified DQOs, if applicable. (AK Petroleum methods: AK101 60%-120%, AK102 75%-125%, AK103 60%-120%; all other analyses see the laboratory QC pages)

☐ Yes ☒ No

Comments:

LCS for bromide (anions by EPA method 300.0) was outside limits (low recovery). Samples were ND for bromide.

iv. Precision – All relative percent differences (RPD) reported and less than method or laboratory limits? And project specified DQOs, if applicable. (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)

☐ Yes ☒ No

Comments:

LCS/LCSD for AK101 failed for RPD. Samples were not reanalyzed. The sample results were non-detect (waters).

v. If %R or RPD is outside of acceptable limits, what samples are affected?

Comments:

All water samples analyzed for GRO

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

☒ Yes ☐ No

Comments:

Samples are J flagged. Sample results are also J flagged due to the results being between the MDL and PQL.

vii. Data quality or usability affected? Explain.

Comments:

Data still usable for the purpose of identifying areas of contamination at the site.

c. Surrogates – Organics Only

- i. Are surrogate recoveries reported for organic analyses – field, QC and laboratory samples?

☒ Yes ☐ No

Comments:

- ii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits? And project specified DQOs, if applicable. (AK Petroleum methods 50-150 %R; all other analyses see the laboratory report pages)

☐ Yes ☒ No

Comments:

Some surrogate recoveries are outside of acceptance limits due to matrix interference or high dilutions.

- iii. Do the sample results with failed surrogate recoveries have data flags? If so, are the data flags clearly defined?

☒ Yes ☐ No

Comments:

- iv. Data quality or usability affected? Explain.

Comments:

No

d. Trip blank – Volatile analyses only (GRO, BTEX, Volatile Chlorinated Solvents, etc.): Water and Soil

- i. One trip blank reported per matrix, analysis and cooler?

☒ Yes ☐ No

Comments:

- ii. All results less than PQL?

☒ Yes ☐ No

Comments:

- iii. If above PQL, what samples are affected?

Comments:

Not Applicable

- iv. Data quality or usability affected? Explain.

Comments:

Not Applicable

e. Field Duplicate

i. One field duplicate submitted per matrix, analysis and 10 project samples?

☒ Yes

☐ No

Comments:

ii. Submitted blind to lab?

☒ Yes

☐ No

Comments:

iii. Precision – All relative percent differences (RPD) less than specified DQOs?
(Recommended: 30% water, 50% soil)

$$\text{RPD (\%)} = \text{Absolute value of: } \frac{(R_1 - R_2)}{((R_1 + R_2)/2)} \times 100$$

Where R_1 = Sample Concentration

R_2 = Field Duplicate Concentration

☒ Yes

☐ No

Comments:

Most results were ND or near PQL.

iv. Data quality or usability affected? Explain.

Comments:

No

f. Decontamination or Equipment Blank (if applicable)

☐ Yes

☐ No

☒ Not Applicable

i. All results less than PQL?

☐ Yes

☐ No

Comments:

ii. If above PQL, what samples are affected?

Comments:

iii. Data quality or usability affected? Explain.

Comments:

7. Other Data Flags/Qualifiers (ACOE, AFC EE, Lab Specific, etc.)

a. Defined and appropriate?

☒ Yes

☐ No

Comments:

N/A

Completed by:

Marty Hannah

Title:

Environmental Scientist

Date:

June 29, 2007

CS Report Name:

Ft. Yukon Former Landfill

Report Date:

June 27, 2007

Consultant Firm:

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Laboratory Name:

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