
FY 2006 DEC Brownfield Assessment
Contaminated Sites Program - Brownfield Team

**Phase I Environmental Site Assessment
Five Historic Buildings, Village of St. George
Final Report**



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Department of
Environmental
Conservation

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Acronyms and Abbreviations

ACM	Asbestos-containing materials
DEC	Alaska Department of Environmental Conservation
ASTM	American Society of Testing and Materials
CSD	Contaminated sites database
EDR	Environmental Data Resources, Inc.
E&P	Electrical and plumbing
ESA	Environmental site assessment
NFRAP	No further remedial action planned
OASIS	OASIS Environmental, Inc.
PCBs	Polychlorinated biphenyls
Tanaq	St. George Tanaq Corporation
Tetra Tech	Tetra Tech EM, Inc.
TPA	Two-party agreement
UST	Underground storage tank
VPSO	Village Public Safety Officer

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EXECUTIVE SUMMARY

This document presents the results of a Phase I Environmental Site Assessment (ESA) conducted by OASIS Environmental, Inc. (OASIS) at the request of the Alaska Department of Environmental Conservation (DEC). The subject properties are five buildings in the Village of St. George on St. George Island, Alaska. The Phase I ESA is being performed as part of an DEC Brownfield Assessment and will cover the following five buildings in the Village of St. George (shown in Figure 1):

- Electrical and Plumbing (E&P) Shop, owned by City of St. George,
- Old Machine Shop, owned by City of St. George,
- Cottage D, owned by City of St. George,
- Cottage G (also known as the Old Power Plant), owned by St. George Tanaq Corporation (Tanaq), and
- Coal House, owned by St. George Traditional Council.

The five historic buildings were built between the 1920's and the 1940's. The St. George Tanaq Corporation (Tanaq) is seeking to restore and preserve the buildings through a grant provided by the Alaska State Historic Preservation Office.

OASIS performed this ESA in conformance with the American Society for Testing and Materials (ASTM) E 1527-05 guidance document *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. The ESA encompassed a review of historical records and regulatory records, interviews with persons familiar with the buildings, review of site photographs provided by Rodney Lekanof, site reconnaissance visit, and preparation of this report summarizing our findings and conclusions.

The ESA revealed evidence of *recognized environmental conditions* (as defined by ASTM) at each of the buildings. In addition, evidence of *recognized environmental conditions* were indicated at adjacent properties that might have the potential to impact buildings.

Based upon the findings of this ESA, it is OASIS' opinion that additional assessment work be conducted at the five buildings.

1 INTRODUCTION

1.1 Purpose

The purpose of this ESA is to identify *recognized environmental conditions* through *all appropriate inquiry* and evaluate the likelihood that each of the building sites 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, groundwater, 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 buildings and surrounding properties; review of site photographs and historical aerial photographs, and a site visit conducted by an OASIS representative.

1.2 Scope of Services

OASIS conducted the following tasks to accomplish the project objective:

- Researched past activities that occurred at each building site to identify any former operations that may have impacted the property with hazardous substances or petroleum products. This task included interviewing residents of adjacent 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 Gig Harbor 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 Village of St. George;
- Performed site walks around each property; and
- Prepared this report with ESA findings, conclusions, and recommendations.

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.

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 ESA did not include the collection or analysis of soil, groundwater, surface water, or air samples. The scope of the Brownfield Assessment included a limited Phase II ESA, in which soil sample and building materials samples were collected and analyzed for petroleum hydrocarbon, lead-based paint, and asbestos contamination. Results of the Phase II ESA will be presented in another report.

1.5 Special Terms and Conditions

The ESA activities were conducted in accordance with the American Society of Testing Materials (ASTM) guidelines E 1527-05 for ESAs 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 SITE DESCRIPTION

2.1 Location

All five buildings are located in the Village of St. George on St. George Island in the Pribilof Islands, Alaska (Figure 1).

2.2 Site and Vicinity General Characteristics

The E&P Shop, the Old Machine Shop, Cottage G, and the Coal House are all located in the northern part of the village within an approximately 150- by 150- foot area. Cottage D is located approximately 200 feet south of the other four buildings in the residential area of St. George. Figure 2 shows the locations of the five buildings.

2.3 Current Use of the Buildings

The E&P Shop, the Old Machine Shop, and Cottage G are currently used for storage. A general inventory of the items stored in each building is included in Section 4. The Coal House is currently empty and not in use. Cottage D is used as housing for the local Village Public Safety Officer (VPSO). The Village currently has no VPSO so Cottage D is vacant.

2.4 Description of Structures, Roads, and Other Improvements on the Site

Each building is described below.

- The E&P shop is a two-story wood frame building with painted wood siding and a painted concrete foundation. The building measures approximately 50- by 60-feet and has a partial basement.
- The Old Machine Shop is a two-story barn-style building with a painted concrete first floor, a painted wood loft and a painted partial basement. The roof gables are covered in painted wood siding. The building measures approximately 45- by 65-feet and an exterior 20- by 55-foot concrete pad.
- Cottage G is a two-story, wood frame building measuring 55- by 30-feet with painted wood siding and a painted concrete foundation.
- The Coal House is a painted concrete building measuring approximately 80- by 30-feet with painted, wood-sided gables and three painted wooden dormers extending from the wood-shingled roof on the south side.
- Cottage D is a two-story painted concrete building with a full basement. The building measuring 35- by 25-feet and has a metal roof with painted, wood-sided gables.

2.5 Description of Adjoining Properties

The E&P Shop is located north of Cottage G and west of the Fur Sealing Plant. A small seawater pumping building, no longer used, is located along the shoreline to the northwest of the building.

The Old Machine Shop is located east of the Fur Sealing Plant and west of the current Tanaq Shop building. An empty lot lies in between the two buildings, the site of a former gas station. A former diesel tank farm was present to the northeast of the Old Machine Shop. The active

power plant facilities are across the street to the southeast and the Coal House is approximately 100 feet south of the Old Machine Shop.

The Coal House is located between Cottage G and the active power plant. It is downhill of the church and uphill of the Old Machine Shop.

Cottage G is west of the Coal House and south of the E&P Shop. A former fuel storage area and a carpenter shop were once located across the road and to the south of the building.

Cottage D is located between Cottage C on the east and another residence to the west. The medical clinic is located southwest of the cottages.

3 USER-PROVIDED INFORMATION

3.1 Title Records

None provided.

3.2 Environmental Liens or Activity and Use Limitations

None provided.

3.3 Specialized Knowledge

None provided.

3.4 Valuation Reduction for Environmental Issues

None provided.

3.5 Owner, Property Manager, and Occupant Information

The buildings are owned by the following entities:

- E&P Shop – City of St. George
- Old Machine Shop – City of St. George
- Cottage G – Tanaq
- Coal House – St. George Traditional Council
- Cottage D – City of St. George

All buildings are currently unoccupied.

3.6 Reason for Performing Phase I

This Phase I ESA was performed as part of an DEC Brownfields Assessment, prior to restoration of the buildings by Tanaq in order to evaluate the likelihood that the building site has been impacted with hazardous materials from activities conducted on or near the site.

4 GOVERNMENT AND HISTORICAL RECORDS REVIEW

4.1 Standard Environmental Record Sources

Regulatory agency database information was obtained from an EDR Radius Map with GeoCheck® (Attachment 2), 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 five buildings in St. George. OASIS also reviewed available reports at the Anchorage DEC office as well as the DEC Contaminated Sites database on the agency's website.

4.2 Environmental Data Resources Report

The EDR report named two sites on St. George Island listed with the Contaminated Sites Database (CSD). One of the sites is the Old Coal House, one of the subject buildings. The other listed site, the Open Pits Site, is listed by EDR as within a ½-mile radius of the subject buildings, and is actually approximately 1/8 mile southeast of the buildings. The CSD also lists the Old Power Plant (Cottage G) as a contaminated site. The CSD information for each site is summarized below.

The Old Coal House and Cottage G are both covered under a two-party agreement (TPA) between the State of Alaska and the National Oceanographic and Atmospheric Administration (NOAA). Site investigations were performed at both the Old Coal House and Cottage G in 1997.

A single sample collected at the Old Coal House contained benzo(a)pyrene at a concentration exceeding DEC cleanup levels. The DEC granted No Further Remedial Action Planned (NFRAP) status for the site. Institutional controls have been established requiring a deed notice.

The 1997 site investigation found diesel contamination in soil surrounding Cottage G (the Old Power Plant). A corrective action was implemented (Tetra Tech, 2005) and the contaminated soil was removed to the maximum extent practicable. No further remedial action is planned for the soil, but the site is still active because of groundwater contamination of a perched aquifer.

No previous site assessments have been conducted at the Old Machine Shop, the E&P Shop, or Cottage D.

4.3 DEC Contaminated Sites Database

The DEC CSD lists 26 contaminated sites on St. George Island. The following sections describe listed contaminated sites in close proximity to the specific sites evaluated under this ESA.

4.3.1 Old Machine Shop

Three contaminated sites are adjacent to the Old Machine Shop, and are either upgradient or cross-gradient to the building. The Former Diesel Tank Farm (TPA 1), the Former Drum Storage Area (TPA 2), and the Former Gas Station (TPA 3) are on adjacent properties to the east and northeast of the Old Machine Shop. The three sites were impacted with petroleum contamination. Sites TPA 1 and TPA 2 are both active sites. At TPA3, corrective action has been completed to the maximum extent practicable and the DEC has declared a "No Further Remedial Action Planned" (NFRAP) status for the site (DEC, 2006).

4.3.2 E&P Shop

The Coal House and Cottage G are each approximately 150 feet upgradient of the E&P shop. These buildings are listed in the CSD as TPA 20 and TPA 9, respectively. The Coal House had a single benzo(a)pyrene cleanup level exceedances in soil (Hart Crowser, 1997). The DEC granted the site NFRAP status (DEC, 2006). Cottage G contained petroleum contaminated soils, which was removed to the maximum extent practicable. The DEC has granted NFRAP status for the site soil, but is still requiring NOAA to perform periodic groundwater monitoring (DEC, 2006 and Louis Howard (verbal communication)).

4.3.3 Cottage G

The Coal House (TPA 20), the Old Carpenter Shop (TPA 19) and the Former Fuel Storage Area (TPA 18) are within 150 feet and possibly upgradient of Cottage G. The Coal House is described above. TPA 19 was impacted by lead-in-soil contamination. The soil was removed to the maximum extent practicable and the DEC has granted the site NFRAP status (DEC, 2006). Diesel contaminated soil was present at TPA 18. The contaminated soil was removed to the maximum extent practicable and the DEC has granted the site NFRAP status (DEC, 2006).

4.3.4 Old Coal House

The Active Power Plant (TPA 8) is adjacent and likely cross-gradient to the Coal House on the east side. The site contained subsurface petroleum contamination, likely associated with two 4,000-gallon underground storage tanks (USTs). The tanks were removed in 1997 along with the contaminated soil, to the maximum extent practicable. The DEC has granted the site NFRAP status (DEC, 2006).

4.3.5 Cottage D

Cottage C (TPA 11) is adjacent to Cottage D on the east side. Petroleum contamination was discovered at TPA 11 during removal of a heating oil UST. The site is still active.

4.4 Additional Environmental Record Sources

OASIS received a copy of a *National Register of Historic Places Inventory – Nomination Form* for St. George Island from Karen Holser, a local resident. The document states that the E&P Shop was rebuilt after the St. George fire of 1950. The (Old) Machine Shop was built in 1948. The Coal Shed (Coal House) and the Cottages (including Cottage D) were built in the 1930's.

4.5 Physical Setting Sources

No 7.5-minute topographic map was available for St. George Island. The report provided a physical setting source map showing water well locations (Attachment 2). One water well is within a ½-mile radius and upgradient of the five buildings. Two additional water wells and two springs are located within a 1-mile radius and cross-gradient of the buildings.

4.5.1 Soil and Geologic Conditions

According to the Corrective Action Report for TPA Site 9 – Old Power Plant (Tetra Tech EM, Inc. [Tetra Tech], 2005), the soil is primarily volcanic in origin and consists of gray, red, and black scoria ranging in size from pebbles to cobbles. Near the Old Power Plant (Cottage G), the soil layers consists of one to two feet of top soil, two to ten feet of silty, gravelly sand with large boulders. Depth to bedrock (basalt) ranges from one to ten feet below ground surface (bgs).

4.5.2 Groundwater Conditions

Groundwater conditions were obtained from the Cottage G closure report (Tetra Tech, 2005). The depth to groundwater near Cottage G is 29 feet bgs. Tetra Tech also found a perched aquifer at 14 feet bgs. Groundwater generally flows to the northwest and is tidally influenced

4.5.3 Asbestos

Based on the age of the buildings, asbestos-containing materials (ACM) are possible.

4.5.4 Radon

No radon information is reported for St. George Island.

4.5.5 Lead Based Paint

Based on the age of the buildings, lead-based paint may be present.

4.6 Historical Use Information

OASIS reviewed historical use information to assess whether prior owners of the buildings and adjoining properties may have conducted activities that could pose environmental concerns. OASIS' research included review of the following information sources:

- Black and white AeroMap aerial photograph dated 1977 (Figure 3);

There appear to be several above ground storage tanks on the north side of the coal house and several tanks east of the Old Machine Shop. A tank farm is present northeast of the Old Machine Shop and is discussed in the following section.

- Color aerial AeroMap aerial photograph dated 1993 (Figure 4);

The 1993 aerial photo shows that the tank farm has been removed from the area northeast of the Old Machine Shop. A tanker truck and approximately 25 drums are present on the east side of the building. Heavy equipment is present on the concrete slab on the west side of the building. Soil staining is present both west of the concrete slab, west of the building and east of building, next to a tanker truck.

Some metal debris is present on the south side of the E&P Shop. There appears to be some staining on the ground on the north side of the building, just west of an adjacent smaller building.

A cleared area on the north side of the Coal House contains unrecognizable debris. A cleared area is also present on the northeast corner of Cottage D. Several white unrecognizable objects are located in and around the cleared area.

- Color aerial AeroMap aerial photograph dated 1997 (Figure 5);

There are no significant changes between the 1993 and 1997 aerial photos. Heavy equipment has replaced the tanker and drums on the east side of the Old Machine shop. The cleared area next to Cottage D is re-vegetated in the 1997 photo. The majority of debris has been cleaned up around the Coal House and the E&P Shop.

4.7 Historical Use Information on Adjoining Properties

OASIS reviewed historical use information to assess whether adjoining properties of the five buildings may have conducted activities that could pose environmental concerns. OASIS' research included review of the following black and white AeroMap aerial photograph dated 1977 (Figure 3). Northeast of the Old Machine Shop, the aerial photo shows some large storage tanks, presumable fuel storage. This area is covered under the two-party agreement (TPA) as TPA1 – Former Diesel Tank Farm. Immediately east of the Old Machine Shop are several smaller tanks at the site of TPA 3 – Former Gas Station. Additional tanks are located south of the Old Machine Shop and east of the Coal House near the Municipal Building and Active Power Plant (TPA 8). These tanks are not visible in the most current aerial photo (Figure 5).

5 SITE RECONNAISSANCE

A Tanaq representative (Rodney Lekanof) visited the buildings between March 29 and April 11, 2006 and took digital photos.

OASIS visited the five buildings in St. George May 8 through May 11 to conduct a combined Phase I ESA site walk and subsequent Phase II ESA sampling. The site walk observations are summarized below. Photographs from the site walk are included as Attachment 3.

The E&P Shop is a two-story, wood-frame building with a partial basement (Photo 1). The first floor is wood floor atop a concrete foundation. The OASIS representative did not enter the basement because the basement has been inhabited by foxes and was deemed unsafe. The building is currently used for storage and contains used car batteries, engine parts, pipe insulation, plumbing supplies, motors, motor oil, portable heaters, windows, phone booths, generator, transformers, tractor, snow machine, electrical wire and meter boxes, and file boxes (Photo 2). Several fluorescent fixtures were present in the building, which may contain polychlorinated biphenyls (PCBs). OASIS was unable to reach the fixtures to determine whether the ballasts were labeled No PCBs. No obvious staining was seen on the ground surrounding the building. The building is not connected to water or sewer. No floor drains were observed in the building.

The Old Machine Shop is a two story concrete building with a partial basement (Photo 3). The first story and basement have concrete floors. The building is currently used for storage of engine parts, oxygen and acetylene tanks, lube and gear oil, parts and fittings, ceiling panels, and a concrete mixer (Photos 4 and 5). Several fluorescent fixtures were present in the building, but OASIS was unable to reach the fixtures to determine whether the ballasts were labeled No PCBs. No obvious staining was seen on the ground surrounding the building. The building is connected to city water and sewer. No floor drains were observed in the building.

Cottage D is a two-story residence which is periodically used by the Village Public Safety Officer (Photo 6). It is a concrete building with a full basement with a concrete floor. Two rooms in the basement are finished and one of these is used for storage of household goods. The main basement area contains household cleaning supplies, several gallons of epoxy glue catalyst that are labeled “Corrosive” (Photo 7), a five-gallon bucket of lubrication oil, and an open bucket of a reddish oily substance. Two sets of UST fill and vent pipes are present on the property, one on the east side of the building and one on the south side of the building. The UST on the east side of the building is currently being used for heating oil (Photo 8). The vent and fill pipes for the UST on the south side of the building are overgrown (Photo 9). The building is connected to city water and sewer. No floor drains were observed in the building.

Cottage G is a two story building that has been converted to two apartments and a three-room storage area (Photo 10). The entrance to the second-floor apartment is also the entrance to the storage area. Two of the storage rooms were open and the third was boarded shut. The two open rooms contained spools of electrical wiring, fencing, electric boxes, conduit, and various household items (Photo 11). Several fluorescent fixtures were present in the building, but OASIS was unable to reach the fixtures to determine whether the ballasts were labeled No PCBs. The building is connected to city water and sewer. No floor drains were observed in the building.

The Coal House is a concrete building with a partial loft that covers the western third of the building (Photo 12). It was boarded up, but access was provided by the St. George Traditional Council. The floor is strewn with debris, which includes an old lawn mower, and a piece of equipment (unknown use) with attached fiberglass insulation. A length of piping is leaning

against the access to the loft, but no loft ladder is in place (Photo 13). OASIS did not enter the loft due to lack of safe access. The building is not connected to water or sewer. No floor drains were observed in the building.

6 INTERVIEWS

6.1 Interview with Owner/ Owner Representative

An OASIS representative spoke with Mr. Andronik Kashevarof on March 14, 2006. Mr. Kashevarof's pertinent comments are summarized below.

The Old Machine Shop was used as a machine shop and is currently used for storage. Used oil, regular oil and used batteries are now stored in the building. The building is hooked up to city water and sewer. Mr. Kashevarof expects that there is petroleum hydrocarbon staining all around the building. He mentioned that an UST had eroded out of the bank supporting the concrete slab on the northwest corner of the building. He did not provide more information regarding the disposal or assessment of the UST removal.

The E&P Shop was used as a warehouse for the federal government and then as an electrical and plumbing shop until 1983. It is now owned by the City of St. George and is used as a storage facility. Used residential batteries, battery acid, and a drum of solvent are now stored in the building. The building had power, but no sewer or water. There is potential for petroleum hydrocarbon contamination around the building. An UST was removed on the north side of the building. OASIS was unable to find any information regarding the UST removal.

Cottage G was the power plant for St. George until the early 1960's. Between the early 1960's and 1983 the building was used as a biology laboratory for the fur seal harvest. In 1983 it was turned over to the Tanaq and was made into an apartment, which was used until about five years ago. It is currently used for Tanaq storage. Diesel fuel and ammonia were once stored in the building. The building is connected to city water and sewer. Diesel contamination was present at the site, but the soil was removed to the extent practicable. The EDR report and DEC CSD provided information regarding the diesel contamination assessment and removal (see Section 4).

The Old Coal House was used for coal storage until the early 1960's. It is currently empty and unused. A previous assessment has been completed on the building.

Cottage D has been and is currently used for housing. Only residential chemicals are stored onsite. No surface staining is expected, but an UST is present on the southwest corner of the building with known contamination below the surface. Apparently contamination from the building to the east (Cottage C) has migrated toward Cottage D. Cottage C is listed in the DEC CSD (see Section 4).

6.2 Interviews with Local Government Officials

An OASIS representative talked with Louis Howard of the DEC regarding the contaminated sites on St. George Island. Mr. Howard stated that previous assessments had been completed at Cottage G and the Coal House. The DEC has granted No Further Remedial Action Planned status for the Coal House and Cottage G. Corrective action was performed at Cottage G and a closure report was written. Mr. Howard also stated that the two sites are still active due to groundwater contamination.

6.3 Interviews with Others

An OASIS representative talked with Karen Holser who caretakes Cottage C for the National Marine Fisheries Service. Ms. Holser stated that asbestos was found in Cottage C in pipe

insulation and in sheetrock tape. She also mentioned that composite shingles in the Fur Seal Plant were found to contain asbestos. The metal roofing on Cottage D was apparently installed over the original roof. She doesn't know whether the original roof was composite or cedar shingles. The OASIS representative was unable to access the roof to determine the composition.

Mr. Rodney Lekanof provided information about the small building northwest of the E&P Shop. The building was a pump house for pumping seawater into the Fur Seal Plant wash house (directly east of the E&P Shop) and was never associated with the E&P Shop.

7 FINDINGS AND CONCLUSIONS

The historical records search, interviews, and site reconnaissance revealed the following with regard to the five buildings:

- Due to the age of the buildings, it is expected that each of the buildings contains lead-paint and asbestos. Where peeling paint is present on the building exteriors, it is likely that there may be lead impacts in the soil adjacent to the buildings' walls.
- Dark soil staining is visible in the 1993 aerial photo around the Old Machine Shop and next to a small building northwest of the E&P Shop, but no visible staining was observed during the site reconnaissance.
- Previous investigations and corrective actions were performed at Cottage G and the Coal House. The DEC has granted NFRAP status with respect to soil at each of the sites.
- Used batteries and motor oil were observed in the E&P Shop. These items are stored on a wood floor underlain by a concrete foundation.
- Motor oil and epoxy glue catalyst were found in the basement of Cottage D. Each is stored on a concrete slab floor.
- The Old Machine Shop contains a drum and 5-gallon bucket of lube and gear oil on the first floor and a 5-gallon bucket of lube oil in the basement. All are stored on intact concrete slab floors. No visible cracks were observed in the concrete slab.
- The Old Machine Shop is adjacent to three DEC Contaminated Sites, including a former diesel tank farm, a former drum storage area, and a former gas station. The tank farm and drum storage area are still active sites, but the former gas station has been designated as No Further Remedial Action Planned for soil contamination. The former gas station may be upgradient of the Old Machine Shop.
- The E&P Shop is likely downgradient of Cottage G and the Coal House, designated as Contaminated Sites by the DEC. Both sites are closed for soil contamination, but groundwater monitoring is ongoing.
- Cottage D is adjacent to and possibly downgradient of an active DEC Contaminated Site (Cottage C). Petroleum contamination was discovered at the Cottage C site during a UST removal.
- Two USTs are present on the Cottage D property. Only one of these is apparently in use. The other tank's fill and vent pipes are overgrown.

8 RECOMMENDATIONS

Based upon the findings of the ESA, OASIS recommends that the following additional assessment activities be performed.

- Each of the buildings should be screened for lead-based paint.
- Asbestos samples should be collected from each of the buildings.
- Soil samples should be collected around the Old Machine Shop, the E&P Shop, and Cottage D. The soil surrounding Cottage G and the Coal House has been adequately assessed for everything except lead-based paint impacts.

9 REFERENCES

Alaska Department of Environmental Conservation (DEC), 2006. Contaminated Sites Database. www.dec.state.ak.us/spar/csp/search/default.asp. June 1, 2006.

Hart Crowser, 1997. *Expanded Site Inspection, St. George Island, Pribilof Islands, Alaska*. January, 1997.

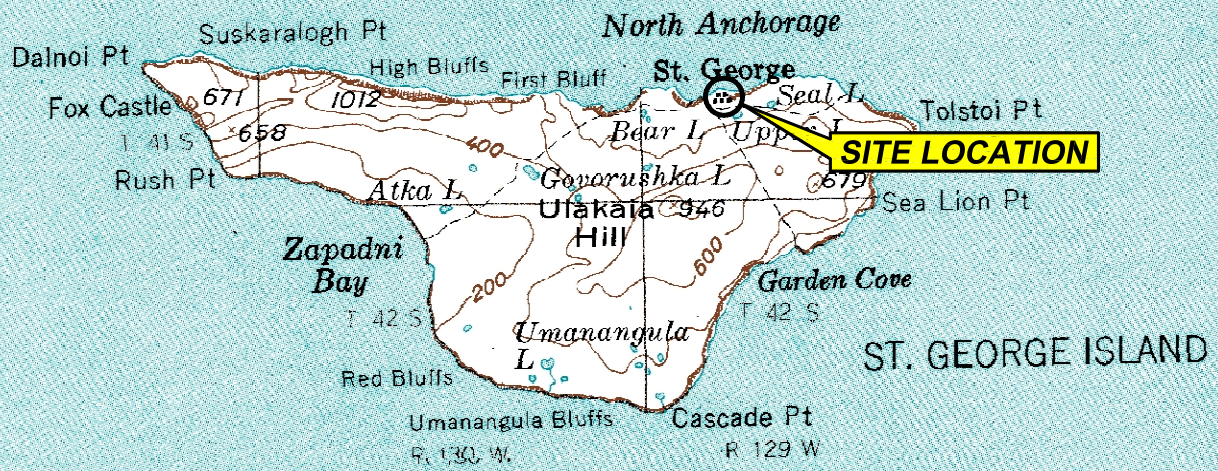
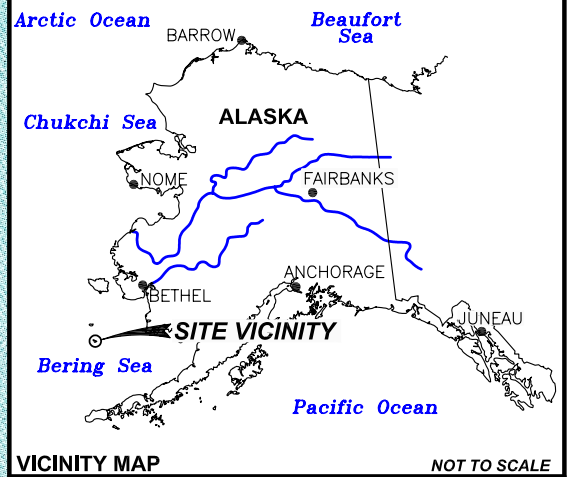
Tetra Tech EM Inc. (Tetra Tech), 2005. *Draft Corrective Action Report, Site 9 / TPA Site 9 – Old Power Plant, St. George Island*. May 27, 2005.

National Park Service, 1987. National Register of Historic Places Inventory – Nomination Form – Saint George Island. Pages 8 to 10 with map (Partial faxed version of document provided by Karen Holser of the National Marine Fisheries Service).

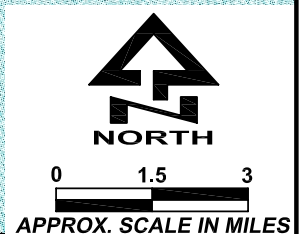
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ATTACHMENT 1
FIGURES

PATH: V:\Project Drawings\St George FILE: 14-076-P1SA.DWG PLOTTED: 6/15/06.



SOURCE: U.S.G.S. TOPOGRAPHY MAP PRIBILOF ISLANDS, DATED 1942 REVISED 1972.



DATE
JUNE 2006
CHKD
L.N.
DRAWN
C.E.H.
PROJ. NO
14-076

masis
ENVIRONMENTAL
825 W. 8TH AVENUE, SUITE 200
ANCHORAGE, ALASKA 99501

SITE LOCATION MAP

PHASE I ENVIRONMENTAL SITE
ASSESSMENT
St. George Island, Alaska

FIGURE

1



0 50 100

APPROX. SCALE IN FEET

E&P SHOP

FUR
SEALING
PLANT

OLD
MACHINE
SHOP

COTTAGE G

COAL HOUSE

COTTAGE D

SOURCE: SCANNED IMAGE OF AERIAL PHOTO
ROLL# 93-13C, EXP# 10-5 DATED 6/93
PROVIDED BY AEROMAP INC.

DATE
JUNE 2006
CHKD
L.N.
DRAWN
C.E.H.
PROJ. NO
14-076



ENVIRONMENTAL
825 W. 8TH AVENUE, SUITE 200
ANCHORAGE, ALASKA 99501

SITE PLAN

PHASE I ENVIRONMENTAL SITE
ASSESSMENT
St. George Island, Alaska

FIGURE

2



0 50 100

APPROX. SCALE IN FEET

E&P SHOP

OLD
MACHINE
SHOP

COTTAGE G

COAL HOUSE

COTTAGE D

SOURCE: SCANNED IMAGE OF AERIAL PHOTO
DATED 1977 PROVIDED BY AEROMAP INC.

DATE
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DRAWN
C.E.H.
PROJ. NO
14-076

masis
ENVIRONMENTAL
825 W. 8TH AVENUE, SUITE 200
ANCHORAGE, ALASKA 99501

1977 AERIAL PHOTOGRAPH

PHASE I ENVIRONMENTAL SITE
ASSESSMENT
St. George Island, Alaska

FIGURE

3

PATH: V:\Project Drawings\St. George FILE: 14-076P1SA-F3.DWG PLOTTED: 6/15/06.



0 50 100

APPROX. SCALE IN FEET

E&P SHOP

OLD
MACHINE
SHOP

COTTAGE G

COAL HOUSE

COTTAGE D

SOURCE: SCANNED IMAGE OF AERIAL PHOTO
DATED 6/93 PROVIDED BY AEROMAP INC.

DATE
JUNE 2006
CHKD
L.N.
DRAWN
C.E.H.
PROJ. NO
14-076

masis
ENVIRONMENTAL
825 W. 8TH AVENUE, SUITE 200
ANCHORAGE, ALASKA 99501

1993 AERIAL PHOTOGRAPH

PHASE I ENVIRONMENTAL SITE
ASSESSMENT
St. George Island, Alaska

FIGURE

4

PATH: V:\Project Drawings\St. George FILE: 14-076P1SA-F4.DWG PLOTTED: 6/15/06.



0 50 100

APPROX. SCALE IN FEET

E&P SHOP

OLD
MACHINE
SHOP

COTTAGE G

COAL HOUSE

COTTAGE D

SOURCE: SCANNED IMAGE OF AERIAL PHOTO
DATED 1997 PROVIDED BY AEROMAP INC.

DATE
JUNE 2006
CHKD
L.N.
DRAWN
C.E.H.
PROJ. NO
14-076

masis
ENVIRONMENTAL
825 W. 8TH AVENUE, SUITE 200
ANCHORAGE, ALASKA 99501

1997 AERIAL PHOTOGRAPH

PHASE I ENVIRONMENTAL SITE
ASSESSMENT
St. George Island, Alaska

FIGURE

5

PATH: V:\Project Drawings\St. George FILE: 14-076P1SA-F5.DWG PLOTTED: 6/15/06.

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ATTACHMENT 2
EDR REPORT



The EDR Radius Map with GeoCheck®

**Village of St. George
St. George Island
SAINT GEORGE ISLAND, AK 99591**

Inquiry Number: 1620831.1s

February 24, 2006

The Standard in Environmental Risk Management 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 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

ST. GEORGE ISLAND
SAINT GEORGE ISLAND, AK 99591

COORDINATES

Latitude (North):	56.603000 - 56° 36' 10.8"
Longitude (West):	169.562400 - 169° 33' 44.6"
Universal Transverse Mercator:	Zone 2
UTM X (Meters):	588258.6
UTM Y (Meters):	6273906.5
Elevation:	7 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

EXECUTIVE SUMMARY

RCRA-SQG	Resource Conservation and Recovery Act Information
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
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
VCP	Voluntary Cleanup Program sites
DRYCLEANERS	Drycleaner Facility Listing
BROWNFIELDS	Identified and/or Proposed Brownfields Sites
CDL	Illegal Drug Manufacturing Sites

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.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

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

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

EXECUTIVE SUMMARY

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 12/21/2005 has revealed that there are 2 SHWS sites within approximately 1 mile of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
<i>TPA 20 STG OLD COAL HOUSE</i>	<i>SAINT GEORGE</i>	<i>1/4 - 1/2 N</i>	<i>1</i>	<i>6</i>
TPA 06 STG OPEN PITS SITE	ST. GEORGE	1/4 - 1/2 NNE	2	11

INST CONTROL:Contaminated sites that have institutional controls.

A review of the Inst Control list, as provided by EDR, and dated 12/20/2005 has revealed that there is 1 Inst Control site within approximately 0.5 miles of the target property.

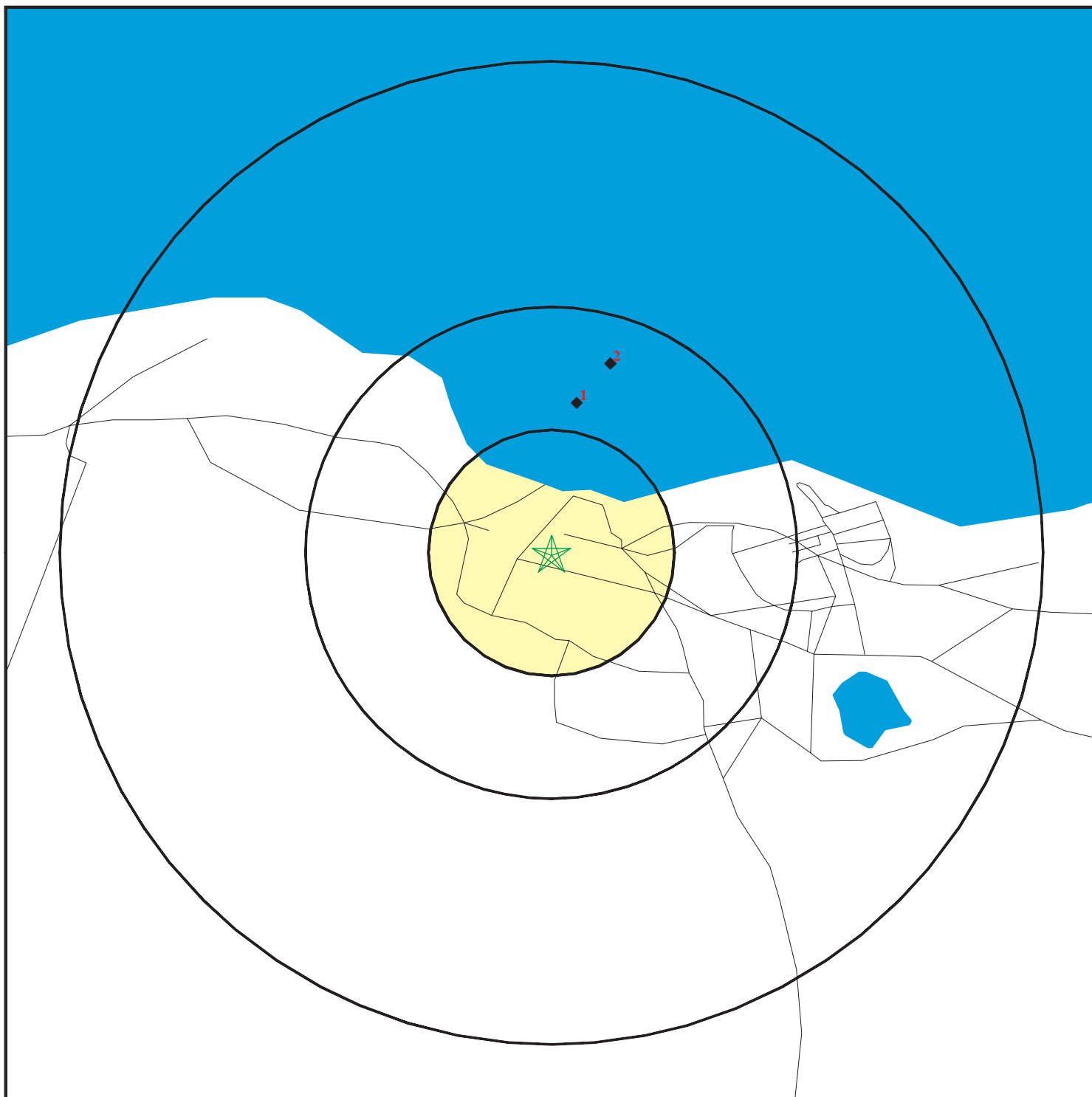
<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
<i>TPA 20 STG OLD COAL HOUSE</i>	<i>SAINT GEORGE</i>	<i>1/4 - 1/2 N</i>	<i>1</i>	<i>6</i>

EXECUTIVE SUMMARY

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

Site Name	Database(s)
TPA 19 STG CARPENTER-MAINT. SHOP	SHWS
TPA 23 STG INACT. DIESEL TANK FARM	SHWS
TPA 01 STG FORMER DIESEL TANK FARM	SHWS
TPA 24 STG INACTIVE GAS TANK FARM	SHWS
TPA 17 STG CROSS HILL DRUM DUMP	SHWS
TPA 07 STG BALLFIELD/FORMER LANDFIL	SHWS
TPA 13 STG MAKUSHIN PIT	SHWS
TPA 14 STG OIL DRUM DUMP	SHWS
TPA 22-1 STG SCHOOL UST SITE	SHWS
TPA 12 STG FORMER HANGAR BUILDING	SHWS
TPA 02 STG FORMER DRUM STORAGE AREA	SHWS
TPA 03 STG INACTIVE GAS STATION	SHWS
TPA 15 STG BONEYARD "B"	SHWS
TPA 22-5 STG GAS STATION #1 UST	SHWS
TPA 18 STG FORMER FUEL STORAGE AREA	SHWS, Inst Control
TPA 25 STG PORT FUEL SUPPLY LINE	SHWS
TPA 05 STG OCEAN DUMP SITE	SHWS
TPA 16 STG BONEYARD "C"	SHWS
TPA 10 STG KEROSENE DRUMS/ASTS	SHWS
TPA 21 STG DIESEL TANK DISP. SITE	SHWS
BFT - SAINT GEORGE ISLAND	SHWS
NOAA - SAINT GEORGE ISLAND	UST
DELTA WESTERN - ST. GEORGE DELTA FUEL	AST
USDOC NOAA NAT MARINE FISHERIES SVC ST G	RCRA-SQG, FINDS
ST GEORGE CY OF WATERFRONT	RCRA-SQG, FINDS
ST GEORGE ISLAND SCHOOL	FINDS
ST GEORGE, CITY OF	FINDS
SAINT GEORGE ISLAND QAX SUBDIVISION, LOT 9 & 10	AK Spills
SAINT GEORGE DELTA WESTERN FUEL COMPANY DOCK	AK Spills
SAINT GEORGE ISLAND IN ST GEORGE HARBOR	AK Spills
SAINT GEORGE ISLAND IN HARBOR	AK Spills

OVERVIEW MAP - 1620831.1s



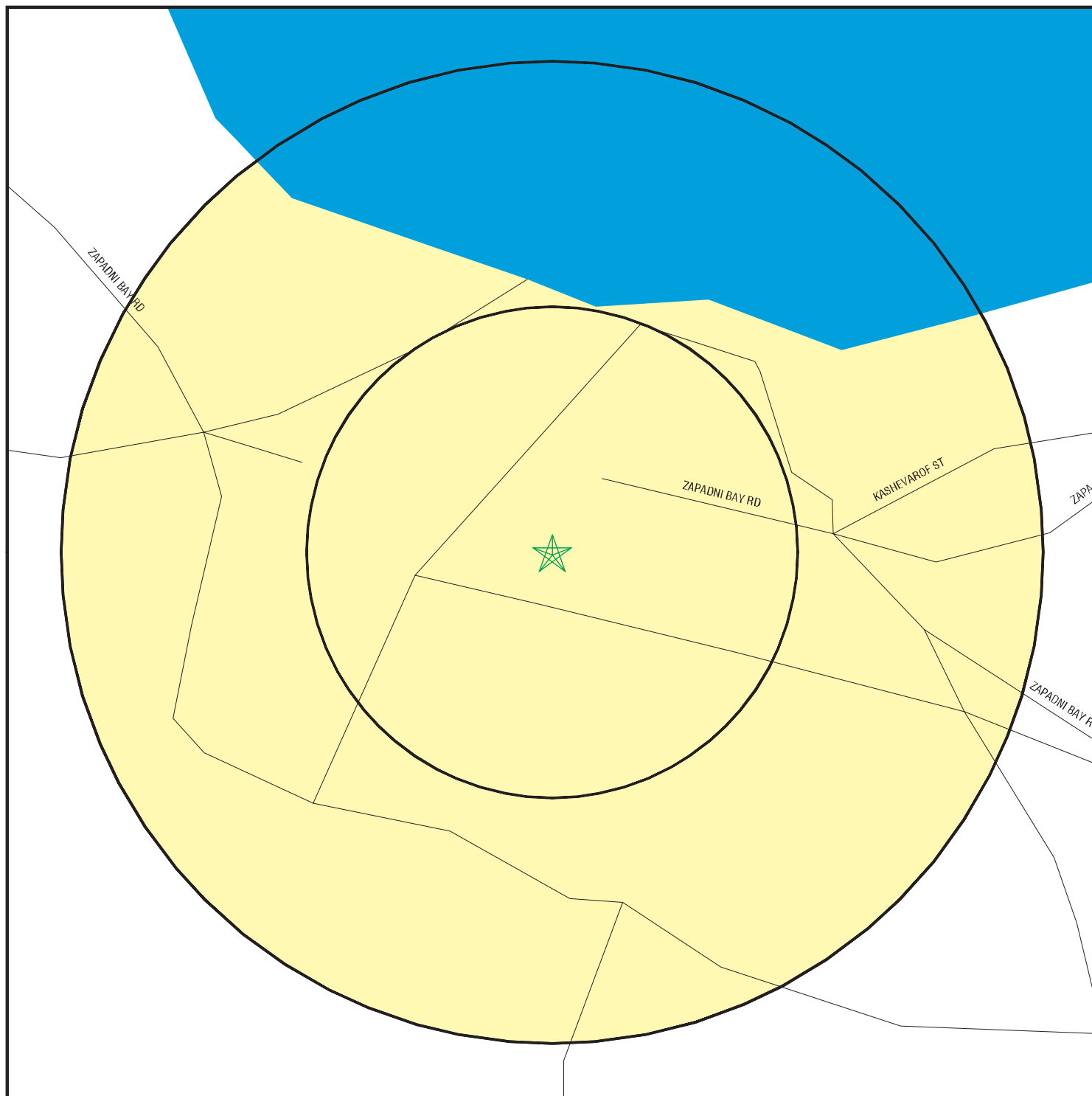
- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ⚙ Manufactured Gas Plants
- ☒ National Priority List Sites
- ☒ Landfill Sites
- ☒ Dept. Defense Sites

Indian Reservations BIA

SITE NAME: Village of St. George
 ADDRESS: St. George Island
 SAINT GEORGE ISLAND AK 99591
 LAT/LONG: 56.6030 / 169.5624

CLIENT: Oasis Environmental
 CONTACT: Lisa Nicholson
 INQUIRY #: 1620831.1s
 DATE: February 24, 2006

DETAIL MAP - 1620831.1s



- ★ 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
- 🗑 Landfill Sites
- 🏢 Dept. Defense Sites

 Indian Reservations BIA

SITE NAME: Village of St. George
 ADDRESS: St. George Island
 SAINT GEORGE ISLAND AK 99591
 LAT/LONG: 56.6030 / 169.5624

CLIENT: Oasis Environmental
 CONTACT: Lisa Nicholson
 INQUIRY #: 1620831.1s
 DATE: February 24, 2006

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
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	2	0	NR	2
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
Inst Control		0.500	0	0	1	NR	NR	1
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
<u>TRIBAL RECORDS</u>								
INDIAN RESERV		1.000	0	0	0	0	NR	0

MAP FINDINGS SUMMARY

<u>Database</u>	<u>Target Property</u>	<u>Search Distance (Miles)</u>	<u>< 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>> 1</u>	<u>Total Plotted</u>
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
North
1/4-1/2
1635 ft.

TPA 20 STG OLD COAL HOUSE
SAINT GEORGE
SAINT GEORGE, AK 99591

SHWS
Inst Control

S104893901
N/A

Relative:
Lower

SHWS:

Actual:
0 ft.

FS Facility Site ID: 66729
Hazard Id: 2187
Latitude: 56.6
Longitude: -169.533333
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: 2
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: 1994250135447
Near: No
Country: USA
Region DEC: Not reported
State Senate District: T
State Representative District: 40
Point Line Area Code: P
Meridian Code: S
Range: 130
Range Direction Code: W
Township: 041
Township Direction: S
Section: 36
Subdivision: Not reported
Block: Not reported
Log: Not reported
Comment: Tract 38 BLM Survey Filed 2/15/1985
Date Created: 11/14/2005 11:11:21 AM
Hydrologic Unit: Not reported
Vertical Measure: Not reported
Quadrangle Id: 0
Flag Parent: Not reported
Fs Election District ID: 496
Xref Location Id: 2187
Generic Name: Landfill
Description: TPA 04 STG Active Landfill
Latitude: 56.6
Longitude: -169.533333
Date Collected: Not reported
Haccuracy: Not reported
Haccuracy Unit Id: Not reported
Description Code: Not reported
Hdatum Code: 2
Hmethod Code: I1
Hsource Code: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

TPA 20 STG OLD COAL HOUSE (Continued)

EDR ID Number
EPA ID Number

Database(s)

S104893901

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

DEC File #: 2643.38.010
Region: 25
Rp Contact Id: 1220
Staff Id: 24
Analyte1: 164
Analyte3 Id: 0
Analyte Id: Not reported
Alternate Name: Not reported
Casrefnbr: Not reported

Spilldate: 12/20/1994
Categorycode: Federal RP Lead
Rp Programcode: RP Willing and Able
Statuscode: Active
Analyte2 Id: 0

Analyte Name: Not reported
Class: Not reported
CS Action Level: Not reported

Drinking Water MCL: 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 Comment: Approximately 120 drums were found above ground leaking and soil staining is evident.

Comment: Covered by 1996 Pribilof Islands Environmental Restoration Agreement a.k.a. Two Party Agreement between State of Alaska and NOAA. City of St. George land owner. Former ADEC project Manager was Ray Dronenburg up to 6/99.

FS Facility Site ID: 66735
Hazard Id: 2193
Latitude: 56.6
Longitude: -169.533333
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: 2
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

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

TPA 20 STG OLD COAL HOUSE (Continued)

EDR ID Number
EPA ID Number

Database(s)

S104893901

Description:	1994250135455		
Near:	No		
Country:	USA		
Region DEC:	Not reported		
State Senate District:	T		
State Representative District:	40		
Point Line Area Code:	P		
Meridian Code:	S		
Range:	129		
Range Direction Code:	W		
Township:	041		
Township Direction:	S		
Section:	29		
Subdivision:	Not reported		
Block:	Not reported		
Log:	Not reported		
Comment:	Lot 15, Tract 48. Qawax Subdivision (Centrum) 10/31/1985 survey		
Date Created:	11/14/2005 11:11:21 AM		
Hydrologic Unit:	Not reported		
Vertical Measure:	Not reported		
Quadrangle Id:	0		
Flag Parent:	Not reported		
Fs Election District ID:	496		
Xref Location Id:	2193		
Generic Name:	Coal House, Former		
Description:	TPA 20 STG Old Coal House		
Latitude:	56.6		
Longitude:	-169.533333		
Date Collected:	Not reported		
Haccuracy:	Not reported		
Haccuracy Unit Id:	Not reported		
Description Code:	Not reported		
Hdatum Code:	2		
Hmethod Code:	I1		
Hsource Code:	Not reported		
Vertical Measure:	Not reported		
Vaccuracy:	Not reported		
Vdatum Code:	Not reported		
Vmethod Code:	Not reported		
Source Scale Code:	Not reported		
Verification Code:	Not reported		
Comment:	Not reported		
Near:	No		
DEC File #:	2643.38.026	Spilldate:	12/20/1994
Region:	25	Categorycode:	Federal RP Lead
Rp Contact Id:	1220	Rp Programcode:	RP Willing and Able
Staff Id:	24	Statuscode:	No Further Remedial Action Planned
Analyte1:	0	Analyte2 Id:	0
Analyte3 Id:	0		
Analyte Id:	Not reported	Analyte Name:	Not reported
Alternate Name:	Not reported	Class:	Not reported
Casrefnbr:	Not reported	CS Action Level:	Not reported
Drinking Water MCL:	Not reported		
Affiliate Contact ID:	Not reported		
Affiliate Address ID:	Not reported		
Contact:	Not reported		
Contact Telephone:	Not reported		

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

TPA 20 STG OLD COAL HOUSE (Continued)

EDR ID Number
EPA ID Number

Database(s)

S104893901

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 Comment: Located 100 feet north of the Church. Cement structure near the church.
Reportedly used for coal storage in the past and currently used for crab pot storage.
Comment: Covered by 1996 Pribilof Islands Environmental Restoration Agreement a.k.a. Two Party Agreement between State of Alaska and NOAA. Tanaq Corp. and TAC owners. Last staff assigned were Dronenburg up to 6/99, then Howard.
FS Facility Site ID: 66723
Hazard Id: 2181
Latitude: 56.6
Longitude: -169.533333
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: 2
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: 1994250135437
Near: No
Country: USA
Region DEC: Not reported
State Senate District: T
State Representative District: 40
Point Line Area Code: P
Meridian Code: S
Range: 129
Range Direction Code: W
Township: 041
Township Direction: S
Section: 29
Subdivision: Not reported
Block: Not reported
Log: Not reported
Comment: BLM Survey Filed 2/15/1985
Date Created: 11/14/2005 11:11:20 AM
Hydrologic Unit: Not reported
Vertical Measure: Not reported
Quadrangle Id: 0

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

TPA 20 STG OLD COAL HOUSE (Continued)

EDR ID Number
EPA ID Number

Database(s)

S104893901

Flag Parent: Not reported
Fs Election District ID: 496
Xref Location Id: 2181
Generic Name: Landfill
Description: St. George Schoolyard/landfill
Latitude: 56.6
Longitude: -169.533333
Date Collected: Not reported
Haccuracy: Not reported
Haccuracy Unit Id: Not reported
Description Code: Not reported
Hdatum Code: 2
Hmethod Code: I1
Hsource Code: Not reported
Vertical Measure: Not reported
Vaccuracy: Not reported
Vdatum Code: Not reported
Vmethod Code: Not reported
Source Scale Code: Not reported
Verification Code: Not reported
Comment: Not reported
Near: No

DEC File #: Not reported
Region: 25
Rp Contact Id: 1220
Staff Id: 181
Analyte1: 0
Analyte3 Id: 0
Analyte Id: Not reported
Alternate Name: Not reported
Casrefnbr: Not reported

Spilldate: 12/20/1994
Categorycode: Federal RP Lead
Rp Programcode: RP Willing and Able
Statuscode: Closed
Analyte2 Id: 0

Analyte Name: Not reported
Class: Not reported
CS Action Level: Not reported

Drinking Water MCL: 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 Comment: Schoolyard - former landfill. Buried drums in school playground are deteriorating causing subsidence and holes in ground large enough to allow children to fall in. NMFS / NOAA operated Islands from early 1900's to late 1970's.

Comment: COBC being drafted by the AG's Office. Hart Crowser is the contractor with the City of Saint George. Last staff assigned were S. Mawson and R. Dronenburg (until retirement June 1999) then it became L. Howard's site.

AK INSTUTIONAL CONTROL:

Secondary Address: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

TPA 20 STG OLD COAL HOUSE (Continued)

EDR ID Number
EPA ID Number

Database(s)

S104893901

Rec Key: 1994250135455
DEC File Number: 2643.38.026
Status Code Description: ICE
Priority: Low
Facility Location: Not reported
Event ID: No Further Remedial
Action Status: Institutional control on soils established. A single hit for Benzo (a) Pyrene (BAP) exceeded MCLs (0.46mg/L) and further investigation not warranted. No further remedial action required, however a deed notice is required of the land owner NOAA with pending transfer to Tanaq Corp. under ANSCA, regarding the groundwater being impacted with BAP (see above).
Problem Statement: Located 100 feet north of the Church. Cement structure near the church. Reportedly used for coal storage in the past and currently used for crab pot storage.

2
NNE
1/4-1/2
2131 ft.
TPA 06 STG OPEN PITS SITE
ST. GEORGE
SAINT GEORGE, AK 99591

SHWS S104893918
N/A

Relative:
Lower

SHWS:

Actual:
0 ft.

FS Facility Site ID: 66727
Hazard Id: 2185
Latitude: 56.6
Longitude: -169.533333
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: 2
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: 1994250135444
Near: No
Country: USA
Region DEC: Not reported
State Senate District: T
State Representative District: 40
Point Line Area Code: P
Meridian Code: S
Range: 129
Range Direction Code: W
Township: 041
Township Direction: S
Section: 29
Subdivision: Not reported
Block: Not reported
Log: Not reported
Comment: Tract 47, Lot 5 Qawax Subdivision (Centrum) 10/31/1985 survey
Date Created: 11/14/2005 11:11:20 AM
Hydrologic Unit: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

TPA 06 STG OPEN PITS SITE (Continued)

EDR ID Number
EPA ID Number

Database(s)

S104893918

Vertical Measure: Not reported
Quadrangle Id: 3022
Flag Parent: Not reported
Fs Election District ID: 496
Xref Location Id: 2185
Generic Name: Heating Oil UST Site, Former
Description: TPA 11 STG Cottage "C" UST
Latitude: 56.6
Longitude: -169.533333
Date Collected: Not reported
Haccuracy: Not reported
Haccuracy Unit Id: Not reported
Description Code: Not reported
Hdatum Code: 2
Hmethod Code: I1
Hsource Code: Not reported
Vertical Measure: Not reported
Vaccuracy: Not reported
Vdatum Code: Not reported
Vmethod Code: Not reported
Source Scale Code: Not reported
Verification Code: Not reported
Comment: Not reported
Near: No

DEC File #: 2643.38.017
Region: 25
Rp Contact Id: 1220
Staff Id: 24
Analyte1: 164
Analyte3 Id: 0
Analyte Id: Not reported
Alternate Name: Not reported
Casrefnbr: Not reported

Spilldate: 12/20/1994
Categorycode: Federal RP Lead
Rp Programcode: RP Willing and Able
Statuscode: Active
Analyte2 Id: 0

Analyte Name: Not reported
Class: Not reported
CS Action Level: Not reported

Drinking Water MCL: 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 Comment: A 1,000-gallon UST was installed in the 1960s to supply federal housing unit Cottage C with diesel heating fuel. In 1997, UST was removed with petroleum contaminated soil. The UST was observed to have holes in it, which led to the soil contamination. The excavation extents were limited by concerns for the Cottage C foundation and equipment refusal caused by bedrock at the bottom of the excavation.

Comment: Covered by 1996 Pribilof Islands Environmental Restoration Agreement a.k.a. Two Party Agreement between State of Alaska and NOAA. Owned by NOAA. Lot 5 Tract

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

TPA 06 STG OPEN PITS SITE (Continued)

EDR ID Number
EPA ID Number

Database(s)

S104893918

47. Former ADEC project Manager was Ray Dronenburg up to 6/99.

FS Facility Site ID: 66745
Hazard Id: 2203
Latitude: 56.6
Longitude: -169.533333
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: 2
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: 1994250935441
Near: No
Country: USA
Region DEC: Not reported
State Senate District: T
State Representative District: 40
Point Line Area Code: P
Meridian Code: S
Range: 129
Range Direction Code: W
Township: 041
Township Direction: S
Section: 2
Subdivision: Not reported
Block: Not reported
Log: Not reported
Comment: Tract 43, Lot 3 Qawax Subdivision (Centrum) 10/31/1985 survey
Date Created: 11/14/2005 11:11:21 AM
Hydrologic Unit: Not reported
Vertical Measure: Not reported
Quadrangle Id: 0
Flag Parent: Not reported
Fs Election District ID: 496
Xref Location Id: 2203
Generic Name: Electrical Generation Facility
Description: TPA 09 STG Old Power Plant
Latitude: 56.6
Longitude: -169.533333
Date Collected: Not reported
Haccuracy: Not reported
Haccuracy Unit Id: Not reported
Description Code: Not reported
Hdatum Code: 2
Hmethod Code: I1
Hsource Code: Not reported
Vertical Measure: Not reported
Vaccuracy: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

TPA 06 STG OPEN PITS SITE (Continued)

EDR ID Number
EPA ID Number

Database(s)

S104893918

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

DEC File #: 2643.38.015

Region: 25

Rp Contact Id: 1220

Staff Id: 24

Analyte1: 164

Analyte3 Id: 210

Analyte Id: Not reported

Alternate Name: Not reported

Casrefnbr: Not reported

Drinking Water MCL: 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 Comment: Reportedly in use from 1936 to 1963 and housed several transformers. Residents stated that transformer oil and crankcase oil disposed of at the northeast corner of the building. The site included 11 aboveground storage tanks (ASTs) used to store diesel fuel, gasoline, and lubricating oil as well as a wood-framed building that contained the generators. Reportedly, fuel was supplied to the ASTs from drums staged at the Former Fuel Storage Area (TPA Site 18), located south of the site. A pipeline was used to transport the fuel via gravity from the Former Fuel Storage Area to the ASTs at the site. Contaminated soil was removed to the maximum extent practicable, no further remedial action is necessary.

Comment: Covered by 1996 Pribilof Islands Environmental Restoration Agreement a.k.a. Two Party Agreement between State of Alaska and NOAA. St. George Tanaq Corporation and The Aleut Corporation (TAC) owners. Lot 14 Tract 43. Former ADEC project Manager was Ray Dronenburg up to 6/99. FAC ID 3047 Tanks 1 and 2

FS Facility Site ID: 66720

Hazard Id: 2178

Latitude: 56.601944

Longitude: -169.538333

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: 2

Horizontal Method Code: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

TPA 06 STG OPEN PITS SITE (Continued)

EDR ID Number
EPA ID Number

Database(s)

S104893918

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:	1994250135434		
Near:	No		
Country:	USA		
Region DEC:	Not reported		
State Senate District:	T		
State Representative District:	40		
Point Line Area Code:	P		
Meridian Code:	S		
Range:	129		
Range Direction Code:	W		
Township:	041		
Township Direction:	S		
Section:	29		
Subdivision:	Not reported		
Block:	Not reported		
Log:	Not reported		
Comment:	Tract 52 BLM Survey Filed 2/15/1985		
Date Created:	11/14/2005 11:11:20 AM		
Hydrologic Unit:	Not reported		
Vertical Measure:	Not reported		
Quadrangle Id:	3022		
Flag Parent:	Not reported		
Fs Election District ID:	496		
Xref Location Id:	2178		
Generic Name:	Open Disposal and Dump Pits		
Description:	TPA 06 STG Open Pits Site		
Latitude:	56.601944		
Longitude:	-169.538333		
Date Collected:	Not reported		
Haccuracy:	Not reported		
Haccuracy Unit Id:	Not reported		
Description Code:	Not reported		
Hdatum Code:	2		
Hmethod Code:	Not reported		
Hsource Code:	Not reported		
Vertical Measure:	Not reported		
Vaccuracy:	Not reported		
Vdatum Code:	Not reported		
Vmethod Code:	Not reported		
Source Scale Code:	Not reported		
Verification Code:	Not reported		
Comment:	Not reported		
Near:	No		
DEC File #:	2643.38.012	Spilldate:	12/20/1994
Region:	25	Categorycode:	Federal RP Lead
Rp Contact Id:	1220	Rp Programcode:	RP Willing and Able
Staff Id:	24	Statuscode:	No Further Remedial Action Planned
Analyte1:	164	Analyte2 Id:	218
Analyte3 Id:	175		
Analyte Id:	Not reported	Analyte Name:	Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

TPA 06 STG OPEN PITS SITE (Continued)

EDR ID Number
EPA ID Number

Database(s)

S104893918

Alternate Name:	Not reported	Class:	Not reported
Casrefnbr:	Not reported	CS Action Level:	Not reported
Drinking Water MCL:	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 Comment:	Originally the pits were constructed as a single pit for a precautionary spill containment area for possible spills from the Inactive/Abandoned Diesel Tank Farm (TPA-23). Served as a historical and recent disposal site for vehicles, building materials, tanks and drums. NOAA removed contaminated soil to the maximum extent practicable and no further remedial action is necessary.		
Comment:	Covered by 1996 Pribilof Islands Environmental Restoration Agreement a.k.a. Two Party Agreement between State of Alaska and NOAA. 2 acres in size. City of St. George and The Aleut Corporation owners. ANSCA Selected property. Former ADEC project Manager was Ray Dronenburg up to 6/99.		
FS Facility Site ID:	66724		
Hazard Id:	2182		
Latitude:	56.602856		
Longitude:	-169.546406		
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:	2		
Horizontal Method Code:	Not reported		
Vertical Method Code:	Not reported		
Vertical Datum Code:	Not reported		
Vetical Accuracy:	Not reported		
Source Scale Code:	Not reported		
Verification Code:	Not reported		
Federal Identifier:	Not reported		
Flag Mobile:	0		
Description:	1994250135439		
Near:	No		
Country:	USA		
Region DEC:	Not reported		
State Senate District:	T		
State Representative District:	40		
Point Line Area Code:	P		
Meridian Code:	S		
Range:	129		
Range Direction Code:	W		
Township:	041		

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

TPA 06 STG OPEN PITS SITE (Continued)

EDR ID Number
EPA ID Number

Database(s)

S104893918

Township Direction:	S	
Section:	29	
Subdivision:	Not reported	
Block:	Not reported	
Log:	Not reported	
Comment:	Tract 43, Lot 14, Qawax Subdivision (Centrum) 10/31/1985 survey	
Date Created:	11/14/2005 11:11:20 AM	
Hydrologic Unit:	Not reported	
Vertical Measure:	Not reported	
Quadrangle Id:	0	
Flag Parent:	Not reported	
Fs Election District ID:	496	
Xref Location Id:	2182	
Generic Name:	Electrical Generation Facility	
Description:	TPA 08 STG Active Power Plant	
Latitude:	56.602856	
Longitude:	-169.546406	
Date Collected:	Not reported	
Haccuracy:	Not reported	
Haccuracy Unit Id:	Not reported	
Description Code:	Not reported	
Hdatum Code:	2	
Hmethod Code:	Not reported	
Hsource Code:	Not reported	
Vertical Measure:	Not reported	
Vaccuracy:	Not reported	
Vdatum Code:	Not reported	
Vmethod Code:	Not reported	
Source Scale Code:	Not reported	
Verification Code:	Not reported	
Comment:	Not reported	
Near:	No	
DEC File #:	2643.38.014	Spilldate: 12/20/1994
Region:	25	Categorycode: Federal RP Lead
Rp Contact Id:	1220	Rp Programcode: RP Willing and Able
Staff Id:	24	Statuscode: No Further Remedial Action Planned
Analyte1:	164	Analyte2 Id: 0
Analyte3 Id:	0	
Analyte Id:	Not reported	Analyte Name: Not reported
Alternate Name:	Not reported	Class: Not reported
Casrefnbr:	Not reported	CS Action Level: Not reported
Drinking Water MCL:	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	

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

TPA 06 STG OPEN PITS SITE (Continued)

EDR ID Number
EPA ID Number

Database(s)

		S104893918
Problem Comment:	The source of petroleum contamination in the subsurface most likely resulted from the leakage of fuel lines associated with two 4,000-gallon underground storage tanks (UST) that supplied fuel to the City's current electrical generation facility. The USTs, along with contaminated soil, were removed in 1997; during removal it was noted that the UST piping was poorly constructed, which resulted in chronic leakage when the tanks were in use.	
Comment:	Covered by 1996 Pribilof Islands Environmental Restoration Agreement a.k.a. Two Party Agreement between State of Alaska and NOAA. Former ADEC project Manager was Ray Dronenburg up to 6/99. Lot 14 Tract 43.	

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
SAINT GEORGE	S107029579	TPA 19 STG CARPENTER-MAINT. SHOP	ADJACENT TO CHURCH	99591	SHWS
SAINT GEORGE	S107029575	TPA 23 STG INACT. DIESEL TANK FARM	SE EDGE OF THE CITY NEAR POWER PLANT	99591	SHWS
SAINT GEORGE	S107029572	TPA 01 STG FORMER DIESEL TANK FARM	ST. GEORGE WATERFRONT	99591	SHWS
SAINT GEORGE	S107029576	TPA 24 STG INACTIVE GAS TANK FARM	ST. GEORGE	99591	SHWS
SAINT GEORGE	S107029578	TPA 17 STG CROSS HILL DRUM DUMP	ST. GEORGE	99591	SHWS
SAINT GEORGE	S107029581	TPA 07 STG BALLFIELD/FORMER LANDFIL	LANDFILL/PRESENT BALLFLD.	99591	SHWS
SAINT GEORGE	S104893896	TPA 13 STG MAKUSHIN PIT	2 MILES SW OF ST. GEORGE ZAPADNI / LANDFILL RD.	99591	SHWS
SAINT GEORGE	S105464318	TPA 14 STG OIL DRUM DUMP	2.5 MILES SOUTHWEST OF THE CITY OF ST. GEORGE	99591	SHWS
SAINT GEORGE	S106425106	TPA 22-1 STG SCHOOL UST SITE	NEAR THE SCHOOL	99591	SHWS
SAINT GEORGE	S107029577	TPA 12 STG FORMER HANGAR BUILDING	NEAR OLD AIR STRIP ZAPADNI BAY ROAD	99591	SHWS
SAINT GEORGE	S107029573	TPA 02 STG FORMER DRUM STORAGE AREA	OCEANFRONT ADJACENT TO FORMER DIESEL TANK FARM	99591	SHWS
SAINT GEORGE	S107029574	TPA 03 STG INACTIVE GAS STATION	OCEANFRONT	99591	SHWS
SAINT GEORGE	S105755253	TPA 15 STG BONEYARD "B"	SOUTHEAST OF THE CITY LANDFILL / OIL DRUM DUMP	99591	SHWS
SAINT GEORGE	S107029570	TPA 22-5 STG GAS STATION #1 UST	EAST OF TANAQ CARP. SHOP	99591	SHWS
SAINT GEORGE	S107029571	TPA 18 STG FORMER FUEL STORAGE AREA	NORTH OF COTTAGE C TPA 11	99591	SHWS, Inst Control
SAINT GEORGE	S107029580	TPA 25 STG PORT FUEL SUPPLY LINE	EAST OF CITY ST. GEORGE	99591	SHWS
SAINT GEORGE	S107504555	TPA 05 STG OCEAN DUMP SITE	NORTHEAST OF ST. GEORGE BEACH SITE BELOW CLIFF	99591	SHWS
SAINT GEORGE	S106688003	TPA 16 STG BONEYARD "C"	SAINT GEORGE ISLAND	99591	SHWS
SAINT GEORGE	S107504556	TPA 10 STG KEROSENE DRUMS/ASTS	SAINT GEORGE	99591	SHWS
SAINT GEORGE	S107504557	TPA 21 STG DIESEL TANK DISP. SITE	SAINT GEORGE	99591	SHWS
SAINT GEORGE	S107504759	BFT - SAINT GEORGE ISLAND	VILLAGE OF ST. GEORGE IS.	99591	SHWS
SAINT GEORGE ISLAND	S104929203	SAINT GEORGE ISLAND QAX SUBDIVISION, LOT 9 & 10	SAINT GEORGE ISLAND QAX SUBDIVISION, LOT 9 / 10		AK Spills
SAINT GEORGE ISLAND	S104927678	SAINT GEORGE DELTA WESTERN FUEL COMPANY DOCK	SAINT GEORGE DELTA WESTERN FUEL COMPANY DOCK		AK Spills
SAINT GEORGE ISLAND	S104926257	SAINT GEORGE ISLAND IN ST GEORGE HARBOR	SAINT GEORGE ISLAND IN ST GEORGE HARBOR		AK Spills
SAINT GEORGE ISLAND	S103579733	SAINT GEORGE ISLAND IN HARBOR	SAINT GEORGE ISLAND IN HARBOR		AK Spills
SEATTLE	U003331163	NOAA - SAINT GEORGE ISLAND	NOAA TANKS	99591	UST
ST GEORGE	1008296697	ST GEORGE ISLAND SCHOOL	#1 ELEMENTARY	99591	FINDS
ST GEORGE	1004433626	ST GEORGE, CITY OF	SAINT GEORGE ISLAND	99591	FINDS
ST GEORGE ISLAND	1000856064	USDOC NOAA NAT MARINE FISHERIES SVC ST G	ST GEORGE VLG	99591	RCRA-SQG, FINDS
ST GEORGE ISLAND	1001085243	ST GEORGE CY OF WATERFRONT	100 WATERFRONT DR	99591	RCRA-SQG, FINDS
ST. GEORGE	A100247591	DELTA WESTERN - ST. GEORGE DELTA FUEL	P. O. BOX 930, WATERFRONT DRIVE	99591	AST

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: 10/14/05
Date Data Arrived at EDR: 11/02/05
Date Made Active in Reports: 12/07/05
Number of Days to Update: 35

Source: EPA
Telephone: N/A
Last EDR Contact: 01/31/06
Next Scheduled EDR Contact: 05/01/06
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 8
Telephone: 303-312-6774

EPA Region 4
Telephone 404-562-8033

Proposed NPL: Proposed National Priority List Sites

Date of Government Version: 10/14/05
Date Data Arrived at EDR: 11/02/05
Date Made Active in Reports: 12/07/05
Number of Days to Update: 35

Source: EPA
Telephone: N/A
Last EDR Contact: 01/31/06
Next Scheduled EDR Contact: 05/01/06
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: 10/14/05
Date Data Arrived at EDR: 11/02/05
Date Made Active in Reports: 12/07/05
Number of Days to Update: 35

Source: EPA
Telephone: N/A
Last EDR Contact: 01/31/06
Next Scheduled EDR Contact: 05/01/06
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by the Comprehensive Environmental Response, Compensation and Liability Act (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 receives notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/15/91
Date Data Arrived at EDR: 02/02/94
Date Made Active in Reports: 03/30/94
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 02/20/06
Next Scheduled EDR Contact: 05/22/06
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: 10/24/05
Date Data Arrived at EDR: 12/21/05
Date Made Active in Reports: 01/30/06
Number of Days to Update: 40

Source: EPA
Telephone: 703-413-0223
Last EDR Contact: 12/21/05
Next Scheduled EDR Contact: 03/20/06
Data Release Frequency: Quarterly

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

As of February 1995, CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites.

Date of Government Version: 10/24/05
Date Data Arrived at EDR: 12/21/05
Date Made Active in Reports: 01/30/06
Number of Days to Update: 40

Source: EPA
Telephone: 703-413-0223
Last EDR Contact: 12/21/05
Next Scheduled EDR Contact: 03/20/06
Data Release Frequency: Quarterly

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/29/05
Date Data Arrived at EDR: 01/11/06
Date Made Active in Reports: 02/21/06
Number of Days to Update: 41

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 12/06/05
Next Scheduled EDR Contact: 03/06/06
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: 12/15/05
Date Data Arrived at EDR: 12/28/05
Date Made Active in Reports: 01/30/06
Number of Days to Update: 33

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 12/28/05
Next Scheduled EDR Contact: 02/27/06
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: 12/31/05
Date Data Arrived at EDR: 01/12/06
Date Made Active in Reports: 02/21/06
Number of Days to Update: 40

Source: National Response Center, United States Coast Guard
Telephone: 202-260-2342
Last EDR Contact: 01/12/06
Next Scheduled EDR Contact: 04/24/06
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: 12/31/05
Date Data Arrived at EDR: 01/16/06
Date Made Active in Reports: 02/21/06
Number of Days to Update: 36

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 01/16/06
Next Scheduled EDR Contact: 04/17/06
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: 08/02/05
Date Data Arrived at EDR: 08/12/05
Date Made Active in Reports: 10/06/05
Number of Days to Update: 55

Source: Environmental Protection Agency
Telephone: 703-603-8867
Last EDR Contact: 02/10/06
Next Scheduled EDR Contact: 04/03/06
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: 01/10/05
Date Data Arrived at EDR: 02/11/05
Date Made Active in Reports: 04/06/05
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 703-603-8867
Last EDR Contact: 02/10/06
Next Scheduled EDR Contact: 04/03/06
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: 12/31/04
Date Data Arrived at EDR: 02/08/05
Date Made Active in Reports: 08/04/05
Number of Days to Update: 177

Source: USGS
Telephone: 703-692-8801
Last EDR Contact: 02/06/06
Next Scheduled EDR Contact: 05/08/06
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: 12/05/05
Date Data Arrived at EDR: 01/19/06
Date Made Active in Reports: 02/21/06
Number of Days to Update: 33

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 01/19/06
Next Scheduled EDR Contact: 04/03/06
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: 11/29/05
Date Data Arrived at EDR: 12/05/05
Date Made Active in Reports: 01/30/06
Number of Days to Update: 56

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 11/30/05
Next Scheduled EDR Contact: 03/13/06
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: 12/14/04
Date Data Arrived at EDR: 02/15/05
Date Made Active in Reports: 04/25/05
Number of Days to Update: 69

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 01/26/06
Next Scheduled EDR Contact: 04/24/06
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: 12/07/05
Date Data Arrived at EDR: 01/06/06
Date Made Active in Reports: 02/21/06
Number of Days to Update: 46

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 01/04/06
Next Scheduled EDR Contact: 04/03/06
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: 11/04/05
Date Data Arrived at EDR: 11/28/05
Date Made Active in Reports: 01/30/06
Number of Days to Update: 63

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 10/28/05
Next Scheduled EDR Contact: 12/19/05
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: 06/30/85
Date Data Arrived at EDR: 08/09/04
Date Made Active in Reports: 09/17/04
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/04
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: 12/31/03
Date Data Arrived at EDR: 07/13/05
Date Made Active in Reports: 08/17/05
Number of Days to Update: 35

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 12/21/05
Next Scheduled EDR Contact: 03/20/06
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: 12/31/02
Date Data Arrived at EDR: 04/27/04
Date Made Active in Reports: 05/21/04
Number of Days to Update: 24

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 01/30/06
Next Scheduled EDR Contact: 04/17/06
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: 10/12/05
Date Data Arrived at EDR: 10/31/05
Date Made Active in Reports: 12/20/05
Number of Days to Update: 50

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 12/20/05
Next Scheduled EDR Contact: 03/20/06
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Date of Government Version: 10/12/05
Date Data Arrived at EDR: 10/31/05
Date Made Active in Reports: 12/20/05
Number of Days to Update: 50

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 12/20/05
Next Scheduled EDR Contact: 03/20/06
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: 12/31/03
Date Data Arrived at EDR: 01/03/05
Date Made Active in Reports: 01/25/05
Number of Days to Update: 22

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 01/16/06
Next Scheduled EDR Contact: 04/17/06
Data Release Frequency: Annually

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: 08/30/05
Date Data Arrived at EDR: 09/13/05
Date Made Active in Reports: 10/27/05
Number of Days to Update: 44

Source: EPA
Telephone: 202-564-3887
Last EDR Contact: 02/08/06
Next Scheduled EDR Contact: 05/08/06
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: 10/18/05
Date Data Arrived at EDR: 10/31/05
Date Made Active in Reports: 12/20/05
Number of Days to Update: 50

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 02/08/06
Next Scheduled EDR Contact: 04/03/06
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: 11/08/05
Date Data Arrived at EDR: 12/27/05
Date Made Active in Reports: 01/30/06
Number of Days to Update: 34

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 12/27/05
Next Scheduled EDR Contact: 03/27/06
Data Release Frequency: Semi-Annually

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: 01/09/06
Date Data Arrived at EDR: 01/16/06
Date Made Active in Reports: 02/21/06
Number of Days to Update: 36

Source: EPA
Telephone: N/A
Last EDR Contact: 01/03/06
Next Scheduled EDR Contact: 04/03/06
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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/17/95
Date Data Arrived at EDR: 07/03/95
Date Made Active in Reports: 08/07/95
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 12/05/05
Next Scheduled EDR Contact: 03/06/06
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: 12/31/03
Date Data Arrived at EDR: 06/17/05
Date Made Active in Reports: 08/04/05
Number of Days to Update: 48

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 09/12/05
Next Scheduled EDR Contact: 12/12/05
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: 12/21/05
Date Data Arrived at EDR: 12/27/05
Date Made Active in Reports: 02/21/06
Number of Days to Update: 56

Source: Department of Environmental Conservation
Telephone: 907-269-7546
Last EDR Contact: 12/27/06
Next Scheduled EDR Contact: 03/13/06
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: 02/07/06
Date Data Arrived at EDR: 02/08/06
Date Made Active in Reports: 02/21/06
Number of Days to Update: 13

Source: Department of Environmental Conservation
Telephone: 907-269-7632
Last EDR Contact: 02/06/06
Next Scheduled EDR Contact: 04/24/06
Data Release Frequency: Semi-Annually

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: 12/13/05
Date Data Arrived at EDR: 12/13/05
Date Made Active in Reports: 01/20/06
Number of Days to Update: 38

Source: Department of Environmental Conservation
Telephone: 907-465-5301
Last EDR Contact: 12/13/05
Next Scheduled EDR Contact: 03/13/06
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: 12/13/05
Date Data Arrived at EDR: 12/13/05
Date Made Active in Reports: 01/18/06
Number of Days to Update: 36

Source: Department of Environmental Conservation
Telephone: 907-269-7504
Last EDR Contact: 12/13/05
Next Scheduled EDR Contact: 03/13/06
Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 01/05/05

Date Data Arrived at EDR: 01/06/05

Date Made Active in Reports: 02/02/05

Number of Days to Update: 27

Source: Department of Environmental Conservation

Telephone: 907-465-5231

Last EDR Contact: 12/27/05

Next Scheduled EDR Contact: 03/13/06

Data Release Frequency: Varies

SPILLS: Spills Database

Date of Government Version: 02/07/06

Date Data Arrived at EDR: 02/07/06

Date Made Active in Reports: 02/21/06

Number of Days to Update: 14

Source: Department of Environmental Conservation

Telephone: 907-465-5242

Last EDR Contact: 01/30/06

Next Scheduled EDR Contact: 05/01/06

Data Release Frequency: Semi-Annually

Inst Control: Contaminated Sites with Institutional Controls

Contaminated sites that have institutional controls.

Date of Government Version: 12/20/05

Date Data Arrived at EDR: 12/21/05

Date Made Active in Reports: 01/20/06

Number of Days to Update: 30

Source: Department of Environmental Conservation

Telephone: 907-269-3063

Last EDR Contact: 12/12/05

Next Scheduled EDR Contact: 03/13/06

Data Release Frequency: Semi-Annually

VCP: Voluntary Cleanup Program sites

Sites involved in the Voluntary Cleanup Program.

Date of Government Version: 12/21/05

Date Data Arrived at EDR: 12/22/05

Date Made Active in Reports: 01/20/06

Number of Days to Update: 29

Source: Department of Environmental Conservation

Telephone: 907-451-2182

Last EDR Contact: 12/12/05

Next Scheduled EDR Contact: 03/13/06

Data Release Frequency: Varies

DRYCLEANERS: Drycleaner Facility Listing

A listing of drycleaning facilities in Alaska.

Date of Government Version: 08/27/04

Date Data Arrived at EDR: 08/27/04

Date Made Active in Reports: 10/05/04

Number of Days to Update: 39

Source: Department of Environmental Conservation

Telephone: 907-269-7577

Last EDR Contact: 02/06/06

Next Scheduled EDR Contact: 04/24/06

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: 11/22/05

Date Data Arrived at EDR: 01/05/06

Date Made Active in Reports: 01/20/06

Number of Days to Update: 15

Source: Department of Environmental Conservation

Telephone: 907-451-2166

Last EDR Contact: 12/16/05

Next Scheduled EDR Contact: 03/13/06

Data Release Frequency: Varies

CDL: Illegal Drug Manufacturing Sites

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

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 11/29/05
Date Data Arrived at EDR: 12/13/05
Date Made Active in Reports: 01/20/06
Number of Days to Update: 38

Source: Department of Environmental Conservation
Telephone: 907-269-7543
Last EDR Contact: 12/13/05
Next Scheduled EDR Contact: 03/13/06
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.

Date of Government Version: 12/31/04
Date Data Arrived at EDR: 02/08/05
Date Made Active in Reports: 08/04/05
Number of Days to Update: 177

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 02/06/06
Next Scheduled EDR Contact: 05/08/06
Data Release Frequency: Semi-Annually

INDIAN LUST: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 01/12/06
Date Data Arrived at EDR: 01/12/06
Date Made Active in Reports: 01/31/06
Number of Days to Update: 19

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/10/06
Next Scheduled EDR Contact: 05/22/06
Data Release Frequency: Varies

INDIAN UST: Underground Storage Tanks on Indian Land Underground storage tanks on Indian Land.

Date of Government Version: 11/23/05
Date Data Arrived at EDR: 01/06/06
Date Made Active in Reports: 01/20/06
Number of Days to Update: 14

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 02/20/06
Next Scheduled EDR Contact: 05/22/06
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 (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Child Care Facilities Database

Source: Department of Education & Early Development

Telephone: 907-465-2800

Flood Zone Data: This data, 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 from the U.S. Fish and Wildlife Service.

STREET AND ADDRESS INFORMATION

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GEOCHECK[®] - PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

VILLAGE OF ST. GEORGE
ST. GEORGE ISLAND
SAINT GEORGE ISLAND, AK 99591

TARGET PROPERTY COORDINATES

Latitude (North):	56.60300 - 56° 36' 10.8"
Longitude (West):	169.5624 - 169° 33' 44.6"
Universal Transverse Mercator:	Zone 2
UTM X (Meters):	588258.6
UTM Y (Meters):	6273906.5
Elevation:	7 ft. above sea level

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).

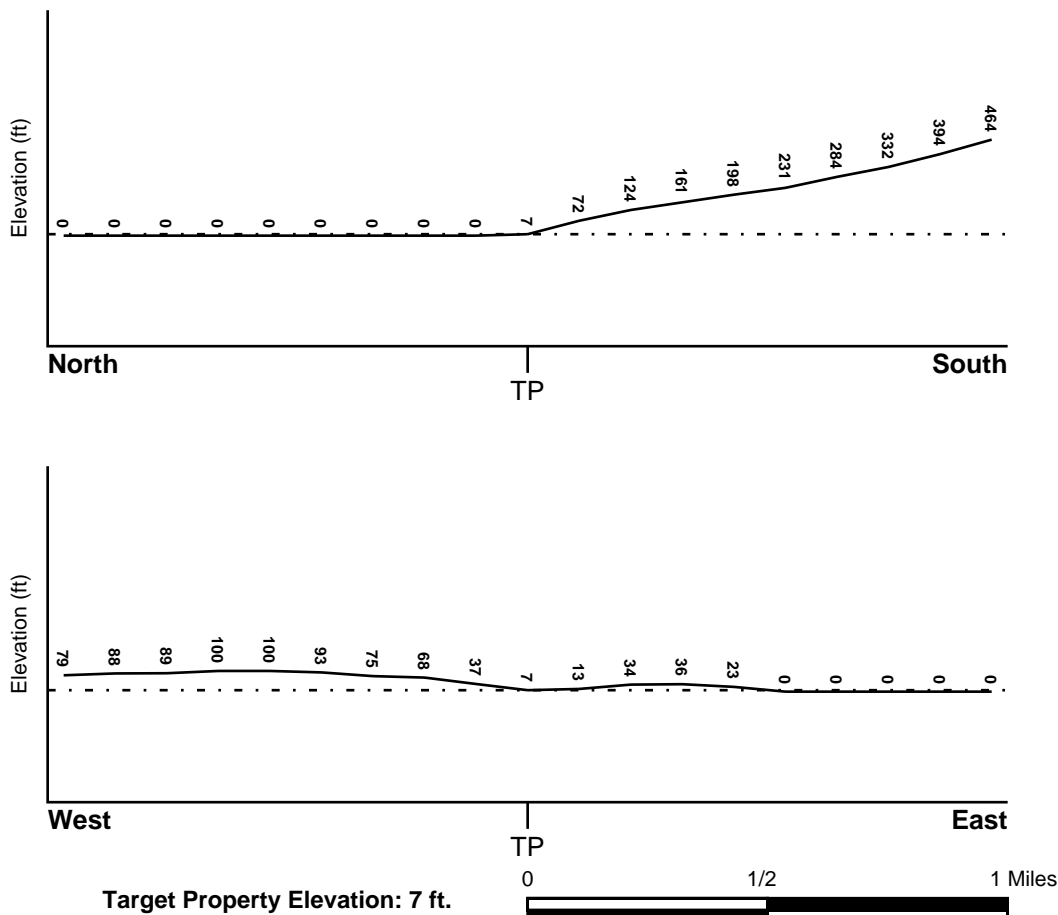
TOPOGRAPHIC INFORMATION

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

USGS Topographic Map: N/A
General Topographic Gradient: General NNE
Source: USGS 7.5 min quad index

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>
ALEUTIANS_WEST, 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: ANDIC CRYOCHREPTS

Soil Surface Texture: sandy 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	20 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 6.00 Min: 0.60	Max: 5.50 Min: 4.50
2	20 inches	26 inches	gravelly - sandy loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Clayey Gravel	Max: 2.00 Min: 0.60	Max: 5.50 Min: 4.50
3	26 inches	60 inches	very gravelly - loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 20.00 Min: 2.00	Max: 6.00 Min: 5.10

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: silt loam

Surficial Soil Types: silt loam

Shallow Soil Types: No Other Soil Types

Deeper Soil Types: unweathered bedrock

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

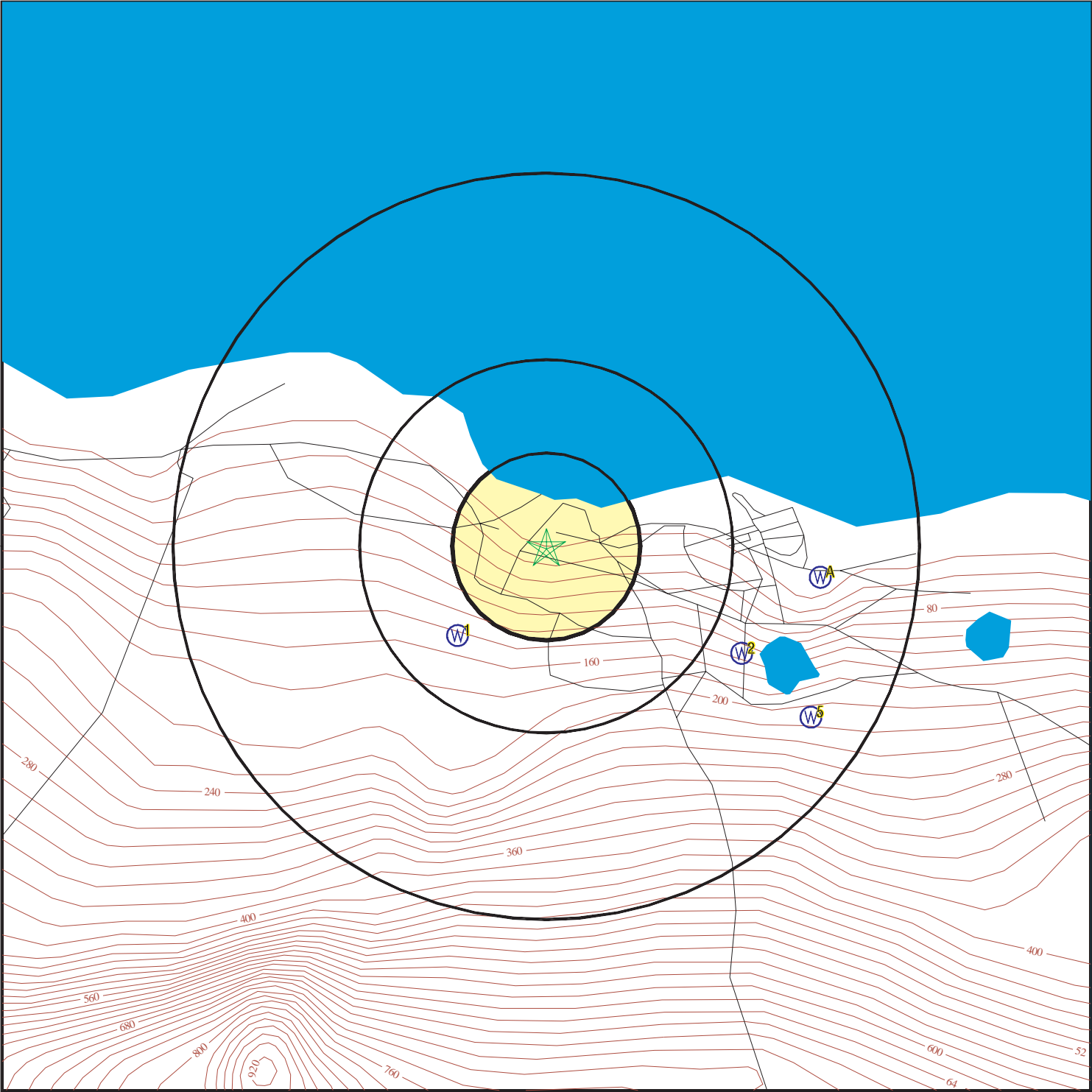
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
1	USGS2045483	1/4 - 1/2 Mile SW
2	USGS2045485	1/2 - 1 Mile ESE
A3	USGS2045486	1/2 - 1 Mile East
A4	USGS2045487	1/2 - 1 Mile East
5	USGS2045484	1/2 - 1 Mile ESE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

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

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

PHYSICAL SETTING SOURCE MAP - 1620831.1s



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

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



SITE NAME: Village of St. George
ADDRESS: St. George Island
SAINT GEORGE ISLAND AK 99591
LAT/LONG: 56.6030 / 169.5624

CLIENT: Oasis Environmental
CONTACT: Lisa Nicholson
INQUIRY #: 1620831.1s
DATE: February 24, 2006

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

1

SW
1/4 - 1/2 Mile
Higher

FED USGS USGS2045483

Agency cd:	USGS	Site no:	563559169335201
Site name:	SC04112930CAAA1 001		
Latitude:	563559		
Longitude:	1693352	Dec lat:	56.59879537
Dec lon:	-169.56671811	Coor meth:	M
Coor accr:	F	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	02
State:	02	County:	016
Country:	US	Land net:	NENESWS30 T041S R129W S
Location map:	PRIBILOF ISLANDS	Map scale:	250000
Altitude:	150.	Altitude method:	M
Altitude accuracy:	50	Altitude datum:	NGVD29
Hydrologic:	19030104		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	19770401
Date inventoried:	Not Reported	Mean greenwich time offset:	AKST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	276.	Hole depth:	276.
Source of depth data:	driller	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1977-04-01	Ground water data end date:	1977-04-01
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1977-04-01	250	

2

ESE
1/2 - 1 Mile
Higher

FED USGS USGS2045485

Agency cd:	USGS	Site no:	563603169321201
Site name:	SC04112929CAAA1 001		
Latitude:	563607		
Longitude:	1693242	Dec lat:	56.6010187
Dec lon:	-169.54727177	Coor meth:	M
Coor accr:	M	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	02
State:	02	County:	016
Country:	US	Land net:	NENESWS29 T041S R129W S
Location map:	PRIBILOF ISLANDS	Map scale:	250000

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Altitude:	180.00	Altitude method:	M
Altitude accuracy:	50	Altitude datum:	NGVD29
Hydrologic:	19030104		
Topographic:	Hillside (slope)		
Site type:	Ground-water other than Spring	Date construction:	19540101
Date inventoried:	Not Reported	Mean greenwich time offset:	AKST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	225	Hole depth:	225
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	1974-05-24
Water quality data end date:	1974-05-25	Water quality data count:	2
Ground water data begin date:	0000-00-00	Ground water data end date:	0000-00-00
Ground water data count:	0		

Ground-water levels, Number of Measurements: 0

A3
East
1/2 - 1 Mile
Lower

FED USGS USGS2045486

Agency cd:	USGS	Site no:	563620169322801
Site name:	SC04112929 1S		
Latitude:	563620	Dec lat:	56.60463004
Longitude:	1693228	Coor meth:	M
Dec lon:	-169.5433826	Latlong datum:	NAD27
Coor accr:	T	District:	02
Dec latlong datum:	NAD83	County:	016
State:	02	Land net:	S29 T041S R129W S
Country:	US	Map scale:	250000
Location map:	PRIBILOF ISLANDS	Altitude method:	M
Altitude:	1.00	Altitude datum:	NGVD29
Altitude accuracy:	5		
Hydrologic:	19030104		
Topographic:	Hillside (slope)		
Site type:	Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	AKST
Local standard time flag:	Y		
Type of ground water site:	Spring		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	1962-08-15
Water quality data end date:	1962-08-15	Water quality data count:	1
Ground water data begin date:	0000-00-00	Ground water data end date:	0000-00-00
Ground water data count:	0		

Ground-water levels, Number of Measurements: 0

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

A4
East
1/2 - 1 Mile
Lower

FED USGS USGS2045487

Agency cd:	USGS	Site no:	563620169322802
Site name:	SC04112929 2S		
Latitude:	563620		
Longitude:	1693228	Dec lat:	56.60463004
Dec lon:	-169.5433826	Coor meth:	M
Coor accr:	T	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	02
State:	02	County:	016
Country:	US	Land net:	S29 T041S R129W S
Location map:	PRIBILOF ISLANDS	Map scale:	250000
Altitude:	1.50	Altitude method:	M
Altitude accuracy:	5	Altitude datum:	NGVD29
Hydrologic:	19030104		
Topographic:	Hillside (slope)		
Site type:	Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	AKST
Local standard time flag:	Y		
Type of ground water site:	Spring		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	1962-08-15
Water quality data end date:	1962-08-15	Water quality data count:	1
Ground water data begin date:	0000-00-00	Ground water data end date:	0000-00-00
Ground water data count:	0		

Ground-water levels, Number of Measurements: 0

5
ESE
1/2 - 1 Mile
Higher

FED USGS USGS2045484

Agency cd:	USGS	Site no:	563601169322101
Site name:	SC04112929CAAA2 001		
Latitude:	563601		
Longitude:	1693221	Dec lat:	56.59935235
Dec lon:	-169.54143779	Coor meth:	M
Coor accr:	F	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	02
State:	02	County:	016
Country:	US	Land net:	NENESWS29 T041S R129W S
Location map:	PRIBILOF ISLANDS	Map scale:	250000
Altitude:	150.	Altitude method:	M
Altitude accuracy:	50	Altitude datum:	NGVD29
Hydrologic:	19030104		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	1954
Date inventoried:	Not Reported	Mean greenwich time offset:	AKST

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	202.	Hole depth:	202.
Source of depth data:	driller	Project number:	Not Reported
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

**GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON**

AREA RADON INFORMATION

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 from the U.S. Fish and Wildlife Service.

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.

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.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

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

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

ATTACHMENT 3
PHOTOGRAPHS

Photographs
St. George Phase I Site Assessment



Photograph 1. E&P Shop, looking northwest.



Photograph 2. E&P Shop. Battery storage.

Photographs St. George Phase I Site Assessment



Photograph 3. Old Machine Shop, looking northeast. Transformers stored on concrete slab in foreground.



Photograph 4. Old Machine Shop. Drum of lube oil stored on concrete slab on 1st floor.

Photographs St. George Phase I Site Assessment



Photograph 5. Old Machine Shop basement. Oxygen-acetylene tanks stored on concrete slab on 1st floor.



Photograph 6. Cottage D, looking southwest.

Photographs St. George Phase I Site Assessment



Photograph 7. Cottage D basement. Containers of Epoxy glue catalyst, labeled "Corrosive". Stored beneath stairs on concrete slab floor



Photograph 8. .. Cottage D, east side. Vent and fill pipes for current UST adjacent to ladder in center right of photo.

Photographs
St. George Phase I Site Assessment



Photograph 9. Cottage D, south side. Overgrown UST fill and vent pipes



Photograph 10. Cottage G, looking west. Covered entrance to 1st floor apartment to right of door to storage area and 2nd floor stairs.

Photographs St. George Phase I Site Assessment



Photograph 11. Cottage G, storage area. Storage of electrical boxes, wiring, windows, etc.



Photograph 12. Coal House, south side, looking east to northeast.

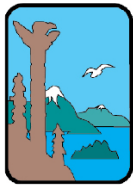
Photographs
St. George Phase I Site Assessment



Photograph 13. Coal House. Approximately 20-foot long pipe leaning against access to loft.

FY 2006 DEC Brownfield Assessment
Contaminated Sites Program - Brownfield Team

**Phase II Environmental Site Assessment
Five Historic Buildings, Village of St. George
Final Report**



ALASKA
Department of
Environmental
Conservation

Prepared for:
Department of Environmental Conservation
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and

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2600 Denali Street, Suite 300
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June 2006

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Table 2: Asbestos Sample Results

Table 3: Analytical Results – DRO, RRO, GRO, BTEX, PAH, and Metals

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Table 5: Test Pit Survey Coordinates

FIGURES

Figure 1: Site Location Map

Figure 2: Site Plan

Figure 3: E&P Shop (1st Floor)

Figure 4: Old Machine Shop (1st Floor)

Figure 5: Old Machine Shop (2nd Floor)

Figure 6: Old Machine Shop (Basement)

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Figure 8: Cottage D (2nd Floor)

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Figure 12: Cottage G (2nd Floor)

Figure 13: E&P Shop – Test Pit Locations and Results

Figure 14: Old Machine Shop – Test Pit Locations and Results

Figure 15: Cottage D – Test Pit Locations and Results

APPENDICES

Appendix A Archeology Report

Appendix B Laboratory Analytical Reports

Appendix C Photograph Log

Acronyms and Abbreviations

ACM	Asbestos-containing materials
DEC	Alaska Department of Environmental Conservation
AK	Alaska method
bgs	below ground surface
BTEX	Benzene, toluene, ethylbenzene, and xylenes
DRO	Diesel-range organics
E&P	Electrical and plumbing
EPA	U.S. Environmental Protection Agency
ESA	Environmental site assessment
GPS	global positioning system
GRO	Gasoline-range organics
HUD	Office of Housing and Urban Development
mg/cm ²	milligrams per square centimeter
mg/kg	milligrams per kilogram
MS	Matrix spike
MSD	Matrix spike duplicate
MTG	Migration-to-groundwater
NFRAP	No further remedial action planned
NOAA	National Oceanographic and Atmospheric Administration
NPS	National Park Service
OASIS	OASIS Environmental, Inc.
PAH	Polynuclear aromatic hydrocarbons
PCB	Polychlorinated biphenyls
PID	Photoionization detector
PLM	Polarized light microscopy
ppm	parts per million
ppmv	parts per million by volume
QAPP	Quality Assurance Project Plan
RCRA	Resource Conservation Recovery Act
RPD	Relative percent difference
RRO	Residual-range organics
SHPO	State Historical Preservation Office
Tanaq	St. George Tanaq Corporation
Tetra Tech	Tetra Tech EM, Inc.
UST	Underground storage tank
VOC	Volatile organic compounds
VP SO	Village Public Safety Officer
XRF	X-ray Fluorescence Spectrophotometer

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EXECUTIVE SUMMARY

This document presents the results of a Phase II Environmental Site Assessment (ESA) conducted by OASIS Environmental, Inc. (OASIS) at the request of the Alaska Department of Environmental Conservation (DEC). The subject properties are five buildings in the Village of St. George on St. George Island, Alaska (Figure 1). The Phase II ESA is being performed as part of a DEC Brownfield Assessment and will cover the following five buildings (Figure 2):

- Electrical and Plumbing (E&P) Shop, owned by City of St. George,
- Old Machine Shop, owned by City of St. George,
- Cottage D, owned by City of St. George,
- Cottage G (also known as the Old Power Plant), owned by St. George Tanaq Corporation (Tanaq), and
- Coal House, owned by St. George Traditional Council.

The five properties were assessed for the presence of lead-based paint, lead-in-soil associated with peeling lead-based paint, asbestos-containing materials (ACM), and petroleum hydrocarbons in soil.

A portable, hand-held X-ray Fluorescence Spectrophotometer (XRF) was used to screen the buildings for lead-based paint. Soil samples were collected adjacent to exterior building walls that screened positive for lead-based paint (greater than 1.0 mg/cm² lead). The samples were screened with the XRF and select samples were submitted for laboratory analysis of lead. All five buildings contained lead-based paint and soil adjacent to the buildings was also found to contain lead concentrations that exceed the DEC method two, migration-to-groundwater (MTG) cleanup level of 400 milligrams per kilogram (mg/kg).

Samples suspected to be ACM were collected from three of the five buildings, the Old Machine Shop, Cottage D, and Cottage G. Two samples each from Cottage G and the Old Machine Shop were found to be ACM. Sheet flooring and floor tile containing asbestos were found in the two apartments in Cottage G. Ceiling tile and soft-corrugated insulation containing asbestos were found in the Old Machine Shop.

Sixteen test pits were excavated around three of the five building, including the E&P Shop, the Old Machine Shop, and Cottage D. No test pits were excavated around Cottage G and the Coal House because these sites have already been adequately assessed for soil contamination (Hart Crowser, 1997, Tetra Tech, 2005, and DEC, 2006). The DEC has issued NFRAP status for the soil at each of the sites (DEC, 2006).

A sample from test pit TP-7 at the Old Machine Shop contained 2,160 mg/kg diesel-range organics (DRO), exceeding the MTG cleanup level of 250 mg/kg.

Based upon the findings of this ESA, OASIS recommends the following:

- Removal of approximately 14 cubic yards of petroleum-impacted soil east of the Old Machine Shop,
- Development of a mitigation strategy for the lead-based paint,
- Removal of approximately 70 cubic yards of lead-impacted soil around the building foundations,
- Development of a management plan for non-friable ACM,
- Removal of approximately 150 linear feet of friable, asbestos-containing, pipe insulation, and

- Development of a management plan for the fluorescent light ballasts, based on the assumption that they contain polychlorinated biphenyls (PCBs).

1 INTRODUCTION

Under contract to the Alaska Department of Environmental Conservation (DEC), OASIS Environmental, Inc. (OASIS) performed a limited Phase II Environmental Site Assessment (ESA) of five buildings in the Village of St. George on St. George Island, Alaska (Figure 1). The buildings are listed below:

- The Electrical and Plumbing (E&P) Shop,
- The Old Machine Shop,
- Cottage G (Old Power Plant),
- The Coal House, and
- Cottage D.

The location of each of the buildings within the Village of St. George is shown on Figure 2.

The purpose of the investigation was to collect sufficient data to determine if remediation is needed and to encourage redevelopment of the properties as historic buildings. The project is being funded by the Alaska Department of Environmental Conservation's (DEC's) Brownfield Assessment Program.

1.1 Objectives and Work Scope

The Phase II ESA involved evaluating the buildings for the presence and extent of contaminants, including petroleum hydrocarbons, lead-based paint, asbestos, and other hazardous substances. The work scope is summarized below:

- Screen and sample the paint on the walls of the building for the presence of lead-based paint.
- Inspect each building for the presence of asbestos-containing materials (ACM). If suspected asbestos is present, collect samples for laboratory analysis.
- Collect soil samples of potentially contaminated soil, if present, from each of the properties.
- Evaluate the sample data to assess the nature and extent of contamination at the site.

1.2 Site Background

A Phase I ESA has been performed as part of this project. The key findings are presented in a separate report (OASIS, 2006a) and summarized below.

- E&P Shop – The E&P Shop is a two-story, wood frame building with a partial basement. The building has a concrete foundation with wood floors on the first and second story. It was built sometime between the 1920's and the 1940's.

The building was used as a warehouse for the federal government and then as an electrical and plumbing shop until the early 1983. It is currently used by the City of St. George for storage of pipe, fittings, used vehicle batteries, a tractor, a snow machine, 5-gallon buckets of motor oil, phone booths, transformers, a small generator, windows and portable heaters.

OASIS was unable to inspect the ballasts of the fluorescent light fixtures in the building, but due to the building's age, they are assumed to contain polychlorinated biphenyls (PCBs). An aboveground storage tank (AST) was apparently removed from the north side of the

building. Piping is currently stored on the ground on the south side of the building. No previous assessments were completed at this site.

- Old Machine Shop – The Old Machine Shop was built sometime between the 1920s and the 1940s. It burned down in a waterfront fire in the 1950s and was re-built. It is a two-story concrete building with a partial basement. The first story and basement have concrete floors. A concrete extension is present on the west side of the building. A concrete extension is present on the west side of the building. Apparently, an underground storage tank (UST) eroded out of the bank supporting the northern side of the concrete extension. Heavy equipment is stored on the east side of the building and an electrical transformer is present on the southeast corner.

The building was used by the federal government for equipment maintenance until 1983 when the building was turned over to the City of St. George. The City used the building for equipment maintenance until the late 1980's when they moved their maintenance facility to another building. Since that time, the building has been used for storage, including batteries, motor oil, a personal vehicle, a concrete mixer, oxygen and acetylene tanks, and an arc welder. OASIS was unable to inspect the ballasts of the fluorescent light fixtures in the building, but due to the building's age, they are assumed to contain PCBs. No previous assessments have been completed at this site.

- Cottage D – Cottage D was built in the 1930's and is currently used to house the Village Public Safety Officer (VPSO). The Village currently has no VPSO and the building is vacant. It is a two-story building with a full basement. There was a known AST release upgradient of the site at Cottage C. There is evidence that two UST's may be present on the property. Two sets of fill and vent pipes are located on the east side of the building and on the south side of the building. No previous assessments were completed at this site.
- Coal House – The Coal House was used to store coal for St. George until the early 1960's when the Village started using diesel for heating. The Coal House is currently covered under a two-party agreement between the State of Alaska and the National Oceanographic and Atmospheric Administration (NOAA). During a 1997 Site Assessment (Hart Crowser, 1997) a single soil sample collected at the Old Coal House contained benzo(a)pyrene at a concentration exceeding DEC cleanup levels. The DEC granted No Further Remedial Action Planned (NFRAP) status for the site; however institutional controls have been established requiring a deed notice (DEC, 2006).
- Cottage G – Cottage G is also covered under the DEC/NOAA two-party agreement. Diesel contamination was discovered in the soils around the building during the 1997 assessment (Hart Crowser, 1997). A corrective action was implemented in 2004 and the contaminated soil was removed (Tetra Tech, 2005). The DEC granted NFRAP status for the soil at the site; however the DEC still considers the site to be active due to groundwater contamination (DEC, 2006).

The building has been converted into two apartments and a three-room storage area. The storage area is used for storage of electrical wiring, electrical boxes, conduit, and various household items. Fluorescent light fixtures are present in the building, but OASIS was unable to inspect the ballasts. Due to the age of the building, the ballasts are assumed to contain PCBs.

All five buildings were built between the 1920's and the 1940's and therefore have a high probability of containing lead-based paint and asbestos. No obvious soil staining was noted around the outsides of each of the buildings.

2 FIELD METHODOLOGY

The Phase II ESA was performed in accordance with the project work plan and quality assurance project plan (QAPP) (OASIS, 2006b and 2006c). OASIS performed the field activities between May 18 and May 22, 2006. Each of the buildings was evaluated for the presence of lead-based paint and asbestos. For each building the assessment involved the following activities:

- Site walk and photos
- Lead paint survey
- Lead in soil sampling
- Asbestos sampling

The E&P Shop, the Old Machine Shop, and Cottage D were also assessed for soil contamination. The screening and sampling methodologies for paint, asbestos, and soil are presented below.

2.1 Lead-based paint sampling

Each of the five buildings was evaluated for the presence of lead-based paint. A portable, hand-held X-Ray Fluorescence Spectrometer (XRF) was used to screen every paint type and color on the buildings. During the screening, the XRF was placed against the painted surface and the shutter was opened, exposing the surface to X-rays. The energy returned to the instrument was recorded as a spectra and the peak was automatically read by the instrument.

The concentration of lead detected in the paint was compared against an action level. The action level for lead-based paint is defined by the U.S. Department of Housing and Urban Development (HUD) as 1 milligram lead per square centimeter (lead equal to 1.0 mg/cm^2). The XRF was calibrated against the lead-based paint standard provided with the instrument.

The screening location, type of building material screened, and concentration of lead in the paint were recorded for each reading taken. Floor plans for each floor of each building are presented in Figures 3 through 12. As noted on each figure, the side of the building was labeled as Side A through Side D, starting at the south side and moving around the building in a clockwise direction.

All painted surfaces within a safe reach were screened. All exterior and interior walls were screened at approximately four feet above the standing surface. In addition, if two types of substrate were present on a wall, i.e. concrete and wood, both were screened. All doors, door trim, window frames and sills, closet walls, built-in shelving, stairways, railings, eaves, and ceilings (within a safe reach for the OASIS representative) were screened.

If lead-based paint was present on the exterior walls of the building, the XRF was used to screen surface soil samples adjacent to the building foundations for lead. The samples were collected from the top two inches of soil and between the building's foundation and drip-line. Sample locations were chosen based on the presence of peeling paint on the building siding. The soil was placed in a Ziploc® bag and then screened through the bag with the XRF in Bulk Analysis Mode. Prior to screening the samples, the XRF was calibrated against National Institute of Standards and Technology (NIST) standards for lead.

One to two soil samples per building were collected for fixed laboratory analysis of lead by U. S. Environmental Protection Agency (EPA) Method 6020. The samples were chosen for laboratory analysis based on XRF screening results. In general, if the XRF results were below the DEC method two cleanup level of 400 parts per million (ppm) lead, a sample was submitted for

laboratory analysis. The samples with screening results below cleanup levels were selected because results for samples screened through a plastic bag are biased low with respect to fixed laboratory analytical results. One screening sample with a high lead concentration was also submitted to check the accuracy of the field screening methodology.

2.2 Asbestos Sampling

At each of the five buildings, samples were collected of building materials suspected to contain asbestos. These materials included tile flooring and mastics, sheet rock mud, pipe insulation. The building material was scraped or cut away from an inconspicuous location, placed in a ZipLoc® bag, and transported to Anchorage for analysis by Solar Environmental Services using polarized light microscopy (PLM). Each sampling site was sprayed with water prior to collecting the sample to decrease disturbance of friable asbestos.

2.3 Test Pit Soil Sampling

Three of the five building properties were also assessed for the presence of soil contamination. Cottage G and the Coal House have already been sufficiently assessed for soil contamination (Hart Crowser, 1997 and Tetra Tech, 2005). Shallow test pits were excavated using a backhoe and operator provided by the St. George Tanaq Corporation (Tanaq). OASIS directed the excavation of shallow test pits. The City of St. George did not perform the required utility locates. Consequently, for safety, the excavator advanced the hole very slowly and OASIS probed the test pit with a rod after every few vertical inches.

The test pits were excavated to an average depth of two feet bgs. Once the soil was removed, the OASIS sampler entered the pit and collected headspace photoionization detector (PID) soil samples. Samples were generally collected from approximately one foot below ground surface (bgs) and then in six-inch to one-foot depth intervals to the bottom of the test pit. For test pits shallower than one-foot, samples were collected from the bottom of the pit only. The samples were collected using disposable sampling spoons and clean nitrile gloves.

Each of the samples was composited from several sites around the edge of the pit. The soil was then placed in a quart-sized plastic Ziploc® freezer bag, filled approximately 1/3 full. The plastic bags were closed securely and placed in a warm area to raise the temperature of the soil to at least 40°F for a minimum of 10 minutes. After the PID samples were warmed to the appropriate temperature, the probe of the instrument was inserted into the plastic bag and the maximum reading was noted in the field notebook.

One sample from each pit was selected for laboratory analysis of the following compounds:

- Diesel-range organics (DRO) using Alaska Method (AK) 102,
- Residual-range organics (RRO) using AK 103,
- Gasoline-range organics (GRO) using AK 101, and
- Benzene, toluene, ethylbenzene, and xylenes (BTEX) using EPA Method 8021B.

The selection was generally based on the location with the highest PID reading.

At least one soil sample from each building site was submitted for analysis of volatile organic compounds (VOC's) using EPA Method 8260B, polynuclear aromatic hydrocarbons (PAH) using EPA Method 8270 in selective ion mode (SIM), and arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver using EPA Methods 6020, 7470, and 7471. Again, the selection of sample locations for these analyses was generally based on highest PID reading.

The Alaska State Historical Preservation Office (SHPO) and the National Park Service (NPS) required that an archeologist be present during the test pit excavations because St. George lies

within the Seal Islands National Historical Landmark. Mark Cassell with Northern Land Use Research, Inc. provided archeological monitoring for the test pit excavating. His report is included in Appendix A.

3 SITE-SPECIFIC FIELD ACTIVITIES AND RESULTS

A summary of the field activities performed and the results from each site are presented below. The building locations are shown in Figure 2. Figures 3 to 12 show the locations and results from lead-paint screening, lead-in-soil samples, and asbestos samples for every floor of each of the five buildings. Figures 13 to 15 show the soil test pit locations and results for the E&P Shop, the Old Machine Shop, and Cottage D. Table 1 presents the lead-based paint screening results and the lead-in-soil sample screening and analytical results. Table 2 presents sampling information and results of the asbestos sampling. Tables 3 and 4 present the screening and analytical results for the test pit soil sampling. The test pit sample results are compared to the DEC method two, migration-to-groundwater (MTG), cleanup levels set out in 18 AAC 75.341. Table 5 presents the global positioning system (GPS) coordinates for the test pits. The laboratory analytical report is included as Appendix B and a photograph log is included as Appendix C.

3.1 The E&P Shop

3.1.1 Lead-based Paint

A lead-based paint survey was conducted for the exterior and the first-floor interior of the building. The results are presented in Table 1 and Figure 3. Results exceeding 1.0 mg/cm^2 are bolded in the table. The second floor interior was not painted; consequently, it was not screened for lead-based paint. The lead-paint survey showed that lead-based paint (paint containing greater than 1.0 milligrams per square centimeter of lead) is present in the following locations:

- Exterior (Figure 3) – North, south, and west walls of the building.
- First-floor interior (Figure 3) - Along the wall supporting the stairs to the second floor, on the blue door trim between Rooms 1 and 2 and on the concrete interior wall of Room 2.

Lead-in-soil samples were collected between the building foundation and the drip-line along the north, south, and west sides of the building (Figure 3). No soil sample was collected on the east side of the building because no lead-based paint was found along that wall. The results are presented in Table 1 and in Figure 3. The lead concentration of the sample collected on the south side was below the MTG level (XRF result of 325.4 ppm and laboratory result of 235 milligrams per kilogram (mg/kg)). The XRF results for the samples collected on the west and north sides of the building were 1,645 ppm and 9,710 ppm lead, respectively, exceeding the MTG cleanup level. No laboratory samples were submitted for these two locations.

3.1.2 Asbestos

No suspected ACM was found at the E&P Shop.

3.1.3 Test Pit Soil Sampling

Six test pits were excavated around the E&P Shop at the locations shown in Figure 13. The test pits were dug in the approximate locations proposed in the work plan for this project. A test pit proposed for the area west of a small building northwest of the E&P Shop was not excavated because it was determined that this building is not associated with the E&P Shop. The results of the sampling are included in Table 3 and Figure 13.

Test pit EP-TP1 was located in front of the main door on the south side of the building and was excavated to a depth of approximately 2.5 feet. The test pit encountered approximately one foot of volcanic soil (sand and gravel) overlying a mixture of volcanic scoria, coal ash and cinders, and concrete (Photo 1). Below the concrete is volcanic breccia bedrock. PID results for

samples collected at one foot, two feet, and 2.5 feet bgs were 8.4, 4.2, and 6.2 parts per million by volume (ppmv), respectively. The sample from one foot bgs (EP-TP1-1) was submitted for analysis of DRO/RRO and GRO/BTEX. All analytical results from this sample were below MTG cleanup levels.

Test pit EP-TP2 was located on the east side of the building and was excavated to a depth of approximately two feet. The test pit encountered volcanic soil (sand and gravel) atop volcanic bedrock. PID results for samples collected at one foot and two feet bgs were 8.7 and 9.6 ppmv, respectively. The sample from two feet bgs (EP-TP2-2) was submitted for analysis of DRO/RRO and GRO/BTEX. No sample results from this test pit exceeded MTG cleanup levels.

Test pit EP-TP3 was located on the north side of the building and was excavated to a depth of 0.5 feet, where the test pit encountered competent volcanic bedrock. PID and analytical samples were collected from just above the bedrock. The PID result was 10.5 ppmv. The sample (EP-TP3-0.5) was submitted for analysis of DRO/RRO, GRO/BTEX, VOC, PAH, and RCRA Metals. No sample results from this test pit exceeded MTG cleanup levels.

Test pits EP-TP4 and EP-TP5 were located on the west side of the building and were excavated to depths of 0.5 and 1 feet, respectively, where the test pits encountered competent volcanic bedrock. PID and analytical samples were collected from just above the bedrock in each test pit. The PID results were 9.4 and 7.4 ppmv, respectively. Each sample (EP-TP4-0.5 and EP-TP5-1) was submitted for analysis of DRO/RRO and GRO/BTEX. Sample EP-TP5-1 contained 0.0416 mg/kg benzene, exceeding the MTG cleanup level. No other analytical results from this test pit exceeded cleanup levels.

Test pit EP-TP6 was located on the south side of the building, west of EP-TP1 and was excavated to a depth of approximately two feet. The test pit encountered one foot of scoria fill and six inches of volcanic soil (sand and gravel). PID results for samples collected at one foot and 1.5 feet bgs were 5.1 and 7.7 ppmv, respectively. The sample from 1.5 feet bgs (EP-TP6-1.5) was submitted for analysis of DRO/RRO and GRO/BTEX. A sample collected from the bottom of the test pit (1.5 feet bgs) contained 0.42 mg/kg benzene, exceeding the MTG cleanup level of 0.02 mg/kg. All other analytical results from this sample were below cleanup levels.

3.2 The Old Machine Shop

3.2.1 Lead-based Paint

A lead-based paint survey was conducted for the first-floor, the second floor, and the basement as well as the exterior walls of the building. The survey results (Table 1) showed that lead-based paint is present in the following locations:

- Exterior (Figure 4) – South and east walls and bay doors on the south side of the building
- First-floor interior (Figure 4) – Gray window frames on west and east walls of Rooms 3 and 4, orange stripe on north wall of Room 4, yellow bathroom door, gray door into Room 6, blue door between Rooms 4 and 5, and blue cabinet in Room 5.
- Second-floor interior (Figure 5) – Gray wall on north side of Room 7, gray shelving on east, south, and west sides of Room 7.
- Basement interior (Figure 6) – Gray shelving in Room 1.

Lead-in-soil samples were collected between the building foundation and the drip-line along the south and east sides of the building (Figure 4). No soil samples were collected on the north or

west sides of the building because no lead-based paint was found along those walls. The lead concentrations for the sample collected on the south side of the building were below MTG cleanup levels (XRF result of 68.6 ppm and laboratory result of 67.0 mg/kg). The XRF result for the sample collected on the east side of the building was 1,472 ppm lead, exceeding the MTG cleanup level. No laboratory sample was submitted for this location.

3.2.2 Asbestos

Asbestos samples were collected from the following locations:

- OMS-ASB-1 – Ceiling tile fallen from the ceiling of Room 4 (Figure 4 and Photo 2). This sample contained 40% chrysotile asbestos and 60% non-fibrous materials. It is unknown whether this tile covers the ceilings of all the rooms in the building. If it does, the building may contain up to 3,000 square feet of asbestos-containing ceiling tile.
- OMS-ASB-2 – Hard insulation around a stovepipe exiting from the chimney in Room 4 (Figure 4). No asbestos was detected in this sample.
- OMS-ASB-3 – Wallboard from the wall between Rooms 1 and 2 (Figure 6). This sample contained no detectable asbestos and was likely drywall.
- OMS-ASB-4 – Soft, corrugated insulation around piping from the furnace in the basement (Figure 6 and Photo 3). This sample contained 65% chrysotile asbestos and 35% non-fibrous materials. OASIS estimates that there may be as much as 150 linear feet of this insulation covering the piping in the building or of ACM.

3.2.3 Test Pit Soil Sampling

Seven test pits were excavated around the Old Machine Shop at the locations shown in Figure 14. The results of the sampling are included in Table 3.

Test pit OMS-TP1 was located in front of the west bay door on the south side of the building and was excavated to a depth of two feet. The test pit encountered reddish volcanic scoria and a two-inch thick layer of concrete on the north side of the test pit at approximately one foot below ground surface (bgs). The concrete is likely the outer edge of the concrete slab from the building. PID results for samples collected at one foot and two feet bgs were 6.0 and 2.6 ppmv, respectively. The sample from one foot bgs (OMS-TP1-1) was submitted for analysis of DRO/RRO and GRO/BTEX. No sample results from this test pit exceeded MTG cleanup levels.

Test pit OMS-TP2 was located adjacent to the concrete slab extending from the west side of the building in the location of staining seen in a 1993 aerial photo of the site. The pit was excavated to a depth of approximately 2.5 feet and encountered approximately nine inches of reddish volcanic scoria fill overlying older volcanic scoria. PID results for samples collected at one foot, 1.5 feet, and 2.5 feet bgs were 4.4, 2.3, and 3.8 ppmv, respectively. The sample from one foot bgs (OMS-TP2-1) was submitted for analysis of DRO/RRO and GRO/BTEX. No sample results from this test pit exceeded MTG cleanup levels.

Test pit OMS-TP3 was located on the north side of the concrete slab, where the foundation of an UST eroded away and the UST was removed (Andronik Kashevarof, personal communication). The pit was excavated to a depth of approximately three feet and encountered volcanic scoria. PID results for samples collected at one foot, two feet, and three feet bgs were 5.7, 4.2, and 4.6 ppmv, respectively. The sample from one foot bgs (OMS-TP3-1) was submitted for analysis of DRO/RRO and GRO/BTEX. No sample results from this test pit exceeded MTG cleanup levels.

Test pit OMS-TP4 was located on the north side of the building in front of a loading dock area. The pit was excavated to a depth of approximately 2.5 feet and encountered approximately six

inches of reddish volcanic scoria fill overlying older volcanic scoria. PID results for samples collected at one foot, two feet, and 2.5 feet bgs were 13.7, 3.1, and 11.0 ppmv, respectively. The sample from 2.5 feet bgs (OMS-TP4-2.5) was submitted for analysis of DRO/RRO, GRO/BTEX, and VOC. No sample results from this test pit exceeded MTG cleanup levels.

Test pit OMS-TP5 was located on the east side of the building in the approximate area where drums were stored in the 1993 aerial photo. The pit was excavated to a depth of approximately 2.5 feet and encountered volcanic scoria along the east side of the pit and well sorted, black sand on the west side of the pit (closest to the building). Rodney Lekanof, our backhoe operator, mentioned that a previous consultant had excavated a test pit on this same site and the black sand was used as backfill. OASIS collected samples from the volcanic scoria rather than the black sand. PID results for samples collected at one foot, two feet, and 2.5 feet bgs were 2.6, 3.6, and 5.4 ppmv, respectively. The sample from 2.5 feet bgs (OMS-TP5-2.5) was submitted for analysis of DRO/RRO and GRO/BTEX. No sample results from this test pit exceeded MTG cleanup levels.

Test pit OMS-TP6 was located approximately 30 feet from the east side of the building where staining is seen in the 1993 aerial photo. The backhoe encountered a concrete platform at one foot bgs and the excavation was discontinued. One sample was collected from soil atop the concrete slab for PID (6.5 ppmv) and laboratory analysis of DRO/RRO and GRO/BTEX. No sample results from this test pit exceeded MTG cleanup levels.

Test pit OMS-TP7 was located at the southwest corner of the building where drums were stored in the 1993 aerial photo. Again, the backhoe encountered a concrete platform; this time at 1.5 feet bgs. The archeology report discusses the possible origin of this platform, which is believed to connect to the platform in OMS-TP6. The soil in the pit had a noticeable diesel odor. Two samples were collected from the pit: at one foot bgs (PID = 72.8 ppmv) and one at 1.5 feet bgs, atop the concrete platform (PID = 108 ppmv). The deeper sample (OMS-TP7-1.5) was submitted for laboratory analysis of DRO/RRO, GRO/BTEX, VOC, PAH, and RCRA Metals. The DRO result was 2,160 mg/kg, exceeding the MTG cleanup level of 250 mg/kg. The chromium result was 36.7 mg/kg, exceeding the MTG cleanup level of 26 mg/kg. All other analytes were below cleanup levels.

3.3 Cottage D

3.3.1 Lead-based Paint

A lead-based paint survey was conducted for the first-floor, the second floor, and the basement as well as the exterior walls of the building. The survey results (Table 1) showed that lead-based paint is present in the following locations:

- Exterior (Figure 7) – The beige-painted concrete walls and the red-painted concrete stripes,
- First-floor interior (Figure 7) – Yellow door to basement; yellow wall in west side of kitchen, yellow shelf in pantry; white door to linen cupboard; pink and white wall inside linen cupboard; pink door and wall in linen closet; and white ceilings in kitchen, living room, back porch, Bedroom 1 and Bedroom 2,
- Second-floor interior (Figure 8) – White wall and trim on the west side of the stairs; white stair railing; white wall at the top of the stairs (south side); yellow wall at back of closet (top of stairs); white wall inside closet (north side of open area); white door into Bedroom 3; white doors into crawlspace on south side of Bedrooms 3 and 4; white wall at back of closet in Bedroom 4; floor trim on south side of Bedroom 4; and ceilings of Bedrooms 3, 4, and open area at top of stairs, and

- Basement interior (Figure 9) – Yellow wall and ceiling and gray handrail of the stairwell from the first floor.

Lead-in-soil samples were collected between the building foundation and the drip-line along the four exterior walls of the building. The samples were collected where lead-based paint screening results from the walls exceeded 1.0 mg/cm². The results are presented in Table 1 and in Figure 7. The sample on the south side of the building had results below the MTG cleanup level for lead (XRF result of 199.6 ppm and laboratory result of 394 mg/kg). The XRF results for the other three samples ranged from 420.2 to 1,844 ppm lead. The sample from the north side of the building (XRF – 420.2) was submitted for laboratory analysis with a result of 475 mg/kg lead. Both XRF and laboratory results for this sample exceed the cleanup level of 400 mg/kg lead.

3.3.2 Asbestos

Asbestos samples were collected from the following locations:

- CD-ASB-1 – Vinyl flooring from the kitchen, next to the stove (Figure 7),
- CD-ASB-2 – Insulation from the chimney furnace in the basement (Figure 9),
- CD-ASB-3 – Ceiling material from the stairs to the basement (Figure 9), and
- CD-ASB-4 - Wallboard from behind a switch plate in the entryway (Figure 7).

No asbestos was detected in any of the samples.

3.3.3 Test Pit Soil Sampling

Three soil test pits were excavated around Cottage D. The test pit proposed from the northeast corner of the building was not excavated due to the presence of a concrete walkway and possible presence of underground utilities. The test pit proposed for the south side of the building was not excavated due to the presence of underground utilities and an UST (Photo 4).

Test pit CD-TP1 was located approximately ten feet north of the back porch of the residence. The pit was excavated to a depth of approximately 2.5 feet and encountered volcanic sand and gravel as well as seal bones and ceramic pottery fragments. The pottery fragments are discussed in the archeological report. PID results for samples collected at one foot, two feet, and 2.5 feet bgs were 4.1, 4.3, and 4.1 ppmv, respectively. The sample from two feet bgs (CD-TP1-2) was submitted for analysis of DRO/RRO and GRO/BTEX. No environmental sample results from this test pit exceeded MTG cleanup levels.

Test pit CD-TP2 was located approximately six feet from the northwest corner of the residence. The pit was excavated to a depth of approximately two feet and encountered volcanic sand and gravel as well as seal bones and ceramic pottery fragments. The pottery fragments are discussed in the archeological report. PID results for samples collected at one foot and two feet bgs were 4.0 and 4.0 ppmv, respectively. The sample from one foot bgs (CD-TP2-1) was submitted for analysis of DRO/RRO and GRO/BTEX. No environmental sample results from this test pit exceeded MTG cleanup levels.

Test pit CD-TP3 was located in the driveway on the east side of the residence approximately 4 feet east of the UST vent and fill pipes (Photo 5). The pit was excavated to a depth of approximately two feet and encountered volcanic sand and gravel with a two-inch layer of reddish scoria and black sand at one foot bgs. PID results for samples collected at one foot and two feet bgs were 6.3 and 2.4 ppmv, respectively. The sample from one foot bgs (CD-TP3-1) was submitted for analysis of DRO/RRO, GRO/BTEX, VOC, PAH, and RCRA Metals. The

chromium concentration in the sample was 36.7 mg/kg, exceeding the MTG cleanup level of 26mg/kg chromium. No other analytes from this sample exceeded cleanup levels.

3.4 The Coal House

3.4.1 Lead-based Paint

A lead-based paint survey was conducted for exterior and first floor of the building. The survey showed that lead-based paint is present in the following locations on the exterior of the building only (Table 1 and Figure 10):

- White concrete on the west and east side of the building, white wood siding on the west and east sides of the building, red graffiti on the south side of the building, and faded green-painted concrete, east of the middle bay door on the north side of the building

Lead-in-soil samples were collected between the building foundation and the drip-line along the four exterior walls of the building. The samples were collected where lead-based paint screening results exceeded 1.0 mg/cm². The results are presented in Table 1 and in Figure 10. The samples from the west and the north sides of the building (XRF results of 209.3 and 5,288 ppm lead, respectively) were submitted for laboratory analysis. The corresponding laboratory results were 415 and 6,830 mg/kg lead, respectively. The XRF results for the samples collected on the other three sides of the building ranged from 2,965 to 5,288 ppm lead. These three samples were not submitted for laboratory analysis.

3.4.2 Asbestos

No suspected ACM was found at the Coal House.

3.4.3 Test Pit Soil Sampling

No test pits were excavated around the Coal House because the soil on the property has already been adequately assessed for petroleum hydrocarbon contamination (Hart Crowser, 1997) and the DEC has issued NFRAP status for the site (DEC, 2006).

3.5 Cottage G

3.5.1 Lead-based Paint

A lead-based paint survey was conducted for the first-floor and second floor as well as the exterior walls of the building. The survey showed that lead-based paint is present in the following locations:

- Exterior (Figure 11) – North, west, and east walls of the building and green paint on the door into the storage area and on the trim on the northeast corner of the building,
- First-floor apartment (Figure 11) – White paint on the concrete chimney in the furnace room,
- First-floor storage (Figure 11) – White walls in the storage rooms (middle room not accessible and not surveyed); blue, gray, and white paint on the walls of the storage area hallway; and gray paint on the stairs to the second floor, and
- Second-floor apartment (Figure 12) – Blue paint on the wall of the foyer, blue paint on the door to the kitchen, and yellow paint on the majority of the walls and ceilings of the bathroom, living room and dining room. No lead-based paint was found in the kitchen or bedroom.

Lead-in-soil samples were collected between the building foundation and the drip-line along the north, west, and east sides of the building. No soil samples were collected on the south side of the building because no lead-based paint was found along that wall. The results are presented in Table 1 and in Figure 11. The lead concentrations for the sample collected on the east side of the building were below MTG cleanup levels of 400 mg/kg (XRF result of 79.5 ppm and laboratory result of 69.1 mg/kg). The XRF result for the sample collected on the east side of the building was 350.6 ppm lead, below the cleanup level. The corresponding analytical result for this sample was 451 mg/kg lead, exceeding the cleanup level. The XRF result for the sample collected on the north side of the building was 2,838 ppm lead, exceeding the cleanup level. This sample was not submitted for laboratory analysis.

3.5.2 Asbestos

Asbestos samples were collected from the following locations:

- CG-ASB-1 – Flooring from the entrance to the furnace room in the first-floor apartment (Figure 11 and Photo 6). The flooring contained 30% asbestos and 70% non-fibrous material. The flooring covers the first floor apartment (approximately 750 square feet of flooring).
- CG-ASB-2 – Floor tile from the bedroom in the second-floor apartment (Figure 12 and Photo 7). The tile contained 10% asbestos and 90% non-fibrous materials. This floor tile covers the entire floor of the second floor apartment (approximately 1,500 square feet).
- CG-ASB-3 – Backing to the wood siding on the front porch of the first-floor apartment (Figure 11). This sample contained no detectable asbestos.
- CG-ASB-4 – Backing to the plywood in the first-floor storage area (Figure 11). This sample contained no detectable asbestos.

3.5.3 Test Pit Soil Sampling

No test pits were excavated around Cottage G because the site has already been adequately assessed (Hart Crowser, 2006) and remedial action has been completed for petroleum hydrocarbon impacted soil at the site (Tetra Tech, 2005). The DEC has issued NFRAP status for the site soil (DEC, 2006).

4 QUALITY ASSURANCE REVIEW

The analytical results for all field, laboratory quality assurance (QA), and quality control (QC) samples were evaluated. The data was reviewed to determine the integrity of the reported analytical results and ensure they met data quality objectives. The guidelines for data review are outlined in the Quality Assurance Project Plan (OASIS 2006a).

OASIS delivered the test pit soil samples to Test America, Inc. (formerly North Creek Analytical) in Anchorage, Alaska on May 123, 2006. The laboratory received the shipment with interior cooler temperatures within the range of 2.0° to 6.0° Celsius. All of the samples collected were analyzed within acceptable holding times resulting in 100% completeness.

One trip blank was submitted for analysis of BTEX and one for VOCs. No BTEX or VOCs were detected in the trip blanks.

Surrogate recoveries were within acceptable recovery ranges for all organic analyses.

Laboratory control samples and duplicates, and matrix spike (MS) and matrix spike duplicate (MSD) samples were within acceptable limits for all analytical methods except PAH and GRO/BTEX. The PAH MS and MSD recoveries were high and the GRO/BTEX MS recoveries were low. The recovery discrepancies were attributed to matrix interference and the data have not been qualified.

Method blank samples were analyzed in the laboratory with each batch of samples to evaluate instrument and systematic laboratory preparation contamination. Method blanks did not contain any analytes at concentrations above their respective reporting limits.

The laboratory QC notes state that the internal standard associated with the PAH analysis for OMS-TP7-1.5 was above acceptance criteria for acenaphthene, acenaphthalene, fluoranthene, 1-methylnaphthalene, 2-methylnaphthalene, and naphthalene. This discrepancy suggests that the actual concentrations of these analytes may be lower than reported. The results the two analytes detected above reporting limits (1- and 2-methylnaphthalene) have been qualified “J” as estimated. The results for the other four analytes were below reporting limits and have not been qualified.

The laboratory QC notes state that the calibration verification standard associated with the VOC analyses was below acceptance criteria for acetone, 1,2-dibromo-3-chloropropane, and naphthalene. This discrepancy suggests that the actual concentrations of these compounds may be higher than reported. None of the samples contained detectable concentrations of these compounds and, given that the remaining VOC compounds are below reporting limits, it is assumed that the non-detect results for the three compounds reflect actual conditions.

Duplicate samples were collected for all soil analyses. The table below shows the association between duplicate and parent samples for each analysis.

Duplicate ID	Parent ID	DRO / RRO	GRO / BTEX	VOC	PAH	RCRA Metals	Lead
TP-DUP1	EP-TP-2	X					
TP-DUP2	OMS-TP7-1.5	X					
TP-DUP3	EP-TP4-0.5		X				
TP-DUP4	EP-TP1-1		X				

Duplicate ID	Parent ID	DRO RRO	/ GRO BTEX	VOC	PAH	RCRA Metals	Lead
TP-DUP5	OMS-TP4-2.5			X			
TP-DUP6	CD-TP3-1					X	
TP-DUP7	EP-TP3-0.5				X		
SS-DUP1	CD-SS-C						X

Relative percent differences (RPD) were calculated for results where analyte concentrations were at least ten-times the reporting limit. The only results to fall within this category included DRO and RRO for OMS-TP7-1.5; barium, chromium, and lead results for CD-TP3-1; and lead results for CD-SS-C. For the DRO and RRO results, RPDs for the duplicate pair were 10% and 56.3%, respectively. For the RCRA metals, the RPDs for barium, chromium, and lead were 54%, 17%, and 21%, respectively. The RPDs for lead in CD-SS-C and its duplicate was 34%. The RPDs for RRO and barium exceeded the precision limits assigned in the project Quality Assurance Project Plan (QAPP). These exceedances are insignificant because the RRO concentration in OMS-TP7-1.5 is well above the cleanup level and the barium concentration is well below the cleanup level. The DRO, chromium and lead RPDs are within limits established for the project.

The primary sample EP-TP-1 contained 0.0197 mg/kg benzene and the corresponding duplicate sample (TP-DUP4) contained 0.0293 mg/kg benzene. The primary sample results are at the DEC cleanup level of 0.02 mg/kg and the duplicate sample results are slightly, but not significantly, above the cleanup level.

5 CONCLUSIONS AND RECOMMENDATIONS

The Phase II ESA produced the following results:

- Lead-based paint is present on all five of the buildings
- Lead-in-soil associated with peeling paint is present on at least one side of each of the buildings. Due to time limitations, the lateral and vertical extent of the lead-in-soil was not thoroughly delineated. Lead-based paint in soil is generally restricted to within the drip-line of the building and within the top two inches of soil (EPA, 1995). For removal purposes, it may be practical to remove soil up to two lateral feet from the building and to a depth of at least one foot (two cubic feet of soil per linear foot of foundation).

The Coal House has lead-in-soil cleanup level exceedances on all four sides of the building. The estimated volume of lead impacted soil around the building is approximately 17 cubic yards

Cottage G has lead-in-soil cleanup level exceedances on three sides of the building. The estimated volume of lead impacted soil around the building is approximately 10 cubic yards.

Cottage D has lead-in-soil cleanup level exceedances on all four sides of the building. The estimated volume of lead impacted soil around the building is approximately 11 cubic yards.

The Old Machine Shop has lead-in-soil cleanup level exceedances on only two sides of the building. Local residents state that fill has been added to the waterfront area (around the Old Machine Shop and the E&P Shop). Evidence of fill in the test pits suggest that the fill layer may be approximately one-foot thick. Lead-in-soil impacts may extend deeper in this area. Consequently the removal depth around the Old Machine Shop and the E&P Shop should be increased to 1.5 feet bgs. The estimated volume of lead impacted soil around the Old Machine Shop, therefore, is approximately 12 cubic yards.

The E&P shop has lead-in-soil cleanup level exceedances on three sides of the building. The estimated volume of lead impacted soil around the building, assuming a depth of 1.5 feet, is approximately 19 cubic yards.

- ACM are present in Cottage G and in the Old Machine Shop. Cottage G contains approximately 750 square feet of asbestos-containing sheet flooring and 1,500 square feet of asbestos-containing floor tile. The Old Machine Shop contains approximately 3,000 square feet of asbestos-containing ceiling tile and 150 linear feet of asbestos-containing piping insulation. No ACM was found in Cottage D, the Coal House, or the E&P Shop.
- The DRO concentration in sample OMS-TP7-1.5 collected from Test Pit 7 at the Old Machine Shop was 2,160 mg/kg, exceeding DEC method two, MTG cleanup levels. The soil in this test pit had a noticeable diesel odor. The sample was collected from the bottom of the test pit, which was just above a concrete platform. The soil below the concrete platform was not accessible.

Due to time limitations, the distribution of DRO contaminated soil was not thoroughly delineated. Based on the location of drum storage in the 1993 aerial photo (Figure 14), the DRO impacted soil may cover an area of approximately 250 square feet. Assuming the concrete platform, encountered at 1.5 feet bgs in OMS-TP7, extends beneath the

entire drum storage area, the volume of impacted soil may be approximately 14 cubic yards.

- The benzene concentration in test pit sample EP-TP6-1.5 was 0.42 mg/kg, exceeding the DEC method two, MTG cleanup level of 0.02 mg/kg. No other analytes from this sample exceeded the cleanup level and no staining or obvious source areas were observed around the test pit. The E&P Shop is within approximately 25 feet of the ocean, suggesting that saltwater intrusion is likely in the groundwater beneath the building, which precludes the use of the groundwater for drinking water. Therefore, the MTG pathway is not complete and the appropriate cleanup level for benzene at the E&P Shop is 9 mg/kg (the DEC method two, inhalation cleanup level). The benzene concentration in EP-TP6-1.5 is below this cleanup level.
- Sample EP-TP3-0.5 contained 62.8 mg/kg chromium and 39.9 mg/kg selenium, exceeding the MTG cleanup levels of 26 and 3.5 mg/kg, respectively. As noted above, the proximity of the E&P Shop to the ocean precludes the use of groundwater for drinking water at the site. Consequently, it is appropriate to use the method two, ingestion cleanup levels for chromium and selenium of 300 and 510 mg/kg, respectively. The concentrations of these two metals in sample EP-TP3-0.5 are below the ingestion cleanup levels.
- Samples OMS-TP7-1.5 and CD-TP3-1 contained 50.5 and 36.7 mg/kg chromium, respectively, exceeding the MTG cleanup level of 26 mg/kg. It is likely that these chromium concentrations are within the naturally occurring levels associated with the surrounding mafic volcanic rocks. Naturally occurring chromium in Alaska soils has been found to range from 5 to 390 mg/kg with an arithmetic mean of 64 mg/kg (Gough, 1988). In addition, the average abundance for chromium in basalt, the rock type in St. George, is twice as high as the average crustal abundance of chromium (Krauskopf, 1979).

Based upon the findings of this ESA, OASIS recommends the following:

- Removal of approximately 14 cubic yards of petroleum-impacted soil east of the Old Machine Shop.
- Development of a mitigation strategy for the lead-based paint.
- Removal of approximately 70 cubic yards of lead-impacted soil around the building foundations.
- Development of a management plan for non-friable ACM. The flooring in the Cottage G apartments (2,250 square feet) and the ceiling tile in the Old Machine Shop (3,000 square feet) are non-friable.
- Removal of approximately 150 linear feet of soft, corrugated insulation around the piping in the Old Machine Shop.
- Development of a management plan for the fluorescent light ballasts, based on the assumption that they contain polychlorinated biphenyls (PCBs). The ballasts should be fine as long as they are not leaking. Once the ballasts fail, they should be disposed of properly.

6 REFERENCES

- Alaska Department of Environmental Conservation (DEC), 2006. *Contaminated Sites Database*. www.dec.state.ak.us/spar/csp/search/default.asp. June 1, 2006.
- Gough, L.P., Severson, R.C., and Shacklette, H.T., 1988. *Element Concentrations in Soils and Other Surficial Materials of Alaska*. U.S. Geological Survey Professional Paper 1458. 53 p.
- Hart Crowser, 1997. *Expanded Site Inspection, St. George Island, Pribilof Islands, Alaska*. January, 1997.
- Krauskopf, 1979. *Introduction to Geochemistry, Second Edition*. p. 545.
- OASIS Environmental (OASIS), 2006a. *Phase I Environmental Site Assessment – Village of St. George – Five Historic Buildings*. June 2006.
- OASIS, 2006b. *Phase II Environmental Assessment Work Plan - Village of St. George – Five Historic Buildings*. May 17, 2006.
- OASIS, 2006c. *Quality Assurance Project Plan – Village of St. George – Five Historic Buildings*. May 2006.
- Tetra Tech EM Inc. (Tetra Tech), 2005. *Draft Corrective Action Report, Site 9 / TPA Site 9 – Old Power Plant, St. George Island*. May 27, 2005.
- U.S. Environmental Protection Agency (EPA), 1995. *Residential Sampling for Lead: Protocols for Dust and Soil Sampling Final Report*. March 29, 1995.

TABLES

Table 1
Lead-based Paint and Lead-in-Soil Screening and Analytical Results
Village of St. George
May 2006

Lead-Based Paint Screening Results									Lead-in-Soil Results		
Building	Floor	Side	Room	Component	Substrate	Color	Results	Lead-in-Paint Result (mg/cm ²)	Lead-in-Soil Sample ID	XRF Screening Results (ppm Pb)	Laboratory Results (mg/kg Pb)
E&P Shop	Exterior	A	N/A	Wall	Wood	Yellow	Negative	0.07 ± 0.05			
E&P Shop	Exterior	A/D	N/A	Door	Metal	Yellow	Negative	0.09 ± 0.04			
E&P Shop	Exterior	A	N/A	Door	Wood	Yellow	Negative	0.03 ± 0.03			
E&P Shop	Exterior	A	N/A	Door Trim	Wood	Yellow	Negative	0 ± 0.02			
E&P Shop	Exterior	A/D	N/A	Main Door	Metal	White	Negative	0 ± 0.02			
E&P Shop	Exterior	A/D	N/A	Door	Wood	White	Negative	0 ± 0.02			
E&P Shop	Exterior	A/D	N/A	Electric Box	Metal	Yellow	Negative	0 ± 0.02			
E&P Shop	Exterior	A/B	N/A	Wall	Concrete	Yellow	Positive	10.6 ± 1.4	EP-SS-A	325.4 ± 32	235
E&P Shop	Exterior	B/A	N/A	Wall	Concrete	Yellow	Positive	1.8 ± 0.6	EP-SS-B	1,645 ± 63	
E&P Shop	Exterior	B/A	N/A	Wall	Concrete	Yellow	Negative	0.4 ± 0.1			
E&P Shop	Exterior	B/A	N/A	Wall	Wood	Yellow	Negative	0.5 ± 0.4			
E&P Shop	Exterior	B	N/A	Window	Wood	Yellow	Negative	0.01 ± 0.02			
E&P Shop	Exterior	B	N/A	Wall	Concrete	Yellow	Positive	1.4 ± 0.2			
E&P Shop	Exterior	B/C	N/A	Door	Wood	Yellow	Negative	0.5 ± 0.1			
E&P Shop	Exterior	B/C	N/A	Wall	Wood	Yellow	Negative	0.02 ± 0.02			
E&P Shop	Exterior	B/C	N/A	Wall	Concrete	Yellow	Positive	1.4 ± 0.2			
E&P Shop	Exterior	C	N/A	Wall	Concrete	Yellow	Positive	8 ± 1.2	EP-SS-C	9,710 ± 32	
E&P Shop	Exterior	C	N/A	Wall	Wood	Yellow	Negative	0.5 ± 0.1			
E&P Shop	Exterior	C	N/A	Window	Plywood	Yellow	Negative	0.01 ± 0.02			
E&P Shop	Exterior	C/D	N/A	Wall	Concrete	Yellow	Negative	0.09 ± 0.03			
E&P Shop	Exterior	C/D	N/A	Wall	Concrete	Yellow	Positive	1.6 ± 0.4			
E&P Shop	Exterior	D	N/A	Wall	Concrete	Yellow	Negative	0.8 ± 0.1			
E&P Shop	Exterior	D	N/A	Wall	Wood	Yellow	Negative	0.6 ± 0.1			
E&P Shop	1st	D	1	Door Trim	Wood	White	Negative	0.13 ± 0.08			
E&P Shop	1st	D	1	Door Trim	Wood	Green	Negative	0.6 ± 0.1			
E&P Shop	1st	C	1	Door Trim	Wood	Green	Negative	0.12 ± 0.03			
E&P Shop	1st	C	1	Door	Wood	Green	Negative	0.28 ± 0.07			
E&P Shop	1st	C	1	Shelf	Wood	Gray	Negative	0.04 ± 0.02			
E&P Shop	1st		1	Post	Wood	Orange	Negative	0.07 ± 0.02			
E&P Shop	1st	D	1	Stairs	Wood	White	Positive	19.2 ± 1.7			
E&P Shop	1st	A	2	Door Trim	Wood	Blue	Positive	1.4 ± 0.1			
E&P Shop	1st	A	2	Wall	Wood	White	Negative	0.01 ± 0.02			
E&P Shop	1st	A	2	Wall	Wood	Yellow	Negative	0.03 ± 0.03			
E&P Shop	1st	D	2	Wall	Wood	Yellow	Negative	0.01 ± 0.02			
E&P Shop	1st	C	2	Wall	Concrete	Red	Positive	2.2 ± 0.5			
E&P Shop	1st	C	2	Wall	Pegboard	Yellow	Negative	0.01 ± 0.02			
E&P Shop	1st	C	2	Window	Wood	Green	Negative	0.7 ± 0.1			
E&P Shop	1st	C	2	Shelf	Wood	Red	Negative	0.9 ± 0.1			
E&P Shop	1st	C	2	Wall	Wood	Blue	Negative	0.04 ± 0.03			
E&P Shop	1st	C	3	Shelf	Wood	Gray	Negative	0.02 ± 0.02			
Old Machine Shop	Exterior	A	N/A	Door Trim	Metal	Red	Negative	0.05 ± 0.06			
Old Machine Shop	Exterior	A	N/A	Wall	Concrete	Beige	Positive	12.8 ± 1.6	OMS-SS-A	68.6 ± 22	67.0
Old Machine Shop	Exterior	A	N/A	Door	Wood	Beige	Positive	2.2 ± 0.3			
Old Machine Shop	Exterior	A/B	N/A	Door	Wood	Beige	Positive	1.5 ± 0.2			
Old Machine Shop	Exterior	A/B	N/A	Door Trim	Wood	Red	Positive	1.6 ± 0.2			
Old Machine Shop	Exterior	B	N/A	Wall - below 4 ft.	Concrete	Beige	Negative	0.09 ± 0.02			
Old Machine Shop	Exterior	B	N/A	Wall	Concrete	Beige	Negative	0.13 ± 0.04			
Old Machine Shop	Exterior	B	N/A	Window	Wood	Beige	Negative	0.08 ± 0.04			
Old Machine Shop	Exterior	B	N/A	Slab	Concrete	White	Negative	0.02 ± 0.65			
Old Machine Shop	Exterior	B/C	N/A	Wall	Concrete	Beige	Negative	0.23 ± 0.05			
Old Machine Shop	Exterior	C	N/A	Wall	Concrete	Beige	Negative	0.3 ± 0.06			

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Building	Floor	Side	Room	Component	Substrate	Color	Results	Lead-in-Paint Result (mg/cm ²)	Lead-in-Soil Sample ID	XRF Screening Results (ppm Pb)	Laboratory Results (mg/kg Pb)
Old Machine Shop	Exterior	C	N/A	Window	Wood	Beige	Negative	0.05 ± 0.03			
Old Machine Shop	Exterior	D	N/A	Wall	Concrete	Beige	Positive	3.1 ± 0.4			
Old Machine Shop	Exterior	D/C	N/A	Wall	Concrete	Beige	Positive	3.2 ± 0.3	OMS-SS-D	1,472 ± 58	
Old Machine Shop	Exterior	D	N/A	Window	Wood	Beige	Negative	0.11 ± 0.06			
Old Machine Shop	Exterior	D	N/A	Conduit	Metal	Beige	Negative	0 ± 0.02			
Old Machine Shop	Exterior	D/A	N/A	Wall	Concrete	Beige	Positive	3.2 ± 0.4			
Old Machine Shop	Exterior	B	N/A	Wall	Concrete	Beige	Negative	0.4 ± 0.1			
Old Machine Shop	Exterior	A	N/A	Wall	Concrete	Beige	Positive	4.5 ± 0.8			
Old Machine Shop	Basement	A	1	Wall	Concrete	Gray	Negative	0.01 ± 0.02			
Old Machine Shop	Basement	B	1	Wall	Concrete	Gray	Negative	0 ± 0.02			
Old Machine Shop	Basement	C	1	Wall	Drywall	Gray	Negative	0 ± 0.02			
Old Machine Shop	Basement	C	1	Wall	Concrete	Gray	Negative	0.4 ± 0.1			
Old Machine Shop	Basement	D	1	Wall	Concrete	Gray	Negative	0.19 ± 0.65			
Old Machine Shop	Basement	A	1	Shelves	Wood	Gray	Positive	1.7 ± 0.2			
Old Machine Shop	Basement	A	1	Mounting Board	Wood	Gray	Negative	0 ± 0.02			
Old Machine Shop	Basement	A	2	Wall	Drywall	Gray	Negative	0 ± 0.02			
Old Machine Shop	Basement	B	2	Wall	Concrete	Gray	Negative	0 ± 0.02			
Old Machine Shop	Basement	C	2	Wall	Concrete	Gray	Negative	0 ± 0.02			
Old Machine Shop	Basement	D	2	Wall	Concrete	Gray	Negative	0 ± 0.02			
Old Machine Shop	Basement	A	2	Door	Metal	Gray	Negative	0 ± 0.02			
Old Machine Shop	Basement	A	2	Post	Concrete	Yellow	Negative	0.24 ± 0.04			
Old Machine Shop	Basement	B	Stair	Wall	Concrete	Gray	Negative	0.13 ± 0.03			
Old Machine Shop	Basement	B	Stair	Wall	Wood	Gray	Negative	0.14 ± 0.04			
Old Machine Shop	Basement	B	Stair	Upper wall	Wood	Gray	Negative	-0.06 ± 0.56			
Old Machine Shop	1st	C	Stair	Wall	Wood	Gray	Negative	0.4 ± 0.1			
Old Machine Shop	1st	A	3	Door	Wood	White	Negative	0.01 ± 0.02			
Old Machine Shop	1st	A	3	Wall	Concrete	White	Negative	0.07 ± 0.03			
Old Machine Shop	1st	A	3	Door	Wood	White	Negative	0.04 ± 0.05			
Old Machine Shop	1st	B	3	Wall	Concrete	White	Negative	0.08 ± 0.02			
Old Machine Shop	1st	C	3	Wall	Concrete	White	Positive	1.2 ± 0.1			
Old Machine Shop	1st	C	3	Wall - support	Concrete	White	Negative	0.7 ± 0.1			
Old Machine Shop	1st	B	3	Shutter	Wood	White	Negative	0.02 ± 0.03			
Old Machine Shop	1st	D	3	Wall	Concrete	White	Negative	0.11 ± 0.03			
Old Machine Shop	1st	D	3	Window	Wood	Gray	Positive	1.4 ± 0.1			
Old Machine Shop	1st	A	4	Wall	Concrete	Yellow	Negative	0.19 ± 0.04			
Old Machine Shop	1st	B	4	Wall	Concrete	Yellow	Negative	0.23 ± 0.05			
Old Machine Shop	1st	B	4	Window	Wood	Gray	Positive	1.4 ± 0.4			
Old Machine Shop	1st	B	4	Shutter	Wood	Yellow	Negative	0.02 ± 0.02			
Old Machine Shop	1st	B	4	Wall	Wood	White	Negative	0.01 ± 0.02			
Old Machine Shop	1st	C	4	Wall	Concrete	Gray	Positive	1.5 ± 0.2			
Old Machine Shop	1st	C	4	Wall	Concrete	Orange	Positive	1.3 ± 0.1			
Old Machine Shop	1st	C	4	Window	Concrete	Gray	Negative	0 ± 0.02			
Old Machine Shop	1st	D	4	Door	Wood	Yellow	Positive	10.9 ± 1			
Old Machine Shop	1st	D	4	Wall	Concrete	White	Negative	0.9 ± 0.1			
Old Machine Shop	1st	D	4	Wall	Concrete	Gray	Negative	0.15 ± 0.03			
Old Machine Shop	1st	D	4	Wall	Concrete	Yellow	Negative	0.16 ± 0.05			
Old Machine Shop	1st	C	Bath	Wall	Concrete	Beige	Negative	0.24 ± 0.05			
Old Machine Shop	1st	A	5	Wall	Concrete	Blue	Negative	0.18 ± 0.07			
Old Machine Shop	1st	B	5	Wall	Concrete	Blue	Negative	0.12 ± 0.48			
Old Machine Shop	1st	B	5	Door	Wood	Blue	Positive	9.6 ± 1.1			
Old Machine Shop	1st	B	5	Cabinet	Wood	Blue	Positive	11.4 ± 0.9			

Table 1
Lead-based Paint and Lead-in-Soil Screening and Analytical Results
Village of St. George
May 2006

Lead-Based Paint Screening Results									Lead-in-Soil Results		
Building	Floor	Side	Room	Component	Substrate	Color	Results	Lead-in-Paint Result (mg/cm ²)	Lead-in-Soil Sample ID	XRF Screening Results (ppm Pb)	Laboratory Results (mg/kg Pb)
Old Machine Shop	1st	D	5	Wall	Concrete	Blue	Negative	0.26 ± 0.6			
Old Machine Shop	1st	D	5	Window	Wood	Blue	Negative	0.03 ± 0.03			
Old Machine Shop	1st	D	6	Door	Wood	Gray	Positive	8 ± 2.3			
Old Machine Shop	1st	A	6	Wall	Wood	Gray	Negative	0.19 ± 0.05			
Old Machine Shop	1st	A	6	Wall	Concrete	Gray	Negative	0.09 ± 0.02			
Old Machine Shop	1st	B	6	Wall	Concrete	Gray	Negative	0.14 ± 0.03			
Old Machine Shop	1st	B	6	Wall	Wood	Gray	Negative	0.15 ± 0.04			
Old Machine Shop	1st	C	6	Wall	Wood	Gray	Negative	0.18 ± 0.05			
Old Machine Shop	1st	C	6	Wall	Concrete	Gray	Negative	0.15 ± 0.03			
Old Machine Shop	1st	D	6	Wall	Concrete	Gray	Negative	0.14 ± 0.04			
Old Machine Shop	1st	D	6	Wall	Wood	Gray	Negative	0.18 ± 0.05			
Old Machine Shop	1st	D	4	Steps	Wood	Gray	Negative	0.01 ± 0.02			
Old Machine Shop	1st	D	4	Shelf	Wood	White	Negative	0.14 ± 0.07			
Old Machine Shop	Stair	D	Stair	Wall	Concrete	Gray	Negative	0.16 ± 0.03			
Old Machine Shop	Stair	D	Stair	Wall	Concrete	Beige	Negative	0.09 ± 0.06			
Old Machine Shop	Stair	D	Stair	Steps	Concrete	Beige	Negative	0.01 ± 0.02			
Old Machine Shop	2nd	C	7	Wall	Wood	Gray	Positive	1.6 ± 0.2			
Old Machine Shop	2nd	C	7	BkCse	Wood	White	Negative	0 ± 0.02			
Old Machine Shop	2nd	C	7	Wall	Wood	Gray	Positive	2.1 ± 0.2			
Old Machine Shop	2nd	D	7	Shelf	Wood	Gray	Positive	2.2 ± 0.2			
Old Machine Shop	2nd	A	7	Shelf	Wood	Gray	Positive	1.9 ± 0.2			
Old Machine Shop	2nd	A	7	Wall	Wood	Gray	Positive	1.9 ± 0.2			
Old Machine Shop	2nd		7	Stair Rail	Wood	White	Negative	0.02 ± 0.03			
Cottage D	Exterior	A	1st	Wall	Concrt	Beige	Negative	0.27 ± 0.15			
Cottage D	Exterior	A	1st	Wall	Concrt	Red	Positive	3.7 ± 0.8			
Cottage D	Exterior	A	1st	Railing	Wood	Red	Negative	0.07 ± 0.16			
Cottage D	Exterior	A	1st	Post	Wood	Red	Negative	0.3 ± 0.2			
Cottage D	Exterior	A	1st	Door Trim	Wood	Red	Negative	0 ± 0.02			
Cottage D	Exterior	A	Basement	Window Trim	Wood	Red	Negative	0 ± 0.02			
Cottage D	Exterior	A	Basement	Wall Stripe	Concrt	Red	Positive	2.8 ± 0.7	CD-SS-A	199.6 ± 27	394
Cottage D	Exterior	A	Basement	Window Trim	Wood	Beige	Negative	0.01 ± 0.02			
Cottage D	Exterior	B	Basement	Window Trim	Wood	Beige	Negative	0 ± 0.02			
Cottage D	Exterior	B	Basement	Porch Siding	Wood	Beige	Negative	0.02 ± 0.04			
Cottage D	Exterior	B	Basement	Electric Box	Plastic	Red	Negative	0 ± 0.06			
Cottage D	Exterior	B	Basement	Door	Wood	Beige	Negative	0.02 ± 0.05			
Cottage D	Exterior	B	Basement	Door Trim	Wood	Red	Negative	0 ± 0.02			
Cottage D	Exterior	B	Basement	Wall	Wood	Beige	Positive	1.3 ± 0.2	CD-SS-B	1,444 ± 61	
Cottage D	Exterior	C	Basement	Wall	Concrt	Beige	Positive	3 ± 0.3	CD-SS-C	420.2 ± 27	475
Cottage D	Exterior	C	Basement	Wall Stripe	Concrt	Red	Positive	2.4 ± 0.5			
Cottage D	Exterior	C	1st	Railing	Wood	Beige	Negative	0.05 ± 0.05			
Cottage D	Exterior	C	1st	Porch Steps	Wood	Green	Positive	2 ± 0.4			
Cottage D	Exterior	C	1st	Door	Wood	Beige	Negative	0 ± 0.02			
Cottage D	Exterior	C	1st	Door Trim	Wood	Brown	Negative	0 ± 0.02			
Cottage D	Exterior	C	1st	Door Trim	Wood	Red	Negative	0.01 ± 0.02			
Cottage D	Exterior	C	1st	Window Border	Wood	Beige	Negative	0 ± 0.02			
Cottage D	Exterior	D	1st	Wall	Concrt	Beige	Negative	0.4 ± 0.2			
Cottage D	Exterior	D	Basement	Wall	Concrt	Beige	Positive	1.6 ± 0.2			
Cottage D	Exterior	D	1st	Wall Stripe	Concrt	Red	Positive	4 ± 1.3	CD-SS-D	1,844 ± 80	
Cottage D	Exterior	D	1st	Wall	Concrt	Red	Negative	0.07 ± 0.04			
Cottage D	Exterior	D	1st	Trim	Concrt	Red	Negative	0.04 ± 0.04			
Cottage D	Exterior	D	1st	Window	Concrt	Beige	Negative	0.03 ± 0.04			

Table 1
Lead-based Paint and Lead-in-Soil Screening and Analytical Results
Village of St. George
May 2006

Lead-Based Paint Screening Results									Lead-in-Soil Results		
Building	Floor	Side	Room	Component	Substrate	Color	Results	Lead-in-Paint Result (mg/cm ²)	Lead-in-Soil Sample ID	XRF Screening Results (ppm Pb)	Laboratory Results (mg/kg Pb)
Cottage D	Exterior	D	1st	Meter Box	Metal	Red	Negative	0 ± 0.02			
Cottage D	Exterior	D	1st	Eave	Wood	Red	Negative	0.3 ± 0.14			
Cottage D	1st	D	Foyer	Wall	Wood	Beige	Negative	0.5 ± 0.5			
Cottage D	1st	B	Foyer	Cbnet Door	Wood	Beige	Negative	0.06 ± 0.04			
Cottage D	1st	B	Foyer	Coat Hanger	Wood	White	Negative	0 ± 0.02			
Cottage D	1st	A	Foyer	Baseboard Trim	Wood	Beige	Negative	0 ± 0.02			
Cottage D	1st	A	Foyer	Window	Wood	Beige	Negative	0 ± 0.02			
Cottage D	1st	D	Foyer	Wall	Wood	Beige	Negative	0 ± 0.02			
Cottage D	1st	C	Foyer	Door	Wood	Yellow	Positive	12.5 ± 2.8			
Cottage D	1st	C	Kitch	Wall	Drywall	White	Negative	0 ± 0.02			
Cottage D	1st	C	Kitch	Pantry	Drywall	Yellow	Negative	0.23 ± 0.06			
Cottage D	1st	C	Kitch	Pantry Door	Drywall	Yellow	Negative	0.19 ± 0.1			
Cottage D	1st	C	Kitch	Pantry Door	Wood	Yellow	Negative	0.3 ± 0.07			
Cottage D	1st	C	Kitch	Pantry Interior	Wood	Yellow	Positive	2.2 ± 0.5			
Cottage D	1st	C	Kitch	Pantry Shelf	Wood	Yellow	Positive	3.4 ± 0.8			
Cottage D	1st	C	Kitch	Pantry Drawers	Wood	Yellow	Negative	0.3 ± 0.09			
Cottage D	1st	C	Kitch	Cbnet	Wood	Yellow	Negative	0.26 ± 0.11			
Cottage D	1st	C	Kitch	Cbnet Interior	Wood	Yellow	Negative	0.1 ± 0.04			
Cottage D	1st	C	Kitch	Cbnet Interior	Wood	White	Negative	0.12 ± 0.06			
Cottage D	1st	B	Kitch	Floor Trim	Wood	White	Negative	0 ± 0.02			
Cottage D	1st	C	Kitch	Baseboard Trim	Wood	White	Negative	0.7 ± 0.3			
Cottage D	1st	C	Kitch	Door Trim	Wood	White	Negative	0.21 ± 0.34			
Cottage D	1st	A	LivRm	Wall	Drywall	White	Negative	0 ± 0.02			
Cottage D	1st	A	LivRm	Floor Trim	Wood	White	Negative	0 ± 0.02			
Cottage D	1st	C	LivRm	Door	Wood	Brown Stain	Negative	0.02 ± 0.03			
Cottage D	1st	C	Back Porch	Door	Wood	Brown	Negative	0 ± 0.02			
Cottage D	1st	D	Bdrm2	Wall	Drywall	White	Negative	0 ± 0.02			
Cottage D	1st	B	Bdrm1	Ceiling	Drywall	White	Positive	8.1 ± 2.3			
Cottage D	1st	B	Bdrm2	Ceiling	Drywall	White	Positive	1.5 ± 0.4			
Cottage D	1st	B	LivRm	Ceiling	Drywall	White	Positive	1.5 ± 0.4			
Cottage D	1st	B	LivRm	Ceiling	Drywall	White	Positive	1.6 ± 0.5			
Cottage D	1st	B	LivRm	Ceiling	Drywall	White	Positive	1.6 ± 0.5			
Cottage D	1st	B	Kitch	Ceiling	Drywall	White	Positive	1.6 ± 0.4			
Cottage D	1st	B	Entry	Ceiling	Drywall	White	Negative	0 ± 0.02			
Cottage D	1st	B	Porch	Ceiling	Drywall	Gray	Positive	9.6 ± 2.5			
Cottage D	1st	B	Entry to Bath	Ceiling	Drywall	White	Positive	1.5 ± 0.4			
Cottage D	1st	B	Entry to Bath	Linen Closet Door	Drywall	Pink	Positive	2.1 ± 0.3			
Cottage D	1st	B	Entry to Bath	Linen Closet Wall	Drywall	Pink	Positive	3.5 ± 0.7			
Cottage D	1st	D	Entry to Bath	Cupboard Door	Wood	White	Positive	2.1 ± 0.3			
Cottage D	1st	D	Entry to Bath	Cupboard Interior	Wood	Pink	Positive	2.1 ± 0.4			
Cottage D	1st	D	Entry to Bath	Cupboard Interior	Wood	White	Positive	2.2 ± 0.3			
Cottage D	1st	D	Bath	Wall	Drywall	White	Negative	0 ± 0.02			
Cottage D	1st	D	Bath	Trim	Wood	White	Negative	0 ± 0.02			
Cottage D	1st	A	Bath	Trim	Wood	White	Negative	0 ± 0.02			
Cottage D	1st	A	Bath	Window	Wood	White	Negative	0 ± 0.02			
Cottage D	1st	B	Bath	Trim	Wood	White	Negative	0 ± 0.02			
Cottage D	1st	B	Bath	Ceiling	Wood	White	Negative	0 ± 0.02			
Cottage D	1st	B	Bath	Ceiling	Drywall	White	Negative	0 ± 0.02			
Cottage D	1st	B	Bath	Ceiling	Drywall	White	Negative	0 ± 0.02			
Cottage D	2nd	D	Stair	Wall	Drywall	White	Negative	0 ± 0.02			
Cottage D	2nd	D	Stair	Baseboard Trim	Plaster	White	Negative	0.2 ± 0.05			

Table 1
Lead-based Paint and Lead-in-Soil Screening and Analytical Results
Village of St. George
May 2006

Lead-Based Paint Screening Results									Lead-in-Soil Results		
Building	Floor	Side	Room	Component	Substrate	Color	Results	Lead-in-Paint Result (mg/cm ²)	Lead-in-Soil Sample ID	XRF Screening Results (ppm Pb)	Laboratory Results (mg/kg Pb)
Cottage D	2nd	D	Stair	Handrail	Wood	White	Negative	0 ± 0.02			
Cottage D	2nd	B	Stair	Trim	Wood	White	Positive	10.6 ± 1.2			
Cottage D	2nd	B	Stair	Wall	Drywall	White	Positive	6.7 ± 1			
Cottage D	2nd	C	Stair	Wall	Drywall	White	Negative	0 ± 0.02			
Cottage D	2nd	A	Stair	Wall	Drywall	White	Positive	1.3 ± 0.3			
Cottage D	2nd	A	Stair	Wall	Drywall	White	Negative	0 ± 0.02			
Cottage D	2nd	B	Open Area	Wall	Drywall	White	Negative	0 ± 0.02			
Cottage D	2nd	C	Open Area	Wall	Drywall	White	Negative	0 ± 0.02			
Cottage D	2nd	B	Open Area	Coat closet wall	Drywall	Yellow	Positive	4.6 ± 0.6			
Cottage D	2nd	B	Open Area	Coat closet door	Wood	White	Negative	0.19 ± 0.05			
Cottage D	2nd	B	Open Area	Coat closet trim	Wood	White	Positive	18.1 ± 1.6			
Cottage D	2nd	B	Open Area	Coat closet interior	Wood	White	Positive	7.1 ± 1			
Cottage D	2nd	A	Bdrm3	Wall	Drywall	White	Negative	0 ± 0.02			
Cottage D	2nd	B	Bdrm3	Wall	Drywall	White	Negative	0 ± 0.02			
Cottage D	2nd	C	Bdrm3	Wall	Drywall	White	Negative	0 ± 0.02			
Cottage D	2nd	D	Bdrm3	Wall	Drywall	White	Negative	0 ± 0.02			
Cottage D	2nd	D	Bdrm3	Closet Door	Wood	White	Negative	0.13 ± 0.07			
Cottage D	2nd	D	Bdrm3	Closet Interior	Wood	Blue	Negative	0.21 ± 0.06			
Cottage D	2nd	A	Bdrm3	Door	Wood	White	Positive	12 ± 1.3			
Cottage D	2nd	B	Bdrm3	Window Trim	Wood	White	Negative	0 ± 0.02			
Cottage D	2nd	B	Bdrm3	Window	Wood	White	Negative	0 ± 0.02			
Cottage D	2nd	B	Bdrm3	Ceiling	Wood	White	Positive	3 ± 0.6			
Cottage D	2nd	B	Open Area	Ceiling	Wood	White	Positive	2.2 ± 0.6			
Cottage D	2nd	D	Bdrm3	Door	Wood	White	Positive	18.8 ± 1.6			
Cottage D	2nd	A	Bdrm4	Wall	Drywall	White	Positive	1.6 ± 0.4			
Cottage D	2nd	B	Bdrm4	Wall	Drywall	White	Negative	0 ± 0.02			
Cottage D	2nd	C	Bdrm4	Wall	Drywall	White	Negative	0 ± 0.02			
Cottage D	2nd	D	Bdrm4	Wall	Drywall	White	Negative	0 ± 0.02			
Cottage D	2nd	A	Bdrm4	Door	Wood	White	Positive	14.2 ± 1.4			
Cottage D	2nd	A	Bdrm4	Door Trim	Wood	White	Positive	16.5 ± 1.5			
Cottage D	2nd	A	Bdrm4	Baseboard Trim	Wood	White	Positive	1.4 ± 0.3			
Cottage D	2nd	B	Bdrm4	Baseboard Trim	Wood	White	Negative	0 ± 0.02			
Cottage D	2nd	B	Bdrm4	Door	Wood	White	Negative	0 ± 0.02			
Cottage D	2nd	B	Bdrm4	Door Trim	Wood	White	Negative	0 ± 0.02			
Cottage D	2nd	B	Bdrm4	Desk	Wood	White	Negative	0.07 ± 0.04			
Cottage D	2nd	C	Bdrm4	Desk	Wood	Blue	Negative	0.06 ± 0.04			
Cottage D	2nd	C	Bdrm4	Closet	Wood	White	Negative	0.05 ± 0.03			
Cottage D	2nd	C	Bdrm4	Closet Interior	Wood	White	Positive	8.1 ± 2.2			
Cottage D	2nd	C	Bdrm4	Closet Interior	Drywall	White	Positive	5.1 ± 1.7			
Cottage D	2nd	C	Bdrm4	Closet Interior - side wall	Wood	White	Negative	0.06 ± 0.04			
Cottage D	2nd	C	Bdrm4	Ceiling	Wood	White	Positive	2.8 ± 0.7			
Cottage D	2nd	D	Open Area	Railing	Wood	White	Positive	17.2 ± 1.5			
Cottage D	2nd	C	Open Area	Cupboard	Wood	White	Negative	0.1 ± 0.05			
Cottage D	2nd	C	Open Area	Cupboard Interior	Wood	Yellow	Negative	0.12 ± 0.05			
Cottage D	2nd	C	Open Area	Window	Wood	Yellow	Negative	0 ± 0.02			
Cottage D	Basement	B	Stair	Wall	Drywall	Yellow	Positive	21 ± 1.8			
Cottage D	Basement	B	Stair	Ceiling	Drywall	Yellow	Positive	15.1 ± 1.5			
Cottage D	Basement	B	Stair	Steps	Drywall	Gray	Negative	0.7 ± 0.1			
Cottage D	Basement	B	Stair	Railing	Drywall	Gray	Positive	1.7 ± 0.2			
Cottage D	Basement	B	Furnace Room	Chimney	Concrt	Gray	Negative	0.9 ± 0.1			

Table 1
Lead-based Paint and Lead-in-Soil Screening and Analytical Results
Village of St. George
May 2006

Lead-Based Paint Screening Results									Lead-in-Soil Results		
Building	Floor	Side	Room	Component	Substrate	Color	Results	Lead-in-Paint Result (mg/cm ²)	Lead-in-Soil Sample ID	XRF Screening Results (ppm Pb)	Laboratory Results (mg/kg Pb)
Cottage D	Basement	B	Furnace Room	Post	Wood	White	Negative	0 ± 0.02			
Cottage D	Basement	B	Den	Wall	Drywall	White	Negative	0 ± 0.02			
Cottage D	Basement	B	Den	BkCse	Wood	White	Negative	0 ± 0.02			
Coal House	Exterior	B	N/A	Door	Wood	White	Negative	0 ± 0.02			
Coal House	Exterior	B	N/A	Siding	Wood	White	Positive	5.7 ± 0.02			
Coal House	Exterior	B	N/A	Eave	Wood	Green	Positive	3.6 ± 0.02			
Coal House	Exterior	B	N/A	Wall	Concrete	White	Positive	19.3 ± 0.9	CH-SS-B	209.3 ± 34	415
Coal House	Exterior	A	N/A	Wall	Wood	White	Negative	0.03 ± 0.3			
Coal House	Exterior	A	N/A	Wall Graffiti	Wood	Red	Positive	5.6 ± 1.8	CH-SS-A	9,876 ± 234	
Coal House	Exterior	B	N/A	Wall	Wood	White	Negative	0.11 ± 0.02			
Coal House	Exterior	D	N/A	Wall	Wood	White	Positive	2.9 ± 0.9			
Coal House	Exterior	D	N/A	Wall	Concrete	White	Positive	4.3 ± 0.04	CH-SS-D	2,965 ± 125	
Coal House	Exterior	C	N/A	Wall	Concrete	Green	Positive	33.7 ± 0.3	CH-SS-C	5,288 ± 158	6,830
Coal House	1st	B	1	Inside of Door	Wood	White	Negative	0 ± 1.1			
Coal House	1st	A	1	Wall Graffiti	Concrt	Red	Negative	0.06 ± 2.5			
Cottage G	Exterior	A	N/A	Wall	Wood	White	Negative	0.01 ± 0.02			
Cottage G	Exterior	B/A	N/A	Wall	Wood	White	Negative	0.4 ± 0.1			
Cottage G	Exterior	B	N/A	Wall	Wood	White	Positive	7.6 ± 0.9	CG-SS-B	350.6 ± 38	451
Cottage G	Exterior	B/C	N/A	Wall	Wood	White	Positive	2.4 ± 0.3			
Cottage G	Exterior	C/B	N/A	Wall	Wood	White	Positive	28.5 ± 2.1			
Cottage G	Exterior	C	N/A	Wall	Wood	White	Positive	38.8 ± 2			
Cottage G	Exterior	C/D	N/A	Wall	Wood	White	Positive	32.2 ± 2.2	CG-SS-C	2,838 ± 99	
Cottage G	Exterior	D/C	N/A	Wall	Wood	White	Negative	0.07 ± 0.03			
Cottage G	Exterior	D	N/A	Wall	Wood	White	Negative	0.03 ± 0.02			
Cottage G	Exterior	D/A	N/A	Wall	Wood	White	Positive	18.3 ± 1.3	CG-SS-D	79.5 ± 23	69.1
Cottage G	Exterior	D	N/A	Porch Siding	Wood	White	Negative	0 ± 0.02			
Cottage G	Exterior	D	N/A	Window Trim	Wood	White	Negative	0 ± 0.02			
Cottage G	Exterior	D/A	N/A	Wall - Corner	Wood	White	Negative	0.22 ± 0.05			
Cottage G	Exterior	B	N/A	Door Trim	Wood	Green	Positive	45.2 ± 2.2			
Cottage G	Exterior	B	N/A	Window	Vinyl	White	Negative	0.5 ± 0.4			
Cottage G	Exterior	B	N/A	Trim	Wood	White	Negative	0.02 ± 0.04			
Cottage G	Exterior	C/D	N/A	Trim - Corner	Wood	Green	Positive	11.1 ± 1.3			
Cottage G	Exterior	D/A	N/A	Trim - Corner	Wood	White	Negative	0.02 ± 0.02			
Cottage G	Exterior	D	N/A	Door Trim	Wood	White	Negative	0 ± 0.02			
Cottage G	Exterior	D	N/A	Door	Wood	White	Negative	0 ± 0.02			
Cottage G	Exterior	D	N/A	Front Door	Wood	White	Negative	0 ± 0.02			
Cottage G	Exterior	D	N/A	Front Door Trim	Wood	White	Negative	0 ± 0.02			
Cottage G	1st	A	Hall	Wall	Drywall	White	Negative	0 ± 0.02			
Cottage G	1st	B	Hall	Wall	Drywall	White	Negative	0.11 ± 0.04			
Cottage G	1st	D	Hall	Wall	Drywall	White	Negative	0 ± 0.02			
Cottage G	1st	C	Hall	Wall	Drywall	White	Negative	0 ± 0.02			
Cottage G	1st	C	Hall	Trim	Wood	White	Negative	0.01 ± 0.02			
Cottage G	1st	A	Bedroom 2	Wall	Drywall	White	Negative	0 ± 0.02			
Cottage G	1st	B	Bedroom 2	Wall	Drywall	White	Negative	0 ± 0.02			
Cottage G	1st	C	Bedroom 2	Wall	Drywall	White	Negative	0 ± 0.02			
Cottage G	1st	D	Bedroom 2	Wall	Drywall	White	Negative	0 ± 0.02			
Cottage G	1st	A	Bedroom 1	Wall	Drywall	White	Negative	0 ± 0.02			
Cottage G	1st	B	Bedroom 1	Wall	Drywall	White	Negative	0 ± 0.02			
Cottage G	1st	C	Bedroom 1	Wall	Drywall	White	Negative	0 ± 0.02			
Cottage G	1st	D	Bedroom 1	Wall	Drywall	White	Negative	0 ± 0.02			
Cottage G	1st	C	Bedroom 1	Trim	Wood	White	Negative	0 ± 0.47			

Table 1
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Village of St. George
May 2006

Lead-Based Paint Screening Results									Lead-in-Soil Results		
Building	Floor	Side	Room	Component	Substrate	Color	Results	Lead-in-Paint Result (mg/cm ²)	Lead-in-Soil Sample ID	XRF Screening Results (ppm Pb)	Laboratory Results (mg/kg Pb)
Cottage G	1st	A	Bath	Wall	Drywall	White	Negative	0 ± 0.03			
Cottage G	1st	B	Bath	Wall	Drywall	White	Negative	-0.06 ± 0.02			
Cottage G	1st	B	Bath	Wall	Drywall	White	Negative	0.05 ± 0.02			
Cottage G	1st	C	Bath	Wall	Drywall	White	Negative	0 ± 0.02			
Cottage G	1st	D	Bath	Wall	Drywall	White	Negative	0 ± 0.02			
Cottage G	1st	A	Kitchen	Wall	Drywall	White	Negative	0 ± 0.02			
Cottage G	1st	B	Kitchen	Wall	Drywall	White	Negative	0 ± 0.02			
Cottage G	1st	C	Kitchen	Wall	Drywall	White	Negative	0 ± 0.02			
Cottage G	1st	D	Kitchen	Wall	Drywall	White	Negative	0 ± 0.02			
Cottage G	1st	C	Kitchen	Door	Wood	White	Negative	0.4 ± 0.02			
Cottage G	1st	A	Living Room	Wall	Drywall	White	Negative	0 ± 0.08			
Cottage G	1st	B	Living Room	Wall	Drywall	White	Negative	0.01 ± 0.02			
Cottage G	1st	C	Living Room	Wall	Drywall	White	Negative	0 ± 0.03			
Cottage G	1st	D	Living Room	Wall	Drywall	White	Negative	0.16 ± 1.3			
Cottage G	1st	C	Living Room	Window	Wood	White	Negative	0 ± 0.02			
Cottage G	1st	C	Living Room	Baseboard Trim	Wood	White	Negative	0 ± 0.02			
Cottage G	1st	A	Furnace	Wall	Drywall	White	Negative	0 ± 0.51			
Cottage G	1st	B	Furnace	Wall	Drywall	White	Negative	0.05 ± 0.02			
Cottage G	1st	B	Furnace	Chimney	Concrete	White	Positive	8.6 ± 0.02			
Cottage G	1st	D	Furnace	Wall	Drywall	White	Negative	0 ± 0.5			
Cottage G	1st	D	Furnace	Wall	Drywall	White	Negative	0 ± 0.02			
Cottage G	1st	D	Furnace	Door	Drywall	White	Negative	0.02 ± 0.02			
Cottage G	1st	A	Storage Hall	Wall	Wood	Blue	Positive	10.7 ± 2.6			
Cottage G	1st	A	Storage Hall	Wall	Wood	Gray	Positive	11.8 ± 1.4			
Cottage G	1st	A	Storage Hall	Wall	Wood	White	Positive	21.9 ± 1.8			
Cottage G	1st	B	West Storage Room	Wall	Wood	White	Positive	11.9 ± 1.3			
Cottage G	1st	C	West Storage Room	Wall	Wood	White	Positive	11.3 ± 1.6			
Cottage G	1st	D	East Storage Room	Wall	Wood	White	Positive	15.6 ± 1.5			
Cottage G	1st	D	Storage Hall	Floor	Concrt	Gray	Negative	0.5 ± 0.1			
Cottage G	1st	D	Storage Hall	Stairs	Wood	Gray	Positive	3.3 ± 0.9			
Cottage G	1st	D	Storage Hall	Stair Post	Wood	Gray	Negative	0.14 ± 0.05			
Cottage G	1st	D	Storage Hall	Stair Handrail	Wood	Gray	Negative	0.08 ± 0.03			
Cottage G	2nd	A	Foyer	Wall	Drywall	Blue	Negative	0.01 ± 0.03			
Cottage G	2nd	B	Foyer	Wall	Wood	Blue	Negative	0 ± 0.02			
Cottage G	2nd	C	Foyer	Wall	Drywall	Blue	Negative	0.06 ± 0.11			
Cottage G	2nd	C	Stairs	Wall	Drywall	Blue	Negative	0.01 ± 0.02			
Cottage G	2nd	C	Stairs	Wall	Wood	Blue	Positive	9 ± 2.3			
Cottage G	2nd	D	Bedroom 1	Door	Wood	Blue	Negative	0.05 ± 0.03			
Cottage G	2nd	D	Bedroom 1	Door	Wood	Blue	Negative	0.05 ± 0.07			
Cottage G	2nd	D	Bedroom 1	Door	Wood	Blue	Negative	0.11 ± 0.06			
Cottage G	2nd	C	Bedroom 1	Wall	Wood	Blue	Negative	0 ± 0.02			
Cottage G	2nd	C	Bedroom 1	Ceiling	Wood	Blue	Negative	0 ± 0.02			
Cottage G	2nd	D	Bedroom 1	Wall	Wood	Blue	Negative	0 ± 0.02			
Cottage G	2nd	C	Bedroom 1	Wall	Drywall	Blue	Negative	0.02 ± 0.05			
Cottage G	2nd	A	Bedroom 1	Wall	Drywall	Blue	Negative	0 ± 0.02			
Cottage G	2nd	B	Bedroom 1	Wall	Drywall	Blue	Negative	0.04 ± 0.07			
Cottage G	2nd	B	Bedroom 1	Closet	Wood	Blue	Negative	0.01 ± 0.02			
Cottage G	2nd	A	Bath	Wall	Wood	Yellow	Positive	16.2 ± 3.3			
Cottage G	2nd	B	Bath	Wall	Wood	Yellow	Positive	5.5 ± 0.9			
Cottage G	2nd	C	Bath	Wall	Wood	Yellow	Positive	4.6 ± 0.7			
Cottage G	2nd	D	Bath	Wall	Wood	Yellow	Positive	4 ± 0.6			

Table 1
Lead-based Paint and Lead-in-Soil Screening and Analytical Results
Village of St. George
May 2006

Lead-Based Paint Screening Results									Lead-in-Soil Results		
Building	Floor	Side	Room	Component	Substrate	Color	Results	Lead-in-Paint Result (mg/cm ²)	Lead-in-Soil Sample ID	XRF Screening Results (ppm Pb)	Laboratory Results (mg/kg Pb)
Cottage G	2nd	B	Bath	Ceiling	Wood	Yellow	Positive	24.5 ± 4.5			
Cottage G	2nd	A	Bath	Trim	Wood	Yellow	Positive	10.5 ± 2.6			
Cottage G	2nd	C	Foyer	Door	Wood	Blue	Positive	12.6 ± 2.8			
Cottage G	2nd	A	Kitchen	Door	Wood	Blue	Negative	0.3 ± 0.09			
Cottage G	2nd	A	Kitchen	Door	Wood	Blue	Negative	0 ± 0.46			
Cottage G	2nd	A	Kitchen	Wall	Wood	Yellow	Negative	0.03 ± 0.02			
Cottage G	2nd	B	Kitchen	Wall	Wood	Yellow	Negative	0.02 ± 0.02			
Cottage G	2nd	C	Kitchen	Wall	Wood	Yellow	Negative	0.03 ± 0.03			
Cottage G	2nd	D	Kitchen	Wall	Wood	Yellow	Positive	11.4 ± 2.7			
Cottage G	2nd	D	Kitchen	Wall	Wood	Yellow	Negative	0.02 ± 0.02			
Cottage G	2nd	D	Dining Room	Outer Wall	Wood	Yellow	Positive	11 ± 2.6			
Cottage G	2nd	D	Dining Room	Ceiling	Wood	Yellow	Positive	16.7 ± 3.3			
Cottage G	2nd	A	Dining Room	Wall	Wood	Yellow	Positive	21.1 ± 4			
Cottage G	2nd	B	Dining Room	Wall	Wood	Yellow	Negative	0.02 ± 0.02			
Cottage G	2nd	C	Dining Room	Wall	Drywall	Yellow	Positive	17.6 ± 3.4			
Cottage G	2nd	C	Dining Room	Wall	Wood	Yellow	Positive	19.2 ± 3.5			
Cottage G	2nd	A	West Living Room	Wall	Wood	Yellow	Positive	7.7 ± 1			
Cottage G	2nd	B	West Living Room	Wall	Wood	Yellow	Positive	10.2 ± 2.6			
Cottage G	2nd	C	West Living Room	Wall	Wood	Yellow	Positive	8.8 ± 5.4			
Cottage G	2nd	D	West Living Room	Wall	Wood	Yellow	Positive	6.9 ± 2.1			
Cottage G	2nd	D	West Living Room	Shelves	Wood	Yellow	Negative	0.5 ± 0.1			
Cottage G	2nd	A	Living Room	Wall	Wood	Yellow	Positive	4.8 ± 2			
Cottage G	2nd	A	Living Room	Closet	Wood	Yellow	Positive	6.3 ± 0.9			
Cottage G	2nd	B	Living Room	Wall	Wood	Yellow	Positive	7.4 ± 2.3			
Cottage G	2nd	C	Living Room	Wall	Wood	Yellow	Positive	32.9 ± 2.3			
Cottage G	2nd	C	Living Room	Chimney	Wood	Yellow	Negative	0.02 ± 0.02			
Cottage G	2nd	D	Living Room	Wall	Wood	Yellow	Positive	7.6 ± 2.2			
Cottage G	2nd	A	East Living Room	Wall	Wood	Yellow	Positive	14.5 ± 3			
Cottage G	2nd	B	East Living Room	Wall	Wood	Yellow	Positive	7.8 ± 2.2			
Cottage G	2nd	C	East Living Room	Wall	Wood	Yellow	Positive	15.7 ± 3.4			
Cottage G	2nd	D	East Living Room	Wall	Wood	Yellow	Positive	11.6 ± 2.7			
Cottage G	2nd	D	East Living Room	Ceiling	Wood	Yellow	Positive	13.5 ± 3			
Cottage G	2nd	D	East Living Room	Floor Trim	Wood	Yellow	Negative	0.5 ± 0.1			
Cottage G	2nd	B	East Living Room	Shelves	Wood	Yellow	Positive	4.4 ± 1.1			
Cottage G	2nd	B	West Living Room	Floor Trim	Wood	Yellow	Negative	0.6 ± 0.1			
Cottage G	2nd	B	Living Room	Window Trim	Wood	Yellow	Positive	1.9 ± 0.6			
Cottage G	2nd	C	Living Room	Window	Wood	Yellow	Positive	19.9 ± 4			
Cottage G	2nd	C	Living Room	Floor Trim	Wood	Yellow	Negative	0.7 ± 0.1			
Cottage G	2nd	C	Dining Room	Floor Trim	Wood	Yellow	Negative	0.8 ± 0.1			
Cottage G	2nd	A	Kitchen	Cabinet	Wood	Yellow	Negative	0.02 ± 0.02			
Cottage G	2nd	C/D	Kitchen	Cabinet	Wood	Yellow	Negative	0.05 ± 0.06			
Cottage G	2nd	A	Kitchen	Cabinet	Metal	Yellow	Negative	0 ± 0.02			

Notes:

Lead-based paint screening results exceeding 1.0 mg/cm² are bolded red

Lead-in-soil screening and analytical results greater than 400 mg/kg (ppm) are bolded

Table 2
Asbestos Sample Results
Village of St. George
May 2006

Sample ID	Building	Location	% Asbestos Present	% Other Fibrous Materials	% Non-fibrous Materials
CD-ASB-1	Cottage D	Vinyl flooring from kitchen	None Detected	20% Cellulose 10% Glass	70%
CD-ASB-2	Cottage D	Insulation from furnace stovepipe in basement	None Detected	95% glass	5%
CD-ASB-3	Cottage D	Ceiling material from stairway to basement			
		Drywall	None Detected	15% Cellulose	85%
		Joint Compound	None Detected	2% Cellulose	98%
CD-ASB-4	Cottage D	Wallboard from behind switchplate in entry	None Detected	10% Cellulose	90%
CG-ASB-1	Cottage G	Flooring from entry to furnace room	30% Chrysotile	None Detected	70%
CG-ASB-2	Cottage G	Floor tile from second floor apartment bedroom			
		Tile	10% Chrysotile	None Detected	90%
		Mastic	None Detected	None Detected	100%
CG-ASB-3	Cottage G	Backing to wood siding on front porch	None Detected	80% Cellulose	20%
CG-ASB-4	Cottage G	Backing to plywood wall in storage area	None Detected	40% Cellulose 5% Glass 50% synthetic	5%
OMS-ASB-1	Old Machine Shop	Ceiling tile from ceiling of Room 4	40% Chrysotile	None Detected	60%
OMS-ASB-2	Old Machine Shop	Insulation from around stove pipe (Room 4)	None Detected	None Detected	100%
OMS-ASB-3	Old Machine Shop	Wallboard between Rooms 1 and 2	None Detected	20% Cellulose	80%
OMS-ASB-4	Old Machine Shop	Corrugated insulation around piping from furnace	65% Chrysotile	None Detected	35%

Note:

Samples with greater than 1% asbestos are bolded.

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Table 3
Analytical Results - DRO, RRO, GRO, BTEX, PAH, and Metals
Village of St. George
May 2006

[illegible]

Notes

GRO- Gasoline-Range Organics

DRO- Diesel-Range Organics

RRO- Residual-Range Organics

ND - Analyte NOT DETECTED at or above the reporting limit

J - Estimated Value

-- Not analyzed

Bolded values are above cleanup level

* - Reporting limit is above cleanup level

** - Based on ADEC Method Two, Migration-to-Groundwater Cleanup Levels set out in 18 AAC 75 - Oil and Other Hazardous Substances Pollution Control.

Table 4
Analytical Results - Volatile Organic Compounds
Village of St. George
May 2006

Sample ID	OMS-TP4-2.5	TP-DUP5 (Dup of OMS-TP4-2.5)	OMS-TP7-1.5	EP-TP2-2	EP-TP3-0.5	CD-TP3-1
Acetone	<0.536	<0.683	<0.603	<0.536	<0.58	<0.691
Benzene	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
Bromobenzene	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
Bromochloromethane	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
Bromodichloromethane	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
Bromoform	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
Bromomethane	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
2-butanone	<0.536	<0.683	<0.603	<0.536	<0.58	<0.691
n-Butylbenzene	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
sec-Butylbenzene	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
tert-Butylbenzene	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
Carbon Disulfide	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
Carbon Tetrachloride	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
Chlorobenzene	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
Chloroethane	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
1-Chlorohexane	<0.536	<0.683	<0.603	<0.536	<0.58	<0.691
Chloroform	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
Chloromethane	<0.268	<0.341	<0.302	<0.268	<0.29	<0.346
2-Chlorotoluene	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
4-Chlorotoluene	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
Dibromochloromethane	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
1,2-Dibromo3-chloropropane	<0.268	<0.341	<0.302	<0.268	<0.29	<0.346
1,2-Dibromomethane	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
Dibromomethane	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
1,2-Dichlorobenzene	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
1,3-Dichlorobenzene	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
1,4-Dichlorobenzene	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
Dichlorodifluoromethane	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
1,1-Dichloroethane	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
1,2-Dichloroethane	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
1,1-Dichloroethene	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
cis-1,2-Dichloroethene	<0.0603	<0.0683	<0.0603	<0.0603	<0.058	<0.0691
trans-1,2-Dichloroethene	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
Ethylbenzene	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
Hexachlorobutadiene	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
Methyl tert-butyl ether	<0.268	<0.341	<0.302	<0.268	<0.29	<0.0691
n-Hexane	<0.268	<0.341	<0.302	<0.268	<0.29	<0.346
2-Hexanone	<0.536	<0.683	<0.603	<0.536	<0.58	<0.691
Isopropylbenzene	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
p-Isopropyltoluene	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
4-Methyl-2-pentanone	<0.536	<0.683	<0.603	<0.536	<0.58	<0.691
Methylene Chloride	<0.536	<0.683	<0.603	<0.536	<0.58	<0.691
Naphthalene	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
n-Propylbenzene	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
Styrene	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
1,2,3-Trichlorobenzene	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
1,2,4-Trichlorobenzene	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
1,1,1,2-Tetrachloroethane	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
1,1,2,2-Tetrachloroethane	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
Tetrachloroethene	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
Toluene	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
1,1,1-Trichloroethane	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
1,1,2-Trichloroethane	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
Trichloroethene	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
Trichlorofluoromethane	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
1,2,3-Trichloropropane	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
1,2,4-Trimethylbenzene	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
1,3,5-Trimethylbenzene	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
Vinyl Chloride	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
o-Xylene	<0.0536	<0.0683	<0.0603	<0.0536	<0.058	<0.0691
m,p, Xylenes	<0.107	<0.137	<0.121	<0.107	<0.116	<0.138
Total Xylenes	<0.161	<0.205	<0.181	<0.161	<0.174	<0.207

Notes:

All concentrations are in milligrams per kilogram

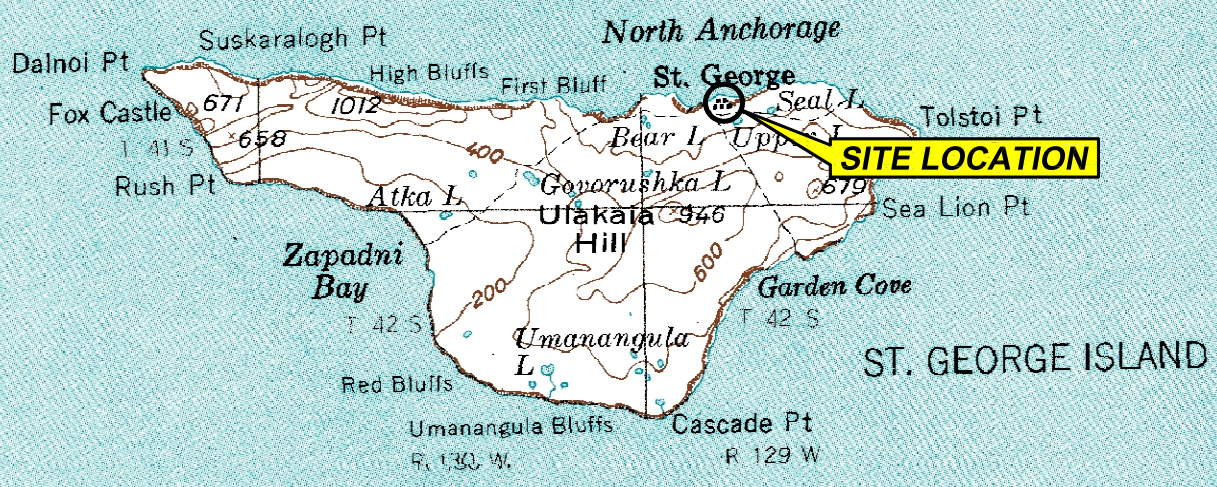
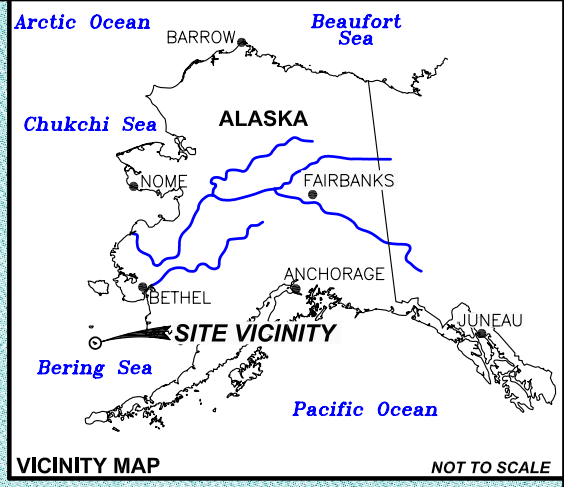
Table 5
Test Pit Survey Coordinates
Village of St. George
May 2006

Building	Test Pit	Longitude (decimal degrees)	Latitude (decimal degrees)
E&P Shop	TP1	-169.5488	56.6032
	TP2	-169.5487	56.6032
	TP3	-169.5488	56.6033
	TP4	-169.549	56.6033
	TP5	-169.5491	56.6032
	TP6	-169.5489	56.6032
Old Machine Shop	TP1	-169.5476	56.6031
	TP2	-169.5478	56.6032
	TP3	-169.5477	56.6033
	TP4	-169.5476	56.6033
	TP5	-169.5474	56.6033
	TP6	-169.5473	56.6032
	TP7	-169.5474	56.6032
Cottage D	TP1	-169.5492	56.6015
	TP2	-169.5493	56.6014
	TP3	-169.549	56.6014

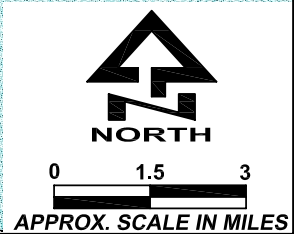
Surveyed using aThales hand-held global positioning system (GPS) unit.

FIGURES

PATH: V:\Project Drawings\St George FILE: 14-076P2A.DWG PLOTTED: 6/13/06.



SOURCE: U.S.G.S. TOPOGRAPHY MAP PRIBILOF ISLANDS, DATED 1942 REVISED 1972.



DATE
JUNE 2006
CHKD
L.N.
DRAWN
C.E.H.
PROJ. NO
14-076

masis
ENVIRONMENTAL
825 W. 8TH AVENUE, SUITE 200
ANCHORAGE, ALASKA 99501

SITE LOCATION MAP

PHASE II ENVIRONMENTAL SITE
ASSESSMENT
St. George Island, Alaska

FIGURE

1



0 50 100

APPROX. SCALE IN FEET

E&P SHOP

OLD
MACHINE
SHOP

COTTAGE G

COAL HOUSE

COTTAGE D

SOURCE: SCANNED IMAGE OF AERIAL PHOTO
ROLL# 93-13C, EXP# 10-5 DATED 6/93
PROVIDED BY AEROMAP INC.

DATE
JUNE 2006
CHKD
L.N.
DRAWN
C.E.H.
PROJ. NO
14-076



ENVIRONMENTAL
825 W. 8TH AVENUE, SUITE 200
ANCHORAGE, ALASKA 99501

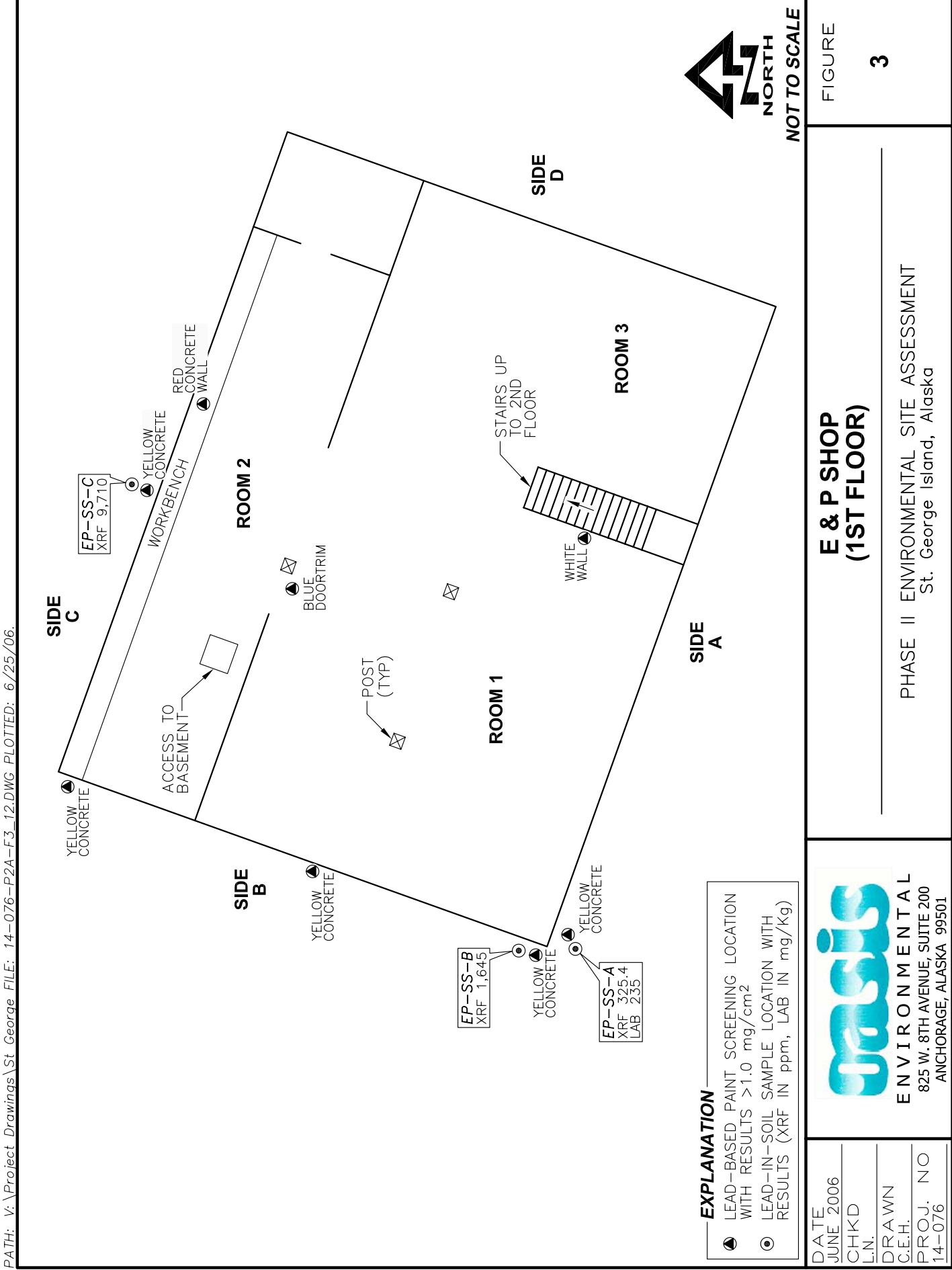
SITE PLAN

PHASE II ENVIRONMENTAL SITE
ASSESSMENT
St. George Island, Alaska

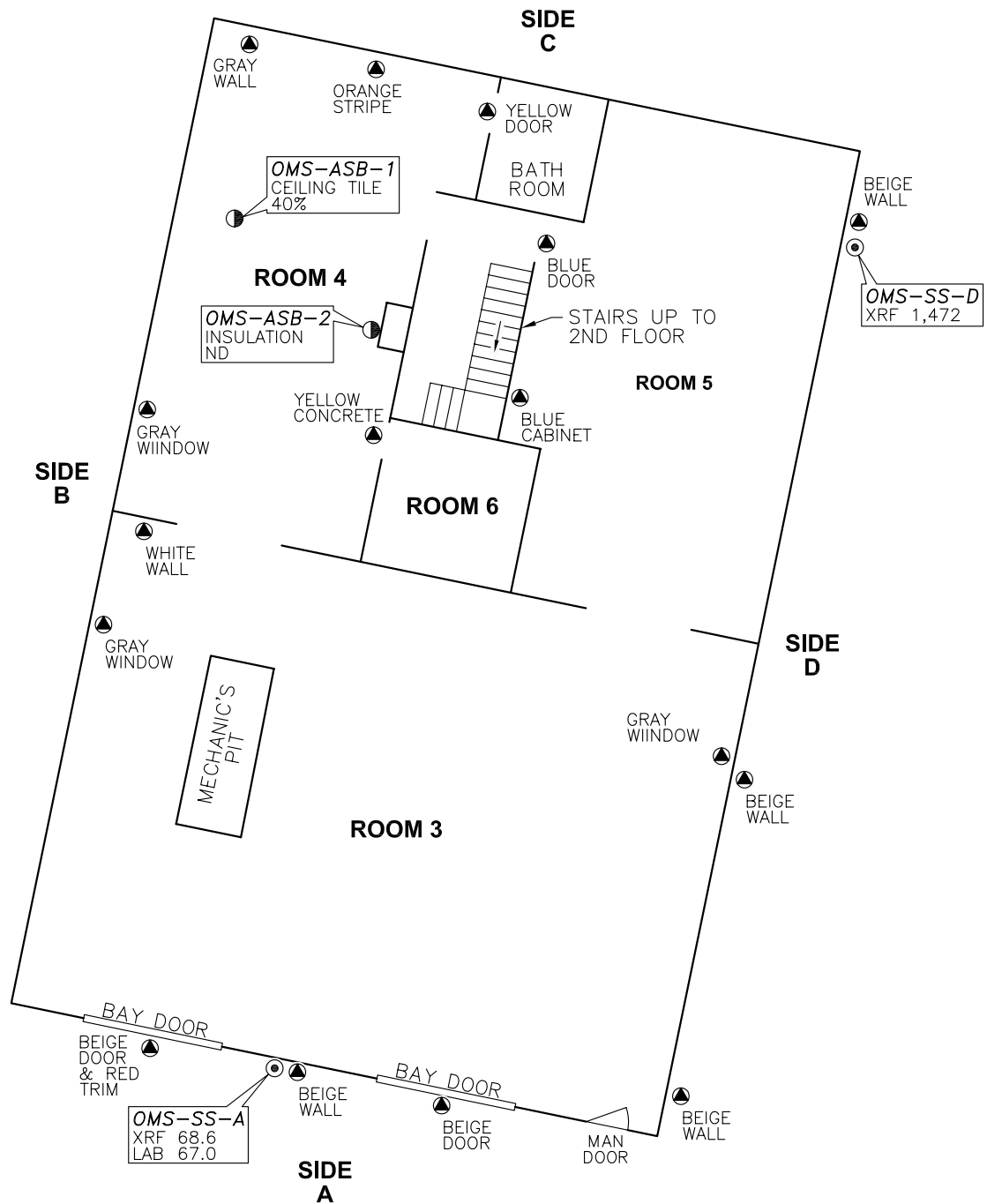
FIGURE

2

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PATH: V:\Project Drawings\St George FILE: 14-076-P2A-F3_12.DWG PLOTTED: 6/13/06.



EXPLANATION

- LEAD-BASED PAINT SCREENING LOCATION WITH RESULTS $>1.0 \text{ mg/cm}^2$
- ⊙ LEAD-IN-SOIL SAMPLE LOCATION WITH RESULTS (XRF IN ppm, LAB IN mg/Kg)
- ⊙ ASBESTOS SAMPLE LOCATION (PERCENT SHOWN OR ND = NOT DETECTED)



NOT TO SCALE

DATE
JUNE 2006
CHKD
L.N.
DRAWN
C.E.H.
PROJ. NO
14-076

oasis
ENVIRONMENTAL
825 W. 8TH AVENUE, SUITE 200
ANCHORAGE, ALASKA 99501

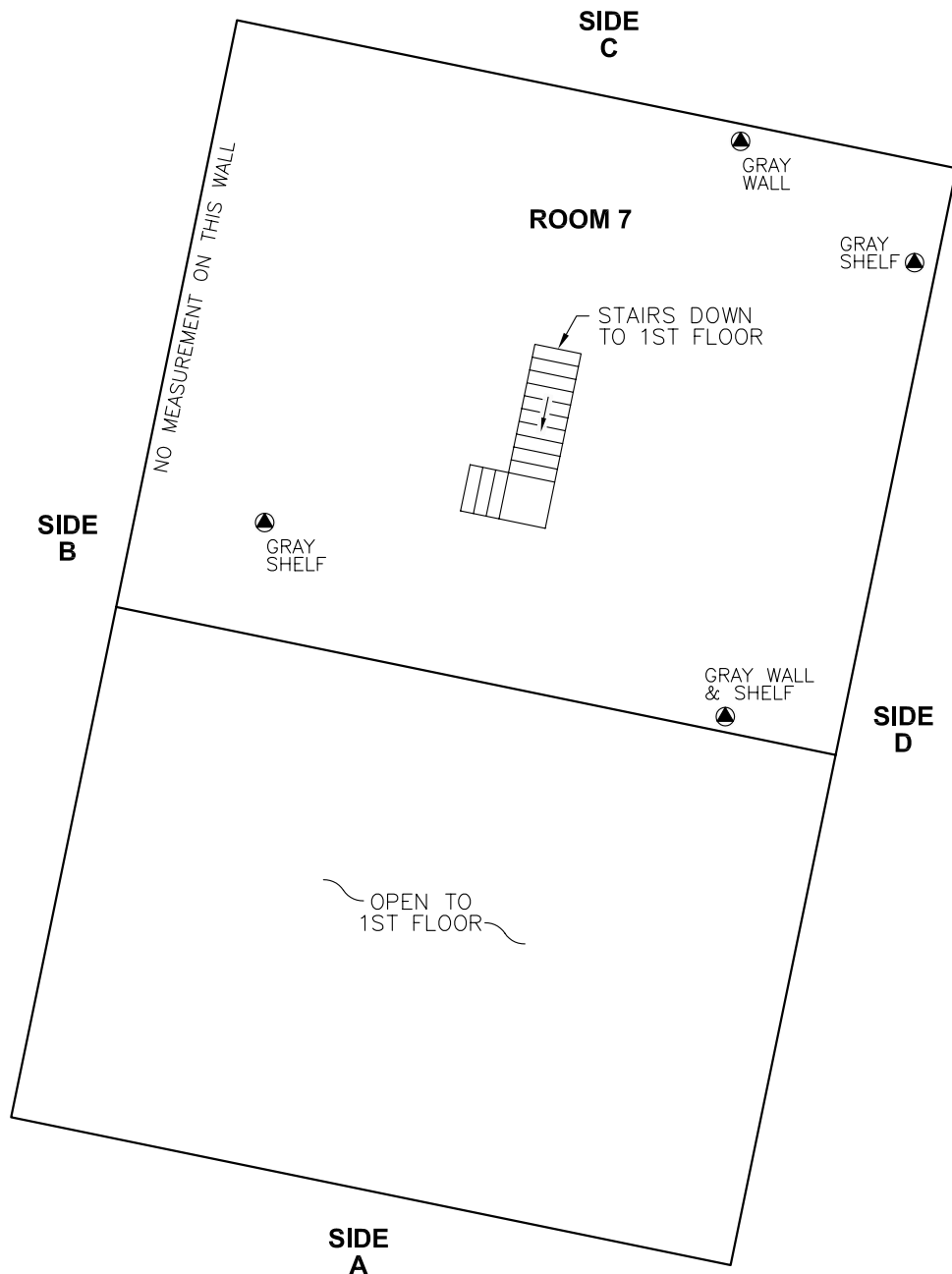
OLD MACHINE SHOP (1ST FLOOR)

PHASE II ENVIRONMENTAL SITE
ASSESSMENT
St. George Island, Alaska

FIGURE

4

PATH: V:\Project Drawings\St. George FILE: 14-076-P2A-F3_12.DWG PLOTTED: 6/13/06.



EXPLANATION

- LEAD-BASED PAINT SCREENING LOCATION
WITH RESULTS $>1.0 \text{ mg/cm}^2$



NOT TO SCALE

DATE
JUNE 2006
CHKD
L.N.
DRAWN
C.E.H.
PROJ. NO
14-076

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ENVIRONMENTAL
825 W. 8TH AVENUE, SUITE 200
ANCHORAGE, ALASKA 99501

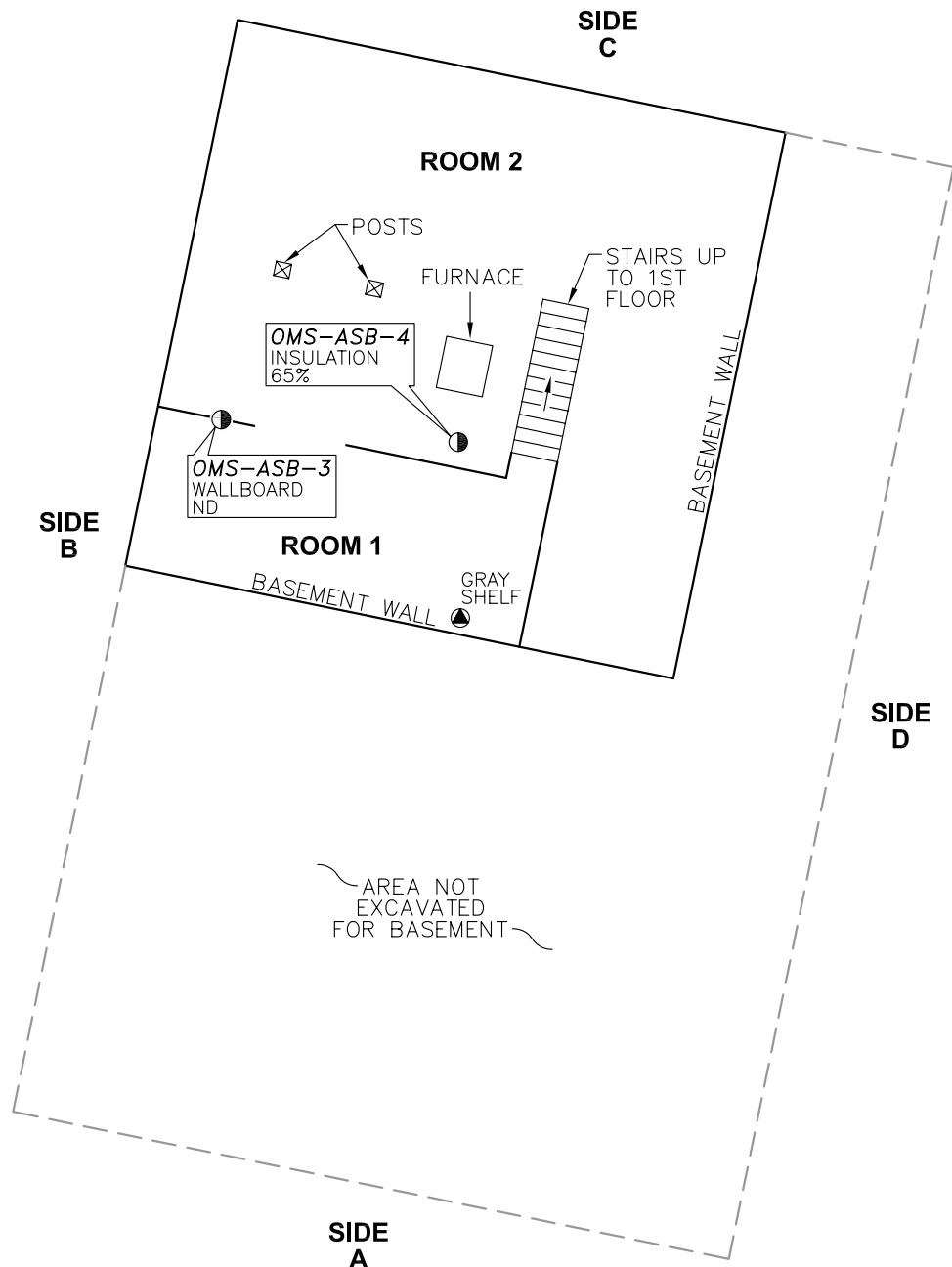
OLD MACHINE SHOP (2ND FLOOR)

PHASE II ENVIRONMENTAL SITE
ASSESSMENT
St. George Island, Alaska

FIGURE

5

PATH: V:\Project Drawings\St. George FILE: 14-076-P2A-F3_12.DWG PLOTTED: 6/13/06.



EXPLANATION

- ▲ LEAD-BASED PAINT SCREENING LOCATION WITH RESULTS >1.0 mg/cm²
- ASBESTOS SAMPLE LOCATION (PERCENT SHOWN OR ND = NOT DETECTED)



NOT TO SCALE

DATE
JUNE 2006
CHKD
L.N.
DRAWN
C.E.H.
PROJ. NO
14-076

oasis
ENVIRONMENTAL
825 W. 8TH AVENUE, SUITE 200
ANCHORAGE, ALASKA 99501

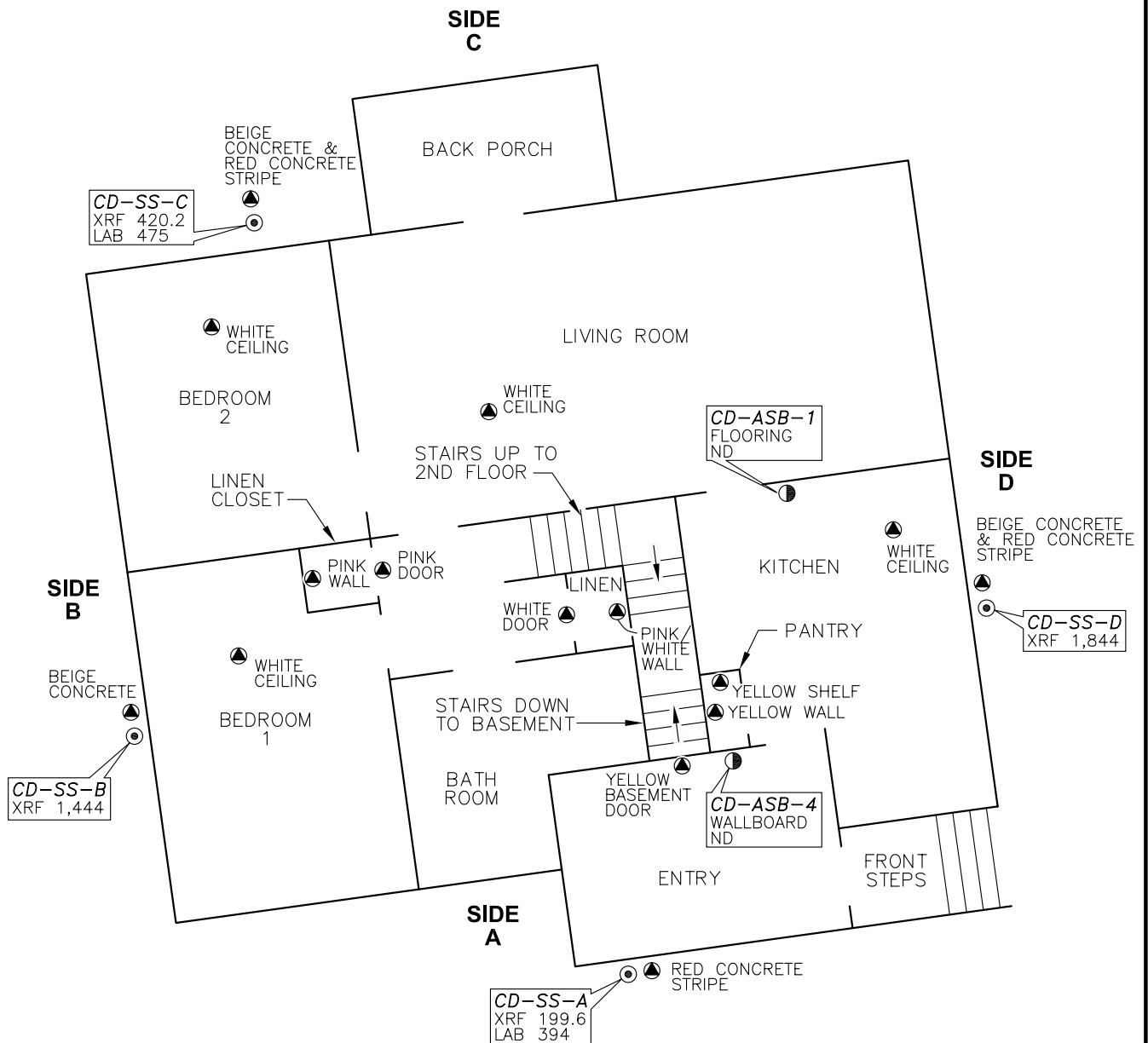
OLD MACHINE SHOP (BASEMENT)

PHASE II ENVIRONMENTAL SITE
ASSESSMENT
St. George Island, Alaska

FIGURE

6

PATH: V:\Project Drawings\St. George FILE: 14-076-P2A-F3_12.DWG PLOTTED: 6/13/06.



EXPLANATION

- LEAD-BASED PAINT SCREENING LOCATION WITH RESULTS >1.0 mg/cm²
- LEAD-IN-SOIL SAMPLE LOCATION WITH RESULTS (XRF IN ppm, LAB IN mg/kg)
- ASBESTOS SAMPLE LOCATION (PERCENT SHOWN OR ND = NOT DETECTED)



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ENVIRONMENTAL
825 W. 8TH AVENUE, SUITE 200
ANCHORAGE, ALASKA 99501

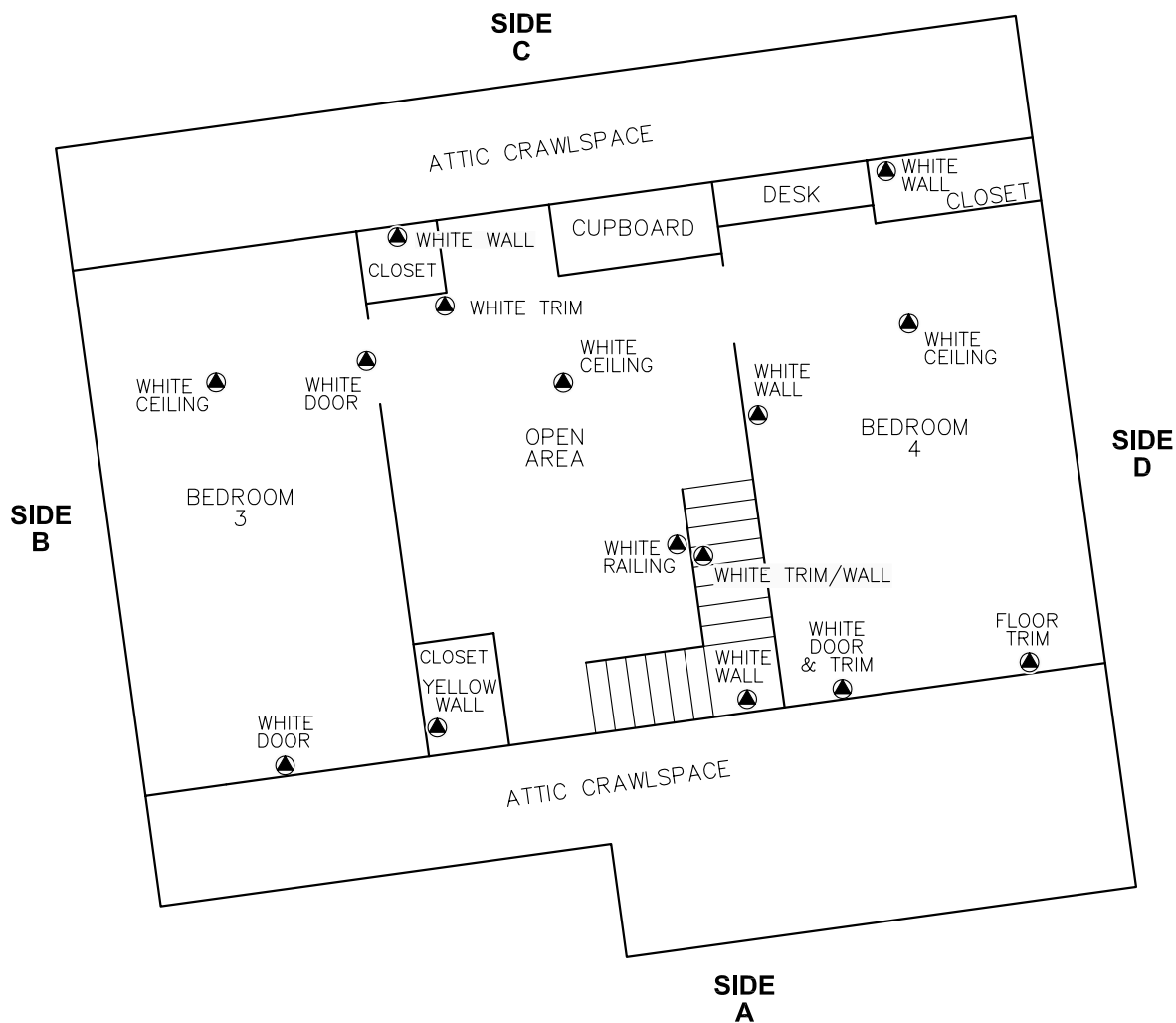
COTTAGE D (1ST FLOOR)

PHASE II ENVIRONMENTAL SITE
ASSESSMENT
St. George Island, Alaska

FIGURE

7

PATH: V:\Project Drawings\St. George FILE: 14-076-P2A-F6.DWG PLOTTED: 6/12/06.



EXPLANATION

- LEAD-BASED PAINT SCREENING LOCATION
WITH RESULTS $>1.0 \text{ mg/cm}^2$



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ENVIRONMENTAL
825 W. 8TH AVENUE, SUITE 200
ANCHORAGE, ALASKA 99501

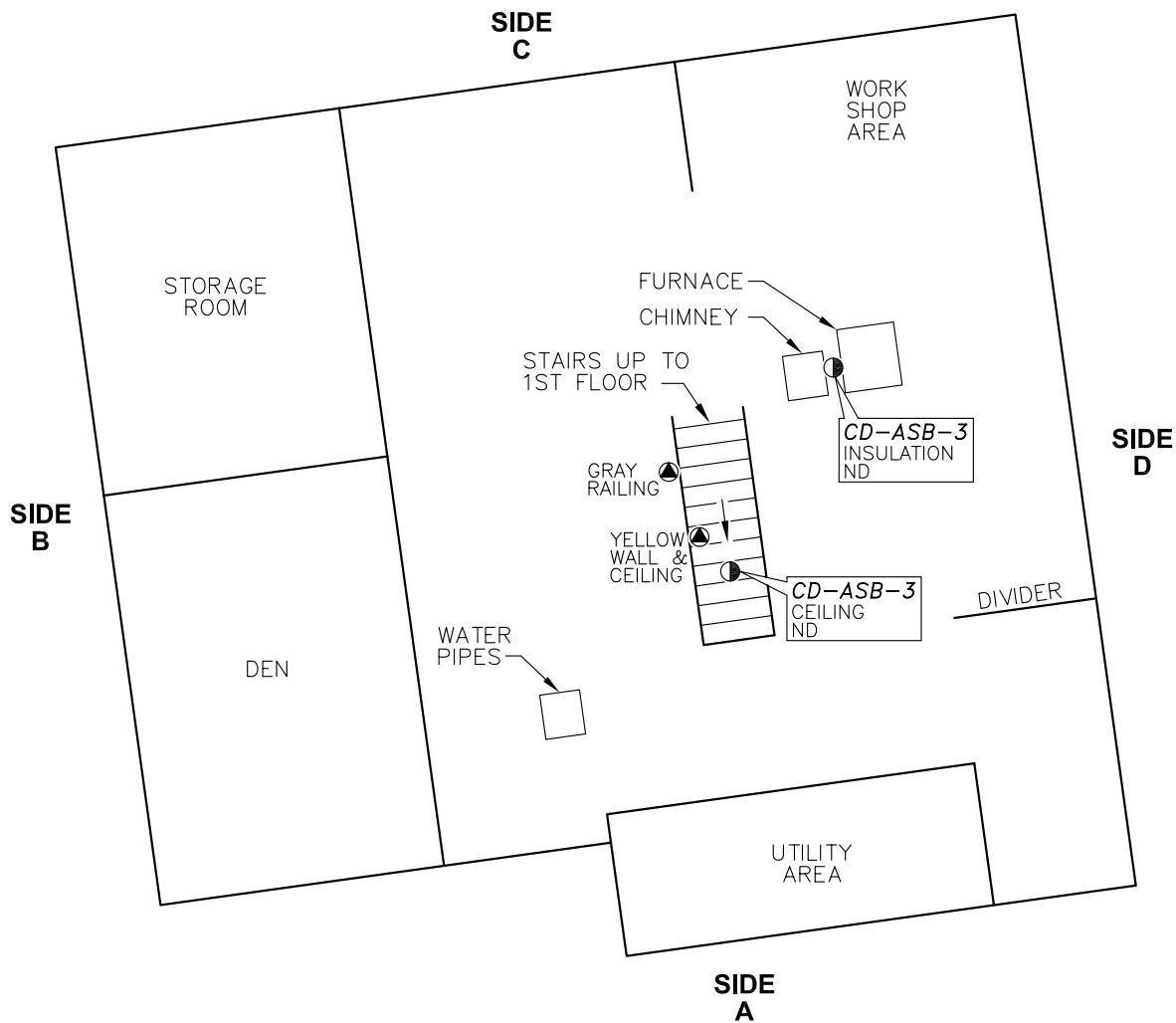
COTTAGE D (2ND FLOOR)

PHASE II ENVIRONMENTAL SITE
ASSESSMENT
St. George Island, Alaska

FIGURE

8

PATH: V:\Project Drawings\St. George FILE: 14-076-P2A-F3_12.DWG PLOTTED: 6/13/06.



EXPLANATION

- ▲ LEAD-BASED PAINT SCREENING LOCATION WITH RESULTS $>1.0 \text{ mg/cm}^2$
- ASBESTOS SAMPLE LOCATION (PERCENT SHOWN OR ND = NOT DETECTED)



NORTH
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DATE
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C.E.H.
PROJ. NO
14-076

oasis
ENVIRONMENTAL
825 W. 8TH AVENUE, SUITE 200
ANCHORAGE, ALASKA 99501

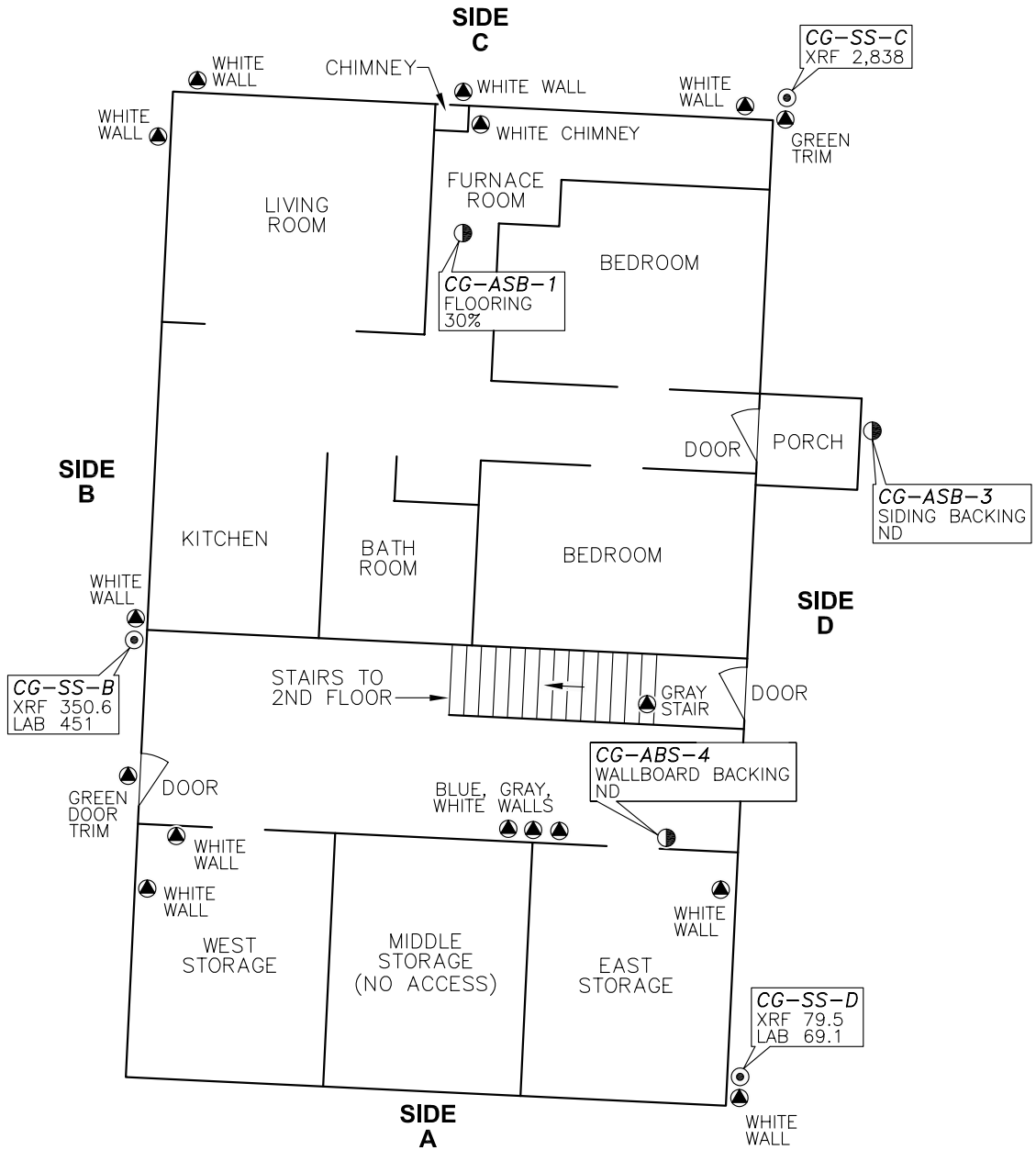
COTTAGE D (BASEMENT)

PHASE II ENVIRONMENTAL SITE
ASSESSMENT
St. George Island, Alaska

FIGURE

9

PATH: V:\Project Drawings\St. George FILE: 14-076-P2A-F3_12.DWG PLOTTED: 6/13/06.



EXPLANATION

- LEAD-BASED PAINT SCREENING LOCATION WITH RESULTS $>1.0 \text{ mg/cm}^2$
- ⊙ LEAD-IN-SOIL SAMPLE LOCATION WITH RESULTS (XRF IN ppm, LAB IN mg/Kg)
- ASBESTOS SAMPLE LOCATION (PERCENT SHOWN OR ND = NOT DETECTED)



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PROJ. NO
14-076

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ENVIRONMENTAL
825 W. 8TH AVENUE, SUITE 200
ANCHORAGE, ALASKA 99501

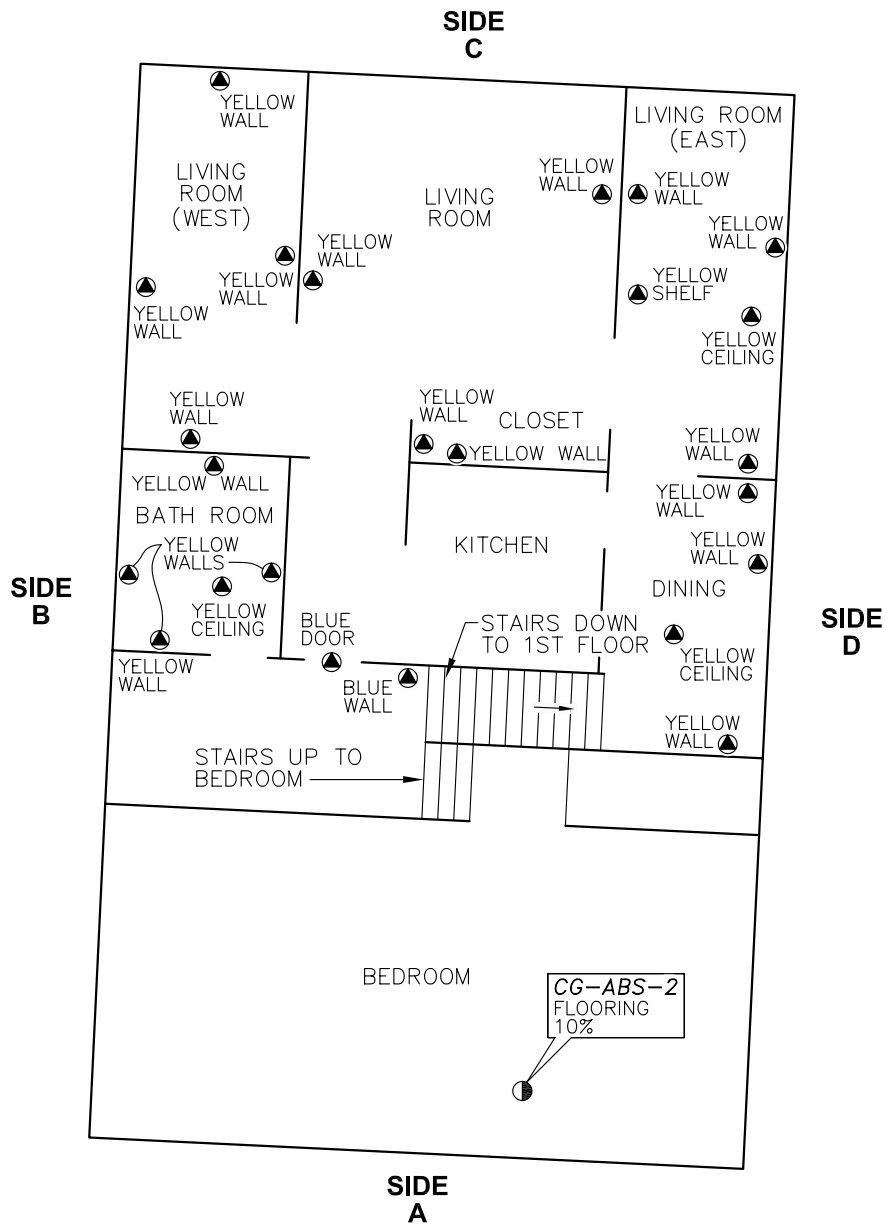
COTTAGE G (1ST FLOOR)

PHASE II ENVIRONMENTAL SITE
ASSESSMENT
St. George Island, Alaska

FIGURE

11

PATH: V:\Project Drawings\St George FILE: 14-076-P2A-F3_12.DWG PLOTTED: 6/13/06.



EXPLANATION

- LEAD-BASED PAINT SCREENING LOCATION WITH RESULTS >1.0 mg/cm²
- ASBESTOS SAMPLE LOCATION (PERCENT SHOWN OR ND = NOT DETECTED)



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825 W. 8TH AVENUE, SUITE 200
ANCHORAGE, ALASKA 99501

COTTAGE G (2ND FLOOR)

PHASE II ENVIRONMENTAL SITE
ASSESSMENT
St. George Island, Alaska

FIGURE

12

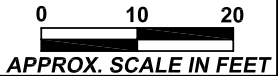
PATH: V:\Project Drawings\St George FILE: 14-076P2A-F13.DWG PLOTTED: 6/27/06.



EXPLANATION					
■	TEST PIT LOCATIONS	1-Me	1-METHYLNAPHTHALENE	Cr	CHROMIUM
DRO	DIESEL-RANGE ORGANICS	2-Me	2-METHYLNAPHTHALENE	Pb	LEAD
RRO	RESIDUAL-RANGE ORGANICS	NAP	NAPHTHALENE	Se	SELENIUM
GRO	GASOLINE-RANGE ORGANICS	Phe	PHENANTHRENE	ND	NOT DETECTED
BTEX	BENZENE, TOLUENE, ETHYLBENZENE, XYLENES	Py	PYRENE	J	ESTIMATED VALUE
		Ba	BARIUM		

NOTES:
1. ALL RESULTS ARE IN mg/Kg.
2. ONLY DETECTED ANALYTICAL RESULTS ARE SHOWN.

SOURCE: SCANNED IMAGE OF AERIAL PHOTO ROLL# 93-13C,
EXP# 10-5 DATED 6/93 PROVIDED BY AEROMAP INC.



DATE	JUNE 2006
CHKD	L.N.
DRAWN	C.E.H.
PROJ. NO	14-076



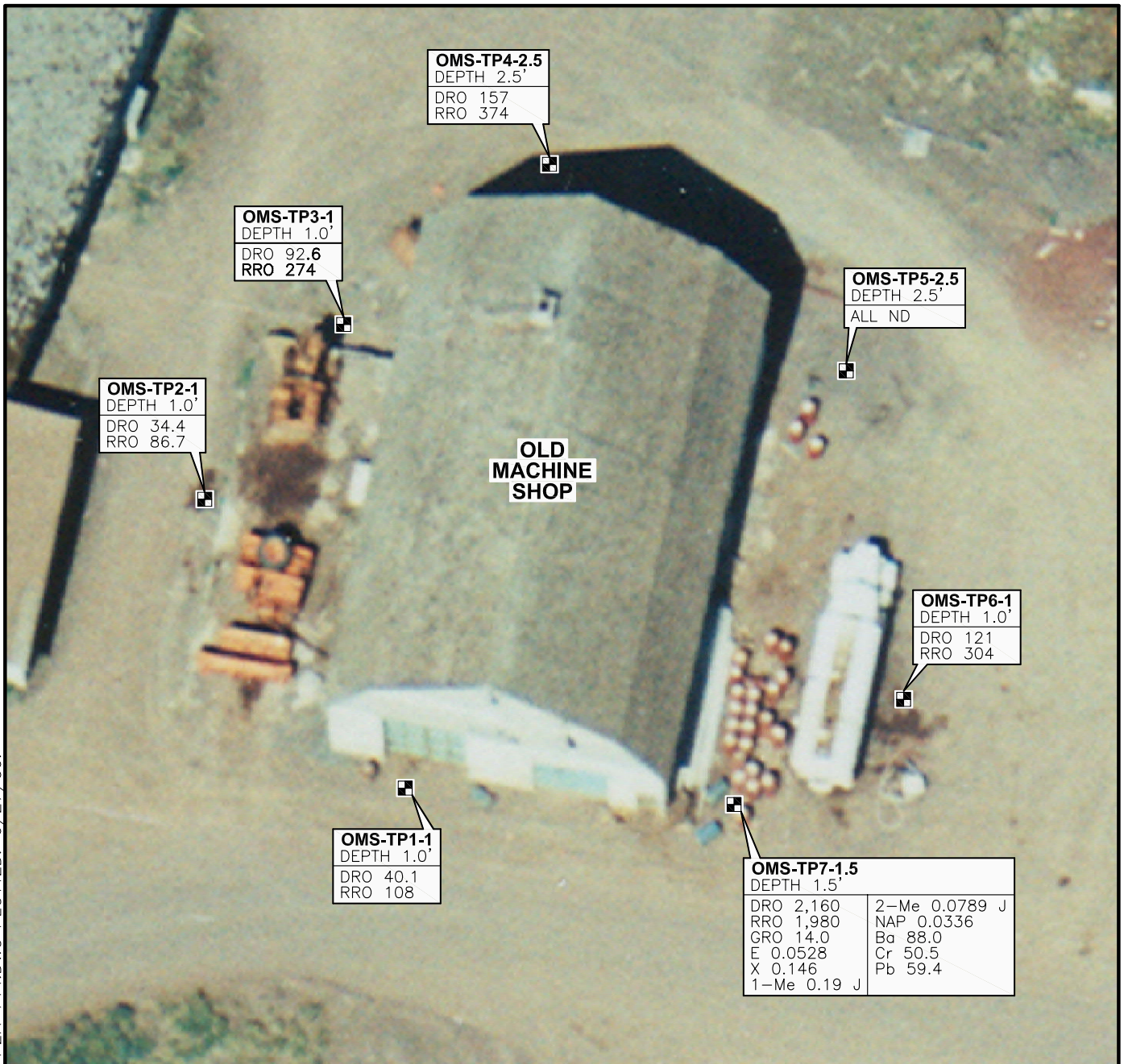
ENVIRONMENTAL
825 W. 8TH AVENUE, SUITE 200
ANCHORAGE, ALASKA 99501

E & P SHOP
TEST PIT LOCATIONS AND RESULTS

PHASE II ENVIRONMENTAL SITE ASSESSMENT
St. George Island, Alaska

FIGURE
13

PATH: V:\Project Drawings\St George FILE: 14-076-P2A-F14.DWG PLOTTED: 6/27/06.



EXPLANATION

■	TEST PIT LOCATIONS	NAP	NAPHTHALENE
DRO	DIESEL-RANGE ORGANICS	Ba	BARIUM
RRO	RESIDUAL-RANGE ORGANICS	Cr	CHROMIUM
GRO	GASOLINE-RANGE ORGANICS	Pb	LEAD
EX	ETHYLBENZENE, XYLENES	ND	NOT DETECTED
1-Me	1-METHYLNAPHTHALENE	J	ESTIMATED VALUE
2-Me	2-METHYLNAPHTHALENE		

NOTES:

1. ALL RESULTS ARE IN mg/Kg.
2. ONLY DETECTED ANALYTICAL RESULTS ARE SHOWN.

SOURCE: SCANNED IMAGE OF AERIAL PHOTO ROLL# 93-13C,
EXP# 10-5 DATED 6/93 PROVIDED BY AEROMAP INC.



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APPROX. SCALE IN FEET

DATE
JUNE 2006
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PROJ. NO
14-076

masis
ENVIRONMENTAL
825 W. 8TH AVENUE, SUITE 200
ANCHORAGE, ALASKA 99501

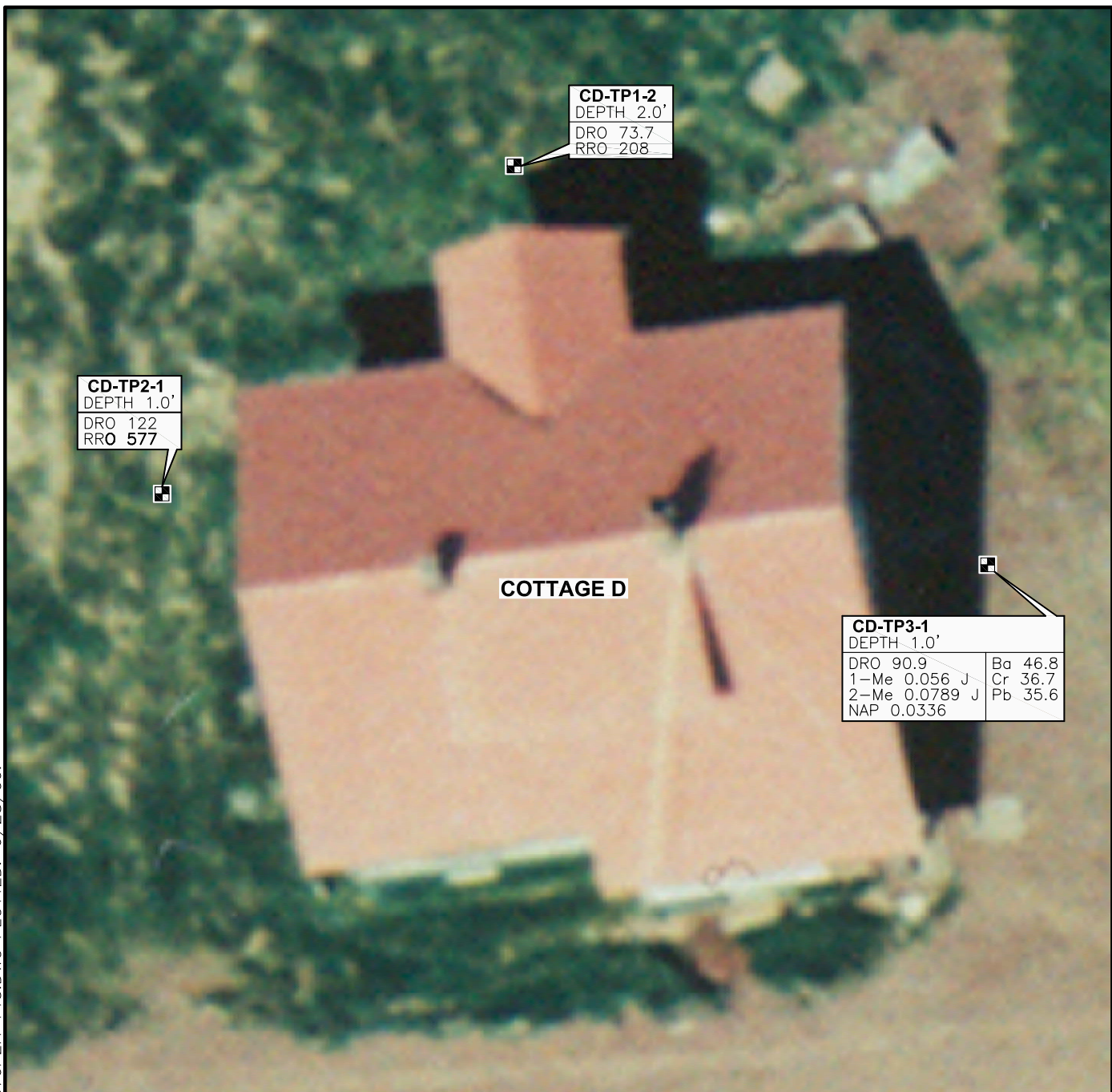
OLD MACHINE SHOP TEST PIT LOCATIONS AND RESULTS

PHASE II ENVIRONMENTAL SITE
ASSESSMENT
St. George Island, Alaska

FIGURE

14

PATH: V:\Project Drawings\St George FILE: 14-076P2A-F15.DWG PLOTTED: 6/28/06.



EXPLANATION

■	TEST PIT LOCATIONS	NAP	NAPHTHALENE
DRO	DIESEL-RANGE ORGANICS	Ba	BARIUM
RRO	RESIDUAL-RANGE ORGANICS	Cr	CHROMIUM
1-Me	1-METHYLNAPHTHALENE	Pb	LEAD
2-Me	2-METHYLNAPHTHALENE	J	ESTIMATED VALUE

NOTES:

1. ALL RESULTS ARE IN mg/Kg.
2. ONLY DETECTED ANALYTICAL RESULTS ARE SHOWN.

SOURCE: SCANNED IMAGE OF AERIAL PHOTO ROLL# 93-13C,
EXP# 10-5 DATED 6/93 PROVIDED BY AEROMAP INC.



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PROJ. NO	14-076



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825 W. 8TH AVENUE, SUITE 200
ANCHORAGE, ALASKA 99501

**COTTAGE D
TEST PIT LOCATIONS AND
RESULTS**

PHASE II ENVIRONMENTAL SITE
ASSESSMENT
St. George Island, Alaska

FIGURE

15

APPENDIX A
ARCHEOLOGY REPORT



NORTHERN LAND USE RESEARCH, INC.

Specialists in Cultural Resource Management

600 University Avenue, Suite 6
P.O. Box 83990
Fairbanks, Alaska 99708
907-474-9684 (vox)
907-474-8370 (fax)

2600 Cordova Street, Suite 110
Anchorage, Alaska 99503
907-644-8128 (vox)

www.northernlanduse.com

1 June 2006

Ms. Lisa Nicholson
OASIS Environmental
825 W. 8th Avenue, Suite 200
Anchorage, Alaska 99501

Dear Ms. Nicholson:

This letter provides the results of archaeological monitoring conducted by Northern Land Use Research, Inc. (NLUR) for OASIS Environmental (OASIS) on 21 May 2006 during the excavation of soil test pits around the exterior of three standing structures associated with the Seal Islands National Historical Landmark in the village of St. George on St. George Island, Alaska (Figure 1). The test pits were excavated with a backhoe by local equipment operator Rodney Lekanof in order for OASIS to obtain subsurface soil samples to be used in testing for petroleum hydrocarbon contamination. In what follows, we provide the results of literature review, field monitoring, and recommendations.

Literature Review

Background research was conducted prior to field monitoring. Reference was made to the 1986 nomination forms for the Seal Islands National Historical Landmark prepared by Sandra Faulkner, to Charles M. Mobley's 1993 *The St. George Seal Skin Plant, St. George, Alaska*, Douglas W. Veltre and Mary J. Veltre's 1981 *A Preliminary Baseline Study of Subsistence Resource Utilization in the Pribilof Islands* (Alaska Department of Fish and Game Technical Paper 57), and to the Alaska Heritage Resource Survey (AHRS) site files at the Office of History and Archaeology in Anchorage. Review of AHRS files indicated no previously identified prehistoric archaeological resources in the vicinity of the project area. Identified historic cultural resources in the vicinity include St George the Great Martyr Russian Orthodox Church, built in 1932-1935 (AHRS XPI-004), the St. George Seal Skin Plant, built about 1951 (AHRS XPI-018), and the St. George Island Cottage, built around 1930 (AHRS XPI-019).

Field Monitoring

Soil test pits were excavated around the exterior of residential Cottage D, the E & P Shop (electrical and plumbing), and the Old Machine Shop (Figure 2). Cottage D was constructed of concrete in the 1930s as a teacher's residence, the E & P Shop was built about 1951 following the 1950 waterfront fire among some commercial buildings at St. George, and the Old Machine shop was constructed about 1948 (Faulkner 1986:8-9).

A total of 16 soil test pits were excavated for soil sampling around the three structures. In general, excavated test pits were approximately 1-2 meters long and 0.5-1 meter wide, and were

excavated until depth had been reached for the soil sample collector (L. Nicholson) to obtain sufficient samples or until bedrock was reached; excavated depths ranged from 0.1 to 0.8 meters. The soils encountered in the test pits indicated the acknowledged and widespread recent periods and materials of fill and resource use occurring in the respective areas. Black beach sand, red scoria, and black and grey coal and coal ash occurred throughout, either independently or in well-defined strata. This fill was described and photographed, and is not considered to contribute to any historical significance.

Cottage D

Three soil test pits (TP) were excavated at Cottage D (Figure 3). Cultural resources in the form of historic-era middens were identified in TP1 and TP 2 (Figures 4 and 5); none were identified in TP 3. Excavation was temporarily halted at TP 1 and 2 while the monitoring archaeologist (M. Cassell) examined the excavated midden contexts. Excavation continued following the archaeologist's assessment that the middens would not likely be considered historically significant.

TP 1 and 2 at Cottage D contained midden material consisting of large quantities of seal bones, together with a small quantity of historic artifacts. TP 1 and 2 contained shallow but evident stratigraphy, comprised of coal and coal ash, sand, and scoria (Figures 6 and 7). Historic artifactual material appeared to derive from throughout the excavation and was not localized within any one strata. All but one identified artifacts (N=11) were collected (Figure 8); seal bones were not collected. The artifacts include:

- 1 white earthenware blue floral transfer print teapot spout ceramic fragment
- 1 white earthenware blue leaf transfer print plate (?) ceramic fragment
- 1 white earthenware green rustic transfer print plate rim ceramic fragment
- 1 white earthenware gilt-edged teacup rim ceramic fragment
- 1 white earthenware undecorated ceramic fragment
- 4 colorless/aqua flat glass fragments
- 1 blue bottle glass fragment
- 1 iron wire fragment (embedded in sidewall; not collected)

While the small size of the ceramic artifacts prevents identification of specific patterns, they generally date to the late 19th- early 20th century. The smoothness of the flat glass likely dates those items to the early 20th century.

The general artifact dates suggest the middens were deposited slightly prior to or slightly following the *ca.* 1930 construction of Cottage D. Historical documentation indicates that the U.S. Department of Commerce embarked on a program of destroying old buildings and erecting new ones in their place after its 1928 management of the sealing industry. It is not known if any residences were located there before the teacher's occupancy of Cottage D; the existence of the seal bones do suggest a possible prior Aleut presence.

While disparities exist in precisely dating the midden deposits, the midden portions excavated in soil testing at Cottage D were not likely to yield additional information beyond the data that was

recorded. We recommend an assessment of “No Historic Properties Affected” concerning the soil test excavations at Cottage D.

E & P Shop

Six soil test pits were excavated at the E & P Shop (Figure 9). A cultural resource in the form of apparently *in situ* concrete remains were identified in TP 1 (Figure 10); none were identified in TP 2-6. Excavation was temporarily halted at TP 1 while the monitoring archaeologist examined the excavated concrete remains. Excavation continued following the archaeologist’s assessment that the concrete remains would not likely be considered historically significant.

The concrete remains at TP 1 consist of concrete containing black beach sand overlying volcanic breccia; the breccia may be bedrock material or may have been placed there prior to the concrete for added subsurface strength and stability. A portion of the concrete is underlain by coal and coal cinders and overlain by scoria (Figures 11 and 12).

The concrete remains date to the building formerly located on the site. This previous structure, also an E and P Shop, was built after the 1928 U.S. Department of Commerce takeover of the St. George sealing operations and destroyed in the 1950 fire (Faulkner 1986:3).

The concrete remains excavated in soil testing at the E & P Shop were not likely to yield additional information beyond the data that was recorded. We recommend an assessment of “No Historic Properties Affected” concerning the soil test excavations at the E & P Shop.

Old Machine Shop

Seven soil test pits were excavated at the Old Machine Shop (Figure 13). Cultural resources in the form of concrete platform remains were identified in TP 1, 6, and 7 (Figures 14-16); none were identified in TP 2-5. Excavation was temporarily halted at TP 1, 6, and 7 while the monitoring archaeologist examined the excavated concrete remains. Excavation continued following the archaeologist’s assessment that the concrete remains would not likely be considered historically significant.

The concrete remains in TP 1 consist of a thin and broken concrete layer underlain by a thin lens of black beach sand and overlain by coal and coal cinders (Figure 17). The concrete platforms in TP 6 and 7 are intact and likely part of the same platform (they lie approximately 5 meters apart on the same side of the structure) (Figures 18-21). The platform in TP 7 appears to be underlain by volcanic breccia, which may be bedrock material or may have been placed there prior to the concrete for added subsurface strength and stability. Concrete samples were collected from TP 1 and 7.

Unlike the wooden commercial structures along the waterfront at St. George, the concrete Old Machine Shop, built in 1948 did not burn down in the 1950 fire. The date of the TP 1 concrete remains is uncertain; it may have provided flooring to a wooden shed entry to the structure and thus did burn. The concrete platform in TP 6 and 7 appear to have been part of an addition to the existing structure: Rodney Lekanof, whose family has been in St. George for four generations, reported that he has a photograph from the 1940s showing this addition (NLUR personnel have

not seen this photograph). Whether that addition burned down or was otherwise removed is uncertain.

The concrete remains excavated in soil testing at the Old Machine Shop were not likely to yield additional information beyond the data that was recorded. We recommend an assessment of “No Historic Properties Affected” concerning the soil test excavations at the Old Machine Shop.

Recommendations

Of the four criteria for significance evaluation set forth in National Park Service regulations (36 CFR 60), the most useful for assessing the significance of the cultural resources identified in soil test excavations at Cottage D (midden remains), the E & P shop (concrete remains), and the Old Machine Shop (concrete platform remains) is Criterion D, which states that a given resource must be known or likely to contain data important in history or prehistory. We suggest that the level of documentation achieved in data gathering during archaeological monitoring efforts has obtained all available relevant data and has removed any potential to yield additional important data. Consequently, we recommend concurrence with our assessment of “No Historic Properties Affected” concerning the soil test excavations at the Cottage D, the E & P Shop, and the Old Machine Shop within the bounds of the Seal Islands National Historical Landmark.

This project was carried out, and this report prepared, in accordance with generally accepted professional practices for the nature and conditions of the work completed in the same or similar localities, at the time the work was performed. It is intended for release to OASIS, its assigns, the State Historic Preservation Officer (SHPO), and appropriate permitting agencies only. This report is not meant to represent a legal opinion.

We do not warrant that we have identified all potentially significant cultural resources present at the referenced properties, as these may be hidden in such a way that only extensive excavations, increased sampling, use of remote sensing equipment (e.g., ground penetrating radar, magnetometer), or other technologies/methods not included in our scope of work will reveal them. No other warranty, expressed or implied, is made. Any questions regarding our work and this report, the presentation of the information, and the interpretation of the data should be referred to NLUR Principal Archaeologist Peter Bowers (907-474-9684) or Senior Project Archaeologist Mark Cassell (907-644-8218, 907-360-2668)

Sincerely,



(Ben Potter, Ph.D., for Mark S. Cassell, Ph.D.)

Mark S. Cassell, Ph.D.
Senior Project Archaeologist

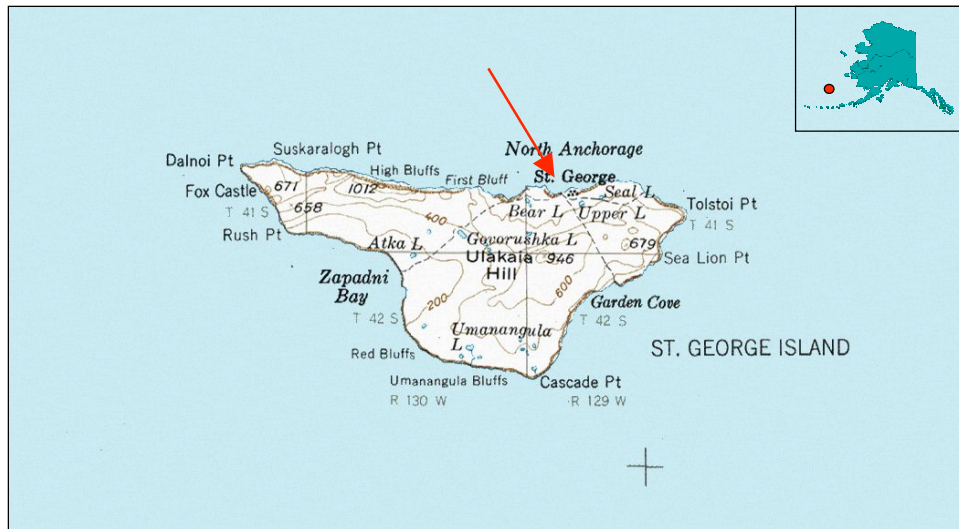


Figure 1: Location of St. George Island and the village of St. George, Alaska.



Figure 2: Location of tested structures in St. George.

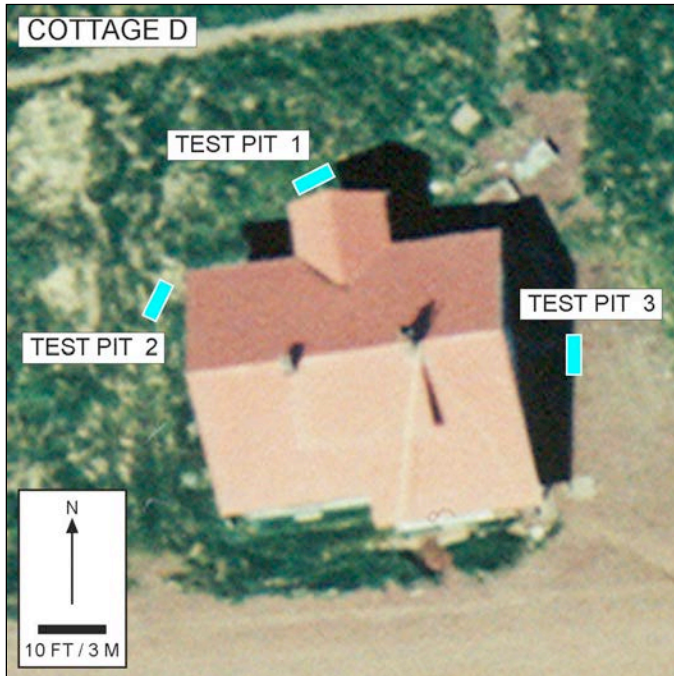


Figure 3: Test pit locations at Cottage D



Figure 4: Cottage D, Test Pit 1 excavation; view south.



Figure 5: Cottage D, Test Pit 2 excavation; view southwest.



Figure 6: Midden at Cottage D, Test Pit 1; note iron wire fragment at pencil tip.



Figure 7: Midden at Cottage D, Test Pit 2.



Figure 8: Artifacts recovered from midden material at Cottage D, Test Pits 1 and 2.

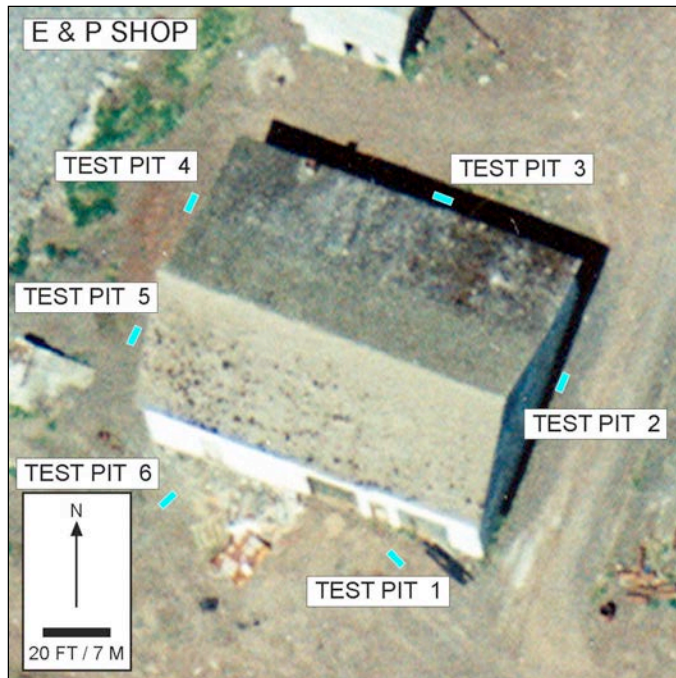


Figure 9: Test pit locations at E&P Shop.



Figure 10: E&P Shop, Test Pit 1 excavation; view north.



Figure 11: Concrete remains at E&P Shop, Test Pit 1; volcanic breccia at far left, concrete at center, coal cinders overlain by scoria at right; view north.



Figure 12: Concrete remains at E&P Shop, Test Pit 1; view northwest.

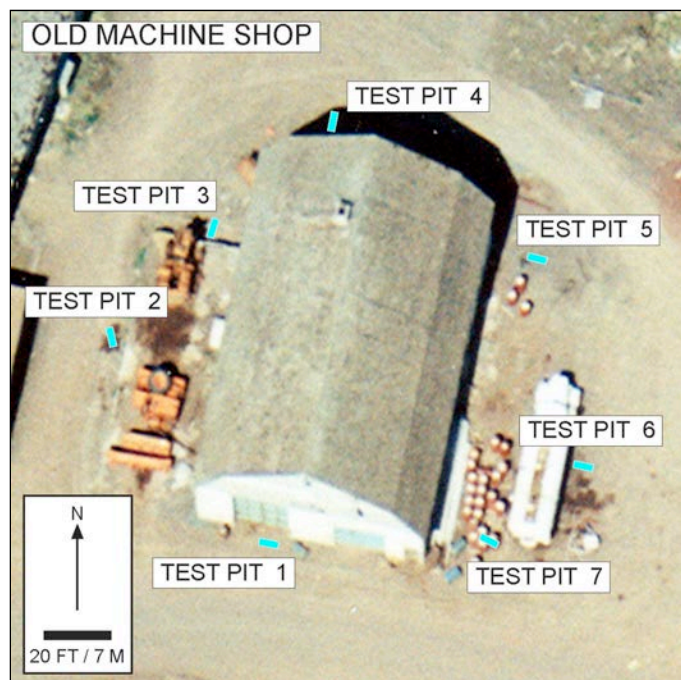


Figure 13: Test pit locations at Old Machine Shop.



Figure 14: Old Machine Shop, Test Pit 1 excavation; view north.

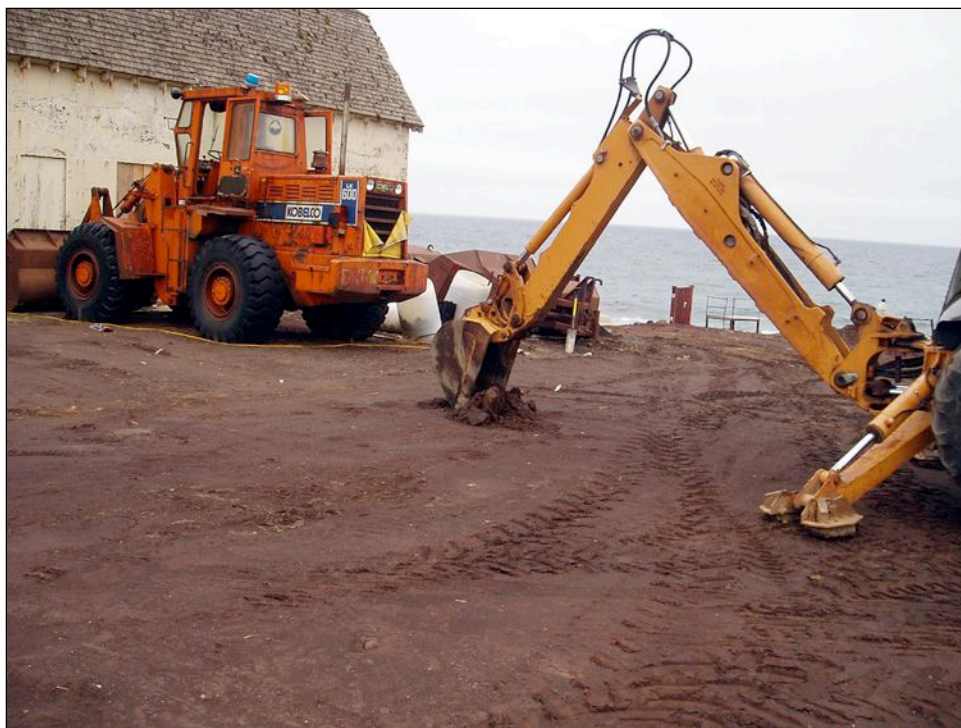


Figure 15: Old Machine Shop, Test Pit 6 excavation; view northwest.



Figure 16: Old Machine Shop, Test Pit 7 excavation; view southwest.



Figure 17: Concrete remains at Old Machine Shop, Test Pit 1; view north.



Figure 18: Concrete platform remains at Old Machine Shop, Test Pit 6; grooves are from backhoe bucket teeth.



Figure 19: Concrete platform remains at Old Machine Shop, Test Pit 6; view west.



Figure 20: Concrete platform remains at Old Machine Shop, Test Pit 7; volcanic breccia at center, concrete at left and right.



Figure 21: Concrete platform remains at Old Machine Shop, Test Pit 7; view northwest.



Figure 22: Concrete samples recovered from Old Machine Shop, Test Pits 1 and 7.

APPENDIX B
LABORATORY ANALYTICAL REPORTS

June 09, 2006

Lisa Nicholson
Oasis Environmental, Inc.
825 8th Ave, Suite 200
Anchorage, AK/USA 99501

RE: St. George Phase II

Enclosed are the results of analyses for samples received by the laboratory on 05/23/06 11:00.
The following list is a summary of the Work Orders contained in this report, generated on 06/09/06
14:40.

If you have any questions concerning this report, please feel free to contact me.

<u>Work Order</u>	<u>Project</u>	<u>ProjectNumber</u>
APE0057	St. George Phase II	2006-490



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
OMS-TP1-1	APE0057-01	Soil	05/21/06 12:05	05/23/06 11:00
OMS-TP2-1	APE0057-02	Soil	05/21/06 12:10	05/23/06 11:00
OMS-TP3-1	APE0057-03	Soil	05/21/06 12:15	05/23/06 11:00
OMS-TP4-2.5	APE0057-04	Soil	05/21/06 12:25	05/23/06 11:00
OMS-TP5-2.5	APE0057-05	Soil	05/21/06 12:27	05/23/06 11:00
OMS-TP6-1	APE0057-06	Soil	05/21/06 12:31	05/23/06 11:00
OMS-TP7-1.5	APE0057-07	Soil	05/21/06 12:40	05/23/06 11:00
EP-TP1-1	APE0057-08	Soil	05/21/06 15:45	05/23/06 11:00
EP-TP2-2	APE0057-09	Soil	05/21/06 15:55	05/23/06 11:00
EP-TP3-0.5	APE0057-10	Soil	05/21/06 16:00	05/23/06 11:00
EP-TP4-0.5	APE0057-11	Soil	05/21/06 16:05	05/23/06 11:00
EP-TP5-1	APE0057-12	Soil	05/21/06 16:10	05/23/06 11:00
EP-TP6-1.5	APE0057-13	Soil	05/21/06 16:15	05/23/06 11:00
CD-TP1-2	APE0057-14	Soil	05/21/06 18:50	05/23/06 11:00
CD-TP2-1	APE0057-15	Soil	05/21/06 18:40	05/23/06 11:00
CD-TP3-1	APE0057-16	Soil	05/21/06 18:30	05/23/06 11:00
TP-DUP1	APE0057-17	Soil	05/21/06 15:55	05/23/06 11:00
TP-DUP2	APE0057-18	Soil	05/21/06 12:40	05/23/06 11:00
TP-DUP3	APE0057-19	Soil	05/21/06 16:05	05/23/06 11:00
TP-DUP4	APE0057-20	Soil	05/21/06 15:45	05/23/06 11:00
TP-DUP5	APE0057-21	Soil	05/21/06 12:25	05/23/06 11:00
TP-DUP6	APE0057-22	Soil	05/21/06 18:30	05/23/06 11:00
TP-DUP7	APE0057-23	Soil	05/21/06 16:00	05/23/06 11:00
CH-SS-B	APE0057-24	Soil	05/21/06 23:00	05/23/06 11:00
CH-SS-C	APE0057-25	Soil	05/21/06 23:05	05/23/06 11:00
CG-SS-B	APE0057-26	Soil	05/21/06 23:10	05/23/06 11:00
CG-SS-D	APE0057-27	Soil	05/21/06 23:15	05/23/06 11:00
OMS-SS-A	APE0057-28	Soil	05/21/06 23:20	05/23/06 11:00
EP-SS-A	APE0057-29	Soil	05/21/06 23:25	05/23/06 11:00
CD-SS-A	APE0057-30	Soil	05/21/06 23:30	05/23/06 11:00
CD-SS-C	APE0057-31	Soil	05/21/06 23:35	05/23/06 11:00
SS-DUP1	APE0057-32	Soil	05/21/06 23:35	05/23/06 11:00
Trip Blank	APE0057-33	Soil	05/21/06 07:00	05/23/06 11:00
Trip Blank	APE0057-34	Soil	05/21/06 07:00	05/23/06 11:00

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40


Gasoline Range Organics (C6-C10) and BTEX per AK101

TestAmerica - Anchorage, AK

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
APE0057-01 (OMS-TP1-1)		Soil								Sampled: 05/21/06 12:05
Gasoline Range Organics	AK101 GRO/BTEX	ND	----	3.02	mg/kg dry	1.5x	6050048	05/24/06 10:22	05/25/06 08:11	
Benzene	"	ND	----	0.0121	"	"	"	"	"	
Toluene	"	ND	----	0.0302	"	"	"	"	"	
Ethylbenzene	"	ND	----	0.0302	"	"	"	"	"	
Xylenes (total)	"	ND	----	0.0453	"	"	"	"	"	
<i>Surrogate(s): a,a,a-TFT (FID)</i>		91.9%			50 - 150 %	"				"
<i>a,a,a-TFT (PID)</i>		80.1%			20.2 - 131 %	"				"
APE0057-02 (OMS-TP2-1)		Soil								Sampled: 05/21/06 12:10
Gasoline Range Organics	AK101 GRO/BTEX	ND	----	3.33	mg/kg dry	2.25x	6050048	05/24/06 10:22	05/25/06 16:26	
Benzene	"	ND	----	0.0133	"	"	"	"	"	
Toluene	"	ND	----	0.0333	"	"	"	"	"	
Ethylbenzene	"	ND	----	0.0333	"	"	"	"	"	
Xylenes (total)	"	ND	----	0.0500	"	"	"	"	"	
<i>Surrogate(s): a,a,a-TFT (FID)</i>		84.8%			50 - 150 %	"				"
<i>a,a,a-TFT (PID)</i>		79.8%			20.2 - 131 %	"				"
APE0057-03 (OMS-TP3-1)		Soil								Sampled: 05/21/06 12:15
Gasoline Range Organics	AK101 GRO/BTEX	ND	----	3.41	mg/kg dry	2.25x	6050048	05/24/06 10:22	05/25/06 09:16	
Benzene	"	ND	----	0.0136	"	"	"	"	"	
Toluene	"	ND	----	0.0341	"	"	"	"	"	
Ethylbenzene	"	ND	----	0.0341	"	"	"	"	"	
Xylenes (total)	"	ND	----	0.0511	"	"	"	"	"	
<i>Surrogate(s): a,a,a-TFT (FID)</i>		78.7%			50 - 150 %	"				"
<i>a,a,a-TFT (PID)</i>		73.0%			20.2 - 131 %	"				"
APE0057-04 (OMS-TP4-2.5)		Soil								Sampled: 05/21/06 12:25
Gasoline Range Organics	AK101 GRO/BTEX	ND	----	3.61	mg/kg dry	2.25x	6050048	05/24/06 10:22	05/25/06 09:49	
Benzene	"	ND	----	0.0144	"	"	"	"	"	
Toluene	"	ND	----	0.0361	"	"	"	"	"	
Ethylbenzene	"	ND	----	0.0361	"	"	"	"	"	
Xylenes (total)	"	ND	----	0.0542	"	"	"	"	"	
<i>Surrogate(s): a,a,a-TFT (FID)</i>		83.8%			50 - 150 %	"				"
<i>a,a,a-TFT (PID)</i>		80.8%			20.2 - 131 %	"				"

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40


Gasoline Range Organics (C6-C10) and BTEX per AK101

TestAmerica - Anchorage, AK

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
APE0057-05 (OMS-TP5-2.5)		Soil		Sampled: 05/21/06 12:27						
Gasoline Range Organics	AK101 GRO/BTEX	ND	----	3.48	mg/kg dry	2.25x	6050048	05/24/06 10:22	05/25/06 10:22	
Benzene	"	ND	----	0.0139	"	"	"	"	"	
Toluene	"	ND	----	0.0348	"	"	"	"	"	
Ethylbenzene	"	ND	----	0.0348	"	"	"	"	"	
Xylenes (total)	"	ND	----	0.0522	"	"	"	"	"	
Surrogate(s):	a,a,a-TFT (FID)	82.7%		50 - 150 %		"		"		
	a,a,a-TFT (PID)	79.7%		20.2 - 131 %		"		"		
APE0057-06 (OMS-TP6-1)		Soil		Sampled: 05/21/06 12:31						
Gasoline Range Organics	AK101 GRO/BTEX	ND	----	3.43	mg/kg dry	1.95x	6050048	05/24/06 10:22	05/25/06 10:55	
Benzene	"	ND	----	0.0137	"	"	"	"	"	
Toluene	"	ND	----	0.0343	"	"	"	"	"	
Ethylbenzene	"	ND	----	0.0343	"	"	"	"	"	
Xylenes (total)	"	ND	----	0.0515	"	"	"	"	"	
Surrogate(s):	a,a,a-TFT (FID)	68.7%		50 - 150 %		"		"		
	a,a,a-TFT (PID)	67.3%		20.2 - 131 %		"		"		
APE0057-07 (OMS-TP7-1.5)		Soil		Sampled: 05/21/06 12:40						
Gasoline Range Organics	AK101 GRO/BTEX	14.0	----	3.68	mg/kg dry	2.25x	6050048	05/24/06 10:22	05/25/06 11:27	
Benzene	"	ND	----	0.0147	"	"	"	"	"	
Toluene	"	ND	----	0.0368	"	"	"	"	"	
Ethylbenzene	"	0.0528	----	0.0368	"	"	"	"	"	J, P-02
Xylenes (total)	"	0.146	----	0.0551	"	"	"	"	"	
Surrogate(s):	a,a,a-TFT (FID)	74.3%		50 - 150 %		"		"		
	a,a,a-TFT (PID)	73.6%		20.2 - 131 %		"		"		
APE0057-08 (EP-TP1-1)		Soil		Sampled: 05/21/06 15:45						
Gasoline Range Organics	AK101 GRO/BTEX	3.60	----	3.01	mg/kg dry	1.5x	6050048	05/24/06 10:22	05/25/06 12:00	
Benzene	"	0.0197	----	0.0120	"	"	"	"	"	
Toluene	"	0.182	----	0.0301	"	"	"	"	"	
Ethylbenzene	"	0.0427	----	0.0301	"	"	"	"	"	
Xylenes (total)	"	0.422	----	0.0451	"	"	"	"	"	
Surrogate(s):	a,a,a-TFT (FID)	77.8%		50 - 150 %		"		"		
	a,a,a-TFT (PID)	70.4%		20.2 - 131 %		"		"		

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40


Gasoline Range Organics (C6-C10) and BTEX per AK101

TestAmerica - Anchorage, AK

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
APE0057-09 (EP-TP2-2)		Soil		Sampled: 05/21/06 15:55						
Gasoline Range Organics	AK101 GRO/BTEX	ND	----	3.20	mg/kg dry	2.25x	6050060	05/30/06 17:15	05/30/06 23:21	
Benzene	"	ND	----	0.0128	"	"	"	"	"	
Toluene	"	ND	----	0.0320	"	"	"	"	"	
Ethylbenzene	"	ND	----	0.0320	"	"	"	"	"	
Xylenes (total)	"	ND	----	0.0481	"	"	"	"	"	
Surrogate(s): a,a,a-TFT (FID)		92.4%		50 - 150 %		"		"		
a,a,a-TFT (PID)		88.0%		20.2 - 131 %		"		"		
APE0057-10 (EP-TP3-0.5)		Soil		Sampled: 05/21/06 16:00						
Gasoline Range Organics	AK101 GRO/BTEX	ND	----	3.73	mg/kg dry	2.25x	6050060	05/30/06 17:15	05/30/06 23:54	
Benzene	"	ND	----	0.0149	"	"	"	"	"	
Toluene	"	ND	----	0.0373	"	"	"	"	"	
Ethylbenzene	"	ND	----	0.0373	"	"	"	"	"	
Xylenes (total)	"	ND	----	0.0560	"	"	"	"	"	
Surrogate(s): a,a,a-TFT (FID)		86.6%		50 - 150 %		"		"		
a,a,a-TFT (PID)		82.8%		20.2 - 131 %		"		"		
APE0057-11 (EP-TP4-0.5)		Soil		Sampled: 05/21/06 16:05						
Gasoline Range Organics	AK101 GRO/BTEX	ND	----	3.63	mg/kg dry	2.25x	6050060	05/30/06 17:15	05/31/06 00:27	
Benzene	"	ND	----	0.0145	"	"	"	"	"	
Toluene	"	0.0375	----	0.0363	"	"	"	"	"	J, P-02
Ethylbenzene	"	ND	----	0.0363	"	"	"	"	"	
Xylenes (total)	"	0.0545	----	0.0544	"	"	"	"	"	
Surrogate(s): a,a,a-TFT (FID)		87.6%		50 - 150 %		"		"		
a,a,a-TFT (PID)		84.5%		20.2 - 131 %		"		"		
APE0057-12 (EP-TP5-1)		Soil		Sampled: 05/21/06 16:10						
Gasoline Range Organics	AK101 GRO/BTEX	4.35	----	3.72	mg/kg dry	2.25x	6050060	05/30/06 17:15	05/31/06 00:59	
Benzene	"	0.0416	----	0.0149	"	"	"	"	"	
Toluene	"	0.272	----	0.0372	"	"	"	"	"	
Ethylbenzene	"	0.0618	----	0.0372	"	"	"	"	"	
Xylenes (total)	"	0.495	----	0.0558	"	"	"	"	"	
Surrogate(s): a,a,a-TFT (FID)		86.3%		50 - 150 %		"		"		
a,a,a-TFT (PID)		84.0%		20.2 - 131 %		"		"		

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Gasoline Range Organics (C6-C10) and BTEX per AK101

TestAmerica - Anchorage, AK

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
APE0057-13 (EP-TP6-1.5)		Soil		Sampled: 05/21/06 16:15						
Gasoline Range Organics	AK101 GRO/BTEX	18.9	----	2.45	mg/kg dry	1x	6050060	05/30/06 17:15	05/31/06 03:10	
Benzene	"	0.420	----	0.00981	"	"	"	"	"	
Toluene	"	2.50	----	0.0245	"	"	"	"	"	
Ethylbenzene	"	0.334	----	0.0245	"	"	"	"	"	
Xylenes (total)	"	3.35	----	0.0368	"	"	"	"	"	
Surrogate(s): a,a,a-TFT (FID)		87.0%		50 - 150 %		"		"		
a,a,a-TFT (PID)		87.9%		20.2 - 131 %		"		"		

APE0057-14 (CD-TP1-2)		Soil		Sampled: 05/21/06 18:50						
Gasoline Range Organics	AK101 GRO/BTEX	ND	----	3.33	mg/kg dry	1x	6050060	05/30/06 17:15	05/31/06 03:43	
Benzene	"	ND	----	0.0133	"	"	"	"	"	
Toluene	"	0.0446	----	0.0333	"	"	"	"	"	
Ethylbenzene	"	ND	----	0.0333	"	"	"	"	"	
Xylenes (total)	"	0.0912	----	0.0500	"	"	"	"	"	J, P-02
Surrogate(s): a,a,a-TFT (FID)		55.4%		50 - 150 %		"		"		
a,a,a-TFT (PID)		51.6%		20.2 - 131 %		"		"		

APE0057-15 (CD-TP2-1)		Soil		Sampled: 05/21/06 18:40						
Gasoline Range Organics	AK101 GRO/BTEX	ND	----	5.84	mg/kg dry	1x	6050060	05/30/06 17:15	05/31/06 04:16	
Benzene	"	ND	----	0.0234	"	"	"	"	"	
Toluene	"	ND	----	0.0584	"	"	"	"	"	
Ethylbenzene	"	ND	----	0.0584	"	"	"	"	"	
Xylenes (total)	"	ND	----	0.0876	"	"	"	"	"	
Surrogate(s): a,a,a-TFT (FID)		61.5%		50 - 150 %		"		"		
a,a,a-TFT (PID)		58.7%		20.2 - 131 %		"		"		

APE0057-16 (CD-TP3-1)		Soil		Sampled: 05/21/06 18:30						
Gasoline Range Organics	AK101 GRO/BTEX	ND	----	3.62	mg/kg dry	1.95x	6050060	05/30/06 17:15	05/31/06 04:49	
Benzene	"	ND	----	0.0145	"	"	"	"	"	
Toluene	"	ND	----	0.0362	"	"	"	"	"	
Ethylbenzene	"	ND	----	0.0362	"	"	"	"	"	
Xylenes (total)	"	0.105	----	0.0542	"	"	"	"	"	J, P-02
Surrogate(s): a,a,a-TFT (FID)		83.2%		50 - 150 %		"		"		
a,a,a-TFT (PID)		78.7%		20.2 - 131 %		"		"		

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Gasoline Range Organics (C6-C10) and BTEX per AK101

TestAmerica - Anchorage, AK


Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
APE0057-19 (TP-DUP3)		Soil		Sampled: 05/21/06 16:05						
Gasoline Range Organics	AK101 GRO/BTEX	ND	----	3.59	mg/kg dry	1.95x	6050060	05/30/06 17:15	05/31/06 05:21	
Benzene	"	ND	----	0.0144	"	"	"	"	"	
Toluene	"	ND	----	0.0359	"	"	"	"	"	
Ethylbenzene	"	ND	----	0.0359	"	"	"	"	"	
Xylenes (total)	"	ND	----	0.0539	"	"	"	"	"	
<i>Surrogate(s): a,a,a-TFT (FID)</i>		90.5%		50 - 150 %		"		"		
<i>a,a,a-TFT (PID)</i>		85.1%		20.2 - 131 %		"		"		

APE0057-20 (TP-DUP4)		Soil		Sampled: 05/21/06 15:45						
Gasoline Range Organics	AK101 GRO/BTEX	5.21	----	2.66	mg/kg dry	1x	6050060	05/30/06 17:15	05/31/06 05:54	
Benzene	"	0.0329	----	0.0106	"	"	"	"	"	
Toluene	"	0.367	----	0.0266	"	"	"	"	"	
Ethylbenzene	"	0.125	----	0.0266	"	"	"	"	"	
Xylenes (total)	"	0.781	----	0.0399	"	"	"	"	"	
<i>Surrogate(s): a,a,a-TFT (FID)</i>		78.6%		50 - 150 %		"		"		
<i>a,a,a-TFT (PID)</i>		77.2%		20.2 - 131 %		"		"		

APE0057-33 (Trip Blank)		Soil		Sampled: 05/21/06 07:00						
Gasoline Range Organics	AK101 GRO/BTEX	ND	----	3.33	mg/kg wet	1x	6050060	05/30/06 17:15	05/31/06 12:01	
Benzene	"	ND	----	0.0133	"	"	"	"	"	
Toluene	"	ND	----	0.0333	"	"	"	"	"	
Ethylbenzene	"	ND	----	0.0333	"	"	"	"	"	
Xylenes (total)	"	ND	----	0.0500	"	"	"	"	"	
<i>Surrogate(s): a,a,a-TFT (FID)</i>		93.8%		50 - 150 %		"		"		
<i>a,a,a-TFT (PID)</i>		90.0%		20.2 - 131 %		"		"		

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



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Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

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

TestAmerica - Anchorage, AK

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
APE0057-01 (OMS-TP1-1)		Soil		Sampled: 05/21/06 12:05						
Diesel Range Organics	AK102/103	40.1	----	25.0	mg/kg dry	1x	6060009	06/04/06 08:57	06/06/06 21:21	
Residual Range Organics	"	108	----	50.0	"	"	"	"	"	
Surrogate(s):	1-Chlorooctadecane	73.9%			50 - 150 %	"			"	
	Triacontane	73.6%			50 - 150 %	"			"	
APE0057-02 (OMS-TP2-1)		Soil		Sampled: 05/21/06 12:10						
Diesel Range Organics	AK102/103	34.4	----	25.0	mg/kg dry	1x	6060009	06/04/06 08:57	06/06/06 21:21	
Residual Range Organics	"	86.7	----	50.0	"	"	"	"	"	
Surrogate(s):	1-Chlorooctadecane	79.1%			50 - 150 %	"			"	
	Triacontane	78.9%			50 - 150 %	"			"	
APE0057-03 (OMS-TP3-1)		Soil		Sampled: 05/21/06 12:15						
Diesel Range Organics	AK102/103	92.6	----	25.0	mg/kg dry	1x	6060009	06/04/06 08:57	06/06/06 22:01	
Residual Range Organics	"	274	----	50.0	"	"	"	"	"	
Surrogate(s):	1-Chlorooctadecane	78.4%			50 - 150 %	"			"	
	Triacontane	78.7%			50 - 150 %	"			"	
APE0057-04 (OMS-TP4-2.5)		Soil		Sampled: 05/21/06 12:25						
Diesel Range Organics	AK102/103	157	----	25.0	mg/kg dry	1x	6060009	06/04/06 08:57	06/06/06 22:01	
Residual Range Organics	"	374	----	50.0	"	"	"	"	"	
Surrogate(s):	1-Chlorooctadecane	81.0%			50 - 150 %	"			"	
	Triacontane	79.1%			50 - 150 %	"			"	
APE0057-05 (OMS-TP5-2.5)		Soil		Sampled: 05/21/06 12:27						
Diesel Range Organics	AK102/103	ND	----	25.0	mg/kg dry	1x	6060009	06/04/06 08:57	06/06/06 22:41	
Residual Range Organics	"	ND	----	50.0	"	"	"	"	"	
Surrogate(s):	1-Chlorooctadecane	82.6%			50 - 150 %	"			"	
	Triacontane	80.9%			50 - 150 %	"			"	
APE0057-06 (OMS-TP6-1)		Soil		Sampled: 05/21/06 12:31						
Diesel Range Organics	AK102/103	121	----	25.0	mg/kg dry	1x	6060009	06/04/06 08:57	06/06/06 22:41	
Residual Range Organics	"	304	----	50.0	"	"	"	"	"	
Surrogate(s):	1-Chlorooctadecane	77.5%			50 - 150 %	"			"	
	Triacontane	76.0%			50 - 150 %	"			"	

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

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

TestAmerica - Anchorage, AK

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
APE0057-07 (OMS-TP7-1.5)		Soil		Sampled: 05/21/06 12:40						
Diesel Range Organics	AK102/103	2160	----	25.0	mg/kg dry	1x	6060009	06/04/06 08:57	06/06/06 23:21	
Residual Range Organics	"	1980	----	50.0	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane		93.8%			50 - 150 %	"			"	
Triacontane		107%			50 - 150 %	"			"	
APE0057-08 (EP-TP1-1)		Soil		Sampled: 05/21/06 15:45						
Diesel Range Organics	AK102/103	181	----	25.0	mg/kg dry	1x	6060009	06/04/06 08:57	06/06/06 23:21	
Residual Range Organics	"	201	----	50.0	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane		79.4%			50 - 150 %	"			"	
Triacontane		81.9%			50 - 150 %	"			"	
APE0057-09 (EP-TP2-2)		Soil		Sampled: 05/21/06 15:55						
Diesel Range Organics	AK102/103	ND	----	25.0	mg/kg dry	1x	6060009	06/04/06 08:57	06/07/06 00:02	
Residual Range Organics	"	ND	----	50.0	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane		80.2%			50 - 150 %	"			"	
Triacontane		79.1%			50 - 150 %	"			"	
APE0057-10 (EP-TP3-0.5)		Soil		Sampled: 05/21/06 16:00						
Diesel Range Organics	AK102/103	77.2	----	50.0	mg/kg dry	4x	6060009	06/04/06 08:57	06/07/06 00:02	R-01
Residual Range Organics	"	216	----	100	"	"	"	"	"	R-01
Surrogate(s): 1-Chlorooctadecane		80.9%			50 - 150 %	"			"	
Triacontane		83.3%			50 - 150 %	"			"	
APE0057-11 (EP-TP4-0.5)		Soil		Sampled: 05/21/06 16:05						
Diesel Range Organics	AK102/103	ND	----	25.0	mg/kg dry	1x	6060009	06/04/06 08:57	06/07/06 01:23	
Residual Range Organics	"	ND	----	50.0	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane		82.9%			50 - 150 %	"			"	
Triacontane		82.4%			50 - 150 %	"			"	
APE0057-12 (EP-TP5-1)		Soil		Sampled: 05/21/06 16:10						
Diesel Range Organics	AK102/103	185	----	22.5	mg/kg dry	1x	6060009	06/04/06 08:57	06/07/06 01:23	
Residual Range Organics	"	268	----	45.0	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane		83.5%			50 - 150 %	"			"	
Triacontane		81.4%			50 - 150 %	"			"	

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40


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

TestAmerica - Anchorage, AK

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
APE0057-13 (EP-TP6-1.5)		Soil		Sampled: 05/21/06 16:15						
Diesel Range Organics	AK102/103	104	----	25.0	mg/kg dry	1x	6060009	06/04/06 08:57	06/07/06 02:03	
Residual Range Organics	"	160	----	50.0	"	"	"	"	"	
Surrogate(s):	1-Chlorooctadecane	82.2%			50 - 150 %	"			"	
	Triacontane	77.2%			50 - 150 %	"			"	
APE0057-14 (CD-TP1-2)		Soil		Sampled: 05/21/06 18:50						
Diesel Range Organics	AK102/103	73.7	----	25.0	mg/kg dry	1x	6060009	06/04/06 08:57	06/07/06 02:03	
Residual Range Organics	"	208	----	50.0	"	"	"	"	"	
Surrogate(s):	1-Chlorooctadecane	65.3%			50 - 150 %	"			"	
	Triacontane	63.9%			50 - 150 %	"			"	
APE0057-15 (CD-TP2-1)		Soil		Sampled: 05/21/06 18:40						
Diesel Range Organics	AK102/103	122	----	73.1	mg/kg dry	1x	6060009	06/04/06 08:57	06/07/06 02:43	
Residual Range Organics	"	577	----	146	"	"	"	"	"	
Surrogate(s):	1-Chlorooctadecane	81.2%			50 - 150 %	"			"	
	Triacontane	85.3%			50 - 150 %	"			"	
APE0057-16 (CD-TP3-1)		Soil		Sampled: 05/21/06 18:30						
Diesel Range Organics	AK102/103	90.9	----	25.0	mg/kg dry	1x	6060009	06/04/06 08:57	06/07/06 02:43	
Residual Range Organics	"	ND	----	50.0	"	"	"	"	"	
Surrogate(s):	1-Chlorooctadecane	82.9%			50 - 150 %	"			"	
	Triacontane	82.6%			50 - 150 %	"			"	
APE0057-17 (TP-DUP1)		Soil		Sampled: 05/21/06 15:55						
Diesel Range Organics	AK102/103	ND	----	25.0	mg/kg dry	1x	6060009	06/04/06 08:57	06/07/06 03:23	
Residual Range Organics	"	ND	----	50.0	"	"	"	"	"	
Surrogate(s):	1-Chlorooctadecane	78.1%			50 - 150 %	"			"	
	Triacontane	77.9%			50 - 150 %	"			"	
APE0057-18 (TP-DUP2)		Soil		Sampled: 05/21/06 12:40						
Diesel Range Organics	AK102/103	1950	----	25.0	mg/kg dry	1x	6060009	06/04/06 08:57	06/07/06 03:23	
Residual Range Organics	"	1110	----	50.0	"	"	"	"	"	
Surrogate(s):	1-Chlorooctadecane	73.7%			50 - 150 %	"			"	
	Triacontane	73.6%			50 - 150 %	"			"	

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Physical Parameters by APHA/ASTM/EPA Methods

TestAmerica - Anchorage, AK

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
APE0057-01 (OMS-TP1-1)		Soil								Sampled: 05/21/06 12:05
Dry Weight	BSOPSPL003R0 7	90.2	----	1.00	%	1x	6060013	06/05/06 16:02	06/06/06 17:03	
APE0057-02 (OMS-TP2-1)		Soil								Sampled: 05/21/06 12:10
Dry Weight	BSOPSPL003R0 7	85.3	----	1.00	%	1x	6060013	06/05/06 16:02	06/06/06 17:03	
APE0057-03 (OMS-TP3-1)		Soil								Sampled: 05/21/06 12:15
Dry Weight	BSOPSPL003R0 7	86.0	----	1.00	%	1x	6060013	06/05/06 16:02	06/06/06 17:03	
APE0057-04 (OMS-TP4-2.5)		Soil								Sampled: 05/21/06 12:25
Dry Weight	BSOPSPL003R0 7	89.2	----	1.00	%	1x	6060013	06/05/06 16:02	06/06/06 17:03	
APE0057-05 (OMS-TP5-2.5)		Soil								Sampled: 05/21/06 12:27
Dry Weight	BSOPSPL003R0 7	83.6	----	1.00	%	1x	6060013	06/05/06 16:02	06/06/06 17:03	
APE0057-06 (OMS-TP6-1)		Soil								Sampled: 05/21/06 12:31
Dry Weight	BSOPSPL003R0 7	84.2	----	1.00	%	1x	6060013	06/05/06 16:02	06/06/06 17:03	
APE0057-07 (OMS-TP7-1.5)		Soil								Sampled: 05/21/06 12:40
Dry Weight	BSOPSPL003R0 7	79.2	----	1.00	%	1x	6060013	06/05/06 16:02	06/06/06 17:03	
APE0057-08 (EP-TP1-1)		Soil								Sampled: 05/21/06 15:45
Dry Weight	BSOPSPL003R0 7	89.1	----	1.00	%	1x	6060013	06/05/06 16:02	06/06/06 17:03	
APE0057-09 (EP-TP2-2)		Soil								Sampled: 05/21/06 15:55
Dry Weight	BSOPSPL003R0 7	94.7	----	1.00	%	1x	6060013	06/05/06 16:02	06/06/06 17:03	
APE0057-10 (EP-TP3-0.5)		Soil								Sampled: 05/21/06 16:00
Dry Weight	BSOPSPL003R0 7	89.3	----	1.00	%	1x	6060013	06/05/06 16:02	06/06/06 17:03	
APE0057-11 (EP-TP4-0.5)		Soil								Sampled: 05/21/06 16:05

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Physical Parameters by APHA/ASTM/EPA Methods

TestAmerica - Anchorage, AK

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
APE0057-11 (EP-TP4-0.5)		Soil						Sampled: 05/21/06 16:05		
Dry Weight	BSOPSPL003R0 7	89.9	----	1.00	%	1x	6060013	06/05/06 16:02	06/06/06 17:03	
APE0057-12 (EP-TP5-1)		Soil						Sampled: 05/21/06 16:10		
Dry Weight	BSOPSPL003R0 7	90.6	----	1.00	%	1x	6060013	06/05/06 16:02	06/06/06 17:03	
APE0057-13 (EP-TP6-1.5)		Soil						Sampled: 05/21/06 16:15		
Dry Weight	BSOPSPL003R0 7	85.5	----	1.00	%	1x	6060013	06/05/06 16:02	06/06/06 17:03	
APE0057-14 (CD-TP1-2)		Soil						Sampled: 05/21/06 18:50		
Dry Weight	BSOPSPL003R0 7	66.5	----	1.00	%	1x	6060013	06/05/06 16:02	06/06/06 17:03	
APE0057-15 (CD-TP2-1)		Soil						Sampled: 05/21/06 18:40		
Dry Weight	BSOPSPL003R0 7	45.5	----	1.00	%	1x	6060013	06/05/06 16:02	06/06/06 17:03	
APE0057-16 (CD-TP3-1)		Soil						Sampled: 05/21/06 18:30		
Dry Weight	BSOPSPL003R0 7	86.2	----	1.00	%	1x	6060013	06/05/06 16:02	06/06/06 17:03	
APE0057-17 (TP-DUP1)		Soil						Sampled: 05/21/06 15:55		
Dry Weight	BSOPSPL003R0 7	93.0	----	1.00	%	1x	6060013	06/05/06 16:02	06/06/06 17:03	
APE0057-18 (TP-DUP2)		Soil						Sampled: 05/21/06 12:40		
Dry Weight	BSOPSPL003R0 7	81.2	----	1.00	%	1x	6060013	06/05/06 16:02	06/06/06 17:03	
APE0057-19 (TP-DUP3)		Soil						Sampled: 05/21/06 16:05		
Dry Weight	BSOPSPL003R0 7	89.9	----	1.00	%	1x	6060026	06/08/06 14:39	06/09/06 09:14	
APE0057-20 (TP-DUP4)		Soil						Sampled: 05/21/06 15:45		
Dry Weight	BSOPSPL003R0 7	89.1	----	1.00	%	1x	6060026	06/08/06 14:39	06/09/06 09:14	

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Total Metals by EPA 6000/7000 Series Methods
TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
APE0057-07 (OMS-TP7-1.5)		Soil		Sampled: 05/21/06 12:40						
Arsenic	EPA 6010B	ND	----	12.2	mg/kg dry	2x	6F03024	06/03/06 16:36	06/05/06 16:29	
Barium	"	88.0	----	3.04	"	5x	"	"	06/05/06 10:56	
Cadmium	"	ND	----	1.52	"	"	"	"	"	
Chromium	"	50.5	----	3.04	"	"	"	"	"	
Lead	"	59.4	----	12.2	"	"	"	"	"	
Mercury	EPA 7471A	ND	----	0.358	"	1x	6E31013	05/31/06 07:55	05/31/06 15:24	
Selenium	EPA 6010B	ND	----	30.4	"	5x	6F03024	06/03/06 16:36	06/05/06 10:56	
Silver	"	ND	----	12.2	"	"	"	"	"	
APE0057-10 (EP-TP3-0.5)		Soil		Sampled: 05/21/06 16:00						
Arsenic	EPA 6010B	ND	----	11.4	mg/kg dry	2x	6F03024	06/03/06 16:36	06/05/06 16:36	
Barium	"	51.6	----	2.85	"	5x	"	"	06/05/06 11:01	
Cadmium	"	ND	----	1.43	"	"	"	"	"	
Chromium	"	62.8	----	2.85	"	"	"	"	"	
Lead	"	331	----	11.4	"	"	"	"	"	
Mercury	EPA 7471A	ND	----	0.336	"	1x	6E31013	05/31/06 07:55	05/31/06 15:27	
Selenium	EPA 6010B	39.9	----	28.5	"	5x	6F03024	06/03/06 16:36	06/05/06 11:01	
Silver	"	ND	----	11.4	"	"	"	"	"	
APE0057-16 (CD-TP3-1)		Soil		Sampled: 05/21/06 18:30						
Arsenic	EPA 6010B	ND	----	11.5	mg/kg dry	2x	6F03024	06/03/06 16:36	06/05/06 16:42	
Barium	"	46.8	----	2.88	"	5x	"	"	06/05/06 11:07	
Cadmium	"	ND	----	1.44	"	"	"	"	"	
Chromium	"	36.7	----	2.88	"	"	"	"	"	
Lead	"	35.6	----	11.5	"	"	"	"	"	
Mercury	EPA 7471A	ND	----	0.461	"	1x	6E31013	05/31/06 07:55	05/31/06 15:35	
Selenium	EPA 6010B	ND	----	28.8	"	5x	6F03024	06/03/06 16:36	06/05/06 11:07	
Silver	"	ND	----	11.5	"	"	"	"	"	
APE0057-22 (TP-DUP6)		Soil		Sampled: 05/21/06 18:30						
Arsenic	EPA 6010B	ND	----	10.4	mg/kg dry	2x	6F03024	06/03/06 16:36	06/05/06 16:48	
Barium	"	81.3	----	2.59	"	5x	"	"	06/05/06 11:12	
Cadmium	"	ND	----	1.30	"	"	"	"	"	
Chromium	"	43.5	----	2.59	"	"	"	"	"	
Lead	"	44.1	----	10.4	"	"	"	"	"	
Mercury	EPA 7471A	ND	----	0.311	"	1x	6E31013	05/31/06 07:55	05/31/06 15:37	
Selenium	EPA 6010B	37.4	----	25.9	"	5x	6F03024	06/03/06 16:36	06/05/06 11:12	
Silver	"	ND	----	10.4	"	"	"	"	"	

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
 Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Total Metals by EPA 6000/7000 Series Methods
 TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
APE0057-24RE1 (CH-SS-B)		Soil		Sampled: 05/21/06 23:00						
Lead	EPA 6020	415	----	2.93	mg/kg dry	5x	6E30079	05/31/06 15:43	06/07/06 14:13	
APE0057-25RE1 (CH-SS-C)		Soil		Sampled: 05/21/06 23:05						
Lead	EPA 6020	6830	----	58.1	mg/kg dry	100x	6E30079	05/31/06 15:43	06/07/06 14:18	
APE0057-26RE1 (CG-SS-B)		Soil		Sampled: 05/21/06 23:10						
Lead	EPA 6020	451	----	2.69	mg/kg dry	5x	6E30079	05/31/06 15:43	06/07/06 14:24	
APE0057-27 (CG-SS-D)		Soil		Sampled: 05/21/06 23:15						
Lead	EPA 6020	69.1	----	0.491	mg/kg dry	1x	6E30079	05/31/06 15:43	06/07/06 13:10	
APE0057-28 (OMS-SS-A)		Soil		Sampled: 05/21/06 23:20						
Lead	EPA 6020	67.0	----	0.448	mg/kg dry	1x	6E30079	05/31/06 15:43	06/07/06 13:15	
APE0057-29RE1 (EP-SS-A)		Soil		Sampled: 05/21/06 23:25						
Lead	EPA 6020	235	----	1.01	mg/kg dry	2x	6E30079	05/31/06 15:43	06/07/06 14:41	
APE0057-30RE1 (CD-SS-A)		Soil		Sampled: 05/21/06 23:30						
Lead	EPA 6020	394	----	3.36	mg/kg dry	5x	6E30079	05/31/06 15:43	06/07/06 14:47	
APE0057-31RE1 (CD-SS-C)		Soil		Sampled: 05/21/06 23:35						
Lead	EPA 6020	475	----	2.83	mg/kg dry	5x	6E30079	05/31/06 15:43	06/07/06 14:53	
APE0057-32RE1 (SS-DUP1)		Soil		Sampled: 05/21/06 23:35						
Lead	EPA 6020	669	----	4.34	mg/kg dry	5x	6E30079	05/31/06 15:43	06/07/06 14:01	

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Volatile Organic Compounds by EPA Method 8260B

TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
APE0057-04 (OMS-TP4-2.5)		Soil		Sampled: 05/21/06 12:25						
Acetone	EPA 8260B	ND	----	0.536	mg/kg dry	1x	6E26025	05/25/06 16:05	05/26/06 15:19	Q-40
Benzene	"	ND	----	0.0536	"	"	"	"	"	
Bromobenzene	"	ND	----	0.0536	"	"	"	"	"	
Bromochloromethane	"	ND	----	0.0536	"	"	"	"	"	
Bromodichloromethane	"	ND	----	0.0536	"	"	"	"	"	
Bromoform	"	ND	----	0.0536	"	"	"	"	"	
Bromomethane	"	ND	----	0.0536	"	"	"	"	"	
2-Butanone	"	ND	----	0.536	"	"	"	"	"	
n-Butylbenzene	"	ND	----	0.0536	"	"	"	"	"	
sec-Butylbenzene	"	ND	----	0.0536	"	"	"	"	"	
tert-Butylbenzene	"	ND	----	0.0536	"	"	"	"	"	
Carbon disulfide	"	ND	----	0.0536	"	"	"	"	"	
Carbon tetrachloride	"	ND	----	0.0536	"	"	"	"	"	
Chlorobenzene	"	ND	----	0.0536	"	"	"	"	"	
Chloroethane	"	ND	----	0.0536	"	"	"	"	"	
1-Chlorohexane	"	ND	----	0.536	"	"	"	"	"	
Chloroform	"	ND	----	0.0536	"	"	"	"	"	
Chloromethane	"	ND	----	0.268	"	"	"	"	"	
2-Chlorotoluene	"	ND	----	0.0536	"	"	"	"	"	
4-Chlorotoluene	"	ND	----	0.0536	"	"	"	"	"	
Dibromochloromethane	"	ND	----	0.0536	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	"	ND	----	0.268	"	"	"	"	"	Q-40
1,2-Dibromoethane	"	ND	----	0.0536	"	"	"	"	"	
Dibromomethane	"	ND	----	0.0536	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	----	0.0536	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	----	0.0536	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	----	0.0536	"	"	"	"	"	
Dichlorodifluoromethane	"	ND	----	0.0536	"	"	"	"	"	
1,1-Dichloroethane	"	ND	----	0.0536	"	"	"	"	"	
1,2-Dichloroethane	"	ND	----	0.0536	"	"	"	"	"	
1,1-Dichloroethene	"	ND	----	0.0536	"	"	"	"	"	
cis-1,2-Dichloroethene	"	ND	----	0.0536	"	"	"	"	"	
trans-1,2-Dichloroethene	"	ND	----	0.0536	"	"	"	"	"	
1,2-Dichloropropane	"	ND	----	0.0536	"	"	"	"	"	
1,3-Dichloropropane	"	ND	----	0.0536	"	"	"	"	"	
2,2-Dichloropropane	"	ND	----	0.0536	"	"	"	"	"	
1,1-Dichloropropene	"	ND	----	0.0536	"	"	"	"	"	
cis-1,3-Dichloropropene	"	ND	----	0.0536	"	"	"	"	"	

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Volatile Organic Compounds by EPA Method 8260B

TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
APE0057-04 (OMS-TP4-2.5)		Soil		Sampled: 05/21/06 12:25						
trans-1,3-Dichloropropene	EPA 8260B	ND	----	0.0536	mg/kg dry	1x	6E26025	05/25/06 16:05	05/26/06 15:19	
Ethylbenzene	"	ND	----	0.0536	"	"	"	"	"	
Hexachlorobutadiene	"	ND	----	0.0536	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	----	0.268	"	"	"	"	"	
n-Hexane	"	ND	----	0.268	"	"	"	"	"	
2-Hexanone	"	ND	----	0.536	"	"	"	"	"	
Isopropylbenzene	"	ND	----	0.0536	"	"	"	"	"	
p-Isopropyltoluene	"	ND	----	0.0536	"	"	"	"	"	
4-Methyl-2-pentanone	"	ND	----	0.536	"	"	"	"	"	
Methylene chloride	"	ND	----	0.536	"	"	"	"	"	
Naphthalene	"	ND	----	0.0536	"	"	"	"	"	Q-40
n-Propylbenzene	"	ND	----	0.0536	"	"	"	"	"	
Styrene	"	ND	----	0.0536	"	"	"	"	"	
1,2,3-Trichlorobenzene	"	ND	----	0.0536	"	"	"	"	"	
1,2,4-Trichlorobenzene	"	ND	----	0.0536	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	"	ND	----	0.0536	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	"	ND	----	0.0536	"	"	"	"	"	
Tetrachloroethene	"	ND	----	0.0536	"	"	"	"	"	
Toluene	"	ND	----	0.0536	"	"	"	"	"	
1,1,1-Trichloroethane	"	ND	----	0.0536	"	"	"	"	"	
1,1,2-Trichloroethane	"	ND	----	0.0536	"	"	"	"	"	
Trichloroethene	"	ND	----	0.0536	"	"	"	"	"	
Trichlorofluoromethane	"	ND	----	0.0536	"	"	"	"	"	
1,2,3-Trichloropropane	"	ND	----	0.0536	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	----	0.0536	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	----	0.0536	"	"	"	"	"	
Vinyl chloride	"	ND	----	0.0536	"	"	"	"	"	
o-Xylene	"	ND	----	0.0536	"	"	"	"	"	
m,p-Xylene	"	ND	----	0.107	"	"	"	"	"	
Total Xylenes	"	ND	----	0.161	"	"	"	"	"	
Surrogate(s): 1,2-DCA-d4		79.9%		70 - 130 %		"		"		
Toluene-d8		98.6%		70 - 130 %		"		"		
4-BFB		97.7%		70 - 130 %		"		"		

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Volatile Organic Compounds by EPA Method 8260B
TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
APE0057-07 (OMS-TP7-1.5)		Soil		Sampled: 05/21/06 12:40						
Acetone	EPA 8260B	ND	----	0.603	mg/kg dry	1x	6E26025	05/25/06 16:05	05/26/06 15:47	Q-40
Benzene	"	ND	----	0.0603	"	"	"	"	"	
Bromobenzene	"	ND	----	0.0603	"	"	"	"	"	
Bromochloromethane	"	ND	----	0.0603	"	"	"	"	"	
Bromodichloromethane	"	ND	----	0.0603	"	"	"	"	"	
Bromoform	"	ND	----	0.0603	"	"	"	"	"	
Bromomethane	"	ND	----	0.0603	"	"	"	"	"	
2-Butanone	"	ND	----	0.603	"	"	"	"	"	
n-Butylbenzene	"	ND	----	0.0603	"	"	"	"	"	
sec-Butylbenzene	"	ND	----	0.0603	"	"	"	"	"	
tert-Butylbenzene	"	ND	----	0.0603	"	"	"	"	"	
Carbon disulfide	"	ND	----	0.0603	"	"	"	"	"	
Carbon tetrachloride	"	ND	----	0.0603	"	"	"	"	"	
Chlorobenzene	"	ND	----	0.0603	"	"	"	"	"	
Chloroethane	"	ND	----	0.0603	"	"	"	"	"	
1-Chlorohexane	"	ND	----	0.603	"	"	"	"	"	
Chloroform	"	ND	----	0.0603	"	"	"	"	"	
Chloromethane	"	ND	----	0.302	"	"	"	"	"	
2-Chlorotoluene	"	ND	----	0.0603	"	"	"	"	"	
4-Chlorotoluene	"	ND	----	0.0603	"	"	"	"	"	
Dibromochloromethane	"	ND	----	0.0603	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	"	ND	----	0.302	"	"	"	"	"	Q-40
1,2-Dibromoethane	"	ND	----	0.0603	"	"	"	"	"	
Dibromomethane	"	ND	----	0.0603	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	----	0.0603	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	----	0.0603	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	----	0.0603	"	"	"	"	"	
Dichlorodifluoromethane	"	ND	----	0.0603	"	"	"	"	"	
1,1-Dichloroethane	"	ND	----	0.0603	"	"	"	"	"	
1,2-Dichloroethane	"	ND	----	0.0603	"	"	"	"	"	
1,1-Dichloroethene	"	ND	----	0.0603	"	"	"	"	"	
cis-1,2-Dichloroethene	"	ND	----	0.0603	"	"	"	"	"	
trans-1,2-Dichloroethene	"	ND	----	0.0603	"	"	"	"	"	
1,2-Dichloropropane	"	ND	----	0.0603	"	"	"	"	"	
1,3-Dichloropropane	"	ND	----	0.0603	"	"	"	"	"	
2,2-Dichloropropane	"	ND	----	0.0603	"	"	"	"	"	
1,1-Dichloropropene	"	ND	----	0.0603	"	"	"	"	"	
cis-1,3-Dichloropropene	"	ND	----	0.0603	"	"	"	"	"	

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40


Volatile Organic Compounds by EPA Method 8260B

TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
APE0057-07 (OMS-TP7-1.5)		Soil		Sampled: 05/21/06 12:40						
trans-1,3-Dichloropropene	EPA 8260B	ND	----	0.0603	mg/kg dry	1x	6E26025	05/25/06 16:05	05/26/06 15:47	
Ethylbenzene	"	ND	----	0.0603	"	"	"	"	"	
Hexachlorobutadiene	"	ND	----	0.0603	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	----	0.302	"	"	"	"	"	
n-Hexane	"	ND	----	0.302	"	"	"	"	"	
2-Hexanone	"	ND	----	0.603	"	"	"	"	"	
Isopropylbenzene	"	ND	----	0.0603	"	"	"	"	"	
p-Isopropyltoluene	"	ND	----	0.0603	"	"	"	"	"	
4-Methyl-2-pentanone	"	ND	----	0.603	"	"	"	"	"	
Methylene chloride	"	ND	----	0.603	"	"	"	"	"	
Naphthalene	"	ND	----	0.0603	"	"	"	"	"	Q-40
n-Propylbenzene	"	ND	----	0.0603	"	"	"	"	"	
Styrene	"	ND	----	0.0603	"	"	"	"	"	
1,2,3-Trichlorobenzene	"	ND	----	0.0603	"	"	"	"	"	
1,2,4-Trichlorobenzene	"	ND	----	0.0603	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	"	ND	----	0.0603	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	"	ND	----	0.0603	"	"	"	"	"	
Tetrachloroethene	"	ND	----	0.0603	"	"	"	"	"	
Toluene	"	ND	----	0.0603	"	"	"	"	"	
1,1,1-Trichloroethane	"	ND	----	0.0603	"	"	"	"	"	
1,1,2-Trichloroethane	"	ND	----	0.0603	"	"	"	"	"	
Trichloroethene	"	ND	----	0.0603	"	"	"	"	"	
Trichlorofluoromethane	"	ND	----	0.0603	"	"	"	"	"	
1,2,3-Trichloropropane	"	ND	----	0.0603	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	----	0.0603	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	----	0.0603	"	"	"	"	"	
Vinyl chloride	"	ND	----	0.0603	"	"	"	"	"	
o-Xylene	"	ND	----	0.0603	"	"	"	"	"	
m,p-Xylene	"	ND	----	0.121	"	"	"	"	"	
Total Xylenes	"	ND	----	0.181	"	"	"	"	"	
Surrogate(s): 1,2-DCA-d4		80.9%		70 - 130 %		"		"		
Toluene-d8		97.1%		70 - 130 %		"		"		
4-BFB		98.8%		70 - 130 %		"		"		

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Volatile Organic Compounds by EPA Method 8260B
TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
APE0057-09 (EP-TP2-2)		Soil		Sampled: 05/21/06 15:55						
Acetone	EPA 8260B	ND	----	0.536	mg/kg dry	1x	6E26025	05/25/06 16:05	05/26/06 16:14	Q-40
Benzene	"	ND	----	0.0536	"	"	"	"	"	
Bromobenzene	"	ND	----	0.0536	"	"	"	"	"	
Bromochloromethane	"	ND	----	0.0536	"	"	"	"	"	
Bromodichloromethane	"	ND	----	0.0536	"	"	"	"	"	
Bromoform	"	ND	----	0.0536	"	"	"	"	"	
Bromomethane	"	ND	----	0.0536	"	"	"	"	"	
2-Butanone	"	ND	----	0.536	"	"	"	"	"	
n-Butylbenzene	"	ND	----	0.0536	"	"	"	"	"	
sec-Butylbenzene	"	ND	----	0.0536	"	"	"	"	"	
tert-Butylbenzene	"	ND	----	0.0536	"	"	"	"	"	
Carbon disulfide	"	ND	----	0.0536	"	"	"	"	"	
Carbon tetrachloride	"	ND	----	0.0536	"	"	"	"	"	
Chlorobenzene	"	ND	----	0.0536	"	"	"	"	"	
Chloroethane	"	ND	----	0.0536	"	"	"	"	"	
1-Chlorohexane	"	ND	----	0.536	"	"	"	"	"	
Chloroform	"	ND	----	0.0536	"	"	"	"	"	
Chloromethane	"	ND	----	0.268	"	"	"	"	"	
2-Chlorotoluene	"	ND	----	0.0536	"	"	"	"	"	
4-Chlorotoluene	"	ND	----	0.0536	"	"	"	"	"	
Dibromochloromethane	"	ND	----	0.0536	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	"	ND	----	0.268	"	"	"	"	"	Q-40
1,2-Dibromoethane	"	ND	----	0.0536	"	"	"	"	"	
Dibromomethane	"	ND	----	0.0536	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	----	0.0536	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	----	0.0536	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	----	0.0536	"	"	"	"	"	
Dichlorodifluoromethane	"	ND	----	0.0536	"	"	"	"	"	
1,1-Dichloroethane	"	ND	----	0.0536	"	"	"	"	"	
1,2-Dichloroethane	"	ND	----	0.0536	"	"	"	"	"	
1,1-Dichloroethene	"	ND	----	0.0536	"	"	"	"	"	
cis-1,2-Dichloroethene	"	ND	----	0.0536	"	"	"	"	"	
trans-1,2-Dichloroethene	"	ND	----	0.0536	"	"	"	"	"	
1,2-Dichloropropane	"	ND	----	0.0536	"	"	"	"	"	
1,3-Dichloropropane	"	ND	----	0.0536	"	"	"	"	"	
2,2-Dichloropropane	"	ND	----	0.0536	"	"	"	"	"	
1,1-Dichloropropene	"	ND	----	0.0536	"	"	"	"	"	
cis-1,3-Dichloropropene	"	ND	----	0.0536	"	"	"	"	"	

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Volatile Organic Compounds by EPA Method 8260B

TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
APE0057-09 (EP-TP2-2)		Soil		Sampled: 05/21/06 15:55						
trans-1,3-Dichloropropene	EPA 8260B	ND	----	0.0536	mg/kg dry	1x	6E26025	05/25/06 16:05	05/26/06 16:14	
Ethylbenzene	"	ND	----	0.0536	"	"	"	"	"	
Hexachlorobutadiene	"	ND	----	0.0536	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	----	0.268	"	"	"	"	"	
n-Hexane	"	ND	----	0.268	"	"	"	"	"	
2-Hexanone	"	ND	----	0.536	"	"	"	"	"	
Isopropylbenzene	"	ND	----	0.0536	"	"	"	"	"	
p-Isopropyltoluene	"	ND	----	0.0536	"	"	"	"	"	
4-Methyl-2-pentanone	"	ND	----	0.536	"	"	"	"	"	
Methylene chloride	"	ND	----	0.536	"	"	"	"	"	
Naphthalene	"	ND	----	0.0536	"	"	"	"	"	Q-40
n-Propylbenzene	"	ND	----	0.0536	"	"	"	"	"	
Styrene	"	ND	----	0.0536	"	"	"	"	"	
1,2,3-Trichlorobenzene	"	ND	----	0.0536	"	"	"	"	"	
1,2,4-Trichlorobenzene	"	ND	----	0.0536	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	"	ND	----	0.0536	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	"	ND	----	0.0536	"	"	"	"	"	
Tetrachloroethene	"	ND	----	0.0536	"	"	"	"	"	
Toluene	"	ND	----	0.0536	"	"	"	"	"	
1,1,1-Trichloroethane	"	ND	----	0.0536	"	"	"	"	"	
1,1,2-Trichloroethane	"	ND	----	0.0536	"	"	"	"	"	
Trichloroethene	"	ND	----	0.0536	"	"	"	"	"	
Trichlorofluoromethane	"	ND	----	0.0536	"	"	"	"	"	
1,2,3-Trichloropropane	"	ND	----	0.0536	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	----	0.0536	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	----	0.0536	"	"	"	"	"	
Vinyl chloride	"	ND	----	0.0536	"	"	"	"	"	
o-Xylene	"	ND	----	0.0536	"	"	"	"	"	
m,p-Xylene	"	ND	----	0.107	"	"	"	"	"	
Total Xylenes	"	ND	----	0.161	"	"	"	"	"	
Surrogate(s): 1,2-DCA-d4		80.4%		70 - 130 %		"		"		
Toluene-d8		96.3%		70 - 130 %		"		"		
4-BFB		98.1%		70 - 130 %		"		"		

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



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Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Volatile Organic Compounds by EPA Method 8260B

TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
APE0057-10 (EP-TP3-0.5)		Soil		Sampled: 05/21/06 16:00						
Acetone	EPA 8260B	ND	----	0.580	mg/kg dry	1x	6E26025	05/25/06 16:05	05/26/06 16:42	Q-40
Benzene	"	ND	----	0.0580	"	"	"	"	"	
Bromobenzene	"	ND	----	0.0580	"	"	"	"	"	
Bromochloromethane	"	ND	----	0.0580	"	"	"	"	"	
Bromodichloromethane	"	ND	----	0.0580	"	"	"	"	"	
Bromoform	"	ND	----	0.0580	"	"	"	"	"	
Bromomethane	"	ND	----	0.0580	"	"	"	"	"	
2-Butanone	"	ND	----	0.580	"	"	"	"	"	
n-Butylbenzene	"	ND	----	0.0580	"	"	"	"	"	
sec-Butylbenzene	"	ND	----	0.0580	"	"	"	"	"	
tert-Butylbenzene	"	ND	----	0.0580	"	"	"	"	"	
Carbon disulfide	"	ND	----	0.0580	"	"	"	"	"	
Carbon tetrachloride	"	ND	----	0.0580	"	"	"	"	"	
Chlorobenzene	"	ND	----	0.0580	"	"	"	"	"	
Chloroethane	"	ND	----	0.0580	"	"	"	"	"	
1-Chlorohexane	"	ND	----	0.580	"	"	"	"	"	
Chloroform	"	ND	----	0.0580	"	"	"	"	"	
Chloromethane	"	ND	----	0.290	"	"	"	"	"	
2-Chlorotoluene	"	ND	----	0.0580	"	"	"	"	"	
4-Chlorotoluene	"	ND	----	0.0580	"	"	"	"	"	
Dibromochloromethane	"	ND	----	0.0580	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	"	ND	----	0.290	"	"	"	"	"	Q-40
1,2-Dibromoethane	"	ND	----	0.0580	"	"	"	"	"	
Dibromomethane	"	ND	----	0.0580	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	----	0.0580	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	----	0.0580	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	----	0.0580	"	"	"	"	"	
Dichlorodifluoromethane	"	ND	----	0.0580	"	"	"	"	"	
1,1-Dichloroethane	"	ND	----	0.0580	"	"	"	"	"	
1,2-Dichloroethane	"	ND	----	0.0580	"	"	"	"	"	
1,1-Dichloroethene	"	ND	----	0.0580	"	"	"	"	"	
cis-1,2-Dichloroethene	"	ND	----	0.0580	"	"	"	"	"	
trans-1,2-Dichloroethene	"	ND	----	0.0580	"	"	"	"	"	
1,2-Dichloropropane	"	ND	----	0.0580	"	"	"	"	"	
1,3-Dichloropropane	"	ND	----	0.0580	"	"	"	"	"	
2,2-Dichloropropane	"	ND	----	0.0580	"	"	"	"	"	
1,1-Dichloropropene	"	ND	----	0.0580	"	"	"	"	"	
cis-1,3-Dichloropropene	"	ND	----	0.0580	"	"	"	"	"	

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Volatile Organic Compounds by EPA Method 8260B

TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
APE0057-10 (EP-TP3-0.5)		Soil		Sampled: 05/21/06 16:00						
trans-1,3-Dichloropropene	EPA 8260B	ND	----	0.0580	mg/kg dry	1x	6E26025	05/25/06 16:05	05/26/06 16:42	
Ethylbenzene	"	ND	----	0.0580	"	"	"	"	"	
Hexachlorobutadiene	"	ND	----	0.0580	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	----	0.290	"	"	"	"	"	
n-Hexane	"	ND	----	0.290	"	"	"	"	"	
2-Hexanone	"	ND	----	0.580	"	"	"	"	"	
Isopropylbenzene	"	ND	----	0.0580	"	"	"	"	"	
p-Isopropyltoluene	"	ND	----	0.0580	"	"	"	"	"	
4-Methyl-2-pentanone	"	ND	----	0.580	"	"	"	"	"	
Methylene chloride	"	ND	----	0.580	"	"	"	"	"	
Naphthalene	"	ND	----	0.0580	"	"	"	"	"	Q-40
n-Propylbenzene	"	ND	----	0.0580	"	"	"	"	"	
Styrene	"	ND	----	0.0580	"	"	"	"	"	
1,2,3-Trichlorobenzene	"	ND	----	0.0580	"	"	"	"	"	
1,2,4-Trichlorobenzene	"	ND	----	0.0580	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	"	ND	----	0.0580	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	"	ND	----	0.0580	"	"	"	"	"	
Tetrachloroethene	"	ND	----	0.0580	"	"	"	"	"	
Toluene	"	ND	----	0.0580	"	"	"	"	"	
1,1,1-Trichloroethane	"	ND	----	0.0580	"	"	"	"	"	
1,1,2-Trichloroethane	"	ND	----	0.0580	"	"	"	"	"	
Trichloroethene	"	ND	----	0.0580	"	"	"	"	"	
Trichlorofluoromethane	"	ND	----	0.0580	"	"	"	"	"	
1,2,3-Trichloropropane	"	ND	----	0.0580	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	----	0.0580	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	----	0.0580	"	"	"	"	"	
Vinyl chloride	"	ND	----	0.0580	"	"	"	"	"	
o-Xylene	"	ND	----	0.0580	"	"	"	"	"	
m,p-Xylene	"	ND	----	0.116	"	"	"	"	"	
Total Xylenes	"	ND	----	0.174	"	"	"	"	"	
Surrogate(s): 1,2-DCA-d4		79.3%		70 - 130 %		"		"		
Toluene-d8		96.6%		70 - 130 %		"		"		
4-BFB		97.8%		70 - 130 %		"		"		

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Volatile Organic Compounds by EPA Method 8260B

TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
APE0057-16 (CD-TP3-1)		Soil					Sampled: 05/21/06 18:30			
Acetone	EPA 8260B	ND	----	0.691	mg/kg dry	1x	6E26025	05/25/06 16:05	05/26/06 17:10	Q-40
Benzene	"	ND	----	0.0691	"	"	"	"	"	
Bromobenzene	"	ND	----	0.0691	"	"	"	"	"	
Bromochloromethane	"	ND	----	0.0691	"	"	"	"	"	
Bromodichloromethane	"	ND	----	0.0691	"	"	"	"	"	
Bromoform	"	ND	----	0.0691	"	"	"	"	"	
Bromomethane	"	ND	----	0.0691	"	"	"	"	"	
2-Butanone	"	ND	----	0.691	"	"	"	"	"	
n-Butylbenzene	"	ND	----	0.0691	"	"	"	"	"	
sec-Butylbenzene	"	ND	----	0.0691	"	"	"	"	"	
tert-Butylbenzene	"	ND	----	0.0691	"	"	"	"	"	
Carbon disulfide	"	ND	----	0.0691	"	"	"	"	"	
Carbon tetrachloride	"	ND	----	0.0691	"	"	"	"	"	
Chlorobenzene	"	ND	----	0.0691	"	"	"	"	"	
Chloroethane	"	ND	----	0.0691	"	"	"	"	"	
1-Chlorohexane	"	ND	----	0.691	"	"	"	"	"	
Chloroform	"	ND	----	0.0691	"	"	"	"	"	
Chloromethane	"	ND	----	0.346	"	"	"	"	"	
2-Chlorotoluene	"	ND	----	0.0691	"	"	"	"	"	
4-Chlorotoluene	"	ND	----	0.0691	"	"	"	"	"	
Dibromochloromethane	"	ND	----	0.0691	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	"	ND	----	0.346	"	"	"	"	"	Q-40
1,2-Dibromoethane	"	ND	----	0.0691	"	"	"	"	"	
Dibromomethane	"	ND	----	0.0691	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	----	0.0691	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	----	0.0691	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	----	0.0691	"	"	"	"	"	
Dichlorodifluoromethane	"	ND	----	0.0691	"	"	"	"	"	
1,1-Dichloroethane	"	ND	----	0.0691	"	"	"	"	"	
1,2-Dichloroethane	"	ND	----	0.0691	"	"	"	"	"	
1,1-Dichloroethene	"	ND	----	0.0691	"	"	"	"	"	
cis-1,2-Dichloroethene	"	ND	----	0.0691	"	"	"	"	"	
trans-1,2-Dichloroethene	"	ND	----	0.0691	"	"	"	"	"	
1,2-Dichloropropane	"	ND	----	0.0691	"	"	"	"	"	
1,3-Dichloropropane	"	ND	----	0.0691	"	"	"	"	"	
2,2-Dichloropropane	"	ND	----	0.0691	"	"	"	"	"	
1,1-Dichloropropene	"	ND	----	0.0691	"	"	"	"	"	
cis-1,3-Dichloropropene	"	ND	----	0.0691	"	"	"	"	"	

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Volatile Organic Compounds by EPA Method 8260B

TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
APE0057-16 (CD-TP3-1)		Soil		Sampled: 05/21/06 18:30						
trans-1,3-Dichloropropene	EPA 8260B	ND	----	0.0691	mg/kg dry	1x	6E26025	05/25/06 16:05	05/26/06 17:10	
Ethylbenzene	"	ND	----	0.0691	"	"	"	"	"	
Hexachlorobutadiene	"	ND	----	0.0691	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	----	0.346	"	"	"	"	"	
n-Hexane	"	ND	----	0.346	"	"	"	"	"	
2-Hexanone	"	ND	----	0.691	"	"	"	"	"	
Isopropylbenzene	"	ND	----	0.0691	"	"	"	"	"	
p-Isopropyltoluene	"	ND	----	0.0691	"	"	"	"	"	
4-Methyl-2-pentanone	"	ND	----	0.691	"	"	"	"	"	
Methylene chloride	"	ND	----	0.691	"	"	"	"	"	
Naphthalene	"	ND	----	0.0691	"	"	"	"	"	Q-40
n-Propylbenzene	"	ND	----	0.0691	"	"	"	"	"	
Styrene	"	ND	----	0.0691	"	"	"	"	"	
1,2,3-Trichlorobenzene	"	ND	----	0.0691	"	"	"	"	"	
1,2,4-Trichlorobenzene	"	ND	----	0.0691	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	"	ND	----	0.0691	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	"	ND	----	0.0691	"	"	"	"	"	
Tetrachloroethene	"	ND	----	0.0691	"	"	"	"	"	
Toluene	"	ND	----	0.0691	"	"	"	"	"	
1,1,1-Trichloroethane	"	ND	----	0.0691	"	"	"	"	"	
1,1,2-Trichloroethane	"	ND	----	0.0691	"	"	"	"	"	
Trichloroethene	"	ND	----	0.0691	"	"	"	"	"	
Trichlorofluoromethane	"	ND	----	0.0691	"	"	"	"	"	
1,2,3-Trichloropropane	"	ND	----	0.0691	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	----	0.0691	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	----	0.0691	"	"	"	"	"	
Vinyl chloride	"	ND	----	0.0691	"	"	"	"	"	
o-Xylene	"	ND	----	0.0691	"	"	"	"	"	
m,p-Xylene	"	ND	----	0.138	"	"	"	"	"	
Total Xylenes	"	ND	----	0.207	"	"	"	"	"	
Surrogate(s): 1,2-DCA-d4		79.7%		70 - 130 %		"		"		
Toluene-d8		96.0%		70 - 130 %		"		"		
4-BFB		97.5%		70 - 130 %		"		"		

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Volatile Organic Compounds by EPA Method 8260B
TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
APE0057-21 (TP-DUP5)		Soil		Sampled: 05/21/06 12:25						
Acetone	EPA 8260B	ND	----	0.683	mg/kg wet	1x	6E26025	05/25/06 16:05	05/26/06 17:38	Q-40
Benzene	"	ND	----	0.0683	"	"	"	"	"	
Bromobenzene	"	ND	----	0.0683	"	"	"	"	"	
Bromochloromethane	"	ND	----	0.0683	"	"	"	"	"	
Bromodichloromethane	"	ND	----	0.0683	"	"	"	"	"	
Bromoform	"	ND	----	0.0683	"	"	"	"	"	
Bromomethane	"	ND	----	0.0683	"	"	"	"	"	
2-Butanone	"	ND	----	0.683	"	"	"	"	"	
n-Butylbenzene	"	ND	----	0.0683	"	"	"	"	"	
sec-Butylbenzene	"	ND	----	0.0683	"	"	"	"	"	
tert-Butylbenzene	"	ND	----	0.0683	"	"	"	"	"	
Carbon disulfide	"	ND	----	0.0683	"	"	"	"	"	
Carbon tetrachloride	"	ND	----	0.0683	"	"	"	"	"	
Chlorobenzene	"	ND	----	0.0683	"	"	"	"	"	
Chloroethane	"	ND	----	0.0683	"	"	"	"	"	
1-Chlorohexane	"	ND	----	0.683	"	"	"	"	"	
Chloroform	"	ND	----	0.0683	"	"	"	"	"	
Chloromethane	"	ND	----	0.341	"	"	"	"	"	
2-Chlorotoluene	"	ND	----	0.0683	"	"	"	"	"	
4-Chlorotoluene	"	ND	----	0.0683	"	"	"	"	"	
Dibromochloromethane	"	ND	----	0.0683	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	"	ND	----	0.341	"	"	"	"	"	Q-40
1,2-Dibromoethane	"	ND	----	0.0683	"	"	"	"	"	
Dibromomethane	"	ND	----	0.0683	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	----	0.0683	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	----	0.0683	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	----	0.0683	"	"	"	"	"	
Dichlorodifluoromethane	"	ND	----	0.0683	"	"	"	"	"	
1,1-Dichloroethane	"	ND	----	0.0683	"	"	"	"	"	
1,2-Dichloroethane	"	ND	----	0.0683	"	"	"	"	"	
1,1-Dichloroethene	"	ND	----	0.0683	"	"	"	"	"	
cis-1,2-Dichloroethene	"	ND	----	0.0683	"	"	"	"	"	
trans-1,2-Dichloroethene	"	ND	----	0.0683	"	"	"	"	"	
1,2-Dichloropropane	"	ND	----	0.0683	"	"	"	"	"	
1,3-Dichloropropane	"	ND	----	0.0683	"	"	"	"	"	
2,2-Dichloropropane	"	ND	----	0.0683	"	"	"	"	"	
1,1-Dichloropropene	"	ND	----	0.0683	"	"	"	"	"	
cis-1,3-Dichloropropene	"	ND	----	0.0683	"	"	"	"	"	

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Volatile Organic Compounds by EPA Method 8260B

TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
APE0057-21 (TP-DUP5)		Soil		Sampled: 05/21/06 12:25						
trans-1,3-Dichloropropene	EPA 8260B	ND	----	0.0683	mg/kg wet	1x	6E26025	05/25/06 16:05	05/26/06 17:38	
Ethylbenzene	"	ND	----	0.0683	"	"	"	"	"	
Hexachlorobutadiene	"	ND	----	0.0683	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	----	0.341	"	"	"	"	"	
n-Hexane	"	ND	----	0.341	"	"	"	"	"	
2-Hexanone	"	ND	----	0.683	"	"	"	"	"	
Isopropylbenzene	"	ND	----	0.0683	"	"	"	"	"	
p-Isopropyltoluene	"	ND	----	0.0683	"	"	"	"	"	
4-Methyl-2-pentanone	"	ND	----	0.683	"	"	"	"	"	
Methylene chloride	"	ND	----	0.683	"	"	"	"	"	
Naphthalene	"	ND	----	0.0683	"	"	"	"	"	Q-40
n-Propylbenzene	"	ND	----	0.0683	"	"	"	"	"	
Styrene	"	ND	----	0.0683	"	"	"	"	"	
1,2,3-Trichlorobenzene	"	ND	----	0.0683	"	"	"	"	"	
1,2,4-Trichlorobenzene	"	ND	----	0.0683	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	"	ND	----	0.0683	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	"	ND	----	0.0683	"	"	"	"	"	
Tetrachloroethene	"	ND	----	0.0683	"	"	"	"	"	
Toluene	"	ND	----	0.0683	"	"	"	"	"	
1,1,1-Trichloroethane	"	ND	----	0.0683	"	"	"	"	"	
1,1,2-Trichloroethane	"	ND	----	0.0683	"	"	"	"	"	
Trichloroethene	"	ND	----	0.0683	"	"	"	"	"	
Trichlorofluoromethane	"	ND	----	0.0683	"	"	"	"	"	
1,2,3-Trichloropropane	"	ND	----	0.0683	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	----	0.0683	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	----	0.0683	"	"	"	"	"	
Vinyl chloride	"	ND	----	0.0683	"	"	"	"	"	
o-Xylene	"	ND	----	0.0683	"	"	"	"	"	
m,p-Xylene	"	ND	----	0.137	"	"	"	"	"	
Total Xylenes	"	ND	----	0.205	"	"	"	"	"	
Surrogate(s): 1,2-DCA-d4		77.7%		70 - 130 %		"		"		
Toluene-d8		97.1%		70 - 130 %		"		"		
4-BFB		97.4%		70 - 130 %		"		"		

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Volatile Organic Compounds by EPA Method 8260B

TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
APE0057-34 (Trip Blank)										
			Soil				Sampled: 05/21/06 07:00			
Acetone	EPA 8260B	ND	----	1.26	mg/kg wet	1x	6E26025	05/25/06 16:05	05/26/06 14:51	Q-40
Benzene	"	ND	----	0.126	"	"	"	"	"	
Bromobenzene	"	ND	----	0.126	"	"	"	"	"	
Bromochloromethane	"	ND	----	0.126	"	"	"	"	"	
Bromodichloromethane	"	ND	----	0.126	"	"	"	"	"	
Bromoform	"	ND	----	0.126	"	"	"	"	"	
Bromomethane	"	ND	----	0.126	"	"	"	"	"	
2-Butanone	"	ND	----	1.26	"	"	"	"	"	
n-Butylbenzene	"	ND	----	0.126	"	"	"	"	"	
sec-Butylbenzene	"	ND	----	0.126	"	"	"	"	"	
tert-Butylbenzene	"	ND	----	0.126	"	"	"	"	"	
Carbon disulfide	"	ND	----	0.126	"	"	"	"	"	
Carbon tetrachloride	"	ND	----	0.126	"	"	"	"	"	
Chlorobenzene	"	ND	----	0.126	"	"	"	"	"	
Chloroethane	"	ND	----	0.126	"	"	"	"	"	
1-Chlorohexane	"	ND	----	1.26	"	"	"	"	"	
Chloroform	"	ND	----	0.126	"	"	"	"	"	
Chloromethane	"	ND	----	0.631	"	"	"	"	"	
2-Chlorotoluene	"	ND	----	0.126	"	"	"	"	"	
4-Chlorotoluene	"	ND	----	0.126	"	"	"	"	"	
Dibromochloromethane	"	ND	----	0.126	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	"	ND	----	0.631	"	"	"	"	"	Q-40
1,2-Dibromoethane	"	ND	----	0.126	"	"	"	"	"	
Dibromomethane	"	ND	----	0.126	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	----	0.126	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	----	0.126	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	----	0.126	"	"	"	"	"	
Dichlorodifluoromethane	"	ND	----	0.126	"	"	"	"	"	
1,1-Dichloroethane	"	ND	----	0.126	"	"	"	"	"	
1,2-Dichloroethane	"	ND	----	0.126	"	"	"	"	"	
1,1-Dichloroethene	"	ND	----	0.126	"	"	"	"	"	
cis-1,2-Dichloroethene	"	ND	----	0.126	"	"	"	"	"	
trans-1,2-Dichloroethene	"	ND	----	0.126	"	"	"	"	"	
1,2-Dichloropropane	"	ND	----	0.126	"	"	"	"	"	
1,3-Dichloropropane	"	ND	----	0.126	"	"	"	"	"	
2,2-Dichloropropane	"	ND	----	0.126	"	"	"	"	"	
1,1-Dichloropropene	"	ND	----	0.126	"	"	"	"	"	
cis-1,3-Dichloropropene	"	ND	----	0.126	"	"	"	"	"	

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Volatile Organic Compounds by EPA Method 8260B

TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
APE0057-34 (Trip Blank)		Soil		Sampled: 05/21/06 07:00						
trans-1,3-Dichloropropene	EPA 8260B	ND	----	0.126	mg/kg wet	1x	6E26025	05/25/06 16:05	05/26/06 14:51	
Ethylbenzene	"	ND	----	0.126	"	"	"	"	"	
Hexachlorobutadiene	"	ND	----	0.126	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	----	0.631	"	"	"	"	"	
n-Hexane	"	ND	----	0.631	"	"	"	"	"	
2-Hexanone	"	ND	----	1.26	"	"	"	"	"	
Isopropylbenzene	"	ND	----	0.126	"	"	"	"	"	
p-Isopropyltoluene	"	ND	----	0.126	"	"	"	"	"	
4-Methyl-2-pentanone	"	ND	----	1.26	"	"	"	"	"	
Methylene chloride	"	ND	----	1.26	"	"	"	"	"	
Naphthalene	"	ND	----	0.126	"	"	"	"	"	Q-40
n-Propylbenzene	"	ND	----	0.126	"	"	"	"	"	
Styrene	"	ND	----	0.126	"	"	"	"	"	
1,2,3-Trichlorobenzene	"	ND	----	0.126	"	"	"	"	"	
1,2,4-Trichlorobenzene	"	ND	----	0.126	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	"	ND	----	0.126	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	"	ND	----	0.126	"	"	"	"	"	
Tetrachloroethene	"	ND	----	0.126	"	"	"	"	"	
Toluene	"	ND	----	0.126	"	"	"	"	"	
1,1,1-Trichloroethane	"	ND	----	0.126	"	"	"	"	"	
1,1,2-Trichloroethane	"	ND	----	0.126	"	"	"	"	"	
Trichloroethene	"	ND	----	0.126	"	"	"	"	"	
Trichlorofluoromethane	"	ND	----	0.126	"	"	"	"	"	
1,2,3-Trichloropropane	"	ND	----	0.126	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	----	0.126	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	----	0.126	"	"	"	"	"	
Vinyl chloride	"	ND	----	0.126	"	"	"	"	"	
o-Xylene	"	ND	----	0.126	"	"	"	"	"	
m,p-Xylene	"	ND	----	0.253	"	"	"	"	"	
Total Xylenes	"	ND	----	0.379	"	"	"	"	"	
Surrogate(s): 1,2-DCA-d4		88.7%		70 - 130 %		"		"		
Toluene-d8		100%		70 - 130 %		"		"		
4-BFB		105%		70 - 130 %		"		"		

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring
TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
APE0057-07 (OMS-TP7-1.5)		Soil		Sampled: 05/21/06 12:40						
Acenaphthene	8270C-SIM	ND	----	0.0122	mg/kg dry	1x	6F01060	06/01/06 14:35	06/05/06 12:45	Q-38
Acenaphthylene	"	ND	----	0.0122	"	"	"	"	"	Q-38
Anthracene	"	ND	----	0.0122	"	"	"	"	"	
Benzo (a) anthracene	"	ND	----	0.0122	"	"	"	"	"	
Benzo (a) pyrene	"	ND	----	0.0122	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	----	0.0122	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	----	0.0122	"	"	"	"	"	
Benzo (b & k) fluoranthene	"	ND	----	0.0244	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	----	0.0122	"	"	"	"	"	
Chrysene	"	0.0199	----	0.0122	"	"	"	"	"	
Dibenz (a,h) anthracene	"	ND	----	0.0122	"	"	"	"	"	
Fluoranthene	"	ND	----	0.0122	"	"	"	"	"	
Fluorene	"	ND	----	0.0122	"	"	"	"	"	Q-38
Indeno (1,2,3-cd) pyrene	"	ND	----	0.0122	"	"	"	"	"	
1-Methylnaphthalene	"	0.190	----	0.0122	"	"	"	"	"	Q-38
2-Methylnaphthalene	"	0.122	----	0.0122	"	"	"	"	"	Q-38
Naphthalene	"	ND	----	0.0122	"	"	"	"	"	Q-38
Phenanthrene	"	ND	----	0.0122	"	"	"	"	"	
Pyrene	"	0.0599	----	0.0122	"	"	"	"	"	

Surrogate(s): p-Terphenyl-d14

140%

50 - 147 %

"

"

APE0057-10 (EP-TP3-0.5)		Soil		Sampled: 05/21/06 16:00						
Acenaphthene	8270C-SIM	ND	----	0.0110	mg/kg dry	1x	6F01060	06/01/06 14:35	06/02/06 17:25	
Acenaphthylene	"	ND	----	0.0110	"	"	"	"	"	
Anthracene	"	ND	----	0.0110	"	"	"	"	"	
Benzo (a) anthracene	"	ND	----	0.0110	"	"	"	"	"	
Benzo (a) pyrene	"	ND	----	0.0110	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	----	0.0110	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	----	0.0110	"	"	"	"	"	
Benzo (b & k) fluoranthene	"	ND	----	0.0220	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	----	0.0110	"	"	"	"	"	
Chrysene	"	ND	----	0.0110	"	"	"	"	"	
Dibenz (a,h) anthracene	"	ND	----	0.0110	"	"	"	"	"	
Fluoranthene	"	ND	----	0.0110	"	"	"	"	"	
Fluorene	"	ND	----	0.0110	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	----	0.0110	"	"	"	"	"	
1-Methylnaphthalene	"	0.0207	----	0.0110	"	"	"	"	"	
2-Methylnaphthalene	"	0.0257	----	0.0110	"	"	"	"	"	

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring
TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
APE0057-10 (EP-TP3-0.5)		Soil		Sampled: 05/21/06 16:00						
Naphthalene	8270C-SIM	0.0144	----	0.0110	mg/kg dry	1x	6F01060	06/01/06 14:35	06/02/06 17:25	
Phenanthrene	"	0.0135	----	0.0110	"	"	"	"	"	
Pyrene	"	0.0130	----	0.0110	"	"	"	"	"	
Surrogate(s): <i>p-Terphenyl-d14</i>		104%		50 - 147 %		"		"		

APE0057-16 (CD-TP3-1)		Soil		Sampled: 05/21/06 18:30						
Acenaphthene	8270C-SIM	ND	----	0.0116	mg/kg dry	1x	6F01060	06/01/06 14:35	06/02/06 17:56	
Acenaphthylene	"	ND	----	0.0116	"	"	"	"	"	
Anthracene	"	ND	----	0.0116	"	"	"	"	"	
Benzo (a) anthracene	"	ND	----	0.0116	"	"	"	"	"	
Benzo (a) pyrene	"	ND	----	0.0116	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	----	0.0116	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	----	0.0116	"	"	"	"	"	
Benzo (b & k) fluoranthene	"	ND	----	0.0232	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	----	0.0116	"	"	"	"	"	
Chrysene	"	ND	----	0.0116	"	"	"	"	"	
Dibenz (a,h) anthracene	"	ND	----	0.0116	"	"	"	"	"	
Fluoranthene	"	ND	----	0.0116	"	"	"	"	"	
Fluorene	"	ND	----	0.0116	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	----	0.0116	"	"	"	"	"	
1-Methylnaphthalene	"	0.0560	----	0.0116	"	"	"	"	"	
2-Methylnaphthalene	"	0.0789	----	0.0116	"	"	"	"	"	
Naphthalene	"	0.0336	----	0.0116	"	"	"	"	"	
Phenanthrene	"	ND	----	0.0116	"	"	"	"	"	
Pyrene	"	ND	----	0.0116	"	"	"	"	"	
Surrogate(s): <i>p-Terphenyl-d14</i>		111%		50 - 147 %		"		"		

APE0057-23 (TP-DUP7)		Soil		Sampled: 05/21/06 16:00						
Acenaphthene	8270C-SIM	ND	----	0.0110	mg/kg dry	1x	6F01060	06/01/06 14:35	06/02/06 18:27	
Acenaphthylene	"	ND	----	0.0110	"	"	"	"	"	
Anthracene	"	ND	----	0.0110	"	"	"	"	"	
Benzo (a) anthracene	"	ND	----	0.0110	"	"	"	"	"	
Benzo (a) pyrene	"	ND	----	0.0110	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	----	0.0110	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	----	0.0110	"	"	"	"	"	
Benzo (b & k) fluoranthene	"	ND	----	0.0219	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	----	0.0110	"	"	"	"	"	

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring
TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
APE0057-23 (TP-DUP7)		Soil		Sampled: 05/21/06 16:00						
Chrysene	8270C-SIM	ND	----	0.0110	mg/kg dry	1x	6F01060	06/01/06 14:35	06/02/06 18:27	
Dibenz (a,h) anthracene	"	ND	----	0.0110	"	"	"	"	"	
Fluoranthene	"	ND	----	0.0110	"	"	"	"	"	
Fluorene	"	ND	----	0.0110	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	----	0.0110	"	"	"	"	"	
1-Methylnaphthalene	"	0.0207	----	0.0110	"	"	"	"	"	
2-Methylnaphthalene	"	0.0230	----	0.0110	"	"	"	"	"	
Naphthalene	"	0.0145	----	0.0110	"	"	"	"	"	
Phenanthrene	"	0.0147	----	0.0110	"	"	"	"	"	
Pyrene	"	0.0121	----	0.0110	"	"	"	"	"	
Surrogate(s): <i>p-Terphenyl-d14</i>		105%		50 - 147 %		"		"		




Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Physical Parameters by APHA/ASTM/EPA Methods

TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
APE0057-04 (OMS-TP4-2.5)		Soil								Sampled: 05/21/06 12:25
Dry Weight	BSOPSPL003R0 8	89.2	----	1.00	%	1x	6E25067	05/25/06 21:17	06/07/06 14:12	
APE0057-07 (OMS-TP7-1.5)		Soil								Sampled: 05/21/06 12:40
Dry Weight	BSOPSPL003R0 8	82.2	----	1.00	%	1x	6E31045	05/31/06 17:24	06/01/06 17:00	
APE0057-09 (EP-TP2-2)		Soil								Sampled: 05/21/06 15:55
Dry Weight	BSOPSPL003R0 8	94.7	----	1.00	%	1x	6E25067	05/25/06 21:17	06/07/06 14:12	
APE0057-10 (EP-TP3-0.5)		Soil								Sampled: 05/21/06 16:00
Dry Weight	BSOPSPL003R0 8	90.3	----	1.00	%	1x	6E31045	05/31/06 17:24	06/01/06 17:00	
APE0057-16 (CD-TP3-1)		Soil								Sampled: 05/21/06 18:30
Dry Weight	BSOPSPL003R0 8	86.8	----	1.00	%	1x	6E31045	05/31/06 17:24	06/01/06 17:00	
APE0057-22 (TP-DUP6)		Soil								Sampled: 05/21/06 18:30
Dry Weight	BSOPSPL003R0 8	86.1	----	1.00	%	1x	6E31045	05/31/06 17:24	06/01/06 17:00	
APE0057-23 (TP-DUP7)		Soil								Sampled: 05/21/06 16:00
Dry Weight	BSOPSPL003R0 8	90.0	----	1.00	%	1x	6E31045	05/31/06 17:24	06/01/06 17:00	
APE0057-24 (CH-SS-B)		Soil								Sampled: 05/21/06 23:00
Dry Weight	BSOPSPL003R0 8	85.2	----	1.00	%	1x	6E31045	05/31/06 17:24	06/01/06 17:00	
APE0057-25 (CH-SS-C)		Soil								Sampled: 05/21/06 23:05
Dry Weight	BSOPSPL003R0 8	78.2	----	1.00	%	1x	6E31045	05/31/06 17:24	06/01/06 17:00	
APE0057-26 (CG-SS-B)		Soil								Sampled: 05/21/06 23:10
Dry Weight	BSOPSPL003R0 8	91.9	----	1.00	%	1x	6E31045	05/31/06 17:24	06/01/06 17:00	
APE0057-27 (CG-SS-D)		Soil								Sampled: 05/21/06 23:15

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Physical Parameters by APHA/ASTM/EPA Methods

TestAmerica - Seattle, WA

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
APE0057-27 (CG-SS-D)		Soil						Sampled: 05/21/06 23:15		
Dry Weight	BSOPSPL003R0 8	94.2	----	1.00	%	1x	6E31045	05/31/06 17:24	06/01/06 17:00	
APE0057-28 (OMS-SS-A)		Soil						Sampled: 05/21/06 23:20		
Dry Weight	BSOPSPL003R0 8	97.1	----	1.00	%	1x	6E31045	05/31/06 17:24	06/01/06 17:00	
APE0057-29 (EP-SS-A)		Soil						Sampled: 05/21/06 23:25		
Dry Weight	BSOPSPL003R0 8	96.8	----	1.00	%	1x	6E31045	05/31/06 17:24	06/01/06 17:00	
APE0057-30 (CD-SS-A)		Soil						Sampled: 05/21/06 23:30		
Dry Weight	BSOPSPL003R0 8	74.3	----	1.00	%	1x	6E31045	05/31/06 17:24	06/01/06 17:00	
APE0057-31 (CD-SS-C)		Soil						Sampled: 05/21/06 23:35		
Dry Weight	BSOPSPL003R0 8	67.0	----	1.00	%	1x	6E31045	05/31/06 17:24	06/01/06 17:00	
APE0057-32 (SS-DUP1)		Soil						Sampled: 05/21/06 23:35		
Dry Weight	BSOPSPL003R0 8	60.7	----	1.00	%	1x	6E31045	05/31/06 17:24	06/01/06 17:00	

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Gasoline Range Organics (C6-C10) and BTEX per AK101 - Laboratory Quality Control Results

TestAmerica - Anchorage, AK

QC Batch: 6050048

Soil Preparation Method: AK101 Field Prep

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
---------	--------	--------	------	-----	-------	-----	---------------	-----------	-------	----------	-------	----------	----------	-------

Blank (6050048-BLK1)

Extracted: 05/24/06 10:22

Gasoline Range Organics	AK101 GRO/BTEX	ND	---	3.33	mg/kg wet	1x	--	--	--	--	--	--	05/24/06 20:37	
Benzene	"	ND	---	0.0133	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	0.0333	"	"	--	--	--	--	--	--	"	
Ethylbenzene	"	ND	---	0.0333	"	"	--	--	--	--	--	--	"	
Xylenes (total)	"	ND	---	0.0500	"	"	--	--	--	--	--	--	"	
Surrogate(s): a,a,a-TFT (FID) Recovery: 92.1% Limits: 50-150% "														
a,a,a-TFT (PID) 94.6% 20.2-131% " 05/24/06 20:37														

LCS (6050048-BS1)

Extracted: 05/24/06 10:22

Gasoline Range Organics	AK101 GRO/BTEX	15.7	---	3.33	mg/kg wet	1x	--	22.0	71.4%	(60-120)	--	--	05/24/06 19:31	
Benzene	"	0.236	---	0.0133	"	"	--	0.212	111%	(73.1-117)	--	--	"	
Toluene	"	1.73	---	0.0333	"	"	--	1.84	94.0%	(70.4-117)	--	--	"	
Ethylbenzene	"	0.364	---	0.0333	"	"	--	0.368	98.9%	(73.3-121)	--	--	"	
Xylenes (total)	"	2.03	---	0.0500	"	"	--	2.12	95.8%	(79-121)	--	--	"	
Surrogate(s): a,a,a-TFT (FID) Recovery: 85.8% Limits: 50-150% "														
a,a,a-TFT (PID) 103% 20.2-131% " 05/24/06 19:31														

LCS Dup (6050048-BSD1)

Extracted: 05/24/06 10:22

Gasoline Range Organics	AK101 GRO/BTEX	16.5	---	3.33	mg/kg wet	1x	--	22.0	75.0%	(60-120)	4.97%	(20)	05/24/06 20:04	
Benzene	"	0.238	---	0.0133	"	"	--	0.212	112%	(73.1-117)	0.844%	(12.6)	"	
Toluene	"	1.80	---	0.0333	"	"	--	1.84	97.8%	(70.4-117)	3.97%	(11.4)	"	
Ethylbenzene	"	0.363	---	0.0333	"	"	--	0.368	98.6%	(73.3-121)	0.275%	(9.89)	"	
Xylenes (total)	"	2.13	---	0.0500	"	"	--	2.12	100%	(79-121)	4.81%	(11.1)	"	
Surrogate(s): a,a,a-TFT (FID) Recovery: 88.3% Limits: 50-150% "														
a,a,a-TFT (PID) 105% 20.2-131% " 05/24/06 20:04														

Duplicate (6050048-DUP1)

QC Source: APE0049-06

Extracted: 05/24/06 10:22

Gasoline Range Organics	AK101 GRO/BTEX	ND	---	3.32	mg/kg dry	2.7x	ND	--	--	--	20.8%	(50)	05/24/06 21:43	
Surrogate(s): a,a,a-TFT (FID) Recovery: 70.3% Limits: 50-150% " 05/24/06 21:43														

Matrix Spike (6050048-MS1)


QC Source: APE0049-06

Extracted: 05/24/06 10:22

Benzene	AK101 GRO/BTEX	0.878	---	0.0133	mg/kg dry	2.7x	ND	0.835	105%	(70.6-120)	--	--	05/24/06 23:55	
Toluene	"	0.921	---	0.0332	"	"	0.00348	0.840	109%	(74.6-120)	--	--	"	
Ethylbenzene	"	0.967	---	0.0332	"	"	ND	0.844	115%	(72.4-127)	--	--	"	
Xylenes (total)	"	2.79	---	0.0499	"	"	ND	2.50	112%	(81-122)	--	--	"	
Surrogate(s): a,a,a-TFT (PID) Recovery: 74.1% Limits: 20.2-131% " 05/24/06 23:55														

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Gasoline Range Organics (C6-C10) and BTEX per AK101 - Laboratory Quality Control Results

TestAmerica - Anchorage, AK

QC Batch: 6050048

Soil Preparation Method: AK101 Field Prep

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike Dup (6050048-MSD1)		QC Source: APE0049-06						Extracted: 05/24/06 10:22						
Benzene	AK101	0.889	---	0.0133	mg/kg dry	2.7x	ND	0.835	106%	(70.6-120)	1.25% (11.3)		05/25/06 00:28	
	GRO/BTEX													
Toluene	"	0.929	---	0.0332	"	"	0.00348	0.840	110%	(74.6-120)	0.865% (11.1)		"	
Ethylbenzene	"	0.988	---	0.0332	"	"	ND	0.844	117%	(72.4-127)	2.15% (10.6)		"	
Xylenes (total)	"	2.83	---	0.0499	"	"	ND	2.50	113%	(81-122)	1.42% (11.4)		"	
Surrogate(s): a,a,a-TFT (PID)		Recovery: 70.0%		Limits: 20.2-131%	"								05/25/06 00:28	

QC Batch: 6050060

Soil Preparation Method: AK101 Field Prep

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (6050060-BLK1)								Extracted: 05/30/06 17:15						
Gasoline Range Organics	AK101	ND	---	3.33	mg/kg wet	1x	--	--	--	--	--	--	05/30/06 22:48	
	GRO/BTEX													
Benzene	"	ND	---	0.0133	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	0.0333	"	"	--	--	--	--	--	--	"	
Ethylbenzene	"	ND	---	0.0333	"	"	--	--	--	--	--	--	"	
Xylenes (total)	"	ND	---	0.0500	"	"	--	--	--	--	--	--	"	
Surrogate(s): a,a,a-TFT (FID)		Recovery: 94.2%		Limits: 50-150%	"								05/30/06 22:48	
a,a,a-TFT (PID)		93.8%		20.2-131%	"								"	

LCS (6050060-BS1)

Extracted: 05/30/06 17:15

Gasoline Range Organics	AK101	16.8	---	3.33	mg/kg wet	1x	--	22.0	76.4%	(60-120)	--	--	05/30/06 21:43	
	GRO/BTEX													
Benzene	"	0.211	---	0.0133	"	"	--	0.212	99.5%	(73.1-117)	--	--	"	
Toluene	"	1.73	---	0.0333	"	"	--	1.84	94.0%	(70.4-117)	--	--	"	
Ethylbenzene	"	0.367	---	0.0333	"	"	--	0.368	99.7%	(73.3-121)	--	--	"	
Xylenes (total)	"	1.94	---	0.0500	"	"	--	2.12	91.5%	(79-121)	--	--	"	
Surrogate(s): a,a,a-TFT (FID)		Recovery: 84.2%		Limits: 50-150%	"								05/30/06 21:43	
a,a,a-TFT (PID)		99.2%		20.2-131%	"								"	

LCS Dup (6050060-BSD1)

Extracted: 05/30/06 17:15

Gasoline Range Organics	AK101	18.7	---	3.33	mg/kg wet	1x	--	22.0	85.0%	(60-120)	10.7% (20)		05/30/06 22:16	
	GRO/BTEX													
Benzene	"	0.223	---	0.0133	"	"	--	0.212	105%	(73.1-117)	5.53% (12.6)		"	
Toluene	"	1.88	---	0.0333	"	"	--	1.84	102%	(70.4-117)	8.31% (11.4)		"	
Ethylbenzene	"	0.380	---	0.0333	"	"	--	0.368	103%	(73.3-121)	3.48% (9.89)		"	
Xylenes (total)	"	2.10	---	0.0500	"	"	--	2.12	99.1%	(79-121)	7.92% (11.1)		"	
Surrogate(s): a,a,a-TFT (FID)		Recovery: 91.7%		Limits: 50-150%	"								05/30/06 22:16	
a,a,a-TFT (PID)		108%		20.2-131%	"								"	

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.	Project Name: St. George Phase II	
825 8th Ave, Suite 200	Project Number: 2006-490	Report Created:
Anchorage, AK/USA 99501	Project Manager: Lisa Nicholson	06/09/06 14:40

Gasoline Range Organics (C6-C10) and BTEX per AK101 - Laboratory Quality Control Results
TestAmerica - Anchorage, AK

QC Batch: 6050060	Soil Preparation Method: AK101 Field Prep
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Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
---------	--------	--------	------	-----	-------	-----	---------------	-----------	-------	----------	-------	----------	----------	-------

Duplicate (6050060-DUP1)

QC Source: APE0068-06

Extracted: 05/30/06 17:15

Gasoline Range Organics	AK101 GRO/BTEX	ND	---	3.53	mg/kg dry	1.5x	ND	--	--	--	6.42% (50)		05/31/06 06:59	
Surrogate(s): a,a,a-TFT (FID)		Recovery: 97.6%		Limits: 50-150%	"								05/31/06 06:59	

Matrix Spike (6050060-MS1)

QC Source: APE0068-06

Extracted: 05/30/06 17:15

Benzene	AK101 GRO/BTEX	0.694	---	0.0141	mg/kg dry	1.5x	0.0203	1.06	63.6%	(70.6-120)	--	--	05/31/06 07:32	MS-2
Toluene	"	0.855	---	0.0353	"	"	0.0657	"	74.5%	(74.6-120)	--	--	"	MS-2
Ethylbenzene	"	0.843	---	0.0353	"	"	0.0112	1.07	77.7%	(72.4-127)	--	--	"	
Xylenes (total)	"	2.40	---	0.0529	"	"	0.0827	3.16	73.3%	(81-122)	--	--	"	MS-2
Surrogate(s): a,a,a-TFT (PID)		Recovery: 104%		Limits: 20.2-131%	"								05/31/06 07:32	

Matrix Spike Dup (6050060-MSD1)


QC Source: APE0068-06

Extracted: 05/30/06 17:15

Benzene	AK101 GRO/BTEX	0.817	---	0.0141	mg/kg dry	1.5x	0.0203	1.06	75.2%	(70.6-120)	16.3% (11.3)		05/31/06 08:05	RP-2
Toluene	"	0.952	---	0.0353	"	"	0.0657	"	83.6%	(74.6-120)	10.7% (11.1)	"		
Ethylbenzene	"	0.950	---	0.0353	"	"	0.0112	1.07	87.7%	(72.4-127)	11.9% (10.6)	"		RP-2
Xylenes (total)	"	2.68	---	0.0529	"	"	0.0827	3.16	82.2%	(81-122)	11.0% (11.4)	"		
Surrogate(s): a,a,a-TFT (PID)		Recovery: 107%		Limits: 20.2-131%	"								05/31/06 08:05	

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/RRO - Laboratory Quality Control Results
TestAmerica - Anchorage, AK

QC Batch: 6060009

Soil Preparation Method: EPA 3545

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (6060009-BLK1)							Extracted: 06/04/06 08:57							
Diesel Range Organics	AK102/103	ND	---	25.0	mg/kg wet	1x	--	--	--	--	--	--	06/06/06 00:07	
Residual Range Organics	"	ND	---	50.0	"	"	--	--	--	--	--	--	"	
Surrogate(s): 1-Chlorooctadecane		Recovery:	82.0%	Limits: 50-150%		"								06/06/06 00:07
Triacontane			82.3%	50-150%		"								"
LCS (6060009-BS1)							Extracted: 06/04/06 08:57							
Diesel Range Organics	AK102/103	102	---	25.0	mg/kg wet	1x	--	125	81.6%	(75-125)	--	--	06/05/06 23:27	
Residual Range Organics	"	97.5	---	50.0	"	"	--	128	76.2%	(60-120)	--	--	"	
Surrogate(s): 1-Chlorooctadecane		Recovery:	75.8%	Limits: 60-120%		"								06/05/06 23:27
Triacontane			74.7%	60-120%		"								"
LCS Dup (6060009-BSD1)							Extracted: 06/04/06 08:57							
Diesel Range Organics	AK102/103	98.2	---	25.0	mg/kg wet	1x	--	125	78.6%	(75-125)	3.80%	(20)	06/05/06 22:46	
Residual Range Organics	"	94.3	---	50.0	"	"	--	128	73.7%	(60-120)	3.34%	"	"	
Surrogate(s): 1-Chlorooctadecane		Recovery:	73.3%	Limits: 60-120%		"								06/05/06 22:46
Triacontane			73.5%	60-120%		"								"
Duplicate (6060009-DUP1)				QC Source: APE0077-01			Extracted: 06/04/06 08:57							
Diesel Range Organics	AK102/103	41.9	---	25.0	mg/kg dry	1x	71.0	--	--	--	51.6%	(20)	06/05/06 22:46	RP-3
Residual Range Organics	"	ND	---	50.0	"	"	ND	--	--	--	17.7%	"	"	
Surrogate(s): 1-Chlorooctadecane		Recovery:	79.7%	Limits: 50-150%		"								06/05/06 22:46
Triacontane			77.3%	50-150%		"								"
Matrix Spike (6060009-MS1)				QC Source: APE0077-01			Extracted: 06/04/06 08:57							
Diesel Range Organics	AK102/103	156	---	25.0	mg/kg dry	1x	71.0	130	65.4%	(75-125)	--	--	06/05/06 23:27	MS-2
Residual Range Organics	"	113	---	50.0	"	"	8.22	133	78.8%	(60-150)	--	--	"	
Surrogate(s): 1-Chlorooctadecane		Recovery:	79.7%	Limits: 50-150%		"								06/05/06 23:27
Triacontane			72.4%	50-150%		"								"
Matrix Spike Dup (6060009-MSD1)				QC Source: APE0077-01			Extracted: 06/04/06 08:57							
Diesel Range Organics	AK102/103	144	---	25.0	mg/kg dry	1x	71.0	131	55.7%	(75-125)	8.00%	(25)	06/06/06 00:07	MS-2
Residual Range Organics	"	116	---	50.0	"	"	8.22	134	80.4%	(60-150)	2.62%	"	"	
Surrogate(s): 1-Chlorooctadecane		Recovery:	80.6%	Limits: 50-150%		"								06/06/06 00:07
Triacontane			72.2%	50-150%		"								"

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.	Project Name: St. George Phase II	
825 8th Ave, Suite 200	Project Number: 2006-490	Report Created:
Anchorage, AK/USA 99501	Project Manager: Lisa Nicholson	06/09/06 14:40

Physical Parameters by APHA/ASTM/EPA Methods - Laboratory Quality Control Results
TestAmerica - Anchorage, AK

QC Batch: 6060013	Soil Preparation Method: *** DEFAULT PREP
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Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Duplicate (6060013-DUP1)			QC Source: APE0057-01				Extracted: 06/05/06 16:02							
Dry Weight	BSOPSPL00 3R07	91.3	---	1.00	%	1x	90.2	--	--	--	1.21% (25)		06/06/06 17:03	

QC Batch: 6060026	Soil Preparation Method: *** DEFAULT PREP
--------------------------	--

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Duplicate (6060026-DUP1)			QC Source: APF0016-02				Extracted: 06/08/06 14:39							
Dry Weight	BSOPSPL00 3R07	92.9	---	1.00	%	1x	91.4	--	--	--	1.63% (25)		06/09/06 08:32	

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Total Metals by EPA 6000/7000 Series Methods - Laboratory Quality Control Results

TestAmerica - Seattle, WA

QC Batch: 6E30079

Soil Preparation Method: EPA 3050B

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (6E30079-BLK1)							Extracted: 05/31/06 15:43							
Lead	EPA 6020	ND	---	0.500	mg/kg wet	1x	--	--	--	--	--	--	06/07/06 10:58	
LCS (6E30079-BS1)							Extracted: 05/31/06 15:43							
Lead	EPA 6020	40.9	---	0.500	mg/kg wet	1x	--	40.0	102%	(80-120)	--	--	06/07/06 11:15	
Duplicate (6E30079-DUP1)				QC Source: BPE0768-12				Extracted: 05/31/06 15:43						
Lead	EPA 6020	18.0	---	0.613	mg/kg dry	1x	27.7	--	--	--	42.5%	(30)	06/07/06 11:32	DP-1
Matrix Spike (6E30079-MS1)				QC Source: BPE0768-12				Extracted: 05/31/06 15:43						
Lead	EPA 6020	64.4	---	0.613	mg/kg dry	1x	27.7	49.0	74.9%	(29-166)	--	--	06/07/06 11:26	
Post Spike (6E30079-PS1)				QC Source: BPE0768-12				Extracted: 05/31/06 15:43						
Lead	EPA 6020	0.141	---		ug/ml	1x	0.0452	0.100	95.8%	(75-125)	--	--	06/07/06 11:21	

QC Batch: 6E31013

Soil Preparation Method: EPA 7471A

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (6E31013-BLK1)								Extracted: 05/31/06 07:55						
Mercury	EPA 7471A	ND	---	0.400	mg/kg wet	1x	--	--	--	--	--	--	05/31/06 15:05	
LCS (6E31013-BS1)								Extracted: 05/31/06 07:55						
Mercury	EPA 7471A	0.635	---	0.400	mg/kg wet	1x	--	0.667	95.2%	(80-120)	--	--	05/31/06 15:07	
Matrix Spike (6E31013-MS1)				QC Source: BPE0654-01				Extracted: 05/31/06 07:55						
Mercury	EPA 7471A	0.852	---	0.522	mg/kg dry	1x	0.0696	0.869	90.0%	(70-130)	--	--	05/31/06 15:10	
Matrix Spike Dup (6E31013-MSD1)				QC Source: BPE0654-01				Extracted: 05/31/06 07:55						
Mercury	EPA 7471A	0.846	---	0.522	mg/kg dry	1x	0.0696	0.869	89.3%	(70-130)	0.707% (30)		05/31/06 15:12	

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Total Metals by EPA 6000/7000 Series Methods - Laboratory Quality Control Results

TestAmerica - Seattle, WA

QC Batch: 6F03024

Soil Preparation Method: EPA 3050B

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (6F03024-BLK1)										Extracted: 06/03/06 16:36				
Silver	EPA 6010B	ND	---	2.00	mg/kg wet	1x	--	--	--	--	--	--	06/05/06 09:43	
Cadmium	"	ND	---	0.250	"	"	--	--	--	--	--	--	"	
Chromium	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Arsenic	"	ND	---	5.00	"	"	--	--	--	--	--	--	06/05/06 15:52	
Barium	"	ND	---	0.500	"	"	--	--	--	--	--	--	06/05/06 09:43	
Selenium	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Lead	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
LCS (6F03024-BS1)										Extracted: 06/03/06 16:36				
Silver	EPA 6010B	50.0	---	2.00	mg/kg wet	1x	--	50.0	100%	(40-120)	--	--	06/05/06 09:48	
Cadmium	"	255	---	0.250	"	"	--	250	102%	(80-120)	--	--	"	
Selenium	"	260	---	5.00	"	"	--	"	104%	"	--	--	"	
Arsenic	"	252	---	5.00	"	"	--	"	101%	"	--	--	06/05/06 16:10	
Lead	"	250	---	2.00	"	"	--	"	100%	"	--	--	06/05/06 09:48	
Chromium	"	254	---	0.500	"	"	--	"	102%	"	--	--	"	
Barium	"	253	---	0.500	"	"	--	"	101%	"	--	--	"	
Duplicate (6F03024-DUP1)										QC Source: APE0057-07 Extracted: 06/03/06 16:36				
Barium	EPA 6010B	93.4	---	3.04	mg/kg dry	5x	88.0	--	--	--	5.95%	(30)	06/05/06 10:50	
Silver	"	ND	---	12.2	"	"	ND	--	--	--	NR	(50)	"	
Arsenic	"	ND	---	12.2	"	2x	ND	--	--	--	21.6%	(30)	06/05/06 16:23	
Cadmium	"	ND	---	1.52	"	5x	ND	--	--	--	NR	"	06/05/06 10:50	
Chromium	"	56.4	---	3.04	"	"	50.5	--	--	--	11.0%	"	"	
Selenium	"	ND	---	30.4	"	"	ND	--	--	--	47.3%	"	"	DP-1
Lead	"	65.4	---	12.2	"	"	59.4	--	--	--	9.62%	"	"	
Matrix Spike (6F03024-MS1)										QC Source: APE0057-07 Extracted: 06/03/06 16:36				
Chromium	EPA 6010B	370	---	3.04	mg/kg dry	5x	50.5	304	105%	(70-130)	--	--	06/05/06 10:39	
Lead	"	381	---	12.2	"	"	59.4	"	106%	(69-121)	--	--	"	
Barium	"	433	---	3.04	"	"	88.0	"	113%	(70-130)	--	--	"	
Arsenic	"	229	---	12.2	"	2x	3.42	"	74.2%	(66-121)	--	--	06/05/06 16:17	
Selenium	"	314	---	30.4	"	5x	26.4	"	94.6%	(70-130)	--	--	06/05/06 10:39	
Silver	"	59.2	---	12.2	"	"	ND	60.8	97.4%	(40-120)	--	--	"	
Cadmium	"	321	---	1.52	"	"	ND	304	106%	(75-125)	--	--	"	

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Volatile Organic Compounds by EPA Method 8260B - Laboratory Quality Control Results

TestAmerica - Seattle, WA

QC Batch: 6E26025

Soil Preparation Method: EPA 5030B

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (6E26025-BLK1)										Extracted: 05/25/06 16:05				
Acetone	EPA 8260B	ND	---	1.00	mg/kg wet	1x	--	--	--	--	--	--	05/26/06 01:20	
Benzene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Bromobenzene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Bromochloromethane	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Bromodichloromethane	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Bromoform	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Bromomethane	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
2-Butanone	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
n-Butylbenzene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
sec-Butylbenzene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
tert-Butylbenzene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Carbon disulfide	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Carbon tetrachloride	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Chlorobenzene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Chloroethane	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1-Chlorohexane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Chloroform	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Chloromethane	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
2-Chlorotoluene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
4-Chlorotoluene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Dibromochloromethane	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1,2-Dibromo-3-chloropropane	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
1,2-Dibromoethane	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Dibromomethane	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1,2-Dichlorobenzene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1,3-Dichlorobenzene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1,4-Dichlorobenzene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Dichlorodifluoromethane	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1,1-Dichloroethane	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1,2-Dichloroethane	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1,1-Dichloroethene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
cis-1,2-Dichloroethene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
trans-1,2-Dichloroethene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1,2-Dichloropropane	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1,3-Dichloropropane	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
2,2-Dichloropropane	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1,1-Dichloropropene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
cis-1,3-Dichloropropene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
trans-1,3-Dichloropropene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Volatile Organic Compounds by EPA Method 8260B - Laboratory Quality Control Results

TestAmerica - Seattle, WA

QC Batch: 6E26025

Soil Preparation Method: EPA 5030B

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (6E26025-BLK1)										Extracted: 05/25/06 16:05				
Ethylbenzene	EPA 8260B	ND	---	0.100	mg/kg wet	1x	--	--	--	--	--	--	05/26/06 01:20	
Hexachlorobutadiene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Methyl tert-butyl ether	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
n-Hexane	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
2-Hexanone	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Isopropylbenzene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
p-Isopropyltoluene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
4-Methyl-2-pentanone	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Methylene chloride	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Naphthalene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
n-Propylbenzene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Styrene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1,2,3-Trichlorobenzene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1,2,4-Trichlorobenzene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1,1,1,2-Tetrachloroethane	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1,1,2,2-Tetrachloroethane	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Tetrachloroethene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1,1,1-Trichloroethane	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1,1,2-Trichloroethane	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Trichloroethene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Trichlorofluoromethane	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1,2,3-Trichloropropane	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1,2,4-Trimethylbenzene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1,3,5-Trimethylbenzene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Vinyl chloride	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
o-Xylene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
m,p-Xylene	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
Total Xylenes	"	ND	---	0.300	"	"	--	--	--	--	--	--	"	
Surrogate(s):	1,2-DCA-d4	Recovery:	93.6%	Limits:	70-130%	"							05/26/06 01:20	
	Toluene-d8		104%		70-130%	"							"	
	4-BFB		97.9%		70-130%	"							"	

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Volatile Organic Compounds by EPA Method 8260B - Laboratory Quality Control Results

TestAmerica - Seattle, WA

QC Batch: 6E26025

Soil Preparation Method: EPA 5030B

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (6E26025-BLK2)										Extracted: 05/25/06 16:05				
Acetone	EPA 8260B	ND	---	1.00	mg/kg wet	1x	--	--	--	--	--	--	05/26/06 14:23	A-02
Benzene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Bromobenzene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Bromochloromethane	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Bromodichloromethane	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Bromoform	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Bromomethane	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
2-Butanone	"	1.23	---	1.00	"	"	--	--	--	--	--	--	"	
n-Butylbenzene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
sec-Butylbenzene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
tert-Butylbenzene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Carbon disulfide	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Carbon tetrachloride	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Chlorobenzene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Chloroethane	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1-Chlorohexane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Chloroform	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Chloromethane	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
2-Chlorotoluene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
4-Chlorotoluene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Dibromochloromethane	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1,2-Dibromo-3-chloropropane	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	A-02
1,2-Dibromoethane	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Dibromomethane	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1,2-Dichlorobenzene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1,3-Dichlorobenzene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1,4-Dichlorobenzene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Dichlorodifluoromethane	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1,1-Dichloroethane	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1,2-Dichloroethane	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1,1-Dichloroethene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
cis-1,2-Dichloroethene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
trans-1,2-Dichloroethene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1,2-Dichloropropane	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1,3-Dichloropropane	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
2,2-Dichloropropane	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1,1-Dichloropropene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
cis-1,3-Dichloropropene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
trans-1,3-Dichloropropene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Volatile Organic Compounds by EPA Method 8260B - Laboratory Quality Control Results

TestAmerica - Seattle, WA

QC Batch: 6E26025

Soil Preparation Method: EPA 5030B

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (6E26025-BLK2)										Extracted: 05/25/06 16:05				
Ethylbenzene	EPA 8260B	ND	---	0.100	mg/kg wet	1x	--	--	--	--	--	--	05/26/06 14:23	
Hexachlorobutadiene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Methyl tert-butyl ether	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
n-Hexane	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
2-Hexanone	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Isopropylbenzene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
p-Isopropyltoluene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
4-Methyl-2-pentanone	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Methylene chloride	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Naphthalene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	A-02
n-Propylbenzene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Styrene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1,2,3-Trichlorobenzene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1,2,4-Trichlorobenzene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1,1,1,2-Tetrachloroethane	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1,1,2,2-Tetrachloroethane	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Tetrachloroethene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1,1,1-Trichloroethane	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1,1,2-Trichloroethane	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Trichloroethene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Trichlorofluoromethane	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1,2,3-Trichloropropane	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1,2,4-Trimethylbenzene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
1,3,5-Trimethylbenzene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Vinyl chloride	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
o-Xylene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
m,p-Xylene	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
Total Xylenes	"	ND	---	0.300	"	"	--	--	--	--	--	--	"	
Surrogate(s):	1,2-DCA-d4	Recovery:	82.0%	Limits:	70-130%	"							05/26/06 14:23	
	Toluene-d8		107%		70-130%	"							"	
	4-BFB		99.9%		70-130%	"							"	

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Volatile Organic Compounds by EPA Method 8260B - Laboratory Quality Control Results

TestAmerica - Seattle, WA

QC Batch: 6E26025

Soil Preparation Method: EPA 5030B

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
---------	--------	--------	------	-----	-------	-----	---------------	-----------	-------	----------	-------	----------	----------	-------

LCS (6E26025-BS1)

Extracted: 05/25/06 16:05

Benzene	EPA 8260B	1.74	---	0.100	mg/kg wet	1x	--	2.00	87.0%	(75-130)	--	--	05/25/06 22:33	
Chlorobenzene	"	1.83	---	0.100	"	"	--	"	91.5%	(77-124)	--	--	"	
1,1-Dichloroethene	"	1.81	---	0.100	"	"	--	"	90.5%	(74-133)	--	--	"	
Methyl tert-butyl ether	"	1.74	---	0.500	"	"	--	"	87.0%	(70-140)	--	--	"	
Toluene	"	1.81	---	0.100	"	"	--	"	90.5%	(75-124)	--	--	"	
Trichloroethene	"	1.87	---	0.100	"	"	--	"	93.5%	(78-128)	--	--	"	
Total Xylenes	"	5.38	---	0.300	"	"	--	6.00	89.7%	(75-125)	--	--	"	
Surrogate(s): 1,2-DCA-d4 Recovery: 88.5% Limits: 70-130% "														
Toluene-d8 96.0% 70-130% "														
4-BFB 92.9% 70-130% "														

LCS Dup (6E26025-BSD1)

Extracted: 05/25/06 16:05

Benzene	EPA 8260B	1.81	---	0.100	mg/kg wet	1x	--	2.00	90.5%	(75-130)	3.94% (20)		05/25/06 23:29	
Chlorobenzene	"	1.89	---	0.100	"	"	--	"	94.5%	(77-124)	3.23%	"	"	
1,1-Dichloroethene	"	1.92	---	0.100	"	"	--	"	96.0%	(74-133)	5.90%	"	"	
Methyl tert-butyl ether	"	1.84	---	0.500	"	"	--	"	92.0%	(70-140)	5.59%	"	"	
Toluene	"	1.85	---	0.100	"	"	--	"	92.5%	(75-124)	2.19%	"	"	
Trichloroethene	"	1.94	---	0.100	"	"	--	"	97.0%	(78-128)	3.67%	"	"	
Total Xylenes	"	5.59	---	0.300	"	"	--	6.00	93.2%	(75-125)	3.83% (30)		"	
Surrogate(s): 1,2-DCA-d4 Recovery: 89.0% Limits: 70-130% "														
Toluene-d8 95.8% 70-130% "														
4-BFB 97.0% 70-130% "														

Matrix Spike (6E26025-MS1)

QC Source: APE0057-04

Extracted: 05/25/06 16:05

Benzene	EPA 8260B	0.978	---	0.0536	mg/kg dry	1x	ND	1.07	91.4%	(66-135)	--	--	05/26/06 12:01	
Chlorobenzene	"	1.13	---	0.0536	"	"	ND	"	106%	(63-131)	--	--	"	
1,1-Dichloroethene	"	0.970	---	0.0536	"	"	ND	"	90.7%	(64-143)	--	--	"	
Methyl tert-butyl ether	"	0.760	---	0.268	"	"	ND	"	71.0%	(54-155)	--	--	"	
Toluene	"	1.17	---	0.0536	"	"	ND	"	109%	(57-142)	--	--	"	
Trichloroethene	"	1.06	---	0.0536	"	"	ND	"	99.1%	(66-144)	--	--	"	
Total Xylenes	"	3.45	---	0.161	"	"	ND	3.21	107%	(70-130)	--	--	"	
Surrogate(s): 1,2-DCA-d4 Recovery: 72.9% Limits: 70-130% "														
Toluene-d8 99.1% 70-130% "														
4-BFB 100% 70-130% "														

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Volatile Organic Compounds by EPA Method 8260B - Laboratory Quality Control Results

TestAmerica - Seattle, WA

QC Batch: 6E26025

Soil Preparation Method: EPA 5030B

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike Dup (6E26025-MSD1)			QC Source: APE0057-04					Extracted: 05/25/06 16:05						
Benzene	EPA 8260B	1.00	---	0.0536	mg/kg dry	1x	ND	1.07	93.5%	(66-135)	2.22%	(25)	05/26/06 12:29	
Chlorobenzene	"	1.17	---	0.0536	"	"	ND	"	109%	(63-131)	3.48%	"	"	
1,1-Dichloroethene	"	0.991	---	0.0536	"	"	ND	"	92.6%	(64-143)	2.14%	"	"	
Methyl tert-butyl ether	"	0.922	---	0.268	"	"	ND	"	86.2%	(54-155)	19.3%	"	"	
Toluene	"	1.16	---	0.0536	"	"	ND	"	108%	(57-142)	0.858%	"	"	
Trichloroethene	"	1.09	---	0.0536	"	"	ND	"	102%	(66-144)	2.79%	"	"	
Total Xylenes	"	3.42	---	0.161	"	"	ND	3.21	107%	(70-130)	0.873%	(30)	"	
<hr/>														
Surrogate(s):	1,2-DCA-d4	Recovery:	80.8%	Limits:	70-130%	"							05/26/06 12:29	
	Toluene-d8		97.2%		70-130%	"							"	
	4-BFB		98.1%		70-130%	"							"	

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring - Laboratory Quality Control Results

TestAmerica - Seattle, WA

QC Batch: 6F01060

Soil Preparation Method: EPA 3550B

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (6F01060-BLK1)										Extracted: 06/01/06 14:35				
Acenaphthene	8270C-SIM	ND	---	0.0100	mg/kg wet	1x	--	--	--	--	--	--	06/02/06 12:44	
Acenaphthylene	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Anthracene	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Benzo (a) anthracene	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Benzo (a) pyrene	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Benzo (b) fluoranthene	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Benzo (k) fluoranthene	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Benzo (b & k) fluoranthene	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Benzo (ghi) perylene	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Chrysene	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Dibenz (a,h) anthracene	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Fluoranthene	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Fluorene	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Indeno (1,2,3-cd) pyrene	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
1-Methylnaphthalene	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
2-Methylnaphthalene	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Naphthalene	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Phenanthrene	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Pyrene	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	

Surrogate(s): p-Terphenyl-d14

Recovery: 111%

Limits: 50-147% "

06/02/06 12:44

LCS (6F01060-BS1)

Extracted: 06/01/06 14:35

Acenaphthene	8270C-SIM	0.687	---	0.0100	mg/kg wet	1x	--	0.667	103%	(70-125)	--	--	06/02/06 13:15	
Acenaphthylene	"	0.688	---	0.0100	"	"	--	"	103%	(70-133)	--	--	"	
Anthracene	"	0.769	---	0.0100	"	"	--	"	115%	(70-152)	--	--	"	
Benzo (a) anthracene	"	0.629	---	0.0100	"	"	--	"	94.3%	(60-125)	--	--	"	
Benzo (a) pyrene	"	0.674	---	0.0100	"	"	--	"	101%	(64-134)	--	--	"	
Benzo (b) fluoranthene	"	0.731	---	0.0100	"	"	--	"	110%	(62-147)	--	--	"	
Benzo (k) fluoranthene	"	0.673	---	0.0100	"	"	--	"	101%	(60-144)	--	--	"	
Benzo (ghi) perylene	"	0.650	---	0.0100	"	"	--	"	97.5%	(57-137)	--	--	"	
Chrysene	"	0.718	---	0.0100	"	"	--	"	108%	(70-139)	--	--	"	
Dibenz (a,h) anthracene	"	0.653	---	0.0100	"	"	--	"	97.9%	(56-140)	--	--	"	
Fluoranthene	"	0.721	---	0.0100	"	"	--	"	108%	(70-141)	--	--	"	
Fluorene	"	0.703	---	0.0100	"	"	--	"	105%	(76-132)	--	--	"	
Indeno (1,2,3-cd) pyrene	"	0.647	---	0.0100	"	"	--	"	97.0%	(55-138)	--	--	"	
1-Methylnaphthalene	"	0.693	---	0.0100	"	"	--	"	104%	(46-128)	--	--	"	
2-Methylnaphthalene	"	0.728	---	0.0100	"	"	--	"	109%	(41-125)	--	--	"	
Naphthalene	"	0.688	---	0.0100	"	"	--	"	103%	(43-125)	--	--	"	
Phenanthrene	"	0.650	---	0.0100	"	"	--	"	97.5%	(73-125)	--	--	"	

TestAmerica - Anchorage, AK

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring - Laboratory Quality Control Results

TestAmerica - Seattle, WA

QC Batch: 6F01060

Soil Preparation Method: EPA 3550B

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
---------	--------	--------	------	-----	-------	-----	---------------	-----------	-------	----------	-------	----------	----------	-------

LCS (6F01060-BS1)

Extracted: 06/01/06 14:35

Pyrene	8270C-SIM	0.698	---	0.0100	mg/kg wet	1x	--	0.667	105%	(68-140)	--	--	06/02/06 13:15	
Surrogate(s): <i>p-Terphenyl-d14</i>		Recovery: 106%	Limits: 50-147%										06/02/06 13:15	

Matrix Spike (6F01060-MS1)

QC Source: BPE0768-16

Extracted: 06/01/06 14:35

Acenaphthene	8270C-SIM	2.00	---	0.113	mg/kg dry	10x	0.975	0.751	136%	(67-132)	--	--	06/02/06 19:29	MS-3
Acenaphthylene	"	1.12	---	0.113	"	"	0.487	"	84.3%	(65-142)	--	--	"	
Anthracene	"	2.51	---	0.113	"	"	1.21	"	173%	(66-158)	--	--	"	MS-3
Benzo (a) anthracene	"	2.20	---	0.113	"	"	1.08	"	149%	(41-156)	--	--	"	
Benzo (a) pyrene	"	2.22	---	0.113	"	"	1.12	"	146%	(52-148)	--	--	"	
Benzo (b) fluoranthene	"	2.19	---	0.113	"	"	0.736	"	194%	(53-151)	--	--	"	MS-3
Benzo (k) fluoranthene	"	2.21	---	0.113	"	"	0.787	"	189%	(46-161)	--	--	"	MS-3
Benzo (ghi) perylene	"	0.822	---	0.113	"	"	0.550	"	36.2%	(26-154)	--	--	"	
Chrysene	"	2.73	---	0.113	"	"	1.38	"	180%	(55-155)	--	--	"	MS-3
Dibenz (a,h) anthracene	"	0.516	---	0.113	"	"	0.157	"	47.8%	(27-157)	--	--	"	
Fluoranthene	"	7.53	---	0.113	"	"	5.04	"	332%	(46-172)	--	--	"	MS-4
Fluorene	"	2.73	---	0.113	"	"	1.51	"	162%	(66-143)	--	--	"	MS-3
Indeno (1,2,3-cd) pyrene	"	0.802	---	0.113	"	"	0.460	"	45.5%	(24-159)	--	--	"	
1-Methylnaphthalene	"	1.08	---	0.113	"	"	0.566	"	68.4%	(39-140)	--	--	"	
2-Methylnaphthalene	"	1.26	---	0.113	"	"	0.828	"	57.5%	(32-139)	--	--	"	
Naphthalene	"	1.74	---	0.113	"	"	1.66	"	10.7%	(38-134)	--	--	"	MS-4
Phenanthrene	"	8.92	---	0.113	"	"	6.06	"	381%	(63-139)	--	--	"	MS-4
Pyrene	"	6.98	---	0.113	"	"	3.99	"	398%	(51-172)	--	--	"	MS-4
Surrogate(s): <i>p-Terphenyl-d14</i>		Recovery: 92.0%	Limits: 50-147%										06/02/06 19:29	

Matrix Spike Dup (6F01060-MSD1)

QC Source: BPE0768-16

Extracted: 06/01/06 14:35

Acenaphthene	8270C-SIM	1.58	---	0.113	mg/kg dry	10x	0.975	0.756	80.0%	(67-132)	23.5%	(50)	06/02/06 20:01	
Acenaphthylene	"	1.08	---	0.113	"	"	0.487	"	78.4%	(65-142)	3.64%	"	"	
Anthracene	"	1.96	---	0.113	"	"	1.21	"	99.2%	(66-158)	24.6%	"	"	
Benzo (a) anthracene	"	2.18	---	0.113	"	"	1.08	"	146%	(41-156)	0.913%	"	"	
Benzo (a) pyrene	"	2.36	---	0.113	"	"	1.12	"	164%	(52-148)	6.11%	"	"	MS-3
Benzo (b) fluoranthene	"	2.33	---	0.113	"	"	0.736	"	211%	(53-151)	6.19%	"	"	MS-3
Benzo (k) fluoranthene	"	2.25	---	0.113	"	"	0.787	"	194%	(46-161)	1.79%	"	"	MS-3
Benzo (ghi) perylene	"	0.850	---	0.113	"	"	0.550	"	39.7%	(26-154)	3.35%	"	"	
Chrysene	"	2.74	---	0.113	"	"	1.38	"	180%	(55-155)	0.366%	(44)	"	MS-3
Dibenz (a,h) anthracene	"	0.533	---	0.113	"	"	0.157	"	49.7%	(27-157)	3.24%	(50)	"	
Fluoranthene	"	6.73	---	0.113	"	"	5.04	"	224%	(46-172)	11.2%	"	"	MS-4
Fluorene	"	2.19	---	0.113	"	"	1.51	"	89.9%	(66-143)	22.0%	(52)	"	
Indeno (1,2,3-cd) pyrene	"	0.842	---	0.113	"	"	0.460	"	50.5%	(24-159)	4.87%	(43)	"	
1-Methylnaphthalene	"	1.03	---	0.113	"	"	0.566	"	61.4%	(39-140)	4.74%	(50)	"	

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring - Laboratory Quality Control Results

TestAmerica - Seattle, WA

QC Batch: 6F01060

Soil Preparation Method: EPA 3550B

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike Dup (6F01060-MSD1)			QC Source: BPE0768-16					Extracted: 06/01/06 14:35						
2-Methylnaphthalene	8270C-SIM	1.23	---	0.113	mg/kg dry	10x	0.828	0.756	53.2%	(32-139)	2.41%	(50)	06/02/06 20:01	
Naphthalene	"	1.78	---	0.113	"	"	1.66	"	15.9%	(38-134)	2.27%	"	"	MS-4
Phenanthrene	"	7.14	---	0.113	"	"	6.06	"	143%	(63-139)	22.2%	"	"	MS-4
Pyrene	"	6.72	---	0.113	"	"	3.99	"	361%	(51-172)	3.80%	"	"	MS-4
Surrogate(s): p-Terphenyl-d14		Recovery: 94.2%	Limits: 50-147%		"								06/02/06 20:01	

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Physical Parameters by APHA/ASTM/EPA Methods - Laboratory Quality Control Results

TestAmerica - Seattle, WA

QC Batch: 6E31045

Soil Preparation Method: Dry Weight

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
---------	--------	--------	------	-----	-------	-----	---------------	-----------	-------	----------	-------	----------	----------	-------

Blank (6E31045-BLK1)

Extracted: 05/31/06 17:24

Dry Weight	BSOPSPLO0 3R08	99.8	---	1.00	%	1x	--	--	--	--	--	--	06/01/06 17:00	
------------	-------------------	------	-----	------	---	----	----	----	----	----	----	----	----------------	--

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



Oasis Environmental, Inc.

825 8th Ave, Suite 200
Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Notes and Definitions

Report Specific Notes:

- A-01 - The recovery of the analyte falls within the +/- 40% deviation limit.
- A-02 - This analyte had a low bias in the associated calibration verification standard.
- DP-1 - Sample RPD exceeded the laboratory control limit.
- J - Estimated value.
- MS-2 - The Matrix Spike and/or Matrix Spike Duplicate were below the acceptance limits due to sample matrix interference. See Laboratory Control Sample.
- MS-3 - The Matrix Spike and/or Matrix Spike Duplicate were above the acceptance limits due to sample matrix interference. See Laboratory Control Sample.
- MS-4 - Due to high levels of analyte in the sample, the Matrix Spike/Matrix Spike Duplicate calculation does not provide useful spike recovery information. See Laboratory Control Sample.
- P-02 - Greater than 40% difference between two dissimilar columns. After evaluation, the higher result has been reported.
- Q-38 - The internal standard associated with this analyte was biased high and outside acceptance criteria. Re-analysis verified the original result.
- Q-40 - This analyte had a low bias in the associated calibration verification standard. See case narrative.
- R-01 - Reporting limit raised due to dilution necessary for analysis.
- RP-2 - The RPD exceeded the laboratory control limit.
- RP-3 - The RPD exceeded the laboratory control limit due to sample matrix effects.

Laboratory Reporting Conventions:

- DET - Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.
- ND - Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).
- NR/NA - Not Reported / Not Available
- dry - Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.
- wet - Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.
- RPD - RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).
- MRL - METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.
- MDL* - METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.
- Dil - Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.
- Reporting Limits - Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



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Anchorage, AK/USA 99501

Project Name: **St. George Phase II**

Project Number: 2006-490

Project Manager: Lisa Nicholson

Report Created:

06/09/06 14:40

Electronic Signature - Electronic Signature added in accordance with TestAmerica's *Electronic Reporting and Electronic Signatures Policy*.
Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory.
Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

TestAmerica - Anchorage, AK

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Jennifer L. Poppe For Stephen Wilson, Laboratory Manager



CHAIN OF CUSTODY REPORT

Page 1 of 4

Work Order #: **WECOS7**

CLIENT: **OASIS Environmental**
 REPORT TO: **Lisa Nicholson / OASIS Environmental**
 ADDRESS: **825 W. 8th Avenue, Suite 200 Anchorage AK 99501**

PHONE: **907-258-4880** FAX: **907-258-4033**

PROJECT NAME: **St. George Phase II**

PROJECT NUMBER: **14-076-1-4**

SAMPLED BY: **Lisa Nicholson**

INVOICE TO: **Same**
 P.O. NUMBER: **2006-490**
 PRESERVATIVE

CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	REQUESTED ANALYSES									
		AK102/103	AK101/802B	VOCS	8260B	PAH	8270 SIM	PCRB Meths	6020/7470/7471	Lead 6020	
OMS-TP1-1	5/21/06 1205	X	X								
OMS-TP2-1	5/21/06 1210	X	X								
OMS-TP3-1	5/21/06 1215	X	X								
OMS-TP4-2.5	5/21/06 1225	X	X	X							
OMS-TP5-2.5	5/21/06 1227	X	X								
OMS-TP6-1	5/21/06 1231	X	X								
OMS-TP7-1.5	5/21/06 1240	X	X	X		X	X				
EP-TP1-1	5/21/06 1545	X	X								
EP-TP2-2	5/21/06 1555	X	X	X							
EP-TP3-0.5	5/21/06 1600	X	X	X	X	X	X				

RELEASED BY: **Lisa Nicholson**

FIRST NAME: **Lisa Nicholson**

DATE: **5/22/06**

TIME: **0930**

RECEIVED BY: **MT**

PRINT NAME: **MT**

DATE: **5/22/06**

TIME: **0930**

RECEIVED BY: **MT**

PRINT NAME: **MT**

DATE: **5/22/06**

TIME: **0930**

TURNAROUND REQUEST
 in Business Days

Organic & Inorganic Analyses
☒ 7 ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ <1

Petroleum Hydrocarbon Analyses
☒ 1 ☐ 3 ☐ 2 ☐ 1 ☐ <1

*Need firm standard TAT

OTHER Specify: **Turnaround Requesters list from standard map (see Back Cover)**

MATRIX (W, S, O)	# OF CONT.	LOCATION / COMMENTS	NO. REQ'D
S	2		
S	2		
S	2		
S	3		
S	2		
S	2		
S	4		
S	3		
S	4		

ADDITIONAL REMARKS:

FIRM

DATE

PRINT NAME

DATE

TIME

CHAIN OF CUSTODY REPORT

* Need firm 10-day TAT

Page 4 of 4

CLIENT: OASIS Environmental

REPORT TO: Lisa Nicholson / OASIS Environmental
ADDRESS: 825 W. 8th Avenue, Suite 200
Anchorage, AK 99501

PHONE: 907-258-4880 FAX: 907-258-4033

PROJECT NAME: St. George Phase II

PROJECT NUMBER: 14-076-1-4

SAMPLED BY: Lisa Nicholson

INVOICE TO:

Same

P.O. NUMBER: 2006-490

PRESERVATIVE

None Meth Meth None None None

REQUESTED ANALYSES

AK102/103 DRO/RO
AK101/802B
8260B
VOCs
PAH
8270 SIM
PCRB Meths
6020/7470/7471
Lead 6020

CLIENT SAMPLE IDENTIFICATION

SAMPLING DATE/TIME

CD-SS-A 5/21/06 2330
CD-SS-C 5/21/06 2335
SS-DUP1 5/21/06 2335
Trip Blank 5/21/06 0700
Trip Blank 5/21/06 0700

TURN-AROUND REQUEST

In Business Days *

Organic & Inorganic Analyses

7 5 4 3 2 1 -1

Petroleum Hydrocarbon Analyses

4 3 2 1 <1

* Need firm standard TAT

OTHER Specify:

* Turnaround Request is a firm standard that means the firm will

MATRIX (W, S, O)

OF CONT.

LOCATION / COMMENTS

WCA WTD

S 1
S 1
S 1
S 1
S 1

RELEASED BY: Lisa Nicholson

PRINT NAME: Lisa Nicholson

RELEASED BY:

PRINT NAME:

ADDITIONAL REMARKS:

DATE: 5/22/06

TIME: 0930

DATE:

TIME:

RECEIVED BY: [Signature]

PRINT NAME: [Signature]

RECEIVED BY:

PRINT NAME:

DATE: 5/22/06
FIRM: TA-AK
TIME: 1400

DATE: [Signature]
FIRM: [Signature]
TIME: [Signature]

ADDITIONAL REMARKS:

APPENDIX C
PHOTOGRAPH LOG

Photographs St. George Phase II Site Assessment



Photograph 1. E&P Shop. Test Pit EP-TP1, looking northeast. Test pit is 2.5 feet deep.



Photograph 2. Old Machine Shop. Asbestos-containing ceiling tiles.

Photographs
St. George Phase II Site Assessment



Photograph 3. Old Machine Shop. Asbestos-containing pipe insulation.



Photograph 4. Cottage D. Overgrown vent and fill pipes for UST on the south side of the building.

Photographs
St. George Phase II Site Assessment



Photograph 5. Cottage D. Test pit 3 adjacent to active UST.



Photograph 6. Cottage G. Asbestos-containing flooring from entrance to furnace room in first-floor apartment.

Photographs
St. George Phase II Site Assessment



Photograph 7. Cottage G. Asbestos-containing floor tile from second-floor apartment.